From Colonial Outpost to Popular Tourism Destination: an
Historical Geography of the Leeuwin-Naturaliste Region
1829-2005

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This thesis is presented for the degree of Doctor of Philosophy of
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I declare that this thesis is my own account of my research and contains as its main content work, which has not previously been submitted for a degree at any tertiary education institution.

..............................................................

Dale Sanders
Abstract

While much of inland rural and regional Australia in the early 21st Century is struggling to survive through a tough restructuring period and significant population decline with its associated impacts on local services, many coastal locations are experiencing unprecedented development including non-urban population growth and coastal subdivision. There is an urgent need for a more holistic approach to future development in coastal communities around Australia that recognises the contribution of past land uses and the implementation of sustainable policies and practices that link the environment, people and the economy. Many of these coastal locations share a similar post contact history of a constant effort to create and maintain sustainable communities. Most have experienced several different dominant land uses since European occupation as various political and ideological forces have promoted new ideas and technologies to exploit the available natural resources. Remnants of these past activities, including pre European land use, still remain and have now become an important component of the cultural heritage and tourist product in these coastal regions.

The Leeuwin-Naturaliste Region occupies the extreme south western corner of Western Australia approximately 250km south of the city of Perth and is one location that shares this experience. The region is presently one of the fastest growing areas in Western Australia outside of the metropolitan area. Between 1991 and 2001 the population of the Leeuwin-Naturaliste Region increased by 65% to 31, 911 (ABS 2001). Although the region has been experiencing unprecedented growth since the late 1980s, it had previously comprised mostly small rural communities struggling to maintain their populations and economic viability.
The Leeuwin-Naturaliste Region has been ‘discovered’ no less than seven times since European occupation in 1830. It has been ‘invaded’ by a series of different people from both the public and private sectors who have initiated diverse land uses for different objectives. Each new land use activity was initiated from outside the region as people reappraised the environment with little consideration of the knowledge of the local environment obtained through past land use activities. These new land uses were usually politically or demand driven and related to the broader development of the state rather than the long term viability of the local region. Whilst the phenomenal development associated with tourism constitutes the most recent land use activity, tourism was preceded by Early European agricultural Settlement from the 1830s; the timber Industry from the 1850s; the Group Settlements and establishment of a dairy industry from the 1920s; the alternative lifestylers from the 1960s and the viticultural industry from the 1970s.

This thesis will explore both the historical and contemporary processes which have played a significant part in shaping the region’s cultural landscapes and underpin the current development issues it is experiencing. It is argued that much of the land use history of this region has been framed by a consistent frontier ethos and that it is only relatively recently the concept of sustainable development has begun to be implemented even though ironically its principles were effectively guiding land use practices for centuries before European settlement. This thesis concludes that for the most recent land use activity of tourism to achieve the long term sustainability that has eluded so many past land uses, development must facilitate multiple land use management and encourage the continued incorporation of past land use activities to maintain the region’s cultural, social and economic diversity rather than tourism
overpowering them to become the dominant activity. At the same time, of course, these multiple land uses must themselves be managed by contemporary and evolving principles of sustainable development. All stakeholders both within and outside the region need to adopt a more holistic sustainable approach to managing the region’s resources learning from both past land use attempts and the principles of Indigenous cosmology including the importance of the interconnectedness of people, environment and economy. If this is achieved then it is more likely that both current and future generations will have a high quality of life with long term economic security that also ensures the long term maintenance of their socio-cultural and environmental resources.
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### Acronyms

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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>ABS</td>
<td>Australian Bureau of Statistics</td>
</tr>
<tr>
<td>AMR</td>
<td>Augusta Margaret River Mail</td>
</tr>
<tr>
<td>CALM</td>
<td>Department of Conservation and Land Management</td>
</tr>
<tr>
<td>CSIRO</td>
<td>Commonwealth Scientific and Industrial Research</td>
</tr>
<tr>
<td>CWA</td>
<td>Country Women’s Association</td>
</tr>
<tr>
<td>ESD</td>
<td>Ecologically Sustainable Development</td>
</tr>
<tr>
<td>RFA</td>
<td>Regional Forests Agreement</td>
</tr>
<tr>
<td>SFA</td>
<td>Surfrider Foundation Australia</td>
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<tr>
<td>WAPD</td>
<td>Western Australian Parliamentary Debates</td>
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Chapter 1 Introduction

Introduction
There is a broad trend of non-urban population growth and coastal subdivision around Australia that has accelerated over the past 25 years. Unlike much of the rest of inland rural Australia which is struggling to survive through a tough restructuring period and significant population decline with its associated impacts on local services, some rural coastal regions are experiencing unprecedented development. Many of these coastal locations share a similar post contact history of a constant struggle to create and maintain sustainable communities. Most have experienced several different land uses over time since European occupation as various groups have moved in with new ideas and technologies to exploit the available natural resources. Remnants of these past activities including pre-European land use still remain and have become an important component of the cultural heritage and tourist product in these coastal regions. Thus the diverse historical geography of these locations has resulted in them becoming attractive places to visit and reside, resulting in the current development boom that has been bourgeoning since the mid 1980s.

One such coastal location that shares this experience is the Leeuwin-Naturaliste Region. This area that comprises the Shires of Busselton and Augusta-Margaret River is located in the extreme south-western corner of the Australian continent approximately 250km south of the capital Perth. It is presently one of the fastest growing regions in Western Australia outside the Perth metropolitan area. In two decades from 1981 to 2001 the regions population increased from 13,049 to 31,911. (ABS 2001). Although the region is currently experiencing unprecedented growth, it
had previously consisted of mostly small rural communities struggling to retain their populations and economic feasibility. The Leeuwin – Naturaliste region has a long history of diverse land use activities initiated by different groups through time as they sought to develop a sustainable future for their communities. Whilst the phenomenal development associated with tourism and recreation constitutes the most recent land use activity, several others precede it; 1. Pre European land use dating back at least 40,000 years 2. Early European settlement from the 1830s, 3. The timber industry from the 1850s. 4. The Group settlements and the establishment of a dairy industry from the 1920s, 5. The Utopia seekers from the 1960s, 6. The viticultural industry from the 1970s.

Whereas in the past each new land use rode over its predecessor to become the dominant activity, the recent wave of tourism needs to retain a mix of land uses from the past as these combine to provide the unique tourist product the region has to offer visitors in the present and in the future. This creates a unique dilemma for the communities of these regions. Some community stakeholders welcome the economic benefits of the new wave; however, others who seek to retain the perceived social and environmental attributes of their communities, often have to fight for a voice in the decision-making processes that affect their region. Issues related to development in coastal communities can often polarise the opinions of residents, stakeholders, visitors and concerned citizens from elsewhere. In Western Australia this has been evidenced recently with the ‘Save Ningaloo’ campaign that seeks to stop proposed development near the coastal community of Coral Bay in the state’s North West, and the ‘Save Smiths Beach’ campaign that is trying to limit development on the Leeuwin-Naturaliste Ridge in the south west of the state (West
Australian various, 2001 & 2002). Both of these cases mobilised large numbers of people both from within and from outside the local areas including many famous faces to protest against perceived unsustainable development proposals in these popular tourist destinations.

There is an urgent need for a more holistic approach to future development in coastal communities around Australia that recognises the contribution of past land uses and the implementation of sustainable policies and practices which link the environment, people and the economy. This thesis will utilise the case study area of the Leeuwin–Naturaliste Region in Western Australia to explore the land use history which has contributed to the present problems and controversies surrounding coastal regional development. The case study region shares a comparable story with many coastal locations around Australia including some of the more established tourism destinations such as the Gold Coast (QLD), Byron Bay (NSW) and Noosa (QLD). Its history includes a series of land uses and communities searching for a sustainable future with limited success, until it was ‘discovered’ by the mass market as a popular tourist destination in the early 1980s. It is currently undergoing a significant transformation linked to the extraordinary growth and development related to the new land use activity of tourism. The region’s attractive product mix of wineries, spectacular coastline, unique karri forest, big surf, diving, mud brick architecture, cheese and chocolate factories, Indigenous culture, diverse accommodation choices and fine food all located within easy weekender distance from the urban agglomeration of Perth has contributed to this popularity (Plates 1.1 & 1.2). Visitation is approximately 90% from intrastate, although 16% of international visitors to Western Australia do visit the wineries in Margaret River, including 16%
Plate 1.1 Images of the Leeuwin-Naturaliste Region 1
(Source: Margaret River Tourist Association 2001)

Plate 1.2 Images of the Leeuwin-Naturaliste Region 2
(www.downsouth.com.au)
from New Zealand, 17% from the USA, 21% from the U.K. and 21% from Germany (WATC 1999:7).

This thesis will explore the historical and contemporary processes which have played a significant part in shaping the present cultural landscapes of the Leeuwin – Naturaliste region. It will also investigate current planning and policy options, the extent of their viability, and their appropriateness in the context of sustainable development for the future of this fragile coastal environment. The thesis will be framed by the notion of sustainable development and explore how various communities have attempted to integrate the principles of sustainable development into their land use activities over time. Whilst the terminology and language of sustainable development are relatively new, this thesis will argue that the principles were strongly in place before European settlement and that whilst much Indigenous knowledge has subsequently been lost there is still much to be learned from the basic philosophy of interconnectedness between people, economy and environment. This thesis is not advocating a reduction in population or a return to pre European technology levels but rather it suggests that there needs to be more investigation into the appropriateness of the application of indigenous principles of land management. The new push for communities to become sustainable is well founded in scientific research; however, its implementation appears to be very top down. Many communities including those in coastal locations, which are coming under ever increasing development pressure, are still coming to terms with the practical applications of sustainable development which is quite a departure from the previous frontier ethos and the western scientific paradigm that has been dominant since European occupation.
Study Site

The Leeuwin – Naturaliste Region is a geographically distinct area that is located between Cape Leeuwin and Cape Naturaliste in the extreme southwest corner of the Australian continent, approximately 250km south of the state capital Perth (Figure 1.1). This places the region within easy weekender distance for metropolitan residents, and those from the fast growing city of Mandurah one hour south of Perth through a dual lane highway connection down the coast.

The case study area is delimited by coastal boundaries to the north, west and south and the foothills of the Darling Plateau to the east. The region incorporates the present local government authorities of Busselton and Augusta-Margaret River and contains two administrative regional service centres, the town of Margaret River and the town of Busselton. In addition it contains several smaller towns including Dunsborough, Yallingup, Gracetown, Prevelly and Augusta on the coast and Cowaramup and Karridale inland. The region is also well endowed with road networks a legacy from the many land uses that preceded tourism and that now provides visitors with good quality access to all the natural and cultural attractions the region has to offer. The climate is temperate characterized by hot dry summers and cool wet winters. The temperature is moderated to some extent by the warm sea currents flowing around the capes. This region also hosts scenic coastal plains, plateaus of jarrah and karri forest and a spectacular limestone ridge with imposing granite outcrops that runs down the entire western coast.
Figure 1.1: Location of the Leeuwin – Naturaliste Region
During the past 175 years the case study area has been known by several different names, some of which are still used in the present context. The original custodians of this landscape would sometimes use different names for the region depending on the circumstance of use and who used them (Collard 1994). Figure 1.2 provides some background on Nyungar nomenclature for the region (Figure 1.2). The areas that are known as the townsites of Busselton and Margaret River were originally named Yoonderup (named after a great warrior) and Wooditchup (named after Nyungar magic men). During the early years of European occupation the location of the first colonial outpost in the south of the region was referred to as the Blackwood Region after the main river that runs through the countryside of the area exiting to the sea at Augusta, whilst the north of the region was identified as the Vasse Region again named after the main river in the area.

Following the establishment of local government during the second half of the 19th century the area became known as the county of Sussex for administrative purposes. In more modern times the region has become known as the “Cape to Cape Region” or the “Margaret River Region”. In the context of the region as a tourism destination the colloquial term of “Down south” is also often used when referring to this location. For the purpose of this thesis the Ministry of Planning’s classification the “Leeuwin –Naturaliste Region” is the preferred term.

My initial interest in investigating what processes were at work in this particular area came from a newspaper article entitled “Cape Fear: Growing Pains Down South” (Amalfi 1995). This particular commentary highlighted the various contemporary development issues going on in the Leeuwin-Naturaliste Region and led to the
Figure 1.2 A Nyungar (Aboriginal) Interpretation: The Lower South West of Western Australia

(Source: Collard 1994:54)
obvious question of why there? And thus the need to research the historical development of this region to understand more about how these issues had evolved. This area, a sub region of the southwest region of Western Australia, was selected as an important case study area in historical geography for a number of reasons including its complex physical geography that has facilitated the large number of different land uses. Secondly there is a significant gap in the collection of knowledge about this region’s geography and history. Thirdly it has provided a case study site that is comparable with other coastal regions in the broader Australian context.

**Aims of the Thesis**

The Leeuwin – Naturaliste Region has been ‘discovered’ no less than seven times since European occupation in 1830. It has been invaded by a series of different groups from both the public and private sectors that have initiated diverse land uses for different objectives. Each new group has come from outside the region and re-appraised the environment with little consideration of the knowledge of the local environment obtained through previous land use activities including several thousands of years of Indigenous custodianship. These new land uses were usually politically and demand driven and related to the broader development of the state of Western Australia, rather than the long-term viability or sustainability of the local region. Many of these land uses have faltered due to unsustainable policies and practices imposed from these external sources.

The most recent land use activity of tourism is also largely driven by outside interests who have contributed to significant investment in the local economy. This has
resulted in unprecedented development pressures, urbanisation and a resultant population boom. As illustrated in figure 1.3, following a slight increase in the early 1960s the region’s population had remained relatively stable during the 1960s and 1970s before accelerating quite rapidly from the mid 1980s (ABS 2001). Whilst the accelerated pace of development associated with this new land use activity is new, the processes of establishing a new land use in the region and the need to implement sustainable policies and practices to ensure its survival are not. Like many land uses that preceded it, tourism is linked to these past activities and this thesis will argue that in fact past land use activities in combination with the region’s unique physical environment are essential components for the sustainability of the present and future tourism product.

![Population of the Leeuwin-Naturaliste Region 1954-2000](image)

**Figure 1.3 Population of the Leeuwin-Naturaliste Region 1954-2000**

(Source ABS Census Data 1954-2000)
The aims of this thesis are:

- To investigate the historical geography of land uses in this area, to provide an informative perspective on the processes that have led to the current development issues.
- To reconstruct the dynamic cultural landscape of the Leeuwin-Naturaliste Region highlighting the nature of human/environment interactions.
- To provide an intensive small-scale historical analysis of land use development that is accessible and provides knowledge that can be incorporated into regional development policy and planning.
- To provide an understanding of the origins of the present environmental problems and controversies.
- To investigate the implementation of sustainable policies and practices in the region.
- To identify the importance of retaining a diverse range of land uses that provides the unique tourist product of this region.
- To argue that there is a need for a more holistic approach and inter sectorial policy in coastal regional development based on sustainable development principles in Australia and that this approach needs to be implemented through a partnership approach which empowers local communities to direct their own futures in a more sustainable manner.

**Structure of the Thesis**

This thesis will investigate past land use policy and practice in terms of the dominant frontier ideology that has existed in the south west of Western Australia since European occupation. Some might even argue that the newest land use of tourism is
still adopting a frontier approach. Thus this thesis will also investigate if there is a
process of “frontier tourism” occurring whereby there is an identifiable practice of
developing mass tourism in a region that had been in the tourism wilderness until the
early 1980s, in the belief that in terms of tourism, the region provides something of a
blank canvas that is in need of significant development. It will also examine the
change towards more sustainable development planning and the role of sustainable
tourism development as a solution to the current problems and controversies
embroiling the Leeuwin – Naturaliste region. In addition it will argue that there is a
need to learn from past mistakes and look even further into the country’s history and
be prepared to learn from Aboriginal land ethics and incorporate more of their
valuable knowledge into our current and future land use activities.

Following an extensive introduction which places the study in the broader context of
coastal regional development in Australia and an outline of the theory, methodology
and aims of this study, this thesis will provide a comprehensive background on the
physical geography and an overview of pre-European land use systems. It will then
chronicle the various land uses that have existed in the Leeuwin–Naturaliste since
European occupation. The thesis will then examine the current processes of change
associated with a significant population increase and tourism development,
explaining how and why past land uses have become an integral part of the current
tourism product. Finally it will conclude by arguing that there is an urgent need for
a more holistic approach to future development in coastal communities around
Australia including the Leeuwin-Naturaliste Region that recognises the contribution
of past land uses and the implementation of sustainable policies and practices which
link the environment, people and the economy. There is a need to be aware that
there is something of a tourism frontier ethic in many of these locations that should be balanced with the need to maintain multiple land use activities which in fact combine to provide the attractive tourism product base rather than allowing mass tourism developments to take over the landscape.

Many of the land uses introduced to the Leeuwin-Naturaliste Region over time have largely been opportunistic. Whilst some have had longer-term goals than others, mostly they were designed without a long term integrated or coordinated vision for the future. Europeans were not the first to attempt to control the landscape of the Leeuwin–Naturaliste Region; the Pibleman and Wardandi Nyungar people had systematically managed the region’s resources for at least 40 000 years. Although their land use system did have some far reaching impacts on the landscape, predominantly through their fire regime, it could be argued that the local ecosystem was more ecologically stable than those created by the more recent European attempts at utilising the natural resources of the region. A comprehensive investigation of Nyungar land use is beyond the scope of this thesis, as it deserves comprehensive investigation in its own right. This thesis will, however, provide a basic outline of pre European land use activities before focusing on investigating European systems of land use since 1830, and the delay in implementing sustainable policies and practices.

The first European land use in the region was by the early settlers from May 2 1830; they were followed by the timber getters from the 1850s. The next major land uses were the two government directed attempts at group settlement after the two World Wars, followed by the utopia seekers who discovered the region in the early 1960s.
The next group to move in was the vinegerons in the 1970s and most recently the region has experienced phenomenal growth of the tourism industry since the 1980s. All of these land uses still exist in the region in one form or another in the 21st century. This thesis will argue that maintenance of a diversity of land uses is the most sustainable option for an area which has a long history of invasion and exploitation. In fact the newly developing tourism industry needs the combination of past land uses as they provide the variety of attractions for which that the region has become famous.

Chapter two provides a review of the contemporary literature relevant to the themes of this thesis. It begins by outlining traditional approaches taken by historical geographers as they have attempted to theorize land use settlement in the Australian context. It then investigates the relatively new area of study around sustainable development and provides a brief examination of the literature on Indigenous environmental ethics and finally explores how the concept of sustainable development has been adopted by the modern tourism industry.

Chapter three describes the complex physical environment of this region, which has to a considerable extent been an important factor in shaping how different groups of people through time have assessed and utilised the region’s natural resources. The physical geography of the Leeuwin-Naturaliste Region can be divided into five distinct physiographic areas, which have developed over various underlying geological features (Tille & Latanzke 1990). These areas include the Swan Coastal Plain, with fertile swampy soils that have required drainage works to enhance their productivity. The Southern Coastal Plain, which is also swampy with poor soils,
bleached sands and tall karri trees. The Leeuwin-‘Naturaliste Ridge that is
classified by limestone cliffs and granite outcrops. The Margaret River Plateau
which contains fertile valleys that now support viticulture and the gently undulating
Blackwood Plateau that once hosted thick jarrah forest that has subsequently been
transformed into grazing pastures. The level of understanding of these physical
environment by each group that has migrated to the region has in turn influenced the
sustainability of their land use practices.

Chapter three will also present a brief overview of pre European land use to provide
some understanding of the landscape that the first Europeans encountered. Before
the arrival of Europeans, the Wardandi and Pibelmen Nyungar people had managed
the region’s resources for more than 60,000 years (Collard 1994). Despite the
common perception amongst the early European explorers that they were
encountering a ‘terra nullius’ or even ‘wilderness’ environment, the ‘natural’
landscape that they observed had been significantly altered by the cultural and
economic practices of the Nyungar people over a significant period of time. The
original custodians’ system of land use is described as hunter gatherer, which
included the utilisation of fire stick farming (Green 1984, Hammond 1980, Bar and

Chapter four investigates early European land use. Following the establishment of
the Swan River Colony in 1829 and the alienation of all the adjacent land, Governor
Stirling made the decision to direct some new settlers to establish a sub colony in the
south west corner of Western Australia at Augusta on Flinders Bay (Lines 1994).
Stirling personally surveyed this new site with government botanist Charles Fraser,
following favorable accounts of the inlet at the entrance to the Blackwood River at Augusta by sealers and whalers. It was also believed at that time that the tall karri timber found in the region was a signifier of promising fertile soils. These new settlers did not seek to obtain knowledge of this new alienating landscape from the original custodians, who were not thought to possess any agricultural skills. Rather these recent arrivals embarked on a process of trial and error in dealing with this new environment. For various reasons, this preliminary frontier settlement at Augusta failed and by the mid 1830s all the settlers had moved north to the Vasse Region at Geographe Bay, which is now known as Busselton (Shann 1926 & Hasluck 1955). Farming pursuits at this new location were marginally more successful, though the frontier ethic persisted through the need for survival. Resources were perceived to be limitless and it was believed that capital and hard work would provide rewards. This frontier ethic also created tensions with the local Wardandi people whose traditional lands were being taken over (Hasluck 1955).

The next wave of land use in the region came in the form of timber getters. This will be investigated in chapter five. Following the early attempts by some local settlers at cutting timber in the 1840s, the introduction of convicts in 1850 and the arrival of well financed entrepreneurs in the 1860s provided the necessary labour and capital for this new industry to change the landscape of this region forever. During the first 20 years of European occupation, lack of capital, infrastructure and shipping hampered the progress of the timber industry. Pit sawing was unattractive and laborious work and it was not until the arrival of convicts in 1851 as a cheap source of labour that commercial felling of the timber became a financially viable option (Kinsella 1990). By the 1860s major entrepreneurs had entered the local industry.
They transformed it from a collection of small-scale concerns to a large scale, well
financed automated industry, which significantly increased the speed at which the
industry altered the local environment and cultural landscape. There was still a
prevailing belief up until the early 1900s that the resource was limitless (CALM
2002). However by 1913 the industry had moved further east out of the region
primarily due to the exhaustion of the local commercially extractable timber
supplies. Small spot mills have continued to operate throughout the region to the
present day. There are also significant amounts of land still under the control of the
Forests Department though some of these were zoned for tourism in the recent
Regional Forests Agreement (RFA) process, and there have been strong community
protests regarding further logging activity in the area.

The third wave of European land use in the region arrived in the form of two
government initiated group settlement schemes following each of the two World
Wars. These schemes will be outlined in chapter six. The first, following World War
I, became known as the Group Settlement Scheme. It began as a soldier settlement
scheme but it later became part of a significant British migration program, which
attempted to establish a dairy industry in the region. Again this new land use was
established on the persistent belief that the tall timber in the region signified fertile
soils and the perceived need to populate this area in line with post war propaganda.
Thus again valuable knowledge attained through previous trial and error attempts at
cultivating the land was not utilised. There were many problems associated with the
Group Settlement Scheme and it has been widely regarded as a failed social
experiment. Difficulties encountered included lack of reliable transport,
underestimation of the time and labour required to clear the land, ploughing the soils
too deeply, poor stock management, expense of fertilisers, lack of market for the milk, dearth of capital, poor selection of farmers and insufficient training and overall inadequate planning and resourcing of the scheme (Gabbedy 1988).

Despite the immense difficulties encountered by the first attempt at group settlement in the region, 20 years later the government once again deemed it necessary to institute a second similar scheme known as the War Service Land Settlement Scheme (WSLSS) following the Second World War to accommodate returning soldiers. Like its predecessor this new scheme was given an optimistic outlook with strong support from the government although unlike the first scheme it was initially to provide farms on land that had already been cleared and regarded suitable for agricultural pursuits (Fyfe 1948). Many abandoned Group Settlement Scheme properties became part of this second scheme establishing new dairy farms in the region. Tobacco was also trialed at Karridale - however problems with curing the leaf resulted in these farms reverting to dairy production. Despite this optimistic outlook and the belief that with careful review and planning the problems associated with the group settlement scheme could be avoided this new scheme also suffered the difficulties of poor administration, undercapitalisation, lack of machinery, unsuitability of some settlers and ploughing the fragile sandy soils too deeply (Barrett 1965). Thus both government directed attempts at group settlement achieved only limited success at establishing a viable dairy industry in the region. The dairy industry consolidated in the 1960s with most of the state’s dairy activities centralizing to the newly completed Harvey irrigation district. Some dairy farms have remained in the region and their profile has recently re emerged as part of the
tourism package of the region with diversification into gourmet dairy products including ice-cream and cheese.

Chapter seven will look at new groups, including surfers and those searching for alternative lifestyles which will be identified as utopian seekers who introduced the next land uses into the region in the early 1960s. As occurred on the east coast, surfers were inspired to head “down south” in search of waves like those of Sunset and Waimea Bay in Hawaii that were pictured in the surf magazines of the day. The region also had the added attraction of cheap land and casual work on the farms, which enabled the new arrivals to experience the rural ideal (Carps 1999). Some of the early surfers decided to stay on in the region and construct houses and raise families whilst others left for the professional surfing circuit. Despite taking up paid work and providing valuable labour for the farmers and later the vinegerons, surfers were not immediately welcomed in the local community due mainly to the myths surrounding their work ethic and drug use. However, surfers have now become part of the mainstream community operating many businesses and surfing is one of the region’s biggest tourist attractions.

Following the migration of surfers, other people who were seeking a similar utopian lifestyle also became attracted to the green landscapes of the area. These new arrivals were part of the western “hippy movement” and their original intention was “just to be”, to plant trees and live a subsistence lifestyle (Sherwood 1999). However they soon became involved in transforming the landscape through alternative and creative industries such as the production of tofu and organic fruits and vegetables and the establishment of galleries, cafes, crafts and the introduction of
alternative building materials such as mud brick and rammed earth. The “alternative culture” has also become part of the tourist experience in the region.

Chapter eight will analyse viticulture, which was the next land use to be established in the region from the late 1960s. Following the suggestion of John Gladstone in 1965 in an agricultural journal that “Margaret River should be the next prime wine region”, Dr Tom Cullity set about establishing the first vineyard in the region, Vasse Felix in 1967 (Gladstones 1965). Viticulture has proved extremely successful in the Leeuwin – Naturaliste Region with a further 85 vineyards being established over the next 35 years. The local community was again skeptical of this newest wave of arrivals, however, with the assistance of labour provided by many of the utopian groups the industry has burgeoned and by the mid 1990s was supplying 20% of the Australian premium market (Wiley 1996). In recent years many of the vineyards have expanded significantly with some moving more directly into the tourism industry through the provision of cellar sales, restaurants and chalet style accommodation. The wineries are now perhaps the biggest tourist draw card in the region.

This leads into the current wave of land use sweeping the region, that of tourism and recreation. Chapter nine will explore how the Leeuwin- Naturaliste Region has experienced phenomenal growth in this industry since the early 1980s, including the construction of numerous resorts and the refurbishment and expansion of many others. A number of small coastal settlements such as Bunker Bay, Prevelly, Gracetown and Yallingup dotted around the coast of the region have also become popular for the purchase of weekend and holiday homes and are under enormous
pressure to expand (Sanders 2000). Although visitation is presently 90% from intrastate, there is significant potential to attract increased numbers of interstate and overseas tourists, particularly with the new airlink to Busselton and proposed new airport at Margaret River. Whilst further development should be carefully planned to minimise adverse environmental, social, cultural, economic impacts on the local community and landscape, there also needs to be recognition that all past land uses provide a significant contribution to the current tourism product. From the pastured hills dotted with livestock, which provide a scenic vista to the cheese factories, vineyards, alternative mud brick buildings and surfers on the beaches, all of these elements of past land use activities they all provide part of the authentic tourist experience of the region.

In the new millennium the communities and local governments in the Leeuwin-Naturaliste Region have begun to positively embrace the concept of sustainable development. They have initiated a number of sustainable development projects in partnership with various state and commonwealth government agencies (Augusta Margaret River Shire Council 2004 & Eastern Metropolitan Regional council 2003). Thus chapter ten will briefly outline some of the new sustainability projects that have commenced in the Leeuwin-Naturaliste Region and investigate their role as a mechanism for a change in attitude and policy making amongst community members, local government and broader stakeholders from waiting for sustainable activities to be introduced to the region from outside towards actively pursuing a sustainable future for the region from within.
The concluding chapter of the thesis will suggest that whilst the region has a strong history of environmental exploitation based on a persistent frontier ethic, it has finally begun to recognise that more integrated planning that learns from the past and incorporates a more inter-sectorial, holistic and sustainable approach to land use and regional development in the area is now required. It is argued that tourism should not be encouraged to take over as the next economic “quick fix” as has occurred with the introduction of various land use activities in the past, but that all existing land uses be incorporated into a diverse economic, social and environmentally sustainable future for the present and future generations. The thesis will also suggest that sustainable development must incorporate principles of Aboriginal land ethics and be delivered in partnership between government and communities. Communities must be encouraged to take ownership of their futures and be provided with the information and expertise to facilitate riding the wave of sustainability all the way to the shore in the long term.

Research Methods
This thesis is written from a geographical perspective and more specifically in the tradition of historical geography. Mitchell (1954:12) defines historical geography as “… simply stated, a geographical study of any period in the past for which more or less ordered and dated sequence is established in human affairs.” Essentially historical geography engages the core geographical perspectives of space, place and scale and utilises geographical techniques to answer the fundamental question of “why there?” (Mitchell 1954). In addition, it incorporates perspectives that the National Research Council (USA) (1997) defines as geography’s domains of synthesis. These include “environmental-societal dynamics relating human action to
the physical environment, environmental dynamics linking physical systems, and human-societal dynamics linking economic, social and political systems.” (National Research Council 1997:29). Within these domains, this thesis is particularly concerned with the human use of and impacts on the environment and environmental impacts on human kind as it seeks to investigate how and why numerous land use activities have been introduced to the case study region over time and how these past activities have contributed to the present development issues and future sustainability of current land use activities including the newest land use of tourism.

According to Powell (1994:95), historical geographers and others have only recently begun to explore the theme of landscape change and there has been a preference for ‘moving pictures’ rather than compressed snapshots. In the Western Australian context there is a significant paucity of regional land use studies, particularly those that deal with a wide range of land uses over a significant period of time. The last and almost the only comprehensive academic case study of this type was George Seddon’s Sense of Place (1972). As there has been no previous thorough academic study of this type of the Leeuwin – Naturaliste Region to date, a combination of qualitative research techniques were utilised to investigate the historical and spatial effects of coastal regional development in this area.

The research design of this thesis follows an explanatory qualitative case study approach. Stake (1995:xi) defines a case study as “the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances.” (Stake cited in Jennings 2002:177). Yin (1994) describes the single case study approach as being one where only one case is studied holistically.
Likewise McMurray et al (2004:229) state that “Case studies typically examine one unit at a time, in detail, so that the whole is addressed in its entirety and not just in part.” Beeton (2005) also provides a definition of research case studies as “a holistic empirical inquiry used to gain an in-depth understanding of a contemporary phenomenon in its real life context, using multiple sources of evidence.” According to Yin (1994:13) “…case studies are the preferred strategy when “how” or “why” questions are being posed…” He further states that, “As a research endeavour, the case study contributes uniquely to our knowledge of individual, organisational, social and political phenomena.”

Whilst the author is aware of the general criticism of the case study approach including the possibility of researcher bias, the need for clear boundaries and the common! perception that they focus on singular instances that cannot be generalised, the case study approach was chosen as the preferred method for this thesis as it allows for a more holistic investigation into why certain events have occurred in this particular place and how past events are linked to the present situation (Yin 1984, Beeton 2005, Jennings 2002, McMurray et al 2004, Clark et al 1998). The case study has many advantages applicable to this study as outlined by Beeton (2005). These include the explanation of why many land use activities have not been successful: it has the advantage of hindsight yet is relevant to the present and the future; it can illustrate the complexities and interrelationships of the situation by recognising that there are often multiple contributing factors; it shows the influence of personalities and politics; it can demonstrate the influence of time; it can evaluate alternatives not chosen; it utilises information from a wide variety of sources; it can
illuminate a general problem through the examination of a specific instance and the reader may be able to apply it to their own situation (adapted from Beeton 2005).

In the spirit of the holistic case study approach, the traditional geographical technique of field work was used in combination with the analysis of secondary and archival information. Field work facilitated observation, interviews and the collection of local documents. According to the National Research Council (1997:52) “The field geographer’s interest in distributions and spatial patterns is part of a larger concern with synthesis: how and why particular phenomena come together in specific places to create distinctive environments.” Several site visits to the region were made over time to determine which people, activities, situations, events and documents to sample and which informants to interview (Krathwohl 1998:248). Field work conducted for this thesis also enabled the author to make direct observations where local data was missing or unreliable and to check the validity of existing secondary sources (National Research Council 1997:51).

The secondary data for this thesis was collected from a variety of sources including local histories, government documents, biographical and family histories, academic studies, general histories, newspapers, historical maps, conservation reports, and company publications and planning proposals. This method of research involved a comprehensive, inclusive literature search of publications available on this topic to identify past and present research in the field and establish a background of information on other studies and their findings (Jennings 2001:78). The identified literature was then subjected to secondary data analysis to develop a comprehensive chronology of land use activities over time, and identify where there were gaps
which would require the implementation of additional methodologies such as archival research and field work. A content analysis of the literature resulted in the categorization of four main types.

Firstly, local histories, which focus on various parts of the region, have been printed although most appear to have been written primarily for past and present residents of this area and for the tourist market. Secondly, biographical publications and works which describe the history of prominent families in the Leeuwin – Naturaliste Region provided a wealth of additional information. Thirdly there are general histories of Western Australia, which provide some detail on local events and furthermore assist in placing the local events in the context of Western Australia’s development. And, finally, a number of broader national and international texts and articles on topics as diverse as environmental history, sustainable development, tourism, ethno-ecology, physical geography, politics, land use management, sociology, archeology and anthropology were also consulted in order to place the case study of this thesis in the broader context of processes that have impacted on similar areas around the Australian continent.

Other source material included the Government Gazette, the Government Statistical Register (Blue Books), Government Parliamentary Debates and Australian Bureau of Statistics Data. Relevant reports from various government departments including the State Planning Commission, Environmental Protection Agency, Department of Conservation and Land Management and the Western Australian Tourism Commission were also consulted. In addition planning proposals, reports and local government records from both the Shire of Busselton and Shire of Augusta-Margaret
River were utilised to ascertain past and present land use activities, populations and land ownership where appropriate. There are also a few academic studies that have been compiled on aspects of this topic though their quality varies considerably from teachers college essays on the local history to Cameron’s 1975 PhD Thesis on the agricultural colonisation of Western Australia until 1850.

After gaining an overview from these secondary sources, it was then necessary to undertake a thorough search of the State and Commonwealth archives to fill in gaps and acquire more detailed relevant primary information. The types of data revealed in these searches included pertinent information contained in rare books, journals, government documents, local government records, statistics and historical maps. To supplement this primary research, a number of newspapers were consulted including, The West Australian, Daily News¹, The Busselton-Margaret River Times and Augusta Margaret River Mail. Articles, both contemporary and historical from these sources provided valuable additional information on local activities.

Following an exhaustive review of the relevant literature and extensive archival searches several large gaps in the knowledge available began to emerge, particularly with regard to the issue of surfers and utopia seekers that seem to have been overlooked by academics and local historians alike. The relative recentness of the land use activities of these groups also meant that there was little archival material to be found as well. Thus, interviews with local and former residents although often anecdotal were used to fill gaps in the documented information on the history of land use in the Leeuwin-Naturaliste Region. Shire planners in both local government

¹ The Daily News discontinued publication in 1990
areas were also interviewed for their perspective on past, present and possible future land use developments in the region. Contact was also made with the local historical societies who hold large volumes of unpublished data.

Conclusion

This introductory chapter has outlined the current development pressures in coastal regional Australia and the specific issues related to the Leeuwin-Naturaliste Region. It has highlighted the need to fully comprehend the historical processes that influence current and future land use issues. This chapter has also stated the research aims and summarised the structure of the thesis to provide the framework for the subsequent chapters. These chapters will explore past land use policy and practice in the context of the frontier ethic which was part of the dominant western scientific paradigm with its key concept of mastery over nature, versus sustainable development which aims to meet the needs of the present without compromising the ability of future generations to meet their own needs (Weaver & Lawton 2002 341-345).

The following chapter provides a theoretical overview of the literature on land use settlement in Australia. It commences by outlining traditional approaches taken by historical geographers in their endeavors to theorize land use settlement activities in the Australian context. The chapter then provides a critical discussion of the relatively new area of study of sustainable development before taking a brief look at Indigenous environmental land ethics. The chapter concludes by investigating how the concept of sustainable development has been taken up by the modern tourism industry.
Chapter 2 Theoretical Perspectives

Introduction

The Leeuwin – Naturaliste Region provides an interesting and important case study of regional development in coastal Australia because its history of European land uses has largely been demand driven from outside the region by both the public and private sectors. Each post-contact land use was to some extent opportunistic, for various reasons, but was usually related to the wider political development of the state rather than to what was appropriate or sustainable for this particular region. Although the practitioners of some land uses have had longer-term goals than others, mostly they were designed without a “long term” integrated or coordinated vision for the future. All have faltered due to unsustainable development policies and practices.

Common to all of the land use activities that have been introduced to the Leeuwin-Naturaliste Region by various groups of people since European occupation is a consistent theme of a frontier approach to the appraisal and subsequent usage of the region’s natural resources. It appears that as each new group moved into the region, they reappraised the environment with little consideration of the information obtained through previous land use activities or Indigenous knowledge. Even the most recent land use activity of tourism appears in some respects to subscribe to this frontier philosophy although more recently planners, policy makers and even the local community have begun to engage with the concept of sustainable development in an effort to implement a more holistic approach to the future development of the region.
This chapter concentrates on the major themes of land use appraisal, frontier ideology and sustainable development that were identified during the research phase of this thesis. As such it provides an overview and a discussion of the literature in four sections. It begins by outlining traditional approaches taken by historical geographers as they have attempted to theorize land use and settlement in the Australian context. It then looks into the relatively new area of study around sustainable development. This is followed by a brief investigation of the literature on Indigenous land ethics. The chapter concludes with an exploration of how the concept of sustainable development has been adopted by the modern tourism industry.

**Historical Geography Perspectives**

Traditional views about land use activities and the development of Australia expounded by historical geographers suggest that Non Indigenous (European) visions of the Australian environment have evolved from *terra nullius*, a view that the environment was pristine and untouched, and through a series of visions over time including Colonial, Scientific, Romantic and National to the present Ecological vision. The first Europeans to settle in Australia were a product of the industrial revolution in Europe and as such their views of the Australian environment were shaped by the scientific principles they brought with them. They believed that they were encountering an unoccupied but not uninhabited land (*terra nullius*) because to their eyes there were no signs of permanent human occupation of the landscape (Frawley 1994:58). Thus in effect whilst acknowledging that Indigenous peoples did live in Australia the early Europeans did not view them as owners of the land.
The historical geography literature (Heathcote 1972, Frawley 1994), states that the first vision of the Australian environment by these newcomers was one of resource exploitation combined with a development ethos or colonial vision. This was followed by scientific inquiry into the unique Australian natural environment, and the emergence of a romantic vision and attraction to the perceived wild and uncivilized Australian landscape. Then later the visions moved on to a national development program of optimism and more recently to an opposition to the development ethos, or an ecological vision.

According to the model devised by Heathcote in 1972 (cited in Frawley 1994:59) the colonial, scientific and romantic visions all evolved during the period from invasion to the 1850s, with the national and ecological visions developing in the 20th Century. The model also suggests that these visions contributed to the development of a public policy framework, which through time evolved into legislation. Heathcote then argues that legislation progressed in two streams, exploitative and protective. This in turn led to the development of the opposing paradigms of developmentalism and environmentalism resulting in the formulation of a national strategy for ecologically sustainable development as illustrated in Figure 2.1. In Frawley’s further development of Heathcote’s original model, he suggests that through political debate from the opposing paradigms of politics with exploitative resource development concerns on one side and conservation and environmentalism on the other that Australia had evolved by the 1990s to a position of sustainable development.
Frawley (1988 & 1994) provides a further analysis of the evolution of Australian environmental visions working from Heathcote’s original model, but simplifying the chronology into three main time periods (see Figure 2.1); Firstly exploitative pioneering from the nineteenth century onwards followed by national development and the “wise” use of resources from the 1900ss to the 1960ss and finally modern environmentalism from the 1960s to the 1990s.

According to Frawley, the first vision was based on the principles of enlightenment, colonialism, rationality, and evolutionary theory combined with the Anglo Celtic background of the people and the desire to implement yeoman style agrarianism and increase the human impact on the environment. The second period that evolved during the first half of the 20th century was based on ‘wise use’ concepts such as national development, immigration and post war political changes. Frawley’s final stage involves the international wave of social change, environmentalism, green politics and sustainable development (Frawley 1994:61).

Heathcote (1976) provides some analysis of the perceptions of the Australian environment during the early period of European occupation suggesting that the Australian landscape was observed by a variety of persons, groups and institutions that had an interest in acquiring knowledge about the continent. He identifies that at least 10 groups, including explorers, officials both in Australia and in Europe, politicians, promoters, scientists, philosophers, technicians, refugees, convicts and free settlers who were all involved in formulating different perceptions of the Australian environment based on their differing motives. According to Heathcote, these perceptions then underwent a process of filtering or distortion before being disseminated to the wider population through the media.
Figure 2.1 Environmental Ideas in Australia

Finally Heathcote concludes that these perceptions resulted in three major themes emerging in terms of attitudes to the Australian environment:

1. The scientific attitude of the landscape as a phenomenon
2. The aesthetic attitude where the landscape is viewed as scenery
3. The materialistic attitude of the landscape as a resource for economic exploitation (Heathcote 1976:29–46).

Powell (1976 & 1988) describes the interest in the Australian environment by the various persons, groups and institutions over time in terms of the interplay between government and non-government approaches, with governments imposing strong, centralized control over the utilisation of the continent’s land resources. The government sector in Australia has over time been comprised of four different levels including, imperial (colonial), federal, state and local. Colonial administrations presided over land issues until the granting of responsible state government in the 1880s, which was followed by the inauguration of a national government in 1901. Thus presently there are three levels of government which influence and control land issues in Australia. Powell suggests that there were two main types of land settlement prior to federation, the first freehold or yeoman and the second leasehold or squatting. Then in the 1890s there was a move towards closer settlement policies that continued with various schemes after the two world wars. Powell further states that the development of government’s role “from aggressive frontiering to the humbling organization of orderly retreat” did not occur until as late as the 1970s in the Australian context (Powell 1988:23). Powell is also conscious of the role of
strong local leadership and the role of public servants as engineers in initiating change.

The history of the development of the Leeuwin-Naturaliste Region is consistent with Powell’s timeline in that it has experienced a development ethos of resource exploitation from European invasion in 1830 until as recently as the 1980s. The prevailing ethos for this region appears to have remained one of frontier ethics throughout the first 170 years of European occupation, rather than one of sustainable development. Although State and Federal legislation does exist to protect the local environment, specific regional planning strategies were only formulated as recently as the late 1980s. This frontier ideology has prolonged its existence based on the underlying assumption that nature is subordinate, and the myths of superabundance and scientific supremacy. As Sharade-Frechette (1981:32), states, this paradigm view is that, “Science and technology will provide ways of solving the problems of pollution and resource depletion.” This anthropocentric view of the world “that hold(s) humans apart and superior to the natural world” (Weaver & Lawton 2002:342) also contains the belief in progress, “or the idea that the application of science and technology will result in the continuous improvement in the quality of human life.” (Weaver & Lawton 2002:342).

Bolton (1981:4) explains this frontier ideology in terms of the European pride in transforming the perceived Australian wilderness with their new science and technology. The expansion of frontier settlement in Australia was rapid. Within 50 years pastoralists had taken up most of the economically viable land in eastern Australia, and by the 1890s they had also done so in the Northern Territory and
Western Australia. Then following the postwar search for minerals, mining leases covered much of the remaining interior (Bolton 1981:22). In the context of southwestern Australia including the Leeuwin-Naturaliste Region, this frontier expansion has continued through a series of land uses over time as new technologies have enabled the exploitation of the area’s natural resources. From early European agricultural pursuits to the timber industry to the government initiated closer settlement policies, which were fuelled by the need to take advantage of the seemingly abundant natural resources and create a capitalist countryside with farms, towns and infrastructure. More recently the viticultural and tourism activities have also been facilitated by new science and technology including significant improvements in transport.

An earlier prominent “Frontier” theorist is Turner. Although Turner’s Frontier theory is based on the westward expansion of European settlement in North America, his explanation of the movement of pioneers from established centres on the east coast of the USA from the 1890s does have some relevance to understanding early European migration patterns in Australia. Turner argued that the westward movement occurred in a series of waves, with hunters then traders, ranchers, agricultural settlers, intensive farmers and finally town folk and city dwellers. The key element of this theory is that as each wave advanced its predecessor moved westward (Turner cited in Taylor 1972). The Australian case differs from the American in that settlement occurred more swiftly and progressed inland from major ports, rather than as a general westward expansion across the continent. In addition remnants of each land use often remained rather than being pushed outward and towns have been established during rather than at the end of the sequence. It is the
preservation of this diverse range of land uses that perhaps holds the key to a sustainable future for coastal regional Australia.

Derwent Whittlesey’s theory of Sequent Occupance, as cited by James (1971:408) provides another view on the process of land use development. This theory states that each land use activity is related to its predecessor and successor “and each exhibits an individuality expressive of mutations in some elements of its natural and cultural characteristics.” According to James the theory also implies “that with any significant change in the attitudes, objectives or technical skills of the inhabitants of a region, the significance of the resource base must be reappraised.” Although links between successive land uses are identifiable in the Leeuwin-Naturaliste region they have tended to involve new waves of people as in the Turner model rather than an evolution of land use practices within an existing community.

Whilst the idea that each successive land use contained the seeds of its own transformation in the Leeuwin-Naturaliste region is probably debatable, it could be argued that each new land use activity introduced from outside did benefit from activities associated with the previous land use. For example, the early European settlers utilized the pastures and pathways created by the original custodians and the timber cutters cleared the land and installed infrastructure that increased the accessibility of the region for the group settlement schemes. The demise of these closer settlement schemes then left a legacy of cheap land that was taken up by the alternative lifestylers who in turn provided a ready labour force for the viticultural industry. The link between the viticultural industry and the modern tourism industry perhaps provides the strongest evidence of one land use sowing the seeds of the next.
However, this thesis will argue that although interest in cellar door sales may have provided a trigger for the development of mass tourism in the region, it is the combination of attractions based on all the past land uses that provide the unique tourism product that attracts present and future visitors.

**Sustainable Development**

Proponents of sustainable development provide another perspective on coastal regional development, as do those who champion the ethos of sustainable tourism. It has been identified that much coastal tourism development and associated non-urban population growth in Australia including that in the Leeuwin – Naturaliste region during the 1980s and 1990s has been characterised by unsustainable policies and practices. This thesis will suggest that there is a clear need for a more holistic and integrated approach to this growth and development linking the many land use activities to provide a more sustainable future for coastal regional Australia. It will argue that tourism as the most recent land use activity should not be encouraged to take over as the next economic “quick fix” as has occurred with the introduction of various land use activities in the past. A range of land uses should be incorporated into a diverse economic, social and environmentally sustainable future for the present and future generations of regional Australia.

The environmental movement in the 1960s and 1970s guided the concept of sustainability although the term sustainable development was not introduced until the early 1980s and it was not until the release of the Bruntland Report in 1987 that the concept came to the forefront of the mainstream environmental debate (Page 2003:291 & Weaver & Lawton 2002:345). The Bruntland Report published by the
World Commission on the Environment and Development, defines sustainable development as, “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (WCED 1987). Jacobs and Sadler (1990) illustrate sustainable development in a Venn diagram below (Figure 2.2). This model provides a useful framework that can be utilised in policy and planning, highlighting the need to balance socio-cultural, economic and environmental goals of local communities.

The key to the concept of sustainable development is the management of the utilisation of the earth’s resources so that they may be consumed today, but that they must also be available for future use. This new global ethos provides a significant change in attitudes towards resources as Page (2003:291), explains “It [Sustainable Development] questions man’s [sic] historical pursuit of resource depletion in the name of progress and development, with no concern for the future.”

![Figure 2.2 Sustainable Development](Source Jacobs and Sadler 1990).
In the Australian context sustainable development provides a significant departure from past ideas about taming the frontier and the existence of a limitless resource base. It must be noted that the transformation to this new global ethos of sustainable development is far from complete in the Australian situation. Indeed this new approach is part of a broad paradigm shift, linked to the new political economy of globalisation that it is still in the transition phase towards a green paradigm from the previous western environmental paradigm which was part of the scientific paradigm that had dominated western political thinking since the early 19th century (Weaver & Lawton 2002: 342).

The Commonwealth Government in Australia has embraced the concept of sustainable development adopting and refining it to suit Australia’s needs, which has resulted in a new term called Ecologically Sustainable Development (ESD). Following a public consultation period of two years from 1990-1992 the Department of the Environment and Heritage released the National Strategy for Ecologically Sustainable Development in 1992. All three levels of government in Australia endorsed this strategy which defines ESD as ‘using, conserving and enhancing the community’s resources so that ecological processes on which life depends, are maintained, and the total quality of life, now and in the future, can be increased.’ in December 1992 (ESDSTC 1992).

This National ESD Strategy is based on three core principles:

1. To enhance individual and community well-being and welfare by following a path of economic development that safeguards the welfare of future generations
2. To provide for equity within and between generations

3. To protect biological diversity and maintain essential ecological processes and life-support systems.

In addition it incorporates a set of guiding principles that focus on decision making processes, prevention of environmental degradation, recognition of the global dimension of environmental impacts, economic diversification, international competitiveness, flexible policy instruments and community participation (ESDSTC 1992).

The federal government qualifies the addition of the word ecological in front of sustainable development by stating that;

Sustainable Development must be ecologically sustainable. Economic and social progress depends on base ecosystem services (for example oxygen production and carbon dioxide absorption by plants) and a healthy environment. Development also implies an improvement in the quality of life through education, justice, community participation, and recreation. (Department of Environment and Heritage 2004).

There are problematic elements within the definitions of sustainable development, particularly with regard to the concepts of ‘needs’ and ‘quality of life’, which are determined by cultural, communal and individual values (Beder 1993:3). However, it can be argued that the theme of sustainable development is still preferable to the frontier resource exploitation ethic that dominated much of the expansion and
development of land uses in Australia until fairly recent times. Sustainable development offers a positive framework for current and future development. There are those, however, who argue that we are still some distance from applying this new ethic. Collins (1998:99), suggests that the vast majority of so-called sustainable development cannot be genuinely conceived of as sustainable whilst Weaver & Lawton (2002:345) state, “Some critics suggest that the term is an oxymoron, with ‘sustainability’ (with its steady state implications) and ‘development’ (with its growth implications) being mutually exclusive.” Professor Donella Meadows goes even further suggesting, “…there is not an economy in the world that is sustainable. The human world is a long way from meeting the needs of the present, and it is borrowing massively from the future…” (Meadows 1992).

There are also calls for more focus on the preservation of biodiversity, as reduced resilience increases the ecosystem’s vulnerability\(^2\) and there is an urgent need to keep non-renewable loss to a minimum and to maintain sustainable yields that do not exceed natural regenerative capacity (Collins 1998:99, Beder 1993:6 & Hunter 1995:157). This thesis will argue that in addition to ecological biodiversity, sustained through protecting the natural environment, land use variety is also important to guard against the development of agricultural, economic and socio-cultural monocultures which have proved to be vulnerable and unsustainable in the past. This thesis also suggests that there is a need to recognise that whist land use policy

\(^2\) These calls have come from international Environmental Organizations including IUCN (World Conservation Union) UNEP (United Nations Environment Programme) and the WWF (World Wide Fund for Nature) and mainstream Australian environmental groups such as the ACF (Australian Conservation Foundation) Greenpeace-Australia, Wilderness Society and WWF-Australia in addition to numerous academic commentators on sustainable development.
can be formulated at a national level; it is at the local level that sustainable
development is often implemented.

Recognition of the role of local government in sustainable development in Australia
has been implemented through the establishment of the Local Agenda 21 program.
This program has evolved from Australia’s commitment to Agenda 21, the global
action plan for sustainable development that was developed at the United Nations
Conference on Environment and Development in 1992 (also known as the Rio
Summit). Chapter 28 of this mandate recognises the important role of local
government in sustainable development acknowledging that many of the core issues
have their roots in local activities (Cotter & Hannan 1999:11). Local policy makers
and planners have a unique opportunity to embrace the principles of sustainable
development. Through the analysis of past land use practices, they are best placed to
determine what land uses are appropriate for the local environment and how they can
be best encouraged to become sustainable.

The Local Agenda 21 program provides a framework for implementing sustainable
development by building on existing local government strategies and resources to
better integrate environmental, economic and social goals at the local level (Cotter &
Hannan 1999). It must be noted that Local Agenda 21 is still a macro approach to
sustainability in that it is a Commonwealth government initiative. It does aim to
encourage a more bottom up localised approach although participation is voluntary
and some local councils are wary of directives that come from the federal
government believing that they may encroach on their local autonomy within the
Australian political system. A number of local governments in Western Australia
have taken up the challenge of Agenda 21. However, at present neither of the local
governments in the Leeuwin-Naturaliste have developed a Local Agenda 21 plan for
their communities.

Although sustainable development and the development of Local Agenda 21
programs are a positive step for policy makers moving from a long history of
resource exploitation to an essential ethos of conservation, this thesis will argue that
sustainable development needs to move beyond legislative changes and the concept
of targets for such outcomes as waste minimisation and a reduction in the
consumption of fossil fuels, to a more inclusive philosophy of human
interconnectedness with the landscape. As Holden (2003) suggests, we need to
move beyond the anthropocentric view of development based on a “…rationalised,
scientific and externalised view of nature, to a more inclusive and spiritual one.”
(Holden 2003:105). Learning from this country’s valuable Aboriginal heritage
should be a first step in this process.

**Indigenous Land Ethics**

Whilst a comprehensive discussion of Indigenous land ethics is beyond the scope of
this thesis, the process of re-valuing Indigenous ecological knowledge by white
Australia needs to continue to grow. The non-Aboriginal approach to the study of
traditional knowledge is known as ethno-biology or ethno-ecology. According to
Hortsman, Cooke and Smith (2001:1) “Australia has a rich and diverse ethno-
ecology but its study is a minor or non existent part of the work of mainstream
scientific and land management agencies.” Non-Indigenous Australia has much to

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3 For a discussion on sustainable development targets see Yencken and Wilkinson (2000). chapter 11.
learn from Indigenous ecological knowledge that according to Rose (2001:6) “…is detailed, localised and well grounded in empirical observations. In addition, Indigenous knowledge is embedded within a system of ethics that is oriented toward long term productivity.”

Although the sharing of knowledge and the implementation of co-management practices may assist with the development of more sustainable land use practices, caution must also be expressed about the possibility for the exploitation of Indigenous cultural and intellectual property rights. Schnierer (cited in Yencken & Wilkinson 2000:354) point out that care must be taken to ensure equitable sharing of the benefits from the application of Indigenous knowledge and that codes of research practice which protect the intellectual property rights of Indigenous peoples need to be in place to protect them from yet further exploitation.

According to Frawley (1994:58), Aboriginal concepts of land, resources and the human–environment relationship have re-emerged as a component of late 20th century visions. For Indigenous Australians nature and culture are inextricably linked in a cosmology known as the dreaming. Goode (2003:10) advises, “…the dreaming is an ideological and philosophical basis for a close emotional connection between Aborigines and their land”. Thus land use is established from a religious understanding of the world and the position of the people in it. Powell (1975:18) suggests that “for Australia’s Aboriginal cultures, religion provided the central coordinating theme which gave meaning to their lives, and the pivot of that religion was man’s [sic] intimate, reciprocal connection with the land.” According to Dodson

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“Everything about Aboriginal Society is inextricably interwoven and connected to the land. Culture is the land…” (Michael Dodson 1995 cited in Yencken & Wilkinson 2000:352). “Not to eat the food of the land is a refusal to connect to the land and to assimilate, and be assimilated by, its spirit.” (Mathews cited in Yencken & Wilkinson 2000:357). Unfortunately Indigenous Australians’ detailed knowledge of the country’s natural resources was by and large ignored as extraneous to early European life-styles and was usually only utilized by early European explorers searching for elusive waterholes and river systems (Heathcote 1972:79).

Although some specific Aboriginal knowledge has been lost due to forced disconnection with the land by European authorities, the general resource management techniques and philosophies developed by the first Australians can provide important models for our future. According to Bowmer (1999:48), “In searching for the future that we would like and which is achievable, it seems that we must first revisit the past, and reconsider the landscape as a symbol of our identity.” Thus perhaps the most important lesson that we can learn from Aboriginal Australia is that natural resource management and sustainable development needs to integrate the biophysical and the social, including our beliefs about land and our expectations (Cullen 1999:24). As Cullen (1999:24) suggests, “Ignorance will always be a problem with natural resource management. We are improving our knowledge base, but only through learning from the mistakes of the past.” This thesis will argue that we can no longer afford this method of learning as some of the mistakes of the past have been too big. We need to become educated which includes learning from Aboriginal people and to be proactive rather than reactive to the new global pressures that are impacting on our local environments.
Of course there are also commentators who disagree with the proposition that the idea of sustainable development is not new and that the concept has been practiced by Indigenous peoples for thousands of years. Leiper (2004:293) quotes the case of Ridley (1997) who has taken exception to the views expounded by authors such as McGregor (1993), Knutson and Suzuki (1992) and others that sustainability can be learned from Indigenous cultures. According to Leiper (2004:293) Ridley suggests that this notion is “…mythical, ignorant and misleading.” Leiper himself appears to be of a similar view stating:

The spiritual basis of environmental sustainability attributed to many Indigenous cultures in recent years has no basis in the distant past; it seems to have been invented in recent years when environmental issues emerged. Indigenous cultures deserve respect but that does not mean that everything attributed to them should be automatically accepted. (Leiper 2004:393)

**Sustainable Tourism Development**

Tourism theorists have also embraced the concept of sustainable development. The theme of sustainable tourism (ST) is now widespread in the tourism literature with many authors commenting on the need for an integrated holistic approach to sustainable tourism that recognises existing land uses and the role of community involvement. According to Hall (2003:32), “A sustainable approach to tourism is concerned with the appropriate development of the economic, social and physical resources of a region in a manner which conserves the social and physical
environment and which promotes the long term goals of the community.” The World Tourism Organisation (1993) defines sustainable tourism as “Tourism that meets the needs of present tourists and host regions while protecting and enhancing opportunity for the future.”

Muller (1994) proposes a magic pentagon for balanced development. The components include economic health, subjective well being of the locals, unspoilt nature, healthy culture, optimum satisfaction of guest requirements, with no one element dominating (Figure 2.3). Whilst there are identifiable advantages for the tourism industry to adopt sustainable practices such as taking advantage of the growth of the new traveller market and the profitability of sustainability, some of the difficulties in achieving sustainable tourism development that have been identified include, too many over abstract theories, boom factors, a hedonistic philosophy, and the need for a change of paradigm (Muller 1994). Some researchers have actively criticised the Australian tourism industry’s pursuit of sustainable tourism suggesting that some mass tourism operators are adopting ‘green practices’ that are profitable such as recycling but evading more complex issues such as social equity and environmental degradation (Weaver & Lawton 2002:358). McKercher (1993:131) warns that, “Rather than acting as a catalyst for change, sustainability may serve to entrench and legitimise extant policies and actions, thus exacerbating rather than solving conservation/development conflicts.”

Hunter (1995:155) also identifies a need for a change of paradigm claiming that current theory is too tourism centric, which is creating tension between sustainable

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5 For further definitions of sustainable tourism see Ritchie & Crouch (2003:36)
development and sustainable tourism development. In addition Hunter (1995:161), asserts the need for inter sectorial, holistic and integrated land use planning as he states, “tourism irrespective of the scale of analysis, cannot exist in isolation from regional, national and global resource concerns.” (Hunter 1995:157). Tourism is in competition with other sectors for renewable and non-renewable resources, and planning for tourism should not proceed in isolation from other sectors. “…the destination area cannot afford to regard tourism as encompassing all of its future development requirements.” (Hunter 1995:161).

Figure 2.3 Tourism’s Magic Pentagon
(Source: Muller 1994:133)

Hunter (1995:157) suggests that sustainable tourism development may focus on specific resource utilisation issues to the apparent exclusion of others which are still pertinent to tourism and of critical concern to the general goals of Sustainable
development and that tourism’s impact on all resources should be considered. “Other than a, perhaps naive, belief in the ‘benefits’ of spreading tourism activity throughout wider areas, there is an almost total absence in the tourism literature of a discussion of policies or mechanisms designed to prevent the uncompensated geographical displacement of environmental (including social) problems.” (Hunter 1995:159). Further he suggests that localised issues need to be addressed within a wider sub-national context to ensure that geographical equity is achieved. Finally he states that a sustainable tourism strategy could be used to encourage a dialogue between all parties with an interest in the general future of an area and the role of tourism in that area (Hunter 1995:169-162).

Hunter (1997) again comments on sustainable tourism development suggesting that it should be an adaptive paradigm, which legitimises a variety of approaches. Sustainable tourism development should also facilitate the most desirable relationship between actions of human societies and the status of the natural world (Hunter 1997: 151-852). It should also minimise the loss of non-renewable resources and restrict activities to sustainable yield whilst encouraging the protection of a destination area’s environmental resource base for future development (Hunter 1997:850-854). He acknowledges that there will be impacts, “in reality, it is impossible to imagine any kind of tourism activity being developed and then operating without in some way reducing the quantity and/or quality of natural resources somewhere.” (Hunter 1997:858). He defines equity in tourism development as the avoidance of development which maintains, creates or widens spatial or temporal differences in human well-being. (Hunter 1997:851). Hunter states that there is a lack of clarity and detail, and a need for flexibility in
understanding human/environment interactions, as the dominant view is growth oriented which weakens sustainability. He claims that,

“...few authors consistently and explicitly consider both the potential role of other sectors and activities in also contributing to sustainable development (a truly holistic approach), and question the assumption that tourism always has a “right” to develop in some form.” (Hunter 1997:858-859).

Collins (1998:104) asserts the need to integrate sustainable tourism, as development in this sector does not occur in isolation from other sectors and other environments, “what may start as a designated sustainable oriented destination can, through a demonstration effect, trigger the exploitation of other natural and cultural capital (beyond the designated site) as tourism resources.” Collins (1998:104) notes that tourism development is not spatially isolated from other land use activities, which can create three main problems in implementing the aims and objectives of sustainable tourism. Firstly there is often the need for incentives and enforcements such as taxes, subsidies, entry quotas or zoning to counter the demonstration effects outside the designated sustainable oriented destination. Secondly there is the upstream / downstream effect where by nearby settlements or activities may impact on the destination’s environmental quality. Finally there is the obstacle of managing excess demand and peak times (Collins 1998:105). Collins states that there is a need for an extra parochial perspective as tourism is a phenomenon typically hungry for finite land resources. According to Collins (1998:106),
…focussing on sustainable agriculture, small village enterprises, and appropriate industrial development on primarily brownfield sites, may well help avoid the accumulation of considerable, but eventually redundant, tourism-oriented capital, and provide “safer” returns as a long term option in economic, sociocultural, and environmental terms.

Pigram (1990) also comments on the trade-off between mutually exclusive alternatives, which may result in irreversibilities. He suggests that there is a limited time scale in sustainable tourism planning, “Typically, development decisions do not reflect future social costs and benefits in favour of more pressing current demands.” (Pigram 1990:3). Further he states, that without coercive measures, developers tend to ignore consideration of the limited resource base (Pigram 1990:4). Pigram also suggests, “…the need for a coincidence between the objectives and values of the public and private sector makes the implementation process much more complex.” (Pigram 1990:5). He states that in order to bridge the implementation gap, “policy must first be perceived by policy makers as conceptually robust, defensible and amenable to implementation, Secondly the various interests involved in the implementation process must be convinced that the net outcome will be positive, or at least benign according to their criteria, in the longer term. Finally, the target groups - the communities affected - must be receptive to change and see the policy as a constructive response to their priorities.” (Pigram 1990:5). Pigram (1990:6) outlines the importance of public participation in policy stating that it makes good sense to consult the communities affected and enact participatory planning as pressure groups can become an effective force in assisting in policy implementation. Of course there are dangers in this approach Pigram addresses this by calling for
more education and information, which will create an aware community without unduly biasing attitudes (Pigram 1990:7).

Wight (1998) provides an alternative view on sustainable tourism development, suggesting that development does not necessarily have to equate with growth. She suggests that economic development can mean the adding of value to existing products without necessarily producing new ones. (Wight 1998:2). Wight also states that sustainable tourism development is only part of sustainable development and that “…sustainable tourism has become a form of shorthand for tourism which attempts to adhere to sustainable development principles…” (Wight 1998:3).

Leiper (2004:394) agrees that the development component of sustainable development should not just relate to economic growth stating that, “The D in SDT cannot be merely economic growth, and not its social justice variations. Surely it should have a component of socioeconomic transformation, when tourists and tourism industries discover and apply new principles.” Leiper acknowledges that SDT has become a popular idea but suggests that there are many defects in the conventional arguments for it. He identifies these as a contradiction with empirical evidence, the underlying assumption that destinations attract tourists which disregards push factors and finally that they ignore time lags and new generations of tourists. Leiper recommends that that, “The better argument in favour of SDT is not that it helps tourism, for that line merely reinforces erroneous theories about what causes tourism. The better argument in favour of SDT is that it conserves the biosphere.” (Leiper 2004:400). According to Leiper (2004:401),
SDT’s best justification is that it conserves life, in all its essential diversity, conserving the complex and often fragile ecosystems of the biosphere. Benefits for tourism should be seen as a by-product of that argument, not as its basis. Once that is recognised, tourism industry associations would endorse pro-environmental policies in general, not merely those which help certain forms of tourism.

Hunter (2002:4) also calls for a broader approach to the implementation of Sustainable Tourism stating that even though there have been developments in the subject area of sustainable development since the introduction of the concept in the early 1990s the theoretical aspects have not been discussed enough. He suggests that sustainable tourism still needs to be interpreted and implemented in the broader context of sustainable development rather than a parochial sectorial perspective. Thus tourism development planning needs to be integrated with development plans for other sectors for a more holistic approach to land use activities under the wider sustainable development umbrella (Hunter 2002:6).

Innovative thinking in the new millennium is suggesting that tourism scholarship now needs to move even further beyond the argument of sustainability towards an understanding of the role of ethics. (Macbeth 2005). This call for a new position draws on work from Duffy (2002), Hallen (2003), Hultsman (1995) and Holden (2003) who all provide a discussion on the importance and relevance of the inclusion of ethics into the discourse of tourism development. Macbeth (2005) argues that “an ethics platform, is needed so that we interrogate the morality of the positions taken in tourism policy, planning, development and management.” He suggests that,
Dominant paradigms in tourism development and theory do not acknowledge ethics and values because they are still imbued with the myth of objectivity that is part of the positivistic scientific paradigm. Further, even sustainable tourism is still dominated by a ‘frontier’ ethic that seeks to extend the boundaries of tourism development into uncharted territories.

**Conclusion**

Empirical research into the historical geography of regional Australia and particularly coastal regional Australia has been limited and infrequent with few studies incorporating discussions of the relatively new concept of sustainable development. It is therefore expected that this thesis will make an important and unique contribution to the existing literature by providing a comprehensive longitudinal regional analysis of past land uses and their contribution to present and future land use management issues in the context of sustainable development. In addition this thesis will provide a foundation for future investigations and revive interest in the importance of historical geography as a framework for understanding how past human activities on the landscape contribute to the present environmental, social and economic pressures.

The following chapter describes the complex physical environment of this region, which has to a substantial degree been an imperative factor in determining how different groups of people through time have assessed and utilised the region’s natural resources. The level of understanding of the physical environment by each
group has in turn influenced the sustainability of their land use practices. It will also present a brief overview of pre European land use to provide some appreciation of the landscape that the first Europeans encountered. Despite the common perception amongst the early settlers that they were encountering a ‘terra nullius’ or ‘wilderness’ environment, the landscape that they were attempting to ‘civilise’ had in fact been managed by Nyungar people for many thousands of years prior to their arrival.
Chapter 3 Physical Setting and Indigenous Occupancy

Introduction

The complex physical environment of this region has to a considerable extent been a significant factor in shaping how different waves of people have assessed and utilised the region’s natural resources through time. The level of understanding of the physical environment by each group has in turn influenced the sustainability of their land use practices as they have learned to adapt to or indeed to modify the physical environment to suit their needs. Thus the primary aim of this chapter is to provide a comprehensive description of the physical landscape including its geology, physiography, climate, drainage, soils and vegetation to develop an appreciation of how various groups at different times have reacted to and reshaped the local environment.

The physical geography of the Leeuwin-Naturaliste Region is unique, like no place other on earth. As part of the southwest corner of the continent its isolation from other parts of Australia means that it also contains many plant and animal species that are endemic to this area. Seddon (1972:xiv) describes ‘the south-west of Western Australia as an island, with sea to the south and west [and] desert to the north and east’. The Leeuwin-Naturaliste Region contains the most westerly karri (Eucalyptus diversicolor) forest at Boranup where the world’s third largest tree grows in limestone based soils rather than its usual habitat of deep red clay loams further east. The region is also home to the Tuart Forest National Park that protects the largest remaining pure forest of tuart (Eucalyptus gomphocephala) in the world. The national park also hosts the largest remaining wild population of the endangered
western ringtail possum, whilst a successful baiting program in the Leeuwin-Naturaliste National Park has been responsible for a comeback of the Quendas or southern brown bandicoots and Wambenger or brush tailed phascogale’s which were also highly endangered (Micallef et al 2001:24) (Plate 3.1). The off shore waters of the Leeuwin-Naturaliste region also provide habitats for 10 species of fish that are endemic to the region (Thomson-Dans et al 2002:2).

The physical geography of the Leeuwin-Naturaliste Region can be divided into five distinct physiographic areas that have developed over various underlying geological features (Tille & Latanzke 1990:8). These physiographic regions are the Swan Coastal Plain in the north, the Southern Coastal Plain in the south, the Leeuwin-Naturaliste Ridge which runs along the west coast, and the Margaret River and Blackwood Plateaus that cover the inland areas between the coastal plains and the ridge (Figure 3.1). Each of these areas contains numerous differences in topography, drainage, soils, vegetation systems and subtle differences in climate which the various waves of migrants to the Leeuwin-Naturaliste Region have had to learn to understand. In addition to the five land based physiographic regions, the Leeuwin-Naturaliste also contains three distinct coastal zones, Geographe Bay, Leeuwin-Naturaliste Ridge and Flinders Bay.

The early Europeans were not the first to attempt to control the physical environment of the Leeuwin – Naturaliste Region; the Pibleman and Wardandi Nyungar people had systematically managed the region’s resources for at least 60 000 years. Although their land use system did have some far reaching impacts on the landscape,
Plate 3.1 Plants and Animals of the Leeuwin-Naturaliste Region

(Source:www.naturebase.wa.gov.au)
Figure 3.1 Physiographic Regions of the Leeuwin-Naturaliste Region

(source: Tille & Latanzke 1990:8)
predominantly through their fire regime, which is responsible for the encouragement
of the proliferation of fire dependant eucalypts, it could be argued that the local
ecosystem was more ecologically stable than after the more recent European attempts
at utilising the natural resources of the region. It was this fire regime that also
created the park like environment on the coastal plains that was so appealing to the
first European arrivals (Boutland 1988:149-162).

It is no coincidence that when Europeans arrived in the second quarter of the 19th
century they chose to settle on the undulating grasslands of the coastal plains, which
were also the best hunting grounds for the local Nyungar people, whilst avoiding the
hostile Leeuwin - Naturaliste Ridge and the heavily wooded plateaus. According to
Cameron (1981) one of the major reasons that Europeans decided to settle and
establish an agricultural colony in the southwest was its latitudinal location. It was
believed that, as other countries of similar latitude were agriculturally productive that
this new land would also prove to be suitable for European agricultural systems.
Despite this seemingly straightforward assumption the new settlers were soon to
realise that the climate along with the other elements of this foreign physical
environment incorporated many peculiarities with which they would have to come to
terms.

This chapter will provide a brief outline of the physical geography of the Leeuwin-
Naturaliste Region, as it is important to have some understanding of the natural
environment in order to make informed judgements about what are appropriate land
use activities for that environment. In the case of the Leeuwin-Naturaliste Region
like the rest of the Australian continent, the natural environment already contained a
cultural landscape at the time of the arrival of the first Europeans thus it is also important to provide some discussion in this chapter about the land use activities of the original custodians of the land in this region.

**Climate**

The climate of the Leeuwin - Naturaliste Region is classified as warm temperate. Essentially it has two main seasons a hot dry summer and a cool wet winter. The climate is influenced by the series of weather systems that travel east across this latitude, with high-pressure cells dominating the summer pattern and low-pressure cells dominating the winter. The large atmospheric highs that pass across the south western corner of the Australian continent, including the Leeuwin-Naturaliste Region, during the summer months comprise a mass of falling air that rotates in an anti clockwise direction as it spreads outward along the ground. Initially they bring winds from the south west which are cool from the ocean but not usually rain bearing, then the winds move easterly and later north easterly which are much warmer and very dry as they are sweeping in from the interior. Although there are many variations to this pattern the general cycle of winds takes approximately six to seven days. It must also be noted that the hot dry summer winds are often moderated in the afternoon by what is commonly referred to as a sea breeze.\(^6\) This cool afternoon wind is created in response to the overheating of the land (Seddon 1972:20). During the winter the Leeuwin-Naturaliste Region falls under the influence of the westerly winds carried through by the dominant low-pressure cells. This westerly air stream picks up moisture from its travels across the ocean, which it

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\(^6\) This is breeze is also referred to as the ‘Fremantle Doctor’ in Western Australia (Seddon 1972:20)
deposits on the land as rain mainly during the months of May to August (Seddon 1972:20).

The coastal location of the Leeuwin-Naturaliste Region restrains and moderates to some extent the range of temperatures associated with the dominant pressure cells at various times of the year. The warm sea currents in the north and west of the region tend to moderate the colder winter temperatures whilst areas south of Cape Naturaliste are generally cooler due to the influence of the Southern Ocean that bring cooler currents up from Antarctic waters. Mean summer temperatures in this region are 28°C whilst in the winter the average maximum is 16°C with a mean minimum of 8°C (State Planning Commission 1989:7-8) (Figure 3.2). The average annual rainfall varies from 1100mm in the west, with rainfall decreasing to 900mm in the far north, due to aspect, with most of the rainfall occurring from May to September (State Planning Commission 1988:87), (Figure 3.3 & 3.4). The higher rainfall in the west is partly attributable to the orographic or rain shadow affect of the Leeuwin-Naturaliste ridge, which results in more rain falling on the windward side of the raised landform and less rain falling on the more sheltered side.

It is probable that in pre European times Aboriginal people would have moved north during the winter months to escape the heavier rains and lower temperatures, returning south during the early summer when the fresh spring grasses would have attracted large numbers of animals to hunt (Green 1984). The first Europeans who were not a mobile population like the original custodians of the land had to learn to adapt to all the seasons in the place they chose to settle. Firstly they would have had to adjust to a reversal of seasons from the northern hemisphere, and then learn to
Figure 3.2 Temperature in the Leeuwin-Naturaliste Region.
(Source: Australian Bureau of Meteorology).

Figure 3.3 Rainfall in the Leeuwin-Naturaliste Region.
(Source: Australian Bureau of Meteorology).
Figure 3.4 Rainfall distribution in the Leeuwin-Naturaliste Region

adapt to long, hot, dry summers, which would have required them to undertake considerable modification to their imported European farming techniques and systems. The early European settlers were also to learn that the higher rainfall experienced in the south of the region did not necessarily correlate with the most fertile soils and in fact the more productive land was in the slightly lower rainfall areas of the north of the region (figure 3.4).

The weather also significantly impacted on communication systems to and within the region during the earliest years of European occupation. The strong prevailing winds affected the availability of shipping, especially at Augusta where the exposed anchorage made it impossible to transfer cargo during the stormy winter months. In addition the dry dusty soils in the summer and the mud in the winter made travel by carriage nearly impossible for most of the year before the formation of paved roads. Farming throughout the region remained at best a marginal occupation in the early years of settlement, and continued to struggle well into the 20th century. However, nearly 150 years later, following some scientific research (Gladstones 1965), the region’s climate was found to be extremely suitable for the production of high quality wine grapes, which led to the introduction of arguably the most successful land use activity of viticulture. The pleasant summer climate is also recognised as a significant factor in the Leeuwin-Naturaliste region’s growing popularity as a tourist destination.

Geology

The ancient rocks that underlie the landscape of the Leeuwin-Naturaliste Region are part of the Yilgarn Craton that was formed between approximately 3,700 and 2,400
million years ago by the convergence of some smaller pieces of the earth’s crust. Over the millennia there were several more movements, collisions, separations, mountain formations, fault activities, volcanic eruptions, lava flows and glaciers that combined to eventually create the continent of Australia of which the Leeuwin-Naturaliste region occupies the extreme south west corner (Copp 2000:12). Since the separation of Australia from Gondwana around 135 million years ago the coastal areas of the southwest have been subject to periodic changes in sea level with the sea rising up to 300 metres higher than it is today. This means that the Leeuwin-Naturaliste region would have spent considerable time under water, as the topography of this area is less than 150 metres above the present sea level. During the past two million years the polar ice caps contracted and expanded more frequently with the rise and fall of the sea level creating the spectacular limestone cliffs that form the western edge of the Leeuwin-Naturaliste Region (Copp 2000:13-14).

The Leeuwin-Naturaliste Region encompasses four major underlying geological features. These include the Perth Basin, Leeuwin Block, Vasse Shelf and Bunbury Trough (Figure 3.5). These geological features are separated by three concealed faults, the Dunsborough Fault, the Wiring Fault and the Busselton Fault (State Planning Commission 1988 & 1999). The Leeuwin Block contains granite-gneiss and granulite rocks. In the west of the block these metamorphic rocks have largely been covered by Quaternary limestone. It is also in this western area that the magnificent limestone caves have been formed. Some of the granite rocks have also remained exposed at the coast and can be viewed at some of the smaller capes where
Figure 3.5 Geology of the Leeuwin-Naturaliste Region

they form spectacular tourist attractions such as Sugarloaf Rock. The Dunsborough Fault separates the Leeuwin Block from the Perth Basin to the East. The Perth Basin consists of consecutive bands of fluvial and marine sediments, which range in age from Permian to cretaceous, with laterite surface sediments (State Planning Commission 1988:6). The Vasse Shelf is primarily sedimentary up to 3000m thick and lies between the Dunsborough Fault and the Busselton-Schroeder Fault. The Bunbury Trough is also sedimentary up to 8000m deep and is situated between the Busselton-Schroeder Fault and the Darling escarpment.

There has been a consistent though small-scale history of mineral exploration in the Leeuwin-Naturaliste Region. Gold prospecting was carried out in the Boodjidup Brook area south of Margaret River in the 1890s and again in the 1930s. There are known coal deposits in the Vasse River and there was interest in the commercial extraction of iron ore at Scott River in the 1960s. Permission was granted for a trial shipment of five hundred tones of iron ore to Japan; however, discoveries of vast deposits in the northwest at the same time shifted the focus of the mining activities away from the Leeuwin – Naturaliste Region (Cresswell 1988:300). The extraction of mineral sands at Scott River near Augusta more recently has proved to be controversial land use activity in the region. This is not only due to the perceived environmental damage at the mine site, but also because of the need for large trucks and new roads to traverse the region to cart the sands to port in Bunbury.

Physiography

The physical geography of the Leeuwin-Naturaliste Region can be divided into five distinct physiographic regions. These areas include the Swan Coastal Plain, the
Southern Coastal Plain, the Leeuwin-Naturaliste Ridge, the Margaret River Plateau and the Blackwood Plateau (Figures 3.6, 3.7, 3.8). In addition to the five land based physiographic regions, the Leeuwin-Naturaliste also contains three distinct coastal zones, Geographe Bay in the north, the Leeuwin-Naturaliste Ridge along the west coast and Flinders Bay in the south. These coastal zones have provided important resources for various land users. These range from sealers and whalers in the 19th Century, communication links via shipping, fisher people throughout time, surfing for the alternative lifestylers and more recently tourism, including activities such as dive tourism, sea kayaking, sailing, recreational fishing and whale watching.

Swan Coastal Plain

The Leeuwin-Naturaliste Region contains the most southern portion of the extensive Swan Coastal Plain that forms a 15km wide strip along the coast from Geraldton in the north to Dunsborough in the south. This low lying area that provided productive hunting grounds for pre European Aboriginal people also became the favoured location for European agriculture. This area is relatively flat, only 30m to 50m above sea level, with gently undulating dunes close to the coast. It has been formed on Quaternary marine, alluvial and Aeolian sediments of the Perth Basin and is traversed by numerous north flowing creeks and rivers. In addition the coastal plain contains a large network of narrow linear lagoons in the dune swales between Dunsborough and Busselton and extensive wide lagoons / wetlands between Busselton and Capel (State Planning Commission 1987:3).
Figure 3.6 Topography of the Leeuwin-Naturaliste Region

(Source State Planning Commission 1987 & 1988)
Figure 3.7 Drainage in the Leeuwin-Naturaliste Region

(Source State Planning Commission 1987 & 1988)
Figure 3.8 Soils of the Leeuwin-Naturaliste Region

(Source Tille & Lantzke 1988)
This region also contains an extensive network of artificial drains, which have been constructed to relieve the impacts of regular flooding on the coastal plain. The soils of the Swan Coastal plain are predominantly swampy alluvial soils with calcareous sands making up the coastal dunes near the sea. Soils of the lowland flats found in this area are comprised of sandy surfaced grey brown soils and mottled clay subsoils with Busselton soils displacing gradational profiles and Abba duplex profiles. There are also swampy soils on the coastal flats, which are subject to water logging, hence the need for extensive draining to make the land more agriculturally productive. The profiles of these soils vary from dark sands, mixed estuarine deposits and clays to shallow loams over bog iron ore.

As the Swan Coastal Plain was found to be suitable for agriculture, it has been largely cleared of its native vegetation, although remnants of the Pinjarra Plain and Spearwood vegetation systems can be identified. The open forest of Marri (*Eucalyptus calophylla*) and Jarrah (*Eucalyptus marginata*), with Blackbutt (*Eucalyptus patens*), flooded gum (*Eucalyptus rudis*), paperbark (*Melaleuca cuticularis*), Christmas trees (*Nuytsia floribunda*) and Banksia (*Banksia grandis*) along the rivers and in swampy areas make up the Pinjarra system. The Spearwood system is characterised by open Tuart (*Eucalyptus gomphocephala*) woodland with a peppermint (*Agonis linearifolia*), understorey along the coastal flats, with samphire shrubs on the flats along the estuaries and paperbarks in the swamps behind the dunes (Tille and Latanzke 1990, Seddon 1972, State Planning Commission 1988, State Planning Commission 1989, Tille and Latanzke 1988, Smith 1973). The 2,049-hectare Tuart Forest National Park that is located in the north west of the Leeuwin-Naturaliste Region on the Swan Coastal plain protects the largest remaining pure
forest of tuart in the world, and provides nature based tourism and recreation opportunities from picnicking to wildlife spotting.

The open nature of the vegetation in this area made it easier for Europeans to clear and thus more attractive for agricultural settlement than the heavily wooded forests of the neighbouring plateaus. In recent times there has been increased awareness promoted by the national landcare movement of the impact of past clearing practices on the Swan Coastal Plain. The Shire of Busselton has implemented the Busselton Biodiversity Incentive Strategy which offers an integrated package of planning and financial incentives to private landholders in exchange for the protection and management of priority biodiversity values on their property. The Busselton shire contains more rare and priority flora than any other municipality in Western Australia with 13 species endemic to the shire (www.busselton.wa.gov.au).

The Southern Coastal Plain

The Southern Coastal Plain in the south of the Leeuwin-Naturaliste region extends east from the Blackwood river and up to 15km inland from the coast. Like the Swan Coastal Plain it was a summer hunting ground for pre European Aboriginal people. Augusta on the Southern Coastal Plain was also the site of the first attempt at settlement by the first Europeans. This area is a relatively flat, low lying, poorly drained area that is formed on Quaternary sediments over the Perth basin, which ranges in age from Permian to Cretaceous. It also contains a significant dunal ridge along the southern Flinders Bay coast. This coastal dune area is now a popular location for recreational 4WD enthusiasts. The soils of the Southern Coastal Plain are largely infertile with the major soil types including the sands of the wet lowlands.
that occur on the poorly drained flats, and the bleached and calcareous sands of the
dunes. The bleached sands of the low dunes are deep bleached siliceous sands
which are usually pale white with a grey stained organic topsoil occur on the dunes
and small rises whilst Calcareous sands of the dunes occur on the well drained flats
and dunes of this area. These soils range from deep pale calcareous sands to black
shallow calcareous sands overlying limestone rubble (Tille and Latanzke 1990:8,
the Southern Coastal plain were major contributing factors to the decision taken by
the earliest European settlers to abandon this area and move their agricultural
activities north to lands on the Swan Coastal Plain near the present town of
Busselton.

Like the Swan Coastal Plain much of the native vegetation on the Southern Coastal
Plain has been cleared for agriculture. The remnant vegetation inland incorporates
the Scott River vegetation system, which consists of low open woodlands of
Paperbark, Jarrah and Banksia with an understorey of small shrubs and sedges whilst
the fragile coastal dunes support only shrub vegetation. The Southern Coastal Plain
also contains the Hardy Inlet estuarine system and two saline lagoons, Deadwater
and Salt Lake that open into the eastern side of the entrance channel to the Hardy
Inlet. This inland waterway provided a key fishing resource for the original
custodians of this land, the Pibleman people. It continues to be a popular location for
recreational fishers in addition to providing safe anchorage for the commercial
fishing fleet that operates out of Augusta.
Leeuwin - Naturaliste Ridge

The Leeuwin - Naturaliste Ridge physiographic area runs 95km along the west coast of the Leeuwin-Naturaliste Region forming a narrow strip 0.2km to 6km in width from Cape Naturaliste in the north to Cape Leeuwin in the south. It incorporates perhaps the most uninviting physical environment in this region due to its exposed location and lack of water but also some of the most spectacular scenery for visitors. Along the western edge, the ridge forms a rugged coastline of vertical limestone cliffs with small asymmetrical sandy bays in between rocky granite headlands (State Planning Commission 1987 & 1988). This coast is exposed to westerly storms and the heavy open ocean swells generated by the roaring forties. It is this exposed location in combination with the near shore reef system that creates the ideal location for the production of the large waves that have been attracting surfers to the region since the late 1960s. The underlying geology of coastal limestone found on the ridge also provides another popular attraction for visitors, the caves. A number of these caves have been converted for mass tourist purposes such as Ngili and Giants caves which have installed lighting and walkways whilst others have been left in their natural state for the more adventure orientated visitors to explore.

There are numerous minor watercourses that traverse westerly through the Leeuwin-Naturaliste Ridge on their way to the sea. Most of these are just brooks or small streams with the only major natural waterway being the Margaret River that has carved a gorge through the ridge to exit at the coast near Prevelly. There is a major sand bar across the mouth of the Margaret River that only opens during the winter, thus this waterway is not accessible from the sea for boats. The calm waters of the river do however provide an excellent location for other water activities such as
kayaking and canoeing and there is a tour company that offers popular bush tucker
tours up the river from the mouth at Prevelly.

The soils of the Leeuwin-Naturaliste Ridge are predominantly Calcareous Sands of
the Dunes, which are also found on the Coastal Plains and both the Eastern, and
Western Spearwood Sands of the Ridge. The western slope soils are yellow brown
siliceous sands whilst the eastern slopes soils are yellow brown to reddish sands.
Neither of these soils are particularly suitable for agriculture due to wind erosion and
low moisture retention (State Planning Commission 1987:12).

The soils do however support a variety of native vegetation types that are classified
as part of the complex Boranup Vegetation system. This vegetation system includes
open heath on the exposed western slopes, jarrah/marri forest on the eastern slopes in
the lee of the high ground and the most westerly forest of the tall Karri trees at
Boranup. The vegetation in this area changes primarily in relation to its exposure to
prevailing winds. It moves from heath land to closed scrub to a low open forest of
Jarrah, Banksia and peppermint to Karri forest with decreased exposure. Marri and
flooded gum are also common in this system on the richer brown soils in the lee of
the Naturaliste downs. (Tille and Latanzke 1990:8, Seddon 1972:30-35, State
Planning Commission 1988, State Planning Commission 1989, Tille and Latanzke

The Boranup Karri Forest that is located in the south of the Leeuwin-Naturalist
Ridge is unique, in that here the tall Karri (the third tallest tree in the world) grows
on limestone based soils rather than it usual habitat of deep red clay loams. It is also
separated from the main body of the karri belt, more than 100 kilometres to the east, by the grey infertile sands and lower rainfall of the Donnybrook Sunklands. Extensive extraction of the Karri resource from this location occurred throughout the late 19th century, thus the Karri trees that stand in the Boranup Forest today are 100-year-old regrowth. The Boranup forest is now protected as part of the Leeuwin-Naturaliste National Park estate and in the late 1990s the true ecological value of this unique tree species was recognised by government policy following the formation of the Regional Forests Agreement (RFA). Old growth logging became a major political issue to such an extent that it spawned a new political party, Liberals for Forests, and following the 2001 state election the new Gallop Labor state government announced that the logging of old growth karri forest in the southwest would stop following the expiration of relevant contracts in 2003 (Gallop 2002:5).

The first Europeans largely avoided the Leeuwin-Naturaliste Ridge due to its exposed location and lack of safe anchorage. A small settlement was established at Hamelin Bay in the south of this region in the late 1800s to service the timber jetty that was the preferred landing during the winter months when Augusta was exposed to southerly storms. This coastal settlement was abandoned in the early 1900s following the decline in the timber industry. During the 1960s several small nodal holiday settlements were established along the ridge at Yallingup, Gracetown and Prevelly. Most of the remainder of the area is now protected as part of the Leeuwin-Naturaliste National Park. The National Park is a popular tourist destination in the region with attractions such as spectacular underground caves and the cape-to-cape walk trail from Cape Naturaliste to Cape Leeuwin. The Leeuwin-Naturaliste Ridge also provides the gateway to the world famous Margaret River Surf Breaks and
provides the location for several major international, national and local surfing carnivals.

**Margaret River Plateau**

Inland from the Leeuwin-Naturaliste Ridge lies the Margaret River Plateau. This is home to the Leeuwin-Naturaliste Region’s world famous wine-growing district. The Margaret River Plateau is an undulating plateau, ranging from 5km to 15km wide, extending from Dunsborough in the north to Augusta in the south. It contains a large number of valley systems, which have proven to be the suitable sites for viticulture. The topography is typically 60 m above sea level with gentle slopes rising up to 120m above sea level. This plateau has formed on the laterised granitic and gneiss basement rock of the underlying Leeuwin Block.

The soils of the Margaret River Plateau belong to the Forest Grove and Mungite Soil classifications. These major soil types include the soils of the upland valleys, upland flats and the hills. The Forest Grove soils are characteristically gravelly with yellow brown duplex profiles whilst the Mungite soils are pale grey with mottled profiles. Both of these soil types provide the most fertile soils located in the Leeuwin-Naturaliste Region, thus the Margaret River Plateau has largely been cleared of its native vegetation and now hosts extensive pasture land and hectares of grape vines. The main exception to this agricultural pattern occurs on the significant pockets of shallow stony soils on steep slopes that are not suited to agriculture as they are less fertile and have a high water erosion hazard (Tille and Latanzke 1990:8, Seddon 1972:30-35, State Planning Commission 1988, State Planning Commission 1989, Tille and Latanzke 1988, Smith 1973).
The Margaret River Plateau, like the Blackwood Plateau to the east is predominantly covered by the Chapman vegetation system, which consists primarily of open jarrah forest on the lateritic gravels of the hills with Marri more common on the richer soils of the valleys. There are also significant areas of Peppermint occurring in the lower valleys of the Blackwood and Margaret Rivers. The original jarrah forests that stood on the Margaret River Plateau provided an important timber resource that was logged of all the commercially extractable timber from the 1850s until the turn of the 20th century. Today there are only three main blocks of state forest left on the Plateau in the north at Cowaramup, centrally at Margaret River and a third block in the south between Witchcliffe and Karridale. As with the Karri Forest all old growth jarrah forests in the region are also protected from future logging (Tille and Latanzke 1990:8, Seddon 1972:30-35, State Planning Commission 1988, State Planning Commission 1989, Tille and Latanzke 1988, Smith 1973).

The first Europeans largely overlooked the Margaret River Plateau due to the presence of the thick forests of jarrah and marri. The area was however heavily logged during the later part of the 19th Century and opened up for farming. Further clearing was carried out as part of the two post war settlement schemes that sought to establish a dairy industry on the Plateau. Whilst the dairy industry struggled to survive, the “discovery” of the region’s potential as a viticultural region in the 1960s has resulted in the establishment of numerous largely boutique wineries throughout the plateau with a large cluster of wineries located in the Wilyabrup valley north of Margaret River. The gently undulating topography, which is conducive to growing good grapes combined with the remnant dairy farms, now provides the scenic, even romantic, landscape that attracts tourists to drive through the region and visit the
numerous cellar doors, cheese factories, venison farms and other niche agricultural activities.

**Blackwood Plateau**

This final physiographic area, the Blackwood Plateau that occurs in the centre of the Leeuwin – Naturaliste Region, is also the largest. It consists of a gently undulating low plateau with contours ranging from 50m to 100m above sea level that has been formed on the sedimentary rocks of the Vasse Shelf and Bunbury Trough. The Blackwood plateau contains the lateritic soils of the hills, which have gravely yellow brown duplex profiles. These lateritic soils were once home to vast Jarrah and Marri forests, however much of the plateau has been cleared since European occupation and now the plateau is predominantly grazing country. In addition to the lateritic soils the plateau also contains significant pockets of shallow stony soils, on the steep slopes and more fertile mixed alluvial soils along the banks of rivers and creeks.

Like the Margaret River Plateau, the Blackwood Plateau contains the Chapman native vegetation system. As mentioned above the Blackwood Plateau once hosted large jarrah and marri forest, which have mostly been cleared to create agricultural grazing pastures. Sedge land is also found in this region on the swamps of the higher parts of the plateau and the broad valleys of the upper reaches of the Margaret River system. To the north of the plateau and in areas of clayey loams the jarrah forest becomes open woodland with significant stands of Marri and Banksia (Tille and Latanzke 1990:8, Seddon 1972:30-35, State Planning Commission 1988, State Planning Commission 1989, Tille and Latanzke 1988, Smith 1973).
Again like the Margaret River Plateau the early European settlers initially overlooked the Blackwood Plateau due to difficulties experienced in clearing the heavy timber. It was not until the coming of the large scale automated timber industry that this area was opened up during the second half of the 19th century, although no major permanent settlements remain in this part of the Leeuwin-Naturaliste Region. Like the Margaret River Plateau to the west, this region was further cleared to facilitate the establishment of the post war settlement schemes and now is largely comprised of mixed farming establishments.

**Coastal Zones**

Three different coastal zones can be found around Leeuwin-Naturaliste Region. Firstly there are the low profile, low energy shores of Geographe Bay in the north, secondly the high-energy shores of the Leeuwin-Naturaliste Ridge in the west and finally the exposed ocean shores of Flinders Bay in the south (Thompson-Dans Et al. 2002:2). North facing Geographe Bay extends some 65 km along the shore from Cape Naturaliste in the west to Peppermint Grove Beach near Bunbury in the east. The western section (approximately 15km) is made up of a series of rocky bays including Castle Bay which is the site of a former whaling operation and Eagle and Bunker Bays that are now popular holiday home settlement areas. The vast remainder of the Bay is a broad shallow waterway with white sandy beaches. Geographe Bay is protected from the strong southerly swell by Cape Naturaliste and provides an excellent environment for a broad range of water-based activities for residents and visitors. It is also an important habitat for the second largest meadow of sea grasses in Western Australia (Thompson-Dans 2000:3). In the early days of European settlement the shallow Bay did present a problem for shipping, although
this was largely solved following the construction of the now famous Busselton Jetty that extends almost two kilometres out into the Bay \(^7\) (Storrie 2003:12).

In contrast to Geographe Bay the coastline of the Leeuwin-Naturaliste Ridge is very rugged with granitic rocks forming both vertical and sloping rock faces on exposed headlands and rounded boulder fields in more sheltered situations. Some of the more pronounced coastal cliff faces such as the Wilyabrup Cliffs provide exciting abseiling locations. Interspersed between the rocky headlands are small beaches and areas where limestone cliffs meet the sea. Off the coast is the Yallingup shelf with its limestone reef system and offshore islands and rocks (Thompson-Dans 2000:3). These reefs provide spectacular snorkeling and diving experiences whilst the large swells and excellent breaks along this coast have been attracting surfers both professional and amateur since the late 1960s. During the height of the timber industry’s activities in the region in the late 19\(^{th}\) century, Hamelin Bay in the south of the Ridge coastal zone provided an important alternative shipping port to Augusta during the wild winter months.

The final major coastal zone of the Leeuwin-Naturaliste Region is the south facing Flinders Bay that extends from Cape Leeuwin in the west to Black Head some 80km to the east. Flinders Bay is a wide sandy beach supported by an extensive dune system. Its southern aspect means that it is very exposed to the wild southwesterly air streams that flow through during the winter months. The river mouth at the Hardy Inlet near the town site of Augusta can be particularly treacherous at this time for both recreational boaters and professional fishers. Flinders Bay was the site

\(^7\) Construction of the Busselton Jetty commenced in 1865 (158.4m) with several extensions carried out until 1960 when the jetty reached 1,841 metres making it the longest jetty in the southern hemisphere.
chosen for the first European settlement in the Leeuwin-Naturaliste Region and prior to that it had been a popular sealing location. Both the Australian Sea Lion and New Zealand Fur Seals were hunted to extinction in the Bay. New Zealand Fur Seals have only started to return during the past 20 years and the Australian Sea Lion has returned to fish but will not breed or haul out in the Bay as females only return to breed on the island on which they were born (Thompson Dans 2000:3).

All of these coastal zones with the addition of the estuarine Hardy Inlet at Augusta provide the location for a proposed marine conservation reserve for the Capes. The state government through its conservation agency the Department of Conservation and Land Management is seeking community support to create this ‘multiple use’ marine reserve that will protect the ecological, economic and social values of the Capes Region. This is an important step towards managing sustainable use of the Leeuwin-Naturaliste Region’s coastline that is under ever increasing pressures from tourism and urban development (Figure 3.9).

**Pre European Land Use**

Before the arrival of Europeans, the Wardandi (*The people that live by the ocean and follow the forest paths*) and Pibelmen (*The people with plenty*) Nyungar people had managed the region’s resources for more than 40 000 years (Collard 1994). The Blackwood River in the South of the Leeuwin-Naturaliste Region provided the natural territorial boundary between these two language groups (Goode 2003:1). Despite the common perception amongst the early European explorers and settlers that they were encountering a ‘terra nullius’ or even ‘wilderness’, environment, the
Figure 3.9 Proposed marine conservation reserve in the Leeuwin-Naturaliste Region

(Source:http://www.naturebase.net/national_parks/marine/capes/study_area.html)
‘natural’ landscape they observed had been significantly altered by the cultural and
‘farming’ practices of the Wardandi and Pibelmen over a significant period of time.

The original Indigenous custodians’ system of land use is described as hunter-gatherer, which included the utilisation of fire stick farming techniques. Aboriginal occupation of the lands in the Leeuwin – Naturaliste Region has been confirmed as dating back at least 37,000 years through archaeological excavations at both Devils Lair and Mammoth Caves on the Leeuwin – Naturaliste ridge (Hallam 1975:99). Although this finding provides a date backed up by scientific evidence, it has been suggested that Aboriginal occupation in this area may date back as much as 50,000 years (McGrath 1995:242). Prior to European colonisation, the southwest including the Leeuwin-Naturaliste Region was a bountiful area with a mild climate that provided water and plenty of food. The Wardandi and Pibelmen people did not construct permanent settlements or even enduring shelters. The Nyungar in the southwest region followed a pattern of seasonal movement within their tribal territory in search of food, constructing temporary housing known as mia-mia from the vegetation close to their food source to protect them from the weather (Green 1984:14 & Hammond 1980:25). As hunter-gatherers, they would move on to a new location when the local food source became insufficient (Howard 1979:91). The Nyungar men hunted large game and birds and caught fish, whilst the women and children would harvest root crops and collect fruit and nuts, yams and bracken ferns (Meagher & Ride 1979: 71-76).
The Wardandi and Pibelmen Nyungar people of the Leeuwin-Naturaliste Region responded to a pattern of seasonal changes that involved six seasons rather than the four seasons conceptualised by Europeans. (The following outline of the Nyungar seasons is taken from: The Swan River Trust 1997 and thus the Whadjuk Nyungar (Perth) words are used). The First Nyungar Season is Bunuru (February to March). This season was characterised by dry conditions that meant that the Nyungars would move to the coastal estuaries such as the Wonnerup Inlet in the north and the Hardy Inlet in the south where they would catch fish in traps and collect marron and gilgies. They would also collect the fruits of the Zamia (*macrozamia riedlei*), the rhizomes of the bullrush that were pounded into a cake and other blossoms and roots and climb trees to hunt possums at this time.

The next season was known as Djeran (April to May). During this time the weather would become cooler with winds from the southwest. The Nyungar would continue to fish in the estuaries and collect bulbs and seeds. *Makuru* (June July) was the wet and cold winter season. During this season the Nyungars would move to the inland hunting areas once the rains had replenished the inland water resources. They would collect tuberous plants and hunt moulting birds such as the swans. They kept warm by constructing mia-mia shelters and holding smouldering bull Banksia branches beneath their animal skin cloaks. The next season was known as Djilba (August to September) marked the arrival of warmer weather. The Nyungars remained inland collecting tubers and hunting emus, quendas, possums and kangaroos.

*Kambarung* (October to November) marked the end of the heavy rains and the Nyungar would begin to move back towards the coast that would have begun to dry
out. Here they would collect seasonal fruits and waterfowl eggs and catch frogs, tortoises and gilgies. They would also construct pits and traps to collect possums and kangaroos. The final season was known as Birak (December to January). This season was characterised by hot dry easterly winds during the day and southwest sea breezes in the late afternoon. During this season the Nyungar people would burn sections of scrubland to force kangaroos, goannas and small marsupials out into the open. The fires also had the effect of reducing undergrowth making the landscape easier to traverse and it also encouraged the regrowth of lush green grasses during the Djilba season.

Like all Nyungar people past and present the Wardandi and Pibelmen people hold a strong economic, social and spiritual connection to the Boodjar or land. “Nyungars have a sense of respect and kinship with the biota and environment and regard themselves as inseparable from the eternal process of nature.” (Swan River Trust 1997:3). According to Collard (1996:24), “Each Nyungar family has had and had control over particular areas of boodjar or land” he further explains that, “Nyungar families were dependent on their country’s natural resources for survival and became very jealous about encroachment on their property. The land was and is divided into districts or areas, which is the property of families or individuals.”

The Wardandi and Pibelmen Nyungar people also developed important communication pathways across the landscape utilising natural features as Collard (1996:25) explains,
Nyungars used the high natural features and lay of the land as lookouts to see where relations or visitors might be camped. The high country was also used by Nyungars to communicate with each other, by speaking in a shout or loud speech or by lighting fire. The Nyungars used these high places to assess where game might be feeding or where fish may be schooling.

The pre-European land use activities of the Wardandi and Pibelmen people in the Leeuwin-Naturaliste Region were based on a spiritual connection to the landscape. The original custodians believed that the landscape was created during the Dreaming. This was a time in the far away past, when mythical beings like the Waugle (a snake or serpent like creature) carved the waterways through the land whilst conflict between other mythical beings created other landforms such as hills (Goode 2003:10). The Dreaming is the name given to Aboriginal people’s cosmology or worldview. The creation stories (Dreamtime Stories) associated with the Dreaming articulate the close spiritual connection between these people and the environment that they inhabit. Unfortunately many of these stories relating to the Leeuwin-Naturaliste Region have been lost due to the displacement of the Nyungar people from their traditional boodjar or lands following the invasion of European settlement.

In terms of land use it is a misconception to suggest that the Leeuwin-Naturaliste Region was not farmed before Europeans arrived. Although the Early Europeans often misunderstood traditional Aboriginal farming techniques, the Wardandi and Pibelmen people had in fact been farming the land for thousands of years. According
to Bar and Cary (1992:7), “The Aborigines did not till the soil and they did not fence the animals, instead the Aboriginal people used fire to control game and increase the productive capacity of the land”. Burning the bush has the impact of increasing the proportion of solar energy per unit area, which in turn increases photosynthesis activity which produces more young growth from the grasses, which in turn attracted game that could be hunted (Seddon 1972:189 & Pyne 1991:94). Burning was also used to herd game and clear tracks. This method of firestick farming has also believed to be responsible for the creation and maintenance of the predominantly eucalypt forests (Barr and Cary 1992:7).

The original custodians of the lands of the Leeuwin-Naturaliste Region created an agricultural system within the limits of the available technology that was sustainable for thousands of years. According to Seddon (1972:189), “Aborigines knew the land, but they also made it more productive and habitable by a practice that has been called ‘fire-stick farming’” Barr and Cary (1992:8), warn however that we must be careful in projecting our own ideology onto an ancient culture and that whilst their farming system was sustainable they did have significant environmental impacts on the land including decreased tree cover and reduced genetic diversity of the forest, changed soil structure and erosion, the introduction of the feral animal the dingo and the extinction of mega fauna. In summary they suggest that,

In short, the Aboriginal farming system did not conserve the landscape of Australia. It created a new landscape, which was more productive than the landscape they found. Although they did not conserve what their ancestors found, the Aborigines created a sustainable agricultural
system that lasted tens of thousands of years, a system dependant on continual burning. (Barr and Cary 1992:8).

**Conclusion**
The physical setting the early Europeans encountered in the Leeuwin-Naturaliste Region was one that had evolved geologically over millions of years and an environmental landscape that had been significantly altered by humans over several thousand years. It is no coincidence that the gently undulating coastal plains of south Western Australia have proved most attractive environments for both Aboriginal people and European settlers. The plains are well suited to farming activities whether by traditional Aboriginal firestick methods or European farming technologies. In the Leeuwin-Naturaliste region, as elsewhere, this inevitably led to many conflicts as the Europeans sought to exert their dominance over this unique physical environment. The accessibility to the coast, warm moist climate, favourable soils, relatively flat topography and absence of heavy timber has resulted in the natural resources of the coastal plains being heavily exploited by various groups through time.

Over time as more knowledge has been obtained about the inland physiographic areas in the Leeuwin-Naturaliste Region and their suitability for different land uses has been assessed, the introduction of technology and capital has enabled further exploitation of more of the area’s natural resources. Land uses such as intensive dairy farming, organic horticulture, viticulture, timber extraction, mineral sands mining, surfing and tourism have all found a place utilising the natural resources of the various physiographic areas which occur in the Leeuwin-Naturaliste Region. All
of these land uses, with the exception of Indigenous fire stick farming\(^8\) all still occur in the region though some have become less dominant as new land uses have emerged. The combination of all of these land use activities that have been introduced into the region since European settlement in conjunction with the diverse physical landscape of the region has created the interesting cultural landscape that now makes the region a popular tourism destination.

The following chapters will investigate the chronological development of these land use activities since European settlement in more detail. It will relate them to the physical environment in the context of the levels of technology and capital available and the political will that was present in each time period. These chapters will also explore the role of sustainable development during these land use activity periods to determine if this ethos was present and to what extent if any these land use activities were opportunistic waves of economic exploitation or if they were part of a search for a sustainable future for the communities which have chosen to reside in the Leeuwin-Naturaliste Region.

\(^8\) It is important to note that whilst firestick farming has ceased other important Nyungar social, cultural and economic activities are still practised on the landscape of the Leeuwin-Naturaliste Region. In addition CALM also carries out periodic burns to help manage fuel loads in the forests.
Chapter 4 Early European Land Use 1830-1850

Introduction
Although the terminology and language of sustainable development was still some 150 years away from being introduced in the 1830s, it would appear that the original custodians of the Leeuwin-Naturaliste region had been practicing a system of sustainable agricultural land use for many thousands of years even prior to this date. In contrast it would seem that the new Europeans who first arrived to settle in the area from May 1830 were determined to impose their English farming techniques on this new and alien landscape. These recent arrivals to this ancient land did not seek to learn about the physical setting from the original inhabitants. The prevailing European thought of the time was to view the local Indigenous people as ‘hand-to-mouth huntsmen and scavengers’ an uneducated people who did not posses any knowledge of agricultural systems. (Shann 1926:96). Thus these early Europeans did not recognise that the vast wealth of knowledge that the local Wardandi and Pibelman Nyungar people had accumulated over thousands of years in relation to the region’s physical setting. The European invaders quickly became preoccupied with survival and engaged in a laborious system of trial and error in an effort to transform the landscape of the Leeuwin-Naturaliste region into something more reminiscent of the English countryside with which they were more familiar.

The first Europeans settler’s were personally encouraged to colonize the Leeuwin-Naturaliste region in April 1830 by Governor Stirling. Families such as the Molloys, Turners, Bussells, Laymans and Chapmans had arrived at the Swan River Colony aboard the Warrior on the 13 March 1830 hoping to secure land grants in the
vicinity and begin their new lives as colonists (Lines 1994:96). Unfortunately for them, all of the most favorable land grants around this newly established colony had been allocated by the time they arrived just 10 months after it was founded. Meanwhile Governor Stirling had returned to the Swan River Colony shortly after the arrival of the passengers of the *Warrior*. Stirling had been on a brief expedition to the extreme southwest corner of the Australian continent with government botanist Charles Fraser to explore the landscape of this area following favourable accounts of the Inlet at Augusta by sealers and whalers. It was also believed at that time that the tall timber found in the region was a signifier of promising fertile soils. By the end of April 1830, Governor Stirling had convinced Captain Molloy and the Bussells to take up land grants at Augusta promising them government assistance and protection. Captain Molloy and the Bussell brothers then encouraged other migrant families such as the Herrings, Laymans and Chapmans who had been fellow passengers aboard the *Warrior* to join them in taking up land grants at this new settlement of Augusta (Lines 1994:106).

This new colonial outpost at Augusta experienced many difficulties right from the start and after just two years the settlers had begun migrating north to the Vasse Region at Geographe Bay, which is now known as Busselton. This resulted in the virtual abandonment of the Augusta settlement by the mid 1830s. Farming pursuits at this new location on the coastal plains adjacent to Geographe Bay were marginally more successful on slightly better country closer to the colony’s capital, Perth. Some settlers also engaged in trade with visiting American whalers with some non-gentry settlers like Heppingstone becoming directly involved in the whaling industry to supplement their income (Bolton 2002). The frontier ethic, however, persisted
through the need for survival in this unfamiliar landscape. Resources were perceived to be limitless at this time and it was thought capital and hard work would bring rewards. This frontier ethic also created tensions with the local Wardandi and Piblemen people whose traditional lands were being taken over.

These early European settlers continued to struggle making a living trying to transform the landscape into productive farmlands for their imported European crops and livestock. In addition to adjusting to a new physical environment including poor soils and the immense difficulty of clearing karri country with English axes, they also had to contend with other difficulties such as isolation, distance from markets and the limited availability of labour. In the 1840s migration virtually ceased to the new Swan River Colony and an economic depression set in. It was not until the 1850s, following the arrival of convict labour from the ‘mother country’ and the emergence of a new large-scale timber industry in the Leeuwin-Naturaliste region, that the future began to look more hopeful for this colonial outpost. These events mid century resulted in the establishment of a ready made local market for the district farmers’ produce and the availability of cheap labour and regular shipping transport to Perth and beyond facilitated more frequent exports of produce from the region marking a turnaround in the region’s economic fortunes.

**Dutch and French Connections**

The English were not the first Europeans to ‘discover’ the Leeuwin-Naturaliste Region; in fact the Dutch had sighted the Leeuwin- Naturaliste Region in the early 1600s. During the next two hundred years the region’s coast was visited several times by Dutch, French and British navigators although only once during all this time
was a recommendation for colonization ever made. Most of the visitors did not appear to consider the environment suitable for agriculture and they did not identify any suitable prospects for trade with the local Aboriginal people (Crowley 1960:1). It was a French employee of the Dutch East India Company who authored the first proposal for the establishment of a settlement in the Leeuwin-Naturaliste Region in 1718. However, he failed to secure support from the company for his plan and subsequently no Dutch colony was ever established in the region (Appleyard & Manford 1979:16 & Cameron 1981:9). Another 112 years would pass before the British rather than the Dutch or French would seriously consider the environment of the Leeuwin-Naturaliste Region suitable for agricultural pursuits and subsequently establish a permanent colony in the area in 1830.

It was common during the 17th century for Dutch ships en route to Java following the Brower sea route to view and occasionally ‘bump’ into the Western Australian coastline (Appleyard & Manford 1979:15). Thus it is not surprising that it was a Dutch ship, the _Leeuwin_ that is recorded as the first European vessel to sight the coastline in the Leeuwin - Naturaliste Region, in March 1622. The southernmost cape of the Leeuwin-Naturaliste Region now bears the name of this ship. Little detail is known about the ship’s activities in the region, with even the captain’s name lost, although according to Yarrow (1980:33), “It is possible that water was taken on board near the mouth of the Blackwood River.”

The next ship to spend time in the waters of the Leeuwin-Naturaliste Region was the _Gulden Zeepaerd_ in January 1627. This ship traveled some 1600km along the south coast of the Australian continent from Cape Leeuwin to Fowlers Bay in South
Australia. The captain Frans Thyssen named the landmass that they encountered Nuytsland after a company official who was traveling on his ship (Appleyard & Manford 1979:16). Some 91 years after the ship’s return to Holland, a French official working for the VOC (East India Trading Company), Joan Peiter Purry, wrote a book suggesting that a Dutch settlement be established in the area of Cape Leeuwin. This is the first known proposal for the establishment of a European Colony in the south west of Western Australia. Purry had envisaged that this colony would function as a supply port on the route linking Table Bay and Batavia. The reasons for this proposed settlement which were published in 1718 included the region’s favorable climate, the idea that Javanese labour could be utilised to cultivate crops, the rumoured silver and gold that could be exploited, and finally it was thought that it would give the Dutch strategic control over the Indian Ocean and curtail British and French interests in the south land (Appleyard & Manford 1979:16 & Cameron 1980:10). It would appear however that these reasons were not taken very seriously and this first proposal for European settlement in the “Southland” at Cape Leeuwin was dismissed by the VOC (Yarrow 1980:38).

Dutch ships continued to chart the Western Australian coastline throughout the 17th century, although much of the territory in the south between the Abrolhos Islands and Cape Leeuwin remained unknown until 1658 as the land was too far south of the Brower Route and the shores were believed to contain dangerous reefs (Appleyard & Manfield 1979:19). The next and last Dutch ship to make contact with the Leeuwin-Naturaliste Region was the Elburg in 1658. It is known that nine crewmembers of the Elburg went ashore at Cape Leeuwin and made contact with the local inhabitants (Yarrow 1980:54). From 1658 to 1696 several more Dutch ships visited the Western
Australian Coast though mostly north of Rottnest Island in search of shipwreck survivors. None of these voyages returned with favorable reports of the environment or suitability of the landscape for settlement. Thus in 1697 the VOC discontinued expeditions to Southland as Witten stated, “Nothing had been discovered which can be in any way serviceable to the company.” (Witten cited in Yarrow 1980:59).

Therefore after more than 100 years of contact with the Western Australian coastline the Dutch gave up any potential claim to its lands. According to Appleyard & Manford (1979:19) their lack of interest was the result of several reasons including;

- Monotonous and inhospitable landscape; lack of water and vegetables;
- Dangerous maritime reefs, which had caused the loss of many passengers, crew and cargo; the absence of precious metals and gems;
- The general aloofness and occasional hostility of nomadic Aborigines, who were never considered potential workers for Dutch outposts; and
- The absence of strategic and military reasons for annexing the coast ahead of rivals.

Over 100 years after the last Dutch landing in the Leeuwin - Naturaliste Region the crew of the French vessel, Gros Venture captained by St Allouarn claimed possession of the west coast of the Australian continent for France in 1772 (Yarrow 1980:81). On the 16 March the Gros Venture approached Cape Leeuwin and anchored in Flinders Bay (Marchant 1982:58). A small boat was sent closer to the shore and the crew noted the land was wooded, but found no evidence of human
habitation. They believed that Cape Leeuwin was an Island (Marchant 1982:61). It was not until May 1801 that the French charted the entire coast from the Swan River to Cape Naturaliste in the ships the *Geographe* and *Naturaliste* (Appleyard & Manford 1979:87 & Yarrow 1980:114). It is believed that this French activity in the Southland was fuelled by a desire to contribute to scientific knowledge rather than to colonise (Marchant 1982:101).

The captain of the *Geographe*, leader of the expedition and self taught scientist Baudin and his team of scientists spent three weeks in May 1801 exploring around Geographe Bay. However the captain is quoted as saying, “All the land we have explored has looked arid to us” (cited in Appleyard and Manford 1979:87). Freycinet a sub-lieutenant on the *Naturaliste* who went ashore at Eagle Bay was also left with the impression that the land was sterile from a non-scientific mariner’s perspective. He reported to Baudin that ‘the country seemed to offer no resource than that of firewood’ (Appleyard and Manford 1979:91 & Marchant 1982:129). A long boat was also dispatched up the Wonnerup Inlet where the scientist Peron observed trees and vegetation that gave no fruit (Marchant 1982:137). Leschenault was more impressed than his colleagues by the countryside which he suggested appeared fertile, however, the valuable specimens he collected were lost following the expedition party’s rescue from the shore following the grounding of their longboat (Marchant 1982:142-44).

The overall impression of the landscape of the region, as reported by Baudin in a letter to the French Marine Ministry in October 1801 was less than enthusiastic with regard to the area’s agricultural potential. This report and Baudin’s journals contain
references to dry creek beds, lack of sea birds indicating lack of food sources for them on land, sandy soils, stunted trees and the absence of grasslands to provide feed for cattle. (Appleyard and Manford 1979:91). These reports must be acknowledged in the context of the time of year the scientific expedition visited. The month of May occurs at the end of long hot, dry summers in this region that would account for the absence of flowing creeks and grasslands.

On another note Baudin is credited with making the first accurate map of the coastline from Cape Hamelin north during his second visit to the region in 1803 aboard the *Geographe* (Marchant 1982:185). An important legacy of the French scientific expeditions undertaken in the Leeuwin-Naturaliste Region in the late 1700s and early 1800s is the nomenclature they imposed on the region’s physical landscape that has endured to the present day. The English settlers inherited French names for features such as Cape Naturaliste, Leschenault Inlet and Geographe Bay, and Vasse which was named after a member of the 1801 expedition who was lost overboard whilst returning to his ship in Geographe Bay.

**British Exploration and Invasion**

Six months after the French expedition to the Leeuwin-Naturaliste Region, the English maritime explorer Matthew Flinders aboard the *Investigator* comprehensively charted the area’s coastline in December 1801 as part of his voyage to circumnavigate and chart the coastline of the continent. Flinders was also the first to recognise that Cape Leeuwin was part of the mainland not an island as was previously believed although he did not land or explore the interior of the region (Cresswell 1988:32 & Yarrow 1980:103). Interestingly in April 1802 Flinders met
Baudin at Encounter Bay in South Australia whilst they were both exploring the southern coast of Terra Australis that Flinders was to rename Australia.

The young ambitious English Captain James Stirling was the next to investigate the landscape of the Leeuwin - Naturaliste Region with the Government Botanist Charles Fraser. Stirling spent two days in March 1827 exploring Geographe Bay although he is reported to have written, “The first appearance of the coast we were now to explore, presented nothing attractive; the monotony of its outline and the dusky hue of the meager vegetation it supported at once accounted for the sterile and hopeless character attributed by early navigators to this region” (Cited in Battye 1978:65 & Cresswell 1988:35). Despite his initial negative perception of the region, Stirling appears to have changed his opinion of the Leeuwin - Naturaliste Region following the creation of the Swan River Colony in 1829 as he actively encouraged an additional settlement there and selected 90,000 acres of his own original grant at Cape Leeuwin (Battye 1978:102).

This change in opinion of the region by Stirling was perhaps evidence of his political agenda overriding his initial landscape appraisal. Stirling had a personal stake in the growth of the Swan River Colony and once good land there had run out, he was forced to look elsewhere, and thus encouraged others to follow his lead and take up land in the Leeuwin-Naturaliste Region. In addition, Seddon (1979:164) suggests that Stirling could dismiss earlier non-favorable observations of the region recorded by explorers because “…they were non-British, and therefore unreliable”.

The Swan River Colony was formed as an independent colony from New South
Wales with a direct link to the United Kingdom following favorable reports from Stirling’s examination of the Swan River Region in 1827 (Hasluck 1955.ix). The British had officially annexed the western third of the continent in 1826 following the detachment of a small party of soldiers and convicts to King George Sound (now known as Albany) (Crowley 1960:2). There are many reasons cited in the literature for the formation of the Swan River Colony including the need to reaffirm the claim the western third of the continent and fear of French possession. More importantly, though, appears to have been the persuasive powers of Stirling himself and his glowing testimony of the local environment. A thorough explanation of the factors influencing the formation of the Swan River Colony is beyond the scope of this thesis.9

Outpost at Augusta

Following the alienation of all the land adjacent to the new settlement on the Swan River, Stirling appears to have made the decision to direct some new settlers to establish a sub colony in the southwest corner of Western Australia at Flinders Bay. Stirling organised an expedition to the region in March 1830 based on favorable accounts of a suitable inlet at Augusta by sealers and whalers who frequently visited the area in search of their catch (Hasluck 1955:64). According to Hasluck, “The Governor’s party reported that the river ran north for 15 miles then east for 10 miles, the banks were covered with good timber of the stringy bark and redgum variety, but the best soil was to be found on the hilly land along the estuary.” (Hasluck 1955:71). It was believed that this new settlement, which was named Augusta, would prove to be an important trade stop for vessels traveling to the eastern colonies and would one

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9 For more detail on the formation of the Swan River Colony see Cameron (1982)
day “boast a fine port and become a fine city.”(Cresswell 1988:47).

The new settlers arrived at Flinders Bay aboard the *Emily Taylor* on Sunday 2nd May. Following just four days exploration they decided to settle, taking three days to unload all their possessions for this new life. They named the local river the Blackwood (Hasluck 1955:69-70). A doctor and troops to protect the fledgling settlement arrived a few months later in August 1830 (Hasluck 1955:74). According to Lines (1994:104) “The Augusta settlers were, on first sight, pleased with the forest. They believed that the trees grew only in fertile soil; the big trees and thick undergrowth of Augusta promised great agricultural potential.” Cameron (1982:122) confirms the new arrivals’ attitudes stating that initially these first settlers “reacted extremely favorably to Augusta but their first planting failed and John Bussell confessed instead of potatoes we have a crop of marbles.” The amount of land allocated to the new settlers in Augusta was based on an inventory of the capital goods and stock that they had transported to the colony. The following table outlines the initial land grants at the Augusta Settlement (Table 4.1). In 1832 Turner added another 5,000 acres at Scott River and Captain Molloy applied for Molloy Island (400 acres) and 12,400 acres on the right bank of the Vasse, which he changed to the left Bank in 1833 (Hasluck 1955:89).

<table>
<thead>
<tr>
<th>Name</th>
<th>People</th>
<th>Capital</th>
<th>Grant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molloy</td>
<td>7 Adults, 3 Children</td>
<td>£960 10s 5.5d</td>
<td>12,813 Acres</td>
</tr>
<tr>
<td>Turner</td>
<td>30 People</td>
<td>£1,502 3s 6.5d</td>
<td>20,026 Acres + 5,000 Acres</td>
</tr>
<tr>
<td>Bussell</td>
<td>5 People</td>
<td>£317 12s 11d</td>
<td>5,573 Acres</td>
</tr>
<tr>
<td>Herring</td>
<td></td>
<td>£57 10s</td>
<td>766 Acres</td>
</tr>
</tbody>
</table>

**Table 4.1: Settlers’ Grants Augusta 1830**

(Source Hasluck 1955)
Like the main Swan River Colony, this new colonial outpost at Augusta was established in the context of *Terra Nullius*. That is, the belief that the land belonged to no one, that it was inhabited but not occupied and that the local Pibelman Nyungar people did not hold sovereignty over the land. Thus, although the original custodians had systematically managed the region’s natural resources for thousands of years and according to Lines (1994:168) “…assigned an Ancestral spirit to every physical feature of the land.” They were quickly dispossessed of their country as the new arrivals took up their land grants and deeded titles and set about renaming the region’s physical features. This new nomenclature was based on the settler’s own names such as Molloy Island and names of places with which they were familiar from their ‘mother’ country.

Despite the privilege of imposing new names on the landscape and the colonial optimism expressed by the taking up of land in the region, the new settlers were quickly faced with many major difficulties as they tried to come to terms with this new alien environment. These included isolation, lack of transport, lack of agricultural knowledge, insufficient capital, clearing difficulties and poor soils that would eventually push the settlers to move north to the more attractive Vasse Region on Geographe Bay. None of the new arrivals came from agricultural backgrounds and additional labour soon became limited as servants left to labour on their own properties (Cresswell 1988:46). The Bussells moved 12 miles up the Blackwood at the end of 1831 to a peninsula, which they named Adelphi (Greek for brother). This new property required less fencing to keep stock, had fewer rocks and was less heavily timbered, provided better hunting and an escape from the demands and
expenses related to keeping one's place in society in Augusta (Shann 1978:20 & Hasluck 1955:78). Land regulations at this time were also very restrictive, requiring land to be improved within three years or a 6d per acre fine would be imposed, and if the land was not improved or cultivated within seven years it would revert to the crown (Cresswell 1988:50).

**Appraisal of the Local Environment**

As previously discussed, earlier European visitors to the region including the Dutch and French were not excited by the local surroundings. The Dutch more than two centuries prior had determined the land completely fruitless for any agricultural pursuits (Shann 1926:9). The French Captain Freycinet also recorded in 1801 that the environment around Geographe Bay in the north seemed to provide only firewood and that the soils were too sandy to be fertile. It was also thought that the smaller trees of this region, at less than 8m, indicated sterile ground; it would be much later before this positive correlation between height of trees and soil fertility would be disproved (Appleyard & Manford 1979:91). Governor Stirling on the other hand was quick to promote the region as potential prime agricultural land. Stirling in company with Molloy and a number of the new settlers explored the Blackwood River region and determined that the taller karri trees (the third tallest tree in the world reaching up to 90m) must indicate good soils, thus reaffirming his decision to establish a sub colony at Augusta (Cresswell 1988:46). Stirling is quoted as stating, “Soil of its valleys was exceedingly rich, and even the high lands were covered with tolerably good sandy loam.” (Stirling cited in Uren 1948:278).

It appears that Governor Stirling’s convictions were believed despite his lack of
scientific training in soil science. According to Shann (1926:10), “Where others had reported sandy wastes and flyblown savages, Stirling told of abundant rainfall, sweet herbage, safe anchorage, fresh water and a well wooded interior.” Partly this acceptance of Stirling’s appraisal can be understood in the context of the superficial similarity of the eucalypt forest to the forests found in New South Wales about which there was some knowledge. Unfortunately for these eager new settlers, however, the trees and plants of the west had evolved in isolation from the eastern species and had adapted to the less fertile soils of the west (Shann 1926:9). Another possible explanation for the ready acceptance of this correlation of tree height to soil fertility can be found in the fact that many of the new arrivals found it difficult to leave their new holdings due to lack of cash. It was a condition of land allocation that monetary capital be converted into items useful for the establishment of an agricultural colony and this often left the settlers without the necessary cash to purchase a boat fare to leave. Perhaps this financial dilemma made the new settlers more willing to accept the preliminary appraisals of the environment, as they had to make the best of their investment, which would have created some necessary level of optimism to facilitate survival.

Many early scholars of Western Australian history continued to perpetuate this myth of good soils and climate until the 1920s, when the disappointment of the group settlement scheme finally produced failures that could not be ignored. For example prominent historian Battye documents in the early 1900s that the soil was good but heavy timber was a problem (Battye 1978:102), while Colebatch as late as 1929 suggested that the soil and climate were good and that timber and distance were the problems (Colebatch 1929:387). Professor Shann appears to be the first to question
the agricultural quality of the local environment in 1926 in his documentation of the Bussell family’s story. He notes that that the occurrence of a dry season halted the build up of humus with the exception of the moist valleys and consequently settlement was spread out in response to these scattered soils (Shann 1926:10-11). He also observes that the character of the timber was very different to that found in the homeland, with thick undergrowth and white ants to contend with (Shann 1926:22).

The yearning for a familiar English countryside was expressed at the time by original Augusta settler Charles Bussell, “The scenery around us is decidedly monotonous, although if it were possible to remove a part selected almost at random and place it in a cultivated country it would not only afford a pleasing variety but would be pronounced a good and beautiful object.”{Charles Bussell} (Cited in Shann 1926:21). The Reverend Wollaston also compared the environment of the new sub colony with England commenting on the lack of beauty compared with the English countryside and that all English notions of gardening must be reversed, suggesting “the general aspect of the country, on this side of Australia at least, is by no means inviting.’ (Wollaston cited in Bolton & Vose 1991:126-128).

Following the early attempts at appraising the local environment, with limited success, the new settlers began the slow process of acquiring more knowledge about their local environment. This was conducted largely through a procedure of trial and error and the new arrivals continued to ignore the vast wealth of knowledge of the local environment held by the original custodians, although they did employ Nyungar labour to track down missing stock in return for flour and other provisions
According to Cameron (1981:120) the process of agricultural experimentation was quite scientific,

Experiments were often recorded carefully in almanacs and farm journals and are firm evidence of a conscious and deliberate process of learning and testing. As a result of them, the imported production techniques and knowledge were slowly adapted to the exigencies of the local situation.

Perhaps the most important result of the various experiments was the determination of planting times. After three years trialing crops at Augusta the new settlers had recognised that June was a good time to sow wheat after the first winter rains, although they still had other problems to overcome such as disease and poor yields. More knowledge about the native vegetation was also gained by Georgiana Molloy who actively collected seeds and specimens which were sent to England in 1837 for classification (Hasluck 1955:154).

**Conditions and Difficulties Experienced at Augusta**

The early conditions in the new sub colony at Augusta were primitive compared with the lifestyles many of the new settlers had enjoyed in England. The initial houses were prefabricated from the U.K. with local rushes used for roofing (Shann 1926:19). The settlers also had to learn to adapt to consuming local produce including fish, birds and kangaroo as supplies were often in short supply at this remote outpost and many stock simply wandered off in to the bush (Hasluck 1955:77 & Lines 1994:170). They also learnt to value rock spinach, a plant found on rich still flats on
the banks of the Blackwood (Hasluck 1955:91). According to Hasluck (1955:92), a lack of starchy foods caused great discomfort. Some settlers also became accomplished net fishers, although catching, cleaning and smoking the fish was often a lengthy process (Shann 1926:70).

Whalers provided a new dimension to the social life at Augusta, with the mainly American crews of these ships having an important role in the survival of the first settlement at Augusta. They traded oil, molasses, tobacco, spirits, soap, whaling gear, jewellery, saddlery, crockery, tin ware etc for meat, vegetables, wine and wood. It has been recorded that Elijah Dawson’s house contained a room that specifically set up to accommodate this barter trade (Cresswell 1988:53-54). Both whalers and sealers would often spend an entire season working out of Flinders Bay that was home to a valuable stock of marine creatures. These included migratory Right whales, Australian Sea Lions and New Zealand Fur Seals. Some of the local girls also married whalers, creating a bond between the local community and these transient seafarers. In addition, a try works was established at Barrack Point Flinders Bay to produce oil from blubber, though it is likely this operation closed when the final members of this new colonial outpost moved north to the Vasse Region in the late 1830ss (Cresswell 1988:53).

The new sub colony at Augusta experienced many difficulties, though perhaps the major obstacle was the lack of capital to make the land productive (Shann 1926:20). As previously mentioned, it was a condition of the land grant system that assets brought to the colony were to be directly beneficial to the establishment of an agricultural colony and therefore monetary capital did not qualify. Consequently
most settlers had converted their wealth into products related to farming, which left them severely short of money. The other great obstacle was the giant karri forest Indigenous to this region (Hasluck 1955:71). Acknowledgment of the obstacle that the timber presented is noted by Hasluck (1955:74), “The Bussell’s refer to the prodigious size of the trees, their stupendous magnitude and great hardness. Mr. Turner says it takes half a dozen men 2-3 days to cut down and dig up the roots and as much time to cut them up.” (Hasluck 1955:74).

There were also many difficulties to overcome in establishing agriculture in the region, with new soils, different climate and limited labour and machinery to contend with. The early settlers learned that growing wheat required allowing the land to fallow unlike traditional methods of crop production in England. In fact, in the early days flour was actually imported to the fledgling settlement, as it was cheaper than the locally grown produce. The Bussells soon gave up trying to grow wheat on their property moving instead to livestock production (Shann 1926:75-76). Thus, for the Augusta Settlement the new arrivals appear to have been stuck in the hunter / subsistence level of economic existence without prospect of moving into the capitalist level of economic growth for some time (Shann 1926:69). Some settlers obviously were not happy to settle for this situation and as a result following the Bussell brothers’ lead began to look for greener pastures in the north of the region at Vasse on Geographe Bay.

**Move to Vasse**

This move north in search of more promising agricultural lands is a little ironic as the French scientific expeditions at the turn of the 19th century had been slightly more
impressed by the countryside at Vasse in the north at Geographe Bay, yet Stirling had ignored this observation in favor of the Blackwood River Region at Augusta (Marchant 1982:142). In October 1831 Edward and John Bussell traveled overland to the undulating grassy plain adjacent to Geographe Bay in search of more amenable farmlands (Shann 1926:26 & Hasluck 1955:87). Traversing overland had been made easier by the well traveled paths formed by the Nyungar people (Palmer 1999:112). John visited the north of the region again “in the heat of the summer and in the depth of winter, to ascertain the capabilities of the port for shipping in stormy weather and the state of herbage in droughts.” (Shann 1926:51). This activity would indicate that the settlers were more careful about appraising new environments following their experiences at Augusta. Molloy also noted that the land was more fertile and easier to work at the Vasse and provided good grazing land (Hasluck 1955:136). Hasluck (1955:151), notes that soil samples from the Vasse were sent to Germany for analysis and it was learned that crops planted in sandy soils actually performed better than those planted in the rich loams.

This new region known as Vasse was named after a French botanist who had gone ashore in 1801 as part of Baudin’s French Scientific expedition. Shann (1926:51) claims that Vasse had gone ashore to look for specimens and had vanished. “In all likelihood he was speared by the natives who were attracted in great numbers by the abundant game there.” Perhaps a more accurate account is provided by Appleyard and Manford (1979:93) based on a letter written by fellow expedition scientist Peron stating that Vasse was lost overboard as his boat was returning to his ship in a heavy north west wind. Whilst more recent accounts suggest that Timothee Vasse was swept overboard and drowned. Another account is provided by Collard (1994:51)
who claims that in fact Vasse survived and actually lived for a short while with the local Wardandi Nyungar people. His account of the story is as follows,

In 1841, the French authorities asked Governor Hutt to investigate the fate of Vasse by inquiries amongst the Aborigines of that region. The Vasse district Nyungars told a story of a lone white man who was left behind by his comrades and spent much of his time on the beach looking out to sea. The Nyungar brought him food and kept him company but when they left to travel inland he refused to accompany them. Months later, when they returned to the coast, they found his body in the sandhills. Vasse had perished while waiting for his companions to return.

Although the Bussell brothers had explored the more inviting lands of the Vasse in 1831 and returned several times during different seasons to more comprehensively assess the region’s agricultural potential it was not until April 1834 that they were ready to move north. They were followed by most of their Augusta neighbours from 1835. The new arrivals at Augusta had realized quickly their miscalculation in choosing the heavily wooded lands of the south. However, they had made considerable investments in establishing a colony at this location and had little money to effect an immediate move north to the Vasse (Lines 1994:174). In addition there were few ships passing by that could facilitate a mass exodus of people, goods and livestock around the capes to Geographe Bay.

By 1839 the advantages of moving north to Vasse had outweighed the concerns of
abandoning properties at Augusta resulting in every family but the Turners and Mr. Herring migrating north to reestablish themselves at Vasse (Hasluck 1955:142). Even Captain Stirling himself was granted 83,834.5 acres at Geographe Bay in 1837 (Hasluck 1955:57). At this time the government also withdrew its support of the isolated settlement at Augusta, which had become a burden on the already stretched resources of the new Swan River Colony, relocating the sub colony’s military post to Albany in 1839 (Cresswell 1988:55). According to the 1841 census there were 99 people residing at Vasse with only a couple of families remaining at Augusta (Western Australian Blue Book 1841). The Turners remained at Augusta until 1844 when Thomas and George Turner took up land at Dunsborough (Hasluck 1955:245). Then in April 1849 their father and the remainder of the family left Augusta for the Swan River Colony, leaving the sub colony virtually abandoned until the timber industry revitalised the settlement in the 1870s (Cresswell 1988:55). Figure 4.1 shows Turners land grant at Dunsborough in 1858 along with the land holdings of many other prominent former Augusta settlers such as the Bussells, Chapman and Molloy.

Settlement was closer at the Vasse in part due to the better soils and in part due to the perceived threat from the Aborigines. The Nyungar people also used the Vasse Region to hunt game, thus their numbers were relatively numerous around the Sabina River and their more visible presence was perceived as a threat by the new-comers (Hasluck 1955:124 & Shann 1926:51). There were also better agricultural prospects at Vasse with a strong demand for dairy produce from the Swan River Colony and good anchorage at Geographe Bay which encouraged more shipping (Hasluck 1955:143). In addition a number of American whalers based themselves at Vasse,
Figure 4.1 Land Alienation – Dunsborough 1858

(Source Jack & Robertson 2001:29)
utilising Geographe Bay as a productive hunting ground. Some of the locals also became involved in whaling activities in an effort to supplement their incomes (Shann 1926:86 & Hasluck 1955:211). Figure 4.2 provides an illustration of the population growth at Vasse or Sussex\textsuperscript{10} as it was then known from 1835 to 1854.

![Population of Sussex 1835 - 1850](Figure 4.2 Population of Sussex (Vasse) 1835 – 1850)

\textit{(Source: Western Australian Blue Books 1835 – 1850)}

Agricultural activities proved to be more successful at Vasse with the open grassy plains created by the local Wardandi people through their fire stick farming techniques proving easier to convert to European style agricultural production than the constant struggle of clearing the heavy timber down at Augusta. A small number of new grants were issued from 1837 until 1850 with a slow but steady increase in agricultural production recorded during this time with stronger activity in cropping until 1848 when there appears to have been a move towards more livestock production. (Tables 4.2 & 4.3). Finally achieving some level of farming success at

\textsuperscript{10} The Leeuwin-Naturaliste Region was known as the Sussex Region for administrative purposes from 1835-1900.
this new location of Vasse enabled some settlers to construct significant homesteads and farming related buildings, a few of which have survived to the present day becoming important tourist attractions (Plate 4.1).

<table>
<thead>
<tr>
<th>Year</th>
<th>Wheat</th>
<th>Barley</th>
<th>Oats</th>
<th>Rye</th>
<th>Potato</th>
<th>Horses</th>
<th>Cattle</th>
<th>Sheep</th>
<th>Goats</th>
<th>Pigs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1837</td>
<td>11</td>
<td>6</td>
<td>.5</td>
<td>.75</td>
<td>10.5</td>
<td>16</td>
<td>100</td>
<td>10</td>
<td>34</td>
<td>43</td>
</tr>
<tr>
<td>1838</td>
<td>23</td>
<td></td>
<td></td>
<td></td>
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<td>12</td>
<td>100</td>
<td>1200</td>
<td>2</td>
<td>55</td>
</tr>
<tr>
<td>1839</td>
<td>41</td>
<td>8</td>
<td>2.5</td>
<td>6</td>
<td></td>
<td>17</td>
<td>170</td>
<td>11</td>
<td>271</td>
<td></td>
</tr>
<tr>
<td>1840</td>
<td>Na</td>
<td>Na</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1841</td>
<td>110</td>
<td>14</td>
<td>6</td>
<td></td>
<td>23</td>
<td>255</td>
<td>230</td>
<td>410</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>1842</td>
<td>150</td>
<td>24</td>
<td>12</td>
<td></td>
<td>45</td>
<td>400</td>
<td>400</td>
<td>300</td>
<td>200</td>
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</tr>
<tr>
<td>1843</td>
<td>189</td>
<td>24</td>
<td>10</td>
<td>2</td>
<td>16</td>
<td>36</td>
<td>406</td>
<td>604</td>
<td>135</td>
<td>170</td>
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<tr>
<td>1844</td>
<td>309</td>
<td>30</td>
<td>4</td>
<td>15</td>
<td>69</td>
<td>501</td>
<td>535</td>
<td>181</td>
<td>101</td>
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</tr>
<tr>
<td>1845</td>
<td>290</td>
<td>23</td>
<td>18</td>
<td>74</td>
<td>74</td>
<td>826</td>
<td>500</td>
<td>29</td>
<td>170</td>
<td></td>
</tr>
<tr>
<td>1846</td>
<td>238</td>
<td>19</td>
<td>12</td>
<td>22</td>
<td>102</td>
<td>760</td>
<td>900</td>
<td>30</td>
<td>100</td>
<td></td>
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<tr>
<td>1847</td>
<td>229</td>
<td>17</td>
<td>19</td>
<td>17</td>
<td>118</td>
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</tr>
<tr>
<td>1848</td>
<td>126</td>
<td>103</td>
<td>20</td>
<td>33</td>
<td>184</td>
<td>1472</td>
<td>6020</td>
<td>43</td>
<td></td>
<td></td>
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<tr>
<td>1849</td>
<td>83</td>
<td>59</td>
<td>25</td>
<td>18</td>
<td>233</td>
<td>1241</td>
<td>2040</td>
<td>63</td>
<td></td>
<td></td>
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<tr>
<td>1850</td>
<td>203</td>
<td>60</td>
<td>38.5</td>
<td>39</td>
<td>245</td>
<td>1908</td>
<td>3014</td>
<td>84</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Crops listed in acres under production and livestock is listed per head

**Table 4.2 Agriculture in the Sussex Region 1837-1850**

(Source: WA Blue Books 1835-1900)

<table>
<thead>
<tr>
<th>Year</th>
<th>Acres &amp; Owner</th>
</tr>
</thead>
<tbody>
<tr>
<td>1837</td>
<td>3a Ludlow; 3a Dawson, 3a Gill, 3a Layman</td>
</tr>
<tr>
<td>1838</td>
<td>5000a James Turner</td>
</tr>
<tr>
<td>1841</td>
<td>824a Wells, 270a Hurford</td>
</tr>
<tr>
<td>1844</td>
<td>7a Green</td>
</tr>
<tr>
<td>1845</td>
<td>25a Doolan</td>
</tr>
<tr>
<td>1849</td>
<td>25a Glashan</td>
</tr>
</tbody>
</table>

**Table 4.3 New Land Grants at Sussex 1837 – 1849**

(Source: Western Australian Blue Books 1837 - 1849)

**Contact with Pibelmen and Wardandi Nyungars**

The first Europeans to make contact with the Wardandi and Pibelmen people of the Leeuwin-Naturaliste Region were members of the French scientific expedition to the area from 1801 to 1803. It has been reported that members of the French scientific team were particularly eager to make contact with the local Aborigines. Peron is
Plate 4.1 Wonnerup and Ellensbrook Homesteads

(Source: Litchfield 2000:87 & 96)
quoted as stating, “As soon as we landed on the beach I ran towards the interior in
search of the natives, with whom I had a strong desire to be acquainted.” (Cited in
Appleyard & Manford 1979:89). However, despite following footsteps he was
unsuccessful in this task (Marchant 1982:132). The French had some further
sightings as they explored the Wonnerup Estuary, but no direct contact. They left
gifts as they were ordered by the French government to only make friendly
approaches, though this did not deter them from firing when they felt “threatened by
spears and clubs” (Marchant 1982:139). As mentioned earlier it has been suggested
that the Wardandi people did make contact with Frenchman Timothee Vasse who
was washed overboard whilst returning to his ship at the conclusion of the French
expedition providing him with food and company whilst he waited fruitlessly for his
colleagues to return for him.

Captain Stirling was the next European to make contact with the original custodians
of the lands of this region during his expedition south in 1827 noting, “There were
many fine specimens of Military tactics practiced by them, all of which were visible
to us from the ship; but as their gestures and actions did not seem hostile, the boat
continued on her course not far from them.” (Stirling cited in Uren 1948:277).
Stirling’s party provided them with gifts and invited two on board for food and drink
(Uren 1948:277).

It appears that there were no major conflicts between the early invaders and the
Pibelmen people in the Augusta region in the first few years of settlement. In fact
the local Nyungar people assisted the struggling sub colony in various ways.
According to Palmer (1999:114), “Once contact was established much of the history
of Wedjela\textsuperscript{11} exploration and expansion of the south-west of Australia became the history of Nyungars being recruited as ‘boodiers\textsuperscript{12}, supervisors and guides.” Palmer further states that, “Wedjelas were shown Nuyngar roads and paths, \textit{karleep mia} or camping places, the best hunting grounds and \textit{gnamma} or water holes.” (Palmer 1999:115). The local Nyungar people also helped Georgiana Molloy collect seeds that were sent back to England. In addition their labour was engaged to deliver mail and assist with tracking stray stock (Hasluck 1955:119&181, Palmer 1999:117).

Hasluck (1955:118) sums up the situation at Augusta from the European settlers point of view,

\begin{quote}
Relations with black inhabitants of Augusta were on the whole friendly... The Natives were not an aggressive race; they were a curious and hungry one. In order to keep relations friendly the colonists made them presents of food and clothing; but they could not understand why they could not take what they liked. They were persistent thieves; and while the better type of colonist could control anger at depredations, the lower classes were quick to retaliate and cause trouble.
\end{quote}

The new European arrivals were of course not settling on unoccupied land but they took possession under the context of \textit{Terra Nullius}. They believed that the land was inhabited but not occupied and that the local Pibelmen Nyungar people did not hold sovereignty over the landscape (Frawley 1994:58). This mistaken understanding was further enhanced in European eyes by observing the Wardandi and Pibelmen

\textsuperscript{11} Wedjela is the Nyungar term for white person or non-Indigenous person.

\textsuperscript{12} Boodier is a Nyungar word for leader, pathfinder and cultural expert (Palmer 1999:110)
peoples’ practice of moving location in accordance with the seasons and the availability of food supplies. This practice seemed to suggest to the European observers that the local Nyungar people did not have permanent attachments with particular pieces of land as they did not follow the European practice of food production in a single location year round. According to Shann (1926:9) “The Aborigines, like those of the eastern states, showed no trace of pastoral or agricultural knowledge.” From a Nyungar perspective the Europeans were intruding without permission on lands with which they did in fact have strong cultural, spiritual and economic ties. As Collard (1994:57) states, “Neither the explorers, the settler families or the government in London sought, or received, permission from the Nyungar land owners to take possession of the local lands.” Collard further suggests that conflict occurred because the land was taken over without a treaty or even clear guidelines of the rights of each party Collard 1994:57).

In relation to contact with the local Aboriginal people, Governor James Stirling proclaimed on the 18th June 1829 that,

And whereas the protection of the law doth of right belong to all people whatsoever who may come or be found to be within the territory aforesaid, I do hereby give notice that if any person or persons shall be convicted of behaving in a fraudulent, cruel or felonious manner towards the Aboriginal race of inhabitants of this country, such person or persons will be liable to be prosecuted and tried for the offence as if the same had been committed against any others of his majesty’s subjects. (Green 1981:80)
Captain Irwin, who was caretaker governor in 1833 whilst Stirling was in London, further declared that, “...it was the moral duty of whites having entered their country to help them become adjusted” (cited in Hasluck 1955:119).

Following the movement of the original European settlement in the Leeuwin-Naturaliste region from Augusta to Vasse, relations between the new arrivals and the original custodians appear to have initially been quite cordial, with the Nyungar men showing Dawson and the Bussell Brothers the location of a well (Shann 1926:57). By 1837, however, relations had soured as the settlers began to complain of the noise the Aboriginal people made. There were also numerous conflicts over thefts of property and killing of stock both European and native, as the two groups tussled for control of the land and its resources. Collard (1994:62) explains this situation,

The Wedjala regarded their sheep; cattle and crops as private property and were incensed when this property was stolen, at the same time, however they regarded the wildlife as public property to be hunted at will. The Nyungar, on the other hand, had areas for hunting and gathering vested in specific families and these families also felt justifiably angry when property and territorial rights were violated.

In June 1837 nine Aboriginal people were killed by the European settlers after they killed a cow and ate it (Hasluck 1955:164). In July, Constable Elijah Dawson was speared whilst sitting in his cottage. It appears that relations continued to worsen, following George Layman’s killing in 1841. A Nyungar Elder Gayware fatally speared Layman during a dispute over damper that was made from flour given to
some local Nyungars as payment for work they had carried out for Layman on his property that day (Collard 1994:64). Seven Aboriginal people were shot whilst the military searched for Layman’s attacker, Gayware, who was subsequently found and shot two weeks later (Hasluck 1955:219). It is understandable that tensions were quick to inflame at the Vasse as not only did it provide better pastures for the English settlers, it was also prime hunting ground for the local Wardandi Nyungar people who were quickly displaced.

Despite these conflicts, the Wardandi and Pibelman Nyungar People continued to provide an invaluable labour source for the new European settlers. They quickly mastered new skills and gained employment for tasks such as shepherding livestock, fishing and whaling, chopping wood, fetching water, clearing land and domestic chores. This work was not, however, always permanent or even regular and often their labour was traded for goods such as tea, sugar and flour and permission to camp on lands that had been taken over by the Europeans (Palmer 1999:138-139). Nyungars continued to contribute to the formal labour market of the Leeuwin-Naturaliste Region throughout the 1800s, although demand for their services declined somewhat with the arrival of convicts in the 1850s, picking up again at the cessation of transportation in 1868.

**Conclusion**

The early colonial history of the Leeuwin-Naturaliste Region is one firmly embedded in frontier ideology. This chapter has argued that the new European arrivals embarked in a process of trial and error in coming to terms with this new alien landscape and failed to draw as extensively from Nyungar knowledge systems as
they might have. This is not to suggest that the Early Europeans did not seek out some Nyungar expertise as Palmer (1999:110) states “Wedjela diaries, journals, reports and other historical documents are full of instances where Wedjelas sought out signs of Nyungars in order that valuable information could be obtained on the availability of water, native fauna, the best farming country, roads and short cuts.” It is the contention of this thesis that much more could have been learned especially in relation to the Nyungars’ ideology of interconnectedness with the landscape and their holistic land use management practices that were much closer to what we now call sustainable.

Of course it has to be acknowledged that at the time of the European invasion of the Leeuwin-Naturaliste Region the prevailing ideology of the newcomers was that of a frontier ethic. They were part of the new world colonization process which was guided by the dominant western scientific paradigm. According to Weaver & Lawton (2002:342) “Fundamentally, the scientific paradigm perceives the universe as a ‘giant machine’…that can be ‘disassembled’ in order to see how it operates.” This world view is also very anthropocentric, holding the view that “…humans are apart from and superior to the natural environment.” (Weaver & Lawton 2002:342). This belief that science and technology will conquer all was transported to the Leeuwin-Naturaliste Region through the process of western colonization in the 1830s. Thus this new idea of mastery over nature and the assignment of economic importance to natural resources began to replace the traditional custodians cosmology of interconnectedness between humans and the environment (Heathcote 1976:29-46).
It could be argued as indeed Bolton (1981) and Powell (1988) do that this frontier ethos continued through until the 1970s, based on the belief that Australia including the Leeuwin-Naturaliste Region contained seemingly abundant natural resources that were there to be taken economic advantage of. Returning to colonial times, the price of land in the Swan River Colony including land in the Leeuwin-Naturaliste Region was raised in 1841 to one pound per acre to form a fund to pay the passages of emigrants to the colony. The result of this policy was, however, the almost complete halt of land sales. This subsequently resulted in the cessation of the emigration fund, which significantly impeded migration to Western Australia (Clarke 1964:55). In addition, labour became increasingly limited and a depression began (Hasluck 1955:248). For various reasons, which are beyond the scope of this thesis, it was agreed in 1849 that convicts should be allowed to enter what was formerly the free Swan River colony, which included the Leeuwin-Naturaliste Region. The first convict ship arrived in Fremantle in June 1850. Convicts were sent to the Leeuwin-Naturaliste Region from 1851 to assist with the fledgling timber industry.

There had been some early attempts at cutting timber in the Vasse Region during the 1840s, however, the severe lack of capital and labour was to hinder the progress of this new industry until the arrival of convicts in the region in 1851. The convicts provided the necessary labour boost for the new timber industry to grow and by the 1860s well-financed entrepreneurs were moving in establishing timber empires and changing the landscape of the Leeuwin-Naturaliste Region forever. The impact of the arrival of convicts and the establishment of a large-scale automated timber industry in the region will be discussed in more detail in the next chapter.
Chapter 5: The Timber Industry 1850-1913

Introduction

At the time of European colonisation in 1830 the Leeuwin-Naturaliste Region was well endowed with ancient jarrah (*Eucalyptus marginata*) and karri (*Eucalyptus diversicolor*) forests on the plateaus. These are both strong hard-wood timbers that were in great demand by the construction and mining industries both locally and internationally during the 1800s. The prevailing belief throughout the second half of the 19th century was that the forests would provide an inexhaustible resource to meet this demand and as such there was limited consideration of need for the industry to adopt sustainable practices. The timber industry in the region, like the rest of the southwest land division of the state at this time, was swept up in the pioneering, frontier attitudes of the day. This largely justified the exploitation of the forest resources in the context that, in addition to contributing to the progress of the state by providing a profitable export industry, they were also opening up the landscape for future agricultural pursuits.

During the first twenty years of European settlement the progress of the timber extraction industry was hampered in the Leeuwin-Naturaliste Region by the lack of capital, infrastructure and shipping. At that time, none of the new arrivals had the necessary money to import large machinery and pit sawing the hard timber by hand was unattractive laborious work. With many of the sub colony’s servants finding newfound freedom to develop their own land grants there was no one to cut and mill the timber. Thus the forests of the region remained largely intact until the
introduction of convict labour in 1851 which provided the necessary cost affective labour to really establish a large-scale timber industry in the region.

A lack of further investment, difficulties with shipping and distance from Perth and major foreign markets again, however, slowed down the development of this new phase of the industry. It was not until the 1870s and the involvement of well financed entrepreneurs, including some who had struck gold in Victoria, that the industry was able to establish a solid foundation. These new players had connections with interstate and international markets, interests in shipping and the required capital to construct the necessary infrastructure for the industry to prosper. From this period the timber industry continued to expand throughout the region until the turn of the 20th century, promoting a significant population increase and the establishment and or expansion of many settlements to service this new industry’s needs (Figure 5.1).

![Population of the Leeuwin Naturaliste Region 1848-1901](image)

**Figure 5.1 Population of the Leeuwin-Naturaliste Region 1848-1901**

(Source: Census of Western Australia 1848, 1870, 1881, 1891, 1901)
During the early years of the expansion phase of the industry neither the timber entrepreneurs nor government authorities gave much attention to questions about sustainable practices or conservation. According to Robertson (1956:32) “As early as 1874 a warning was sounded although the government in reply to a colonial office circular, said it was too early yet to institute a conservation policy.” It was not until a Royal Commission into the industry in 1877 that it was identified by policy makers that the timber resources in the southwest including the Leeuwin-Naturaliste Region were in fact finite and were suffering the impacts of over exploitation. As a direct result of the findings of the Royal Commission new licences were introduced. The licences, however, appear to have been more focussed on attempting to curtail the waste associated with this new export industry rather than introducing stricter conservation controls and despite these new measures many continued to believe that the forests were still inexhaustible (WAPD 1890).

The firm belief that timber supplies were unlimited was not seriously challenged until the appointment of a conservator of forests in 1896. Thus it was not until the turn of 20th century that attitudes towards the unsustainable practices of the timber industry were at last being reviewed as it finally became apparent that supplies were in fact running out in some areas. For the Leeuwin-Naturaliste Region this recognition largely happened too late. By the time of the second Royal Commission in to the state’s timber industry activities in 1903, the Jarrah and Karri timber resources of the Leeuwin-Naturaliste Region were already in a state of rapid decline. This had forced the local industry to consolidate in response to increasing competition for increasingly scarce supplies and by 1913 all the mills in the
Leeuwin-Naturaliste Region had closed and the industry had moved its operations to the nearby town of Nannup further east.

This chapter will chart the rise and decline of the timber industry in the Leeuwin-Naturaliste Region during the 19th century. It will explore how the jarrah and karri resources were appraised as a commercial resource and as a facilitator in the opening up of more agricultural lands. It will also investigate the relationship between public and private initiatives in the development of the timber industry, the environmental impacts and its contribution to the region’s economic and social development. Finally it will discuss the changing attitudes towards conservation and sustainable land use practices and look into the reasons why this industry took so long to adopt more sustainable attitudes and practices.

**Early European Colonisers**

Following the establishment of a new sub colony at Augusta in 1830 many of the new settlers in the Leeuwin - Naturaliste Region acknowledged the potential of the local timber resources, particularly the Swan River Mahogany or Jarrah as it became known and the Karri. However, they did not have the necessary capital or equipment to extract it profitably. In fact, it was discovered very early that English axes were virtually useless for the purpose of felling these giants of the forest, and many trees were simply ringbarked and burned in order to clear the land for agricultural purposes, which had always been the primary goal of this fledgling settlement. In the early years of settlement timber along with lack of capital was seen as a great obstacle to settlement in this region with Vernon Bussell commenting “[Jarrah] we may burn for everlasting and still there will be enough to supply the world forever”
Despite the difficulties in extracting the timber from this region, there were a few early attempts at establishing a timber industry and setting up an export trade.

The first person to successfully export timber from the region was one of the original local settlers named Turner. He shipped a 36-ton load of jarrah to Mauritius in 1844 although this appears to have been a one-off event (Kinsella 1990:2). Following this initial successful attempt at establishing a timber industry, a consortium of locals at Geographe Bay formed the ‘Vasse Timber Company’ in December 1849. Members of this company included local identities such as Messrs Kerr, Geo Chapman, G. Bridges, William Bunbury, Vernon Bussell, Earnshaw and Coppin. However, after less than one year of operation the company experienced financial difficulties that were primarily the result of the lack of available shipping in what was at that time a remote area. (Kinsella 1990:3). Kinsella (1990:4) notes that another local, William Seymour also held a license to cut timber at the Vasse at this time. Alfred Bussell was another local settler who is believed to have been involved in the early stages of the timber industry in the Leeuwin - Naturaliste Region, pit sawing timber, and successfully applying for a tender to supply 1,000 loads of Mahogany timber for merchants Padbury and Hayson in 1851 (Cresswell 1990:72).

Thus although there appears to have been significant activity towards the development of a timber industry in the Leeuwin - Naturaliste Region during the first 20 years of settlement, it was access and technology issues that hampered its progress rather than any issues with supply or demand or regulatory controls. At this

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13 Jarrah was commonly referred to as Swan River Mahogany during the first half of the 19th century
time the forests were thick and the timber getters had to largely rely on the narrow walking tracks that the Pibelmen and Wardandi Nyungar people had created for access. In addition pit-sawing timber is particularly laborious work; firstly the tree has to be felled by axes by two men standing on suspended platforms 6 to 8 feet from the ground, as the lower portion of the tree is not suitable for sawn timber (Plate 5.1). Then the sawyers have to dig a pit underneath the felled tree and one man has the particularly unenviable task of squatting in the pit underneath the timber to guide the cutting saw (Cresswell 1988:74). The timber then has to be carted out of the forest by horse or bullock team to be exported.

It is interesting to note here that although this method of timber extraction was quite difficult, it was a much more sustainable practice than the mechanised processes that were introduced to the region later on. The early timber getters were very selective with the trees they decided to fell, usually choosing the tallest and straightest and leaving most of the surrounding trees undisturbed. The carting of the timber from the forest floor to the port, whilst creating some localised impacts, was also less intrusive than the large cleared access ways that were created to facilitate the establishment of a quite comprehensive railway and tramway network during the 1870s and 1880s.

**Convicts and the Timber Industry**
The arrival of convicts into the Swan River Colony in 1851 provided the necessary cost effective labour to really increase the momentum of the development and expansion of the timber industry in the Leeuwin - Naturaliste Region. In addition to
Plate 5.1 Timber Felling

(Source: Wiltshire 2000:12)
providing a ready source of cheap labour for the local timber industry, the huge
government works program that the new convicts were employed to undertake in the
southwest of the state further increased local demand for the region’s hardwoods.
Convicts were first employed in the Leeuwin-Naturaliste region in 1851 to cut timber
at Augusta. The first shipment of convict produced timber, comprising 170 tons of
sawn jarrah and 14,000 tree nails, was exported from the Flinders Bay port in 1852

Perth merchants Messrs Shenton and Davey employed the convicts who cut timber at
Augusta. They would pit saw the timber from the nearby forest and raft it down the
Blackwood River for export from Flinders Bay. Although the employment of
convicts solved the labour shortage problem in the short term for the fledgling timber
industry in the Leeuwin-Naturaliste Region, it appears that this operation was short
lived. Inadequate port facilities and irregular shipping were the main reasons for the
discontinuation of this latest timber venture (Stewart 1948:34). In 1852, timber-
cutting activities moved to the Geographe Bay Region, which had greater
infrastructure due to the relocation of the Augusta settlement there in the previous
decade. Here Charles Keyser employed 42 ticket-of-leave men who cut timber as a
topping up load for visiting whalers. From Geographe Bay the timber industry
spread south with Captain Jacob Toby establishing timber cutting operations at the
Carbunup River and ex convict John McGibbon employed many ticket-of-leave men
to saw timber at Quindalup (Kinsella 1990:4). The extraction of timber during the
convict period was still carried out by the pit sawing method and the small-scale
nature of the industry at this time meant that the forests of the Leeuwin-Naturaliste
Region remained largely intact until the arrival of well financed entrepreneurs from
1858. The convict connection to the timber industry did however remain strong with many of these new entrepreneurs continuing to employ ticket-of-leave men up until the early 1880s (table 5.1).

<table>
<thead>
<tr>
<th>Employer</th>
<th>Number of Ticket-of-leave men</th>
<th>Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Davies, M.C.</td>
<td>16</td>
<td>1876-1883</td>
</tr>
<tr>
<td>Yelverton, Snr.</td>
<td>270</td>
<td>1851-1871</td>
</tr>
<tr>
<td>Yelverton, Jnr.</td>
<td>60</td>
<td>1872-1885</td>
</tr>
<tr>
<td>Simpson, G.</td>
<td>150</td>
<td>1866-1881</td>
</tr>
<tr>
<td>Elderidge, W.</td>
<td>6</td>
<td>1874-1876</td>
</tr>
<tr>
<td>Keyser, C.</td>
<td>42</td>
<td>1867</td>
</tr>
<tr>
<td>Seymour, F.</td>
<td>7</td>
<td>1867-1881</td>
</tr>
</tbody>
</table>

Table 5.1 Ticket-of-leave men employed in the timber industry in the Leeuwin-Naturaliste Region
(Source: Western Australian Archives)

Entrepreneurs

In the next phase of development of the timber industry in the Leeuwin- Naturaliste Region, major entrepreneurs\(^\text{14}\) transformed the industry from struggling small scale concerns to a large scale, well financed, automated industry, which significantly transformed the local environment and cultural landscape as well as providing an additional market for local farmer’s fresh produce. The new timber entrepreneurs introduced technology and processes that enabled them to extract large volumes of timber from the forest. At this time there was little interest in issues of sustainability, as it was widely believed not only by those in the industry but also by politicians and the general community that the forest would provide an unlimited natural resource. The extraction of the timber resources was also supported as it provided a strong

\(^{14}\) Brief biographies of the main timber entrepreneurs are presented in Appendix 2
export industry and the clearing of the tall timber had the added bonus effect of creating more useable agricultural land.

The first major timber entrepreneur to move into the region was Fremantle merchant Henry Yelverton, who had gained his wealth from carting and storing sandalwood (Santalum spicatum) at Fremantle. Yelverton, who also had significant interests in local shipping, took up leases in the Sussex Region and established a mill at Quindalup in 1853 (Erickson 1988 & Kinsella 1990:6). In 1858 Yelverton took on a partner, local timber cutter McGibbon who had established his timber operations utilising ticket-of-leave labour and together they constructed two more mills. The first mill was located 1.5 miles from the coast and the other a further seven miles inland bringing the total number of mills operated by the partnership to four. This new enterprise also constructed a major piece of infrastructure, the Quindalup jetty to facilitate the export of their timber from these mills (Thomas 1929:32).

In 1862 it was reported that Yelverton’s company was experiencing financial difficulties, with a notice to creditors being placed in the Inquirer. However, according to Robertson (1956:5), he was able to carry on timber production. Yelverton is also credited with being the first person to introduce a steam-powered mill to Western Australia, which signified the beginning of the mechanisation of the local timber industry. Following a change in licensing laws in the 1860s Yelverton obtained a 20 year concession of 57,000 acres and his operations continued to prosper, with the handing over of the company to Yelverton’s oldest son, also named Henry, who oversaw his father’s company’s incorporation into the ‘Imperial Jarrah Wood Company’ in 1897. Kinsella (1990:16), claims that this amalgamation was
primarily a financial exercise in response to increasing competition, as Yelverton Jnr remained as manager. The new company closed down its operations the following year primarily as a result of the exhaustion of the timber supply.

Following Yelverton’s lead, another entrepreneurial timber enterprise established its operations in the north of the Leeuwin - Naturaliste Region in 1862. A consortium of businessmen from Ballarat, Victoria financed the ‘Western Australian Timber Company’ that was also locally referred to as the ‘Ballarat Timber Company’ (Thomas 1937:478 & Stewart 1948:35). The Western Australian Timber Company possessed a 200 000 acre timber lease at Lockeville and they constructed a 12 mile railway line to link this timber lease with their newly constructed jetty at Wonnerup at the northern end of Geographe Bay (Robertson 1956:13 & Thomas 1937:478).

The Western Australian Timber Company continued its operations exporting timber from the Leeuwin-Naturaliste Region until 1878 when it closed down. Its closure is reported to have been in response to higher fees. The government was also severely criticised for blocking attempts to transfer the company’s shares, which was seen as a discouragement of much needed outside capital into the industry. In 1883 the company’s lease was finally taken over by Simpson a former manager of the company with government support from John Forrest (Robertson 1956:17). Following the change in ownership, a new mill was constructed, employing 30 men at Harrington, 28 miles from Busselton. This new mill was required, as all the available timber resources at Lockeville had been exhausted. However its revival was relatively short lived with the company being liquidated five years later in 1888 (Robertson 1956:25).
In 1875, another entrepreneur, Willy Elderidge, who originally came from Victoria to manage the Western Australian Timber Company at Lockeville for Simpson, was granted his own 14 year lease to cut timber from 75 000 acres in the south of the Leeuwin-Naturaliste Region near Augusta (Fall 1974:94). The success of this operation and the revival of the timber industry in the south of the Leeuwin-Naturaliste Region was however thwarted by significant infrastructure and shipping difficulties. Elderidge had to deal with inadequate port facilities at Hamelin Bay. This lack of suitable infrastructure meant that the sawn timber had to be jinkered to the awaiting vessels, which was an inherently dangerous procedure that could only be carried out during the most favourable weather conditions.

A further-set back was the sinking of Elderidge’s first load in the Bay as the ship set sail. While Elderidge finally successfully exported a load of timber in 1876, he had sustained a considerable financial loss that was to hamper further development of the timber industry in this southern part of the region. Thus the forests of this part of the Leeuwin-Naturaliste Region were again saved from significant destruction at this time due to isolation and lack of suitable infrastructure. This situation was soon to change however, when Elderidge’s forfeited lease was taken over by another entrepreneur, M.C. Davies in 1878.

Maurice Coleman Davies was perhaps the most well known entrepreneur to become involved in the timber industry in the Leeuwin-Naturaliste Region in the late 1800s. Unlike many of the Victorian entrepreneurs before him, Davies was committed to the development of the timber industry in the Leeuwin-Naturaliste Region over the long term. Davies invested heavily in new technology such as mechanised mills and
constructed major infrastructure including railways and ports to facilitate the
extraction and export of the region’s timber (Plate 5.2). Davies originally migrated
with his family from London to Tasmania at the age of five, and then at the age of 16
joined the gold rush in Victoria. He must have experienced some success on the gold
fields, as he was able to establish himself as a contractor in Adelaide, supplying
timber for the newly developing railways. Due to a shortage of natural timber
supplies in South Australia in the 1870s, Davies looked west for greater timber
resources.

In 1875, Davies became a shareholder in several milling companies in Western
Australia including the ‘Jarrahdale and Rockingham Timber Company’. However,
he was interested in developing his own timber interests. This led him to
successfully apply for a 2 000 acre lease at Collie in 1876. By 1878 he had
established two small mills at Worsley and withdrawn his interests in the established
Western Australian Timber Companies (Hameling 1965:39-41, Karridale School
1983:3 & Thomas 1937:400). Whilst Davies now had sole control of his new timber
enterprises, he was soon to experience some problems in his first solo venture. Firstly
there were difficulties experienced with transporting the timber from Worsley to the
port at Bunbury. The terrain was steep and rocky on the hills of the Collie River, and
then coastal swamplands had to be crossed to reach the coast (Thomas 1937:400).
Transport issues became the source of several arguments between Davies and the
government over the responsibility of the road system. In response to an
unsatisfactory outcome of this dispute, Davies decided to turn his interests to the
Plate 5.2 MC Davies Timber Operations

largely unexploited timber reserves in the south of the Leeuwin-Naturaliste Region near Augusta. (Cresswell 1990:80).

In 1878, Davies took over Elderidge’s operations near Augusta, including lighters and bullock teams, and according to Cresswell (1990:79) it can be assumed that Davies continued to pit saw timber until the construction of his first mill at Coodarup in 1881. This original mill did not utilise locomotives to transport the timber, but rather was established on a horse drawn, wooden railway system. The mill was however, powered by a 25 horsepower engine and had a capacity of 9 000 super feet per day (Karridale School 1983:4, Thomas 1937:400 & Thomas 1929:33). Davies became the first successful timber entrepreneur in the south of the Leeuwin-Naturaliste Region and in 1882 expanded his operations by obtaining a further lease of 46 000 acres for a term of 42 years at £150 per year. It is interesting to note that the conditions of this lease included,

The right to cut and remove the whole of the timber standing, growing or which might grow upon the area during the term, with power to construct railways and tramways any-where through the land, and with the pre-emptive right to purchase at the rate of 10/- per acre certain blocks within the boundaries of the concession land at Hamelin Harbour. (Hameling 1965:41).

The terms of Davies new lease provides a strong indication of the government’s position towards the forest resources of the southwest at this time. It is clear that the
prevailing belief was that the timber was an inexhaustible resource and that clear felling was to be encouraged. This attitude is also consistent with the perceived need to clear more land for agriculture. As discussed in the previous chapter the task of clearing the land of the tall Karri and Jarrah forests in the south of the Leeuwin-Naturaliste Region had proved a particularly arduous task and had contributed to abandonment of the Augusta settlement 40 years earlier.

**Karridale & M.C. Davies Operations**

Interestingly, Davies did not select the (re) emerging settlement of Augusta as the centre for his timber operations in the region, but rather he constructed a new town at Karridale some 40km north. This fresh site was chosen due to its proximity to both Flinders and Hamelin Bays, which became the ports used to export the company’s timber alternatively during the summer and winter months according to prevailing winds (Hameling 1965:42). Davies relocated his first mill, which was established at Coodarup in 1881 to a new site at his headquarters at Karridale in 1882 (Cresswell 1990:80). In 1891 an even larger mill was constructed by Davies at Boranup three miles north of Karridale, with a third mill constructed at Jarrahdene in 1895 although Karridale remained as the centre of Davies operations (Karridale School 1983:5). In 1883 Davies’ son Walter also purchased the land grants of the late Turner, who had been one of the pioneers in the timber industry of the Leeuwin - Naturaliste Region, adding to the family’s timber operations (Cresswell 1990:80 & Hameling 1965:41).

Karridale was established as the first self-contained company town in Western Australia in what was at that time a very isolated location, some 12 hours by coach from the capital, Perth (Thomas 1937:401). The company provided housing for
approximately 300 workers and their families and all of the town’s facilities including a company store, recreation hall, hospital, church, library, sports ground and racecourse (Plate 5.3). Davies operations had their own currency with company cheques, which were accepted anywhere in the state (Karridale School 1983:5). Workers were provided with rent-free housing and employed on a bonus system and received wages by company cheque in the local currency (Hameling 1969:47). Davies also established some 30 or 40 acres of market gardens at Karridale in the 1880s and employed Chinese gardeners to tend them.

By the 1880s the timber industry in Western Australia had become an important economic resource, with exports second only to wool (Cresswell 1990:80). By the late 1890s at the peak of the timber industry in the Leeuwin - Naturaliste Region, M.C. Davies had become the largest timber producer in the state, accounting for 32% of all the Colony’s timber exports (Cresswell 1990:92). Davies’ operations at this time were running three mills with a capacity of 45 000 super feet per day including 12 000 super feet per day at the Karridale Mill, 12 000 at Borranup and 21 000 Jarrahdene with timber being exported primarily to Adelaide, Melbourne and South Africa (Thomas 1929:33). In addition to the mills, Davies’ Company was also running a number of steam driven locomotives on some 40 miles of newly constructed private railway and tramway and the two ports at Hamelin Bay and Flinders Bay. The Flinders Bay Jetty which was originally only 800 feet long was later extended to 1 100 feet, whilst the Hamelin Bay Jetty was constructed in 1882 at a length of 1 800 feet. These ports were always hazardous due to their exposed locations, and many ship wrecks occurred during bad weather (Cresswell 1990:80 & Hameling 1965:42-49). The construction and maintenance of this entire
Plate 5.3 Karridale Race Course and Karridale Church

(Source: Cresswell 1988:77 & 93)
infrastructure including company settlements at the mills and ports and an extensive railway and tramway network required significant and ongoing investment (Plate 5.4).

In 1894 at the peak of production, Davies incorporated his company with his sons, and in 1897 the new family company was refloated in London to secure more capital for further expansion and equipment (Cresswell 1990:108 & Hameling 1969:45). In fact the infusion of English capital into the industry not only in the Leeuwin - Naturaliste Region but the whole state was to become a turning point for the industry. The capital which was probably initially attracted by the gold rushes at the time increased competition in the local industry to meet shareholder profit levels and this combined with a sharp decrease in trade with South Africa due to the Boer War, was to create a climate for a shake up in the timber industry (Cresswell 1990:111 & Robertson 1956:32).

**Combine**

At the turn of the 20th century in response to the heavy competition, eight major Western Australian timber companies, excluding Bunnings and Whittakers agreed to amalgamate into what became known as the ‘Combine’, headed by the Millars company, in 1902. Figure 5.2 shows the locations of many of the mills, tramways and timber leases of the new combine. M.C. Davies’ operations and the ‘Imperial Jarrah Wood Corporation’ that included the remains of Henry Yelverton’s operations became part of this new entity in an effort to survive increasing pressure from declining markets and heavy price-cutting (Hameling 1969:52 & Gilchrist
Plate 5.4 Timber Industry Infrastructure at Boranup

(Source Cresswell 1988: 101&106)
Figure 5.2 Millars Karri & Jarrah Company 1902

(Source: Battye Library Map Collection Series 237 No. 3845)
The new Combine now accounted for more than 70% of Western Australian timber exports (Cresswell 1990:113). The strengthened position of the combine enabled it to raise prices, which resulted in suspicion regarding its activities, and in the government calling a Royal Commission in 1903 to investigate the conduct of the timber industry (Robertson 1956:51).

Thus the amalgamation of the two largest timber enterprises in the Leeuwin-Naturaliste Region into the ‘Combine’ signified the end of an era for the industry in this area that had previously been based on individual entrepreneurial skills. Further, by 1913 the industry had moved out of the region entirely due to the exhaustion of local timber supplies. Karridale closed shortly after the amalgamation, with Boranup following in 1910 and Jarrahdene in 1913. Some timber extraction activity remained in the region, although the milling operations were now centralised at Nannup to the east of the Leeuwin-Naturaliste Region. Nannup was connected to the public port facility at Bunbury via a government railway. This use of public infrastructure significantly reduced the overheads for the timber industry in the 20th century enabling it to survive (Robertson 1956:31). In the 21st century there is little evidence to be found of the once thriving timber industry in the Leeuwin-Naturaliste Region with major fires in 1961 destroying the last remnants of infrastructure associated with this major land use activity (Hameling 1969:55). A major exception is the Busselton Jetty which has been restored and is now one of the regions’ major tourist attractions.

The timber industry in the Leeuwin-Naturalist Region was probably the site of largest systematic exploitation of forests in Western Australia during the 19th
century. Although very little occurred in forest policy during the boom period of Davies’ operations, it is significant that when Conservator Lane - Poole was appointed in 1916, his first trip out of Perth was to Boranup, the site of one of Davies’ former mills, to examine the legacy of timber operations as a prototype on which to base the state’s future forest policy (Mills 1996:6). It is also interesting to note the apparent lack of appreciation of the contribution of sustainable logging practices for the future of these timber enterprises. It would appear that these frontier entrepreneurs were more concerned with exploiting the timber resources to make money in the short term, rather than being able to stay in business for the long term. Of course this ideology would have been guided by the prevailing belief, in the early years of operation, that the timber source was unlimited. However, by the turn of the 20th century, it had become clear that this was not the case and the increasing competition for the dwindling resource led to a significant shake up in the industry in the Leeuwin-Naturaliste Region.

Sustainability and Timber Regulations
Until the Forest Act of 1918 Western Australia’s forests were administered by the Lands Department. In 1842 the government did adopt a system of timber license fees of 10/- per month obtainable from the Collector of Revenue. However, they did not have any real control over exploitation and waste (Mills 1986:7 and Robertson 1956:12). This policy that was administered firstly by the colonial powers and later from 1890 by the state government indicates that the priority of the government was land administration for agriculture rather than any focus on the sustainable use of forest resources.
In the early 1870s Governor Weld introduced a system of timber concessions at nominal rent in an effort to attract entrepreneurs into the newly emerging industry. Although the government was prohibited from placing any duty on export timber at this time they still collected license fees for the area worked annually and sawyers fees so that government revenue did not decline. Despite this new system of concessions, the regulations still did not place any significant government control over waste or encourage any move towards more sustainable practices within the industry (Robertson 1956:13).

In 1875 Special timber licenses were introduced with M.C. Davies amongst the first to obtain such a license (Robertson 1956:14). Until the 1870s the timber industry largely comprised of unautomated operations that were necessarily selective with the trees that they felled to ensure maximum return for their efforts. With the introduction of new technologies from the 1870s the timber industry began to have more serious impacts on the environment. This new phase of the industry did spark some concerns and a Royal Commission was held into the activities of the timber industry in 1877 to consider steps to regulate and develop exports and conserve forests (Robertson 1956:32). As a result, new timber regulations were introduced in September 1878 that increased the license fee for timber exports. The fees were intended to curtail waste associated with the export trade. However, as a government spokesperson admitted, “it was less a measure of protection than one designed to ensure the government a fairer return for its asset.” (Robertson 1956:17).

As late as 1890, the premier, John Forrest was claiming that the state’s forests including those located in the Leeuwin-Naturaliste Region were still inexhaustible
and that it was too early for conservation measures in response to concerns over forest protection raised in parliament (WAPD 1890). By 1894 the issue of forest conservation was again being debated in parliament with a notice being moved by William Traylen “That in the opinion of this House, the subject of forestry is becoming of increasing importance, and the time has arrived for taking efficient steps to provide for future supplies of timber for home consumption and export purposes.” It should be noted here that William Traylen was also motivated by the need for better water supplies (WAPD 1894:639). In response to increased public concern over the forests the government established a Forests and Woods Department in 1895 and in 1896 appointed its first conservator of forests Ednie Brown. This newly created position was short lived however with no replacement conservator being appointed following Brown’s death in 1899 until Lane-Poole in 1918.

A further development was introduced to forest administration when, in 1898, the Lands Act was amended to require improvement on timber leases as was required by agricultural leases. This Amendment however, proved to be very unpopular with all of its clauses being repealed within six years (Robertson 1956:48). Again this move can be viewed as an indication that the government was supporting the timber industry as a means to have more land cleared and made available for agriculture.

In 1903 a second Royal Commission was held into the timber industry, though it was primarily in response to concerns over the power of the newly created combine administered by the Millars Company rather than issues of conservation or sustainability. As a result of this Royal Commission, on 24 December 1904, all timber leaseholds were abolished and a system of permits and royalties was
established (Mills 1986:36). At this time there was still no legislation to protect the forests as stated by CALM (2002:1) “Before the Forests Act was Passed in 1918, there was no legislation to control the amount of timber cut, or where and how it could be cut, or to provide for regeneration of the forest after the mills had finished in an area.” As late as the 1910s according to (CALM 2002) “No information had been gathered on the extent of the forest, or the amount of timber that could be taken without reducing the size of the forest. Exploitation was the cry of the day, and land cleared by the sawmills was generally turned over to agriculture.”

In 1918 attitudes towards the state’s forest resources finally changed and the Forests Act was passed by parliament. This new act resulted in the formation of a Forests Department, and the re appointment of a Conservator of Forests, C.E. Lane-Poole, who came to the position with significant international forestry experience. CALM (2002:1) describe the importance of Lane-Poole’s role,

In 1918, Lane-Poole saw the disastrous consequences of 70 years of uncontrolled felling and realised that, without regulation, the forest would be devastated within a generation…Against powerful opposition from sawmilling and commercial interests Lane-Poole pushed for legislation, laying the foundations for management aimed at conserving rather than exploiting the forest. Without his efforts, and those of his successors, it is highly likely that there would be little forest for any purpose left to us today.
Under the Forests Act of 1918 the government through the Forests Department now had control of all forestry matters on Crown land, although private land was still exempt from regulation. The Forests Act also empowered the government to create state forests, with State Forests, Number 1 and Number 2 both located in the Leeuwin-Naturaliste Region. This land between the Capel and Ludlow Rivers, which contained 1385 hectares of prime Tuart Forest, the last remaining remnant of the species, was repurchased from private landowners, primarily for the growth of Tuart (Kay 1985). Many additional large managed forest blocks were also established in the eastern part of the Leeuwin-Naturaliste Region with some smaller blocks in the west which were surrounded by private land holdings.

The Government initiatives introduced in 1918 were largely too late for the timber industry in the Leeuwin-Naturaliste Region which had been denuded of most of its commercially extractable timber. The private industry had consolidated and moved its milling operations out of the area to the east at Nannup in 1913, signalling the end of the timber era for the Leeuwin-Naturaliste region. Some timber activities did however continue in the area, though on a much smaller scale. In 1920 the new Forests Department established its own mill at Wonnerup Beach, and a new mill at Ludlow, which produced timber for the government railways, which were expanding to facilitate the newly established group settlement scheme in the region. The Department’s operations continued full time until 1955, from which time they operated only intermittently until 1974 (Kay 1985).

By 1988 the timber industry was still a small-scale niche industry in the region with one mill at Witchcliffe and two at Busselton. These mills were producing timber for
the building industry, local furniture and crafts with some production of railway
sleepers for export (State Planning Commission 1988). At this time community
opposition to the remaining timber operations in the Leeuwin-Naturaliste region was
gaining strong momentum. The struggle to save the forests began with the growth of
the environment movement in the 1970s. This combined with the influx of a
significant number of alternative lifestyler to the Leeuwin-Naturaliste Region during
this time set the scene for future conflict with the timber industry. Throughout the
1980s and 1990s opposition to old growth logging of the region’s karri and jarrah
forests grew and protests at logging sites were held throughout the south west of
Western Australia.

In the late 1990s the Western Australian government participated in the national
Regional Forests Agreement process which recommended the discontinuation of the
logging of old growth karri and more restrictions on the logging of jarrah
(Commonwealth and Western Australian Regional Forest Agreement Steering
Committee 1998) By the year 2000 a new Labor government was elected in Western
Australia on the platform of stopping old growth logging. They stopped the logging
of old growth karri and set in place restrictions and restructuring packages to assist
the industry to move out of logging old growth jarrah as well. The remnant old
growth as well as the now 100+-year-old regrowth forests of the Leeuwin-Naturaliste
Region are now viewed as significant tourism assets.

Wardandi and Pibelmen Nyungar People
The Wardandi and Pibelmen people did not cut down the timber of the Leeuwin-
Naturaliste region prior to European settlement as they did not have the technology
or an economic need to do so. The ancient forests were an important part of their culture and an integral component of their managed farming system providing both food and shelter. It is however, likely that the Nyungar people did contribute to the post European timber industry in the early days providing their labour and navigation skills. During the convict period the original custodians of the Leeuwin-Naturaliste region were further marginalised as their labour was not required as much whilst the settlers had access to free convict workers. Following the cessation of the importation of new convicts in 1868, the local Nyungar peoples’ labour was again called upon again more frequently.

During the late 1800s the government made significant changes to their policies on the state’s Indigenous peoples which impacted on the Wardandi and Pibelmen Nyungar people of the Leeuwin-Naturaliste Region. In 1886 Aboriginal People came under the control of the government through the Aborigines Protection Act and in 1906 the government introduced the Aborigines Act which controlled Aboriginal people’s movements, land use and employment. This Act also promoted the removal of children. People who wished to employ Aboriginal people now had to seek permission in writing from the Aborigines Department which involved the payment of a fee, thus many people were now dissuaded from employing Nyungar people (Collard 1996:74).

In 1899 the Chief Protector of Aborigines, Henry Prince, negotiated with Edith Bussell (his cousin) to use Ellensbrook Homestead in the Leeuwin-Naturaliste Region as a farm home for destitute Aboriginal Children. The demand for this facility was largely created by the government policies of the day. These
government decisions were making it increasingly difficult for Nyungar people to secure employment and provide for their children especially as they were also becoming increasingly isolated from their traditional lands by the expansion of the timber industry. According to Collard (1996:77) “Ellensbrook provided accommodation, training in writing, reading and work skills. The aim was to prepare children so that they would have useful skills for future employment in domestic work, on their own property or on local farms.” Ellensbrook remained in operation as a home for Aboriginal women and children from all over the state until it was closed in March 1917. Collard (1996:83) cites a reduction in funds for the Aborigines Department due to the outbreak of World War 1 as the main reason no more funds were given to provide services at Ellensbrook.

**Conclusion**

The timber industry in the Leeuwin - Naturaliste Region expanded rapidly from its origins as an alternative source of income for local colonists, to a large scale automated industry which provided much needed infrastructure and encouraged inland settlement in the area. The industry was allowed to progress with little government control or regulation until the inevitable exhaustion of the resource, which then resulted in the removal of infrastructure and contraction of settlement, not to mention the legacy of the environmental impacts of timber extraction. The government had encouraged the industry in the belief that ‘...much advantage would result to the colony by the expansion of its timber trade’ (WAPD 1872:37). No political concern was expressed for conservation of the State’s timber resources until 1892, with this change in attitude arising more for concern over protecting water catchments than forest conservation. By 1896, however, it was finally realised that
the State’s timber resources were not infinite and a conservator of forests was appointed to address the problem. New regulations were not introduced until the Forests Act of 1918, which was too late for the Leeuwin-Naturaliste Region which had already denuded most of its commercially extractable timber.

The policies and practices of the timber industry in the 19th century were consistent with the dominant frontier ideology of the time. One of the main reasons the timber industry was so strongly supported and little attention was given to sustainable practices was that it provided a mechanism for opening up more land for agricultural pursuits. Thus the romanticising of the rural lifestyle remained a strong force at this time. The Leeuwin-Naturaliste region was promoted from the beginning of European occupation as providing the opportunity for the ‘yeoman ideal’; where middle class people of Western Australia could establish profitable farming with associated settlements. The government continued to encourage the agricultural settlement of the south west of Western Australia well into the 20th century, although the states main development focus was now on the gold rush\textsuperscript{15} centred on the newly created townships of Coolgardie and Kalgoorlie some 600km east of the capital Perth, rather than the timber industry.

The First World War had a significant impact on the community of the Leeuwin-Naturaliste Region with many local men signing up. At the conclusion of the War the government once again turned its attention to the development of the South West including the Leeuwin-Naturaliste Region. The war had sparked the idea that Australia and in particular the more remote regions which at this time included the

\textsuperscript{15} The Western Australian gold rush started in 1892 and development was supported by the construction of a water pipeline by C.Y. O’Connor to the goldfields which was completed in 1903
Leeuwin-Naturaliste area needed to ‘populate or perish’. There was also the need to turn around the sluggish post war economy and provide employment opportunities for returning service personnel. The solutions to these problems were to feature in the group settlement scheme which was established by Premier Mitchell in the 1920s (Gabbedy 1988). This project which began as a soldier settlement scheme became part of a significant British migration program that involved granting land to new arrivals who would in turn create a dairy industry in the region. The details of this new land use activity will be further investigated in the next chapter. The following chapter will also examine a second land settlement scheme known as the War Service Land Settlement Scheme that was introduced to the Leeuwin- Naturaliste following World War II.
Chapter 6: Group Settlement Scheme 1920-1940 and the Post War Land Settlement Scheme 1945-1960

Introduction

Following the contraction of the timber industry at the turn of the 20th century and exodus of many of the region’s young men during the Boer War and World War 1, the Leeuwin-Naturaliste Region was in a state of economic stagnation. This situation contributed to the region being selected as a prime candidate for the two government directed post war land settlement schemes. The formation of these schemes was based on the persistent belief that the tall timber in the region indicates fertile soils, and the perceived need to populate this area. Following each of the two world wars the conviction in the requirement to populate or perish was particularly heightened resulting in strong political and community support for both schemes. However, like the land settlement policies that preceded them, these new government directed attempts at closer land settlement were introduced to the Leeuwin-Naturaliste Region to satisfy the political agendas of the day rather than encouraging a sustainable agricultural industry that would be able to support the community in the long term.

The first post war land settlement scheme was introduced into the Leeuwin-Naturaliste region following the First World War. Known as the group settlement scheme, it began as a soldier settlement scheme, but then became part of a significant British migration program. Despite the evidence and marginal agricultural success of the early European settlers in this region, the Mitchell government of the 1920s established the scheme that involved the clearing of significant areas of forest for the
establishment of a dairy industry. The imposition of a new dairy industry on marginal lands was destined to face difficulties from the start. Essentially this new land use involved the wholesale clearing of much of the remaining forests and the introduction of a monoculture activity on land holdings that were too small to be viable. In addition many of the new farmers were inexperienced ex soldiers or urban migrants from the U.K. Like the timber industry, which preceded it, the Group Settlement Scheme was also to become the subject of a Royal Commission.

The relative success or failure of the Group Settlement scheme continues to be debated by academics and descendants, many of whom were born ‘on the farm’. In terms of progress or development, the scheme was responsible for opening up large tracts of agricultural land, increasing the population (Figure 6.1), the building of new townships and the provision of improved infrastructure including roads and rail links. However, it would appear that overall the scheme was a costly experiment that resulted in some significant negative environmental and social impacts.

Despite the fact that this first post war closer settlement scheme had proved to be unsustainable, following World War II it was again deemed necessary by the government of the day to institute another land settlement scheme to accommodate returning soldiers. This second scheme ran from 1945 until the conclusion of property purchases in 1952, although crown land was still developed until the formal closure of the scheme in 1963. Unlike the first scheme, this one initially was only to provide farms on already cleared land that was regarded suitable for agricultural purposes. Again like its predecessor this scheme was given an optimistic outlook with strong support from government.
Figure 6.1 Population of the Leeuwin-Naturaliste Region 1921 – 1961

(Source: Census 1921, 1933, 1947, 1954, 1961)

The Leeuwin-Naturaliste Region, containing many abandoned group settlement properties, became part of the dairy section of the War Service Land Settlement Scheme. Tobacco was also trialed at Karridale, but problems with leaf curing resulted in these farms reverting to dairy production. Whilst this second attempt at a post war land settlement scheme has been regarded as slightly more successful than the first, it still faced many similar difficulties and was still based on finding a short-term solution for employment and accommodation for returned service personnel rather than a long-term vision for the sustainability of the region.

This chapter will examine the establishment of the two schemes, identifying how and why they were given so much government support. It will also take a brief look at the participants and investigate why they experienced such difficulties. Finally this chapter will analyse the land use activities undertaken as part of these schemes in the
context of sustainable land use practices and explore why it appears that there has been a reluctance to learn from past environmental mistakes.

**Group Settlement Scheme**

The group settlement scheme which operated in the south west of the state including the Leeuwin-Naturaliste Region from 1921 to 1930 is credited as the brainchild of Premier James Mitchell, who is believed to have planned the concept whilst minister for railways during the First World War (Brayshay & Selwood 1997:5). It was Mitchell’s firm belief that previous land settlement in the southwest had failed due to the inefficiency of the settlers not the suitability of the land for intensive agriculture (Cresswell 1988:167). According to Field (1963:18), “Mitchell’s idea of south west development was politically inspired. It offered the chance for the establishment of a compact, densely populated area which would owe its existence to his efforts.”

Mitchell did have some previous experience in developing new agricultural country in the Wheatbelt and this had given him the confidence that this achievement could be emulated in the south west (Oliver 1995:210). It has been noted though, that his reasoning was not based on scientific research but the mistaken assumption that the tall forests and high rainfall in this area indicated a suitable environment for dairy farming (Cresswell 1988:167). Initially there appears to have been little resistance to the scheme from either the political opposition or the local media (Hunt 1957:18), although there was some minor disagreement expressed from the National Party whose objective was to look after the interests of their existing farming constituents (Oliver 1995:211). It was generally envisaged that agriculture would quickly prove
profitable as the environment was tamed and markets expanded and thus the government’s significant investment would prove worthwhile (Field 1963:18).

The scheme was originally set up for returned Australian soldiers; however, the Mitchell government then used the model of their post war settlement scheme to attract interest from the Colonial Office in London to secure its future as part of the post war empire settlement scheme. This large-scale migration programme involved most Commonwealth countries and similar group settlement schemes were established in Canada and New Zealand (Field 1963:17). The British parliament passed their Empire Settlement Act in May 1922 and the Mitchell Government signed the Migration Agreement Act in 1923, which committed it to receiving 6,000 British families to establish dairy farms in the South West on a Group Settlement Cooperative basis (Watson 1997:401).

The first 40 groups in the scheme comprised Australian settlers (Rooney 1958:10). According to Field (1963:18), “The general object was to provide the ex-soldier with the means to rehabilitate at concession rates rather than to make an outright gift of a farm and other capital assets.” Groups of 20 families were placed on 160-acre blocks and granted 10 shillings a day for an 8-hour day 6 days a week whilst clearing and a 10 pound loan for the purchase of household necessities (Hunt 1957:21).

The group’s men worked co-operatively clearing blocks for farming, under the direction of a foreman who decided the selection of blocks and the work required. Their families were housed in temporary dwellings constructed of iron, which were 7.3m by 3.6m (24f, by 12f). The internal walls were fabricated from Hessian bags.
and the huts were often windowless, as the iron would have to be reused later for roofing on the permanent house. Following the preliminary clearing of 25 acres on each selection, the blocks were then balloted between the 20 families with priority given to married men. The balloted farmland was free, with £13-1-0 due in survey and office costs (Cresswell 1988:167). Following the allocation of their farms, farmers could then construct permanent dwellings to house their families. These houses were four room timber framed cottages with the recycled shack iron for roofing (Plate 6.1)

Plate 6.1 Group Settlement Housing
(Source: Cullen et al 1999:57)

There were 51 groups located in the Leeuwin-Naturaliste Region (Table 6.1 and Figure 6.2). Thus the group settlement scheme contributed to a population increase
for the region of more than 1000 families, with the region’s overall population increasing from 2045 in 1921 to 7005 by 1933 (ABS 1921 & 1933).

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<td>Chapmans Hill</td>
<td>137</td>
<td>Rosa Brook</td>
<td>136</td>
<td>Kaloorup</td>
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Table 6.1 Groups’ in the Leeuwin-Naturaliste Region

(Source: Western Australian Archives)

Many reasons are cited in the literature explaining the establishment of the group settlement scheme. As mentioned, it was the dream of the then state premier, but there were also other factors which contributed. Field (1963:17) suggests that it was part of a patriotic impulse where environmental and market hazards were minimised.

At this time the demand “to do right for our boys” overrode all other considerations. There is little evidence that the technical trends in farming, the skills demanded in agriculture, or the trends

16 Groups are numbered in the order of establishment.
Figure 6.2 Location of the Group Settlement Scheme

(Source Roberts 1944:172)
Figure 6.3 Group locations in the Leeuwin-Naturaliste Region

(Source: Western Australian State Archives)
Figure 6.3 Group locations in the Leeuwin-Naturaliste Region

(Source: Western Australian State Archives)
of the international market for farm products were given careful attention. It was felt that anyone could become a capable farmer.

Bolton (1992:28), states that at that time Western Australia’s leaders “...were all too firmly entrenched in the view that no amount of industrial or urban development was as good for the west as rural growth.” There was a prevailing belief in Western Australia in the 1920s that every man should have the chance to be a farmer and it was necessary to settle as many families as possible in the bush. Another major reason given is Western Australia’s adverse balance of trade particularly in dairy produce in the early 1920s (Watson 1997:400). In 1921-22 the state imported food supplies from the east worth £1,936,846 (Cresswell 1988:167). There was also a conviction that Western Australia had an abundance of vacant crown land which required development including significant amounts that had reverted back to the crown following the expiration of timber leases in the Leeuwin-Naturaliste Region (Gabbedy 1988:31).

There were also external factors, which influenced the establishment of the group settlement scheme. The Western Australian government had set up a direct migration scheme with the United Kingdom, pledging to receive six thousand families, which would have doubled the population of the south west (Bolton 1992:36-37). According to Oliver (1995:205), “The group settlement scheme was undergirded by imperialist ideology which encouraged the settlement of far-flung parts of the Empire with stout British Yeomanry.” (Oliver 1995:214). There was also a similar patriotic fervour in the U.K. at this time with a need to rehabilitate large numbers of soldiers returning from the Great War. According to Gabbedy (1988:31),
the British Oversea Settlement Committee decided in May 1919 that all ex-personnel and their dependants should be entitled to free passage to any dominion or state.

Political unrest in South Africa, a migrant quota system in the USA and a recession in Canada also contributed to Western Australia being viewed as a desirable destination for these men and their families. In addition it has been suggested that U.K. doles would have been discontinued if men chose not to migrate (Cresswell 1988:175). Films and brochures were used in England to encourage settlers and misrepresentations were common (Cresswell 1988:169). Whilst there clearly was some propaganda used, on the other side of the migration marketing campaign the group settlement scheme was positively praised by visiting celebrities including Lord Apsley who spent three months with his wife living as a “groupie”, and publicized the romantic notion of a settlers life in his journals (Bolton 1992:37 & Apsley 1925:35).

Operations and Difficulties
The Group Settlement scheme in the Leeuwin-Naturaliste Region was funded by a common loan from the Commonwealth government of 1,000 pounds per farmer, with the states holding administrative power and providing any additional funds that were required (Field 1963:18). 160 acres was granted free to each family with no repayments required for five years, then reimbursement was at the rate of 3d per acre (Oliver 1995:137). Migrant families from the U.K. were housed briefly at Fremantle before being transported to the southwest. Initially these new migrants were to have been trained in basic farming techniques in Fremantle before they were moved south to their new farms; however, this was soon abandoned due to the unmanageably
large numbers (Challis 1964:3). Upon arrival in the Leeuwin - Naturaliste region the migrants were transported either by ship to Augusta or train to Busselton where they would then walk or ride in a horse and cart often several miles to their block (Cresswell 1988:181).

Each farm was allocated only 6 to 8 cows which meant that the cream cheque did not bring in enough money for basic family sustenance, and there was little opportunity to diversify into other agricultural produce due to lack of local markets and distance from Perth (Challis 1964:2). Following the disappointing results with the dairy cows, the government decided that farmers should diversify into pigs. However, it seems that it was not considered that farms that could not grow fodder for cows were unlikely to produce fodder for pigs. The price of pork at this time was also quite low at 4½d per lb, which meant that the price received for the pig was less than the cost of transport to market in Perth (Blond 1985:8). According to Hunt (1957:75), “The outcome of the matter was what might have been anticipated. Some pigs thrived; others perished mysteriously - but not so mysteriously as to preclude the addition of an unusual amount of pork to the settlers customary diet.”

There were many problems associated with the group settlement scheme, and its participants endured isolation and many hardships. Perhaps one of the major impediments to the success of the scheme was the lack of reliable transport. There were few suitable roads until 1929 (Challis 1964:4 & Blond 1985:4). According to Challis (1964:4), “The hand cut tracks were as wide as the wheels of a cart and were virtually impassible in the winter months”. The poor conditions of the roads also often resulted in the loss of the cream on its way to market (Challis 1964:13).
Another significant obstacle was the underestimation of the time, labour and capital involved in clearing the land to make it suitable for dairy pasture. In some cases the undergrowth was so dense that the men were said to have to call to one another to avoid becoming lost as they moved through the bush. According to Challis (1964:4) “Some settlers were on their blocks six weeks before they knew the Blackwood River was two hundred yards from their huts”. Often the clearing would take twice as long as estimated with the average rate of tree felling being one large tree every four days (Challis 1964:6). A traction engine was employed to clear 25 acres on each block (Blond 1985:2). However, a steam tractor cost 5/- per hour to hire plus fuel. Gelignite was also used to blow up stumps with each case costing £3.15.0 (Challis 1964:6).

A further underestimated cost was the hire of a contractor with a steam tractor for ploughing at a cost of 30/- per acre. In addition, the first ploughs were often too deep which resulted in soil deficiencies and the subsequent need for super phosphates and guano. Another expense was the poison required for Zamia palms which were fatal if consumed by livestock (Gabbedy 1988:93). There were also problems with stock management. Some cattle became diseased due to unbalanced diets; however, they were not segregated creating further problems (Challis 1964:13). There was also the problem of what to do with the milk, which was not a marketable commodity due to the distance from the main market of Perth. According to a former groupie, “The milk wasn’t wanted. I used to bathe the kids in milk, drink a lot, make puddings to get rid of it, we were too far out to sell it.” (Merrick 1961:6).
Another major problem for the group settlers was the isolation and lack of access to facilities and resources. For example Groups 12 & 13 were quite remote, 34km from Busselton and 13km from Margaret River (Gabeddy 1988:94). Some commentators have suggested that the groupies were happy to live in small simple villages and even didn’t mind sleeping in humpies whilst waiting for proper accommodation to be built as Apsley (1925:26) suggested, “but as a matter of fact, as temporary accommodation they had little objection to these ‘humpies’, because they were easier to keep warm and easier to keep clean.” However, it would seem that most group settlers and in particular the women and children were quite disadvantaged. Often it was nearly impossible for women to leave their houses, and children would have to walk several miles to school each day with many often kept home from school to help on the farm. A trip to the local store, for example could be a round trip of 30 miles that could take an entire day (Apsley 1925:34). There were also great emotional stresses to be dealt with living such a marginal existence as this quote from Bolton exemplifies,

We just do not know how many broke down under the strain, because in those days psychological stress was regarded as something rather shameful, to be hushed up as far as possible. But it is certain that individual breakdowns occurred, and that it was not only economic hardship which drove some families to give up their holdings and move back to the city. (Bolton 1994:44).

Some groupies attempted to put a positive spin on their adverse situation as this following song illustrates;
‘Moo Cow Mitchell’ set up the scheme
The Settlers came over the sea,
They came with new hopes,
Part of a dream,
To place where they’d truly be free

The men came first to set up the camp,
Blazing their way with an axe,
Then came the families with laden drays,
Over the forest tracks.

The children were all dressed in rags,
No shoes were worn at all,
Their clothes were made from flour bags,
But there’s fun for large and small.

On Friday night the school would ring,
With laughter and music too,
As the settlers danced and then they’d sing,
With voices tied and true
(Duncan 1987)
Criticisms and Royal Commission

It was not long before major criticisms of the scheme emerged. There was some opposition published in the local Sunday Times newspaper over costs and the unsuitability of migrants and the union criticised quality of settlers, with some members of Mitchell’s own party also expressing reservations. According to Oliver (1995:215), the most vocal were actually the group settlers themselves. Oliver (1995:232), states that by the end of 1923 the scheme had been criticised by immigrants, employers, and the labour movement, which saw hard won privileges lost by long hours and poor wages. Some migrants were also resented by the wider community for a perceived drain on taxpayers’ dollars and competition for jobs when they walked off their farms (Gabbedy 1988:162). In addition there was also some debate over the Group Settlement Scheme taking precedence over decisions regarding the creation of forest reserves (Gabbedy 1988:204).

There was some political fallout from the difficulties encountered by the group settlement scheme. The 1924 election campaign was won partly on criticism of the scheme. However, the new Collier, Labor Government and new Minister for Lands, W.C. Angwin, reconstructed the scheme rather than closing it down (Bolton 1994:46 & Cresswell 1988:174). Gabeddy (1988:202) suggests that previously in opposition Labor had criticized Mitchell Government for “lack of forward and constructive planning, rather than its principles and aims.” Gabbedy (1988:204) also highlights the new link that was formed following the election between two major government agencies which had an interest in the scheme,
As Collier was also minister for forests, he confidently gave Angwin his blessing to proceed with the development of forest lands where necessary. He staved off the conservator of forests with the undertaking that it would not be long before his dedications would finally be resolved.

In response to mounting criticisms a Royal Commission into the scheme was held in 1924/25 which resulted in tougher conditions including the cutting back of sustenance payments to just three months (Crowley 1960:214 & Cresswell 1988:175). In 1925 the Group Settlement Act was passed which enabled the closure of unsuccessful groups and the amalgamation of forfeited blocks (Cresswell 1988:175 & Bolton 1994:46). Thus the scheme struggled on although there was to be a further Royal Commission called into the dairy industry in 1932 (Hunt 1957:82).

**Outcomes and Impacts of the Scheme**

So what did the group settlement scheme achieve? Whilst it did open up farming land, increase immigration and populate the southwest including the Leeuwin-Naturaliste Region it also had many environmental and social impacts on the local landscape. According to Crowley (1960:217) “In grappling with their many problems the inexperienced group settlers had at least shown that settlement in the forest country of the south west would be effective at cost.” The clearing of land failed to reach its numerical objective with the greatest number of holdings at any one time only reaching 2,442 (Field 1963:19). It did, however, bring some 145,000 acres of former forest and scrubland into agricultural production and the south west’s
population increased by some 10,000 British migrants (Hunt 1957:214). By 1931, 27,765 acres had been cleared in the Leeuwin-Naturaliste Region and stock had increased from 193 cows and 78 pigs in 1921 to, 7009 cows and 3213 pigs in 1931 (Cresswell 1988:202).

New townships also emerged in the newly cleared forests, and there were significant improvements in transport and communication (Cresswell 1988:215). A number of public works were also implemented as a result of the scheme including road improvements within the region and the completion of a direct rail link from Augusta to Perth (Field 1963:18). In addition a number of light railways within the region were constructed to link the farms with local ports and the new line to the capital. These included the Busselton to Witchcliffe railway, a distance of 43 miles which was completed in April 1924, and the Witchcliffe to Flinders Bay railway a distance of 24 miles that was completed in 1925. This final section of the rail link already existed, built by M.C. Davies before the turn of the century to haul timber but was reconditioned by the government and connected to the Western Australian Government Railways (WAGR) system (Watson 1997:401-403). Gabeddy (1988:105) argues that the Busselton-Augusta Railway should have been located 16-20km inland thus serving both the western and eastern sides, rather than just those properties close to the coast and that this was another shortcoming of the group settlement scheme. At this time the Flinders and Hamelin Bay jetties that were constructed the previous century to service the timber industry were also still operational to facilitate the movement of goods (Gabledy 1988:92). In addition an administrative Branch office for the scheme opened in Busselton in May 1923 with 28 groups under its control (Gabledy 1988:93).
The group settlement scheme did contribute to the furthering of knowledge of pasture production and herd management, which provided a stimulus to the dairy industry in other parts of the state (Hunt 1957:215). There was also a significant upsurge in butter production in the region (Watson 1977:403). In addition, the scheme provided spin off employment, particularly in the timber industry, as lumber was required for housing and fencing (Watson 1997:404 & Crowley 1960:218). For example in 1921 there were 41 sawmills in the Leeuwin-Naturaliste Region (Hunt 1957:15).

There were however, some significant environmental impacts associated with the Group Settlement Scheme. During the operational life of the group settlement scheme, 12% of the karri forest was ringbarked and burned (Watson 1997:401). There was also some opposition to the scheme by Lane Poole, the conservator of forests, who resigned July 1921 partly in protest to the wasteful ringbarking and clearing of valuable timber in the region (Gabeddy 1988:45). The scheme was also costly in financial terms. Over the first ten years, it is estimated that the state outlaid some 8 million pounds (Watson 1997:401& Crowley 1960:215). Bolton (1979:165) sums up the costs of the scheme,

… the cost was great - economically, in terms of the public money expended on rural credits and on operating country railways and public works; environmentally, since most of the settlers lacked the means or knowledge to practice good conservation; and humanely, when one reflects on the hardships and deprivations suffered by even the more successful families of those days.
Reasons for Failure

Although the group settlement scheme did meet its objectives of populating the region and increasing agricultural production, it was not sustainable and by April 1924 30% of the migrant and 40% of the Australian groupies had walked off their holdings (Bolton 1994:46). There is evidence to support a myriad of reasons why the group settlement scheme could be considered a failure. These include issues of poor planning, poor selection of farmers and serious deficiencies in their subsequent training, lack of capital, lack of established infrastructure, inadequate assessment of the local environment, including analysis of soil types and clearing difficulties and inadequate farm sizes. Some commentators such as Field (1963:18) have refrained from labelling the scheme a total failure suggesting that “even in retrospect it is difficult to assess the final results of the project. As with earlier land settlements, the failure to achieve stated or assumed goals cannot be taken as a total failure.” Whilst others such as McKenzie have been more bold in their conclusion of the schemes outcomes, “one way of appraising the Group settlement experiment is to see it as an illustration of the incapacity of the politician and the organisation man to learn from experience” (McKenzie:130).

It has been suggested that whilst the group settlement scheme was a visionary project it, was never properly planned. This is evident in the fact that although the scheme was enacted in 1920 the formal agreement with Britain was not signed until February 1923 (Field 1963:19). The government at the time enthusiastically supported the Scheme though as Field (1963:20) points out, “alternative plans were never explored.” He goes on to further suggest that, it was lack of good planners that was a major hindrance to the scheme’s operations, rather than its chief architect, “He
[Premier Mitchell] was an unfortunate combination of a visionary who could never conceive largely and an autocrat who could never find nor trust the subordinates to work out the details necessary for fulfilling his design.” (Field 1963:19).

Hunt suggests that the state was to blame for the lack of success, not just Premier Mitchell (Hunt 1957:221). Planning advice was also often ignored as Gabbedy (1988:112) provides the example of group 36 at Sabina River, “Bill Fish volunteered the information that Brockman was opposed to the opening of Group 36, as almost all of the land was on deep white Banksia sands, but he was overruled. The Group was established, but it was eventually entirely abandoned.” The speed of establishment of the groups was also a problem, for example in the first 18 months of the scheme, 19 groups had been established in the Leeuwin – Naturaliste Region, then in 4 months from September to December 1922 a further 21 groups were established (Gabeddy 1988:96).

Most of the migrants who arrived from the United Kingdom to take part in the group settlement scheme were from urban rather than rural backgrounds and many applicants were inadequately skilled as farmers, and some were handicapped with war disabilities. It has even been suggested that some farmers were happy to receive sustenance payment providing little work in return (Hunt 1957:33). The low credentials of many migrants then added to the economic difficulties experienced by the scheme (Field 1963:18). Banks, who was Secretary of State of Dominion Affairs in 1926 even suggested that more care should have been taken in the selection of families, with particular attention to the wives as he states;
I think that more attention might perhaps be paid to the psychological side of the medical examination. The woman is the key to the success of the whole scheme, her discontent or her illness will undermine the whole family and may drive them off the group (Banks 1926:20).

Often the group foremen were also inexperienced which left some groups without adequate leadership (Crowley 1960:213 & Cresswell 1988:174). According to Hunt (1957:30), “One fact in connection with the foreman seems quite beyond dispute. None of them had any knowledge of the clearing techniques that were required under Group Settlement conditions.”

Many of the new settlers were also under the misapprehension that they would begin their farming careers as farmers rather than clearers (Hunt 1957:179). There was also a high turnover of farm ownership, for example, “On group 44, through which about 80 families had passed in the course of the years, there were by 1952, only seven farms.” (Hunt 1957:36). Even premier Mitchell came to the conclusion that the settlers must have been poorly selected as it couldn’t possibly be his great vision that was producing failures. Hunt (1957:74) suggests that Mitchell, “Displeased by the unpalatable fact that his group settlement scheme was proving to be an expensive failure he adopted the attitude that the settlers must be a fault, because there was nothing unsound in the scheme as he had planned it.” According to Bolton (1992:39), too many migrants were sent out too quickly and there was a serious lack of information and training. Conditions in these new southwest communities were also tough as Cresswell (1988:173) states, “Life was NOT froth and bubble in the
corrugated iron shacks in mid winter in the South West of Western Australia.” There were also often un acknowledged cultural differences between the newcomers, and many of the British migrants simply had no money for fare home, thus were in some sense forced to endure the hardships of a “groupies” life (Cresswell 1988:174).

The harsh conditions of the local environment were severely underestimated. Even as late as the 1920s, correlations between the size of trees in the forest and soil quality were still being made, despite the evidence to the contrary discovered by earlier settlers in the region. Often the groups were placed on unsuitable land, with soils that were deficient in essential minerals (Crowley 1960:213). Previous settlers in the region had developed a method of clearing where it had fitted into the general pattern of work and did not require excessive machinery. Ring barking followed by “sucker-bashing” was done over an extended period and fires would burn day and night (Hunt 1957:30-31). Despite this clearing knowledge, trial and error clearing was still encouraged as the group settlers needed to clear their land quickly in order to get pasture ready for the dairy herd which would bring in much needed income to pay off their mounting debts. The hasty clearing also resulted in some farms not being cleared properly for example only 11 of the first 20 blocks surveyed met the group settlement standard (Gabbedy 1988:81 & 120).

Explosives were sometimes used to speed up the clearing process. However according to Hunt (1957:31), “...as much time had to be spent in gathering the bits for burning, as would have sufficed to chop the trees down in the first place.” There were also issues of poor drainage on many farms due to inadequate planning which produced worse flooding as tapping into main drains on lower levels bought surplus
water down from higher levels (Hunt 1957:37). In addition there were still significant gaps in the knowledge of pasture development in the southwest. As Hunt (1957:163) outlines, “During the early Group Settlement Days it was found that ploughing to the customary depth of 9 or 10 inches brought the sour sub-soil to the surface, and in many cases the land received treatment from which it took years to recover.” Bolton (1992:39), suggests that more consideration should have been given to placing the settlers on cleared land previously worked over by the timber industry. Some of the first groups were sited on previous timber leases for example, groups 3 and 4 were 5km north of Augusta at Kudarup, the site of MC Davies’ first mill, groups 6 and 7, which contained mostly settlers from gold mining areas, were at Forest Grove near Margaret River. Groups 2 4, 6, 7, were in good soil country, on an original MC Davies timber lease which meant most large trees had been removed, although the uncommercially viable timber and the often dense undergrowth was still left for the group settlers to clear (Gabeddy 1988:91).

As mentioned earlier many farms were abandoned, for example by July 1927 from 923 blocks there had been 72 abandonments (Hunt 1957:66 & Gabeddy 1988:114). The rate of abandonment increased particularly after the onset of the depression in the 1930s. For example by 1935 there was only one settler left on group 20 at Miamup. These deserted farms would then deteriorate quickly, although some sustenance work was created by the government to reclear these properties (Blond 1985:8). It also became clear early on that the allocated farm sizes were not economically viable and by 1925, 382 properties had been bracketed (Amalgamated) including 124 in the Busselton region (Hunt 1957:36).
Despite the conclusion by many that the group settlement scheme was an unsuccessful experiment, or perhaps marginal at best, it was to form the foundation for a further attempt at closer settlement following the Second World War. This new scheme, known as the War Service Land Settlement Scheme was implemented, like its predecessor, primarily to accommodate and provide employment for soldiers returning from war. Again this scheme involved the imposition of land use practices that had more do with satisfying political agendas and populating the countryside than implementing sustainable land use practices that could maintain long-term communities in the Leeuwin-Naturaliste Region.

**War Service Land Settlement Scheme 1945-1960**

Despite the fact that the first post war closer settlement scheme had proved to be environmentally, socially and economically unsustainable, following World War II it was once again deemed necessary by the government to institute another land settlement scheme to accommodate returning soldiers. This scheme ran from 1945 until its formal closure in 1963 (Fischer 1963:39). Unlike the first group settlement scheme, this one initially was only to provide farms on already cleared land that was regarded as suitable for agricultural pursuits. Again this new scheme like its predecessor was given an optimistic outlook with strong support from the government. The new War Service Land Settlement Scheme (WSLSS) was assessed to be based on sound economic principles, and according to Fyfe (1948:42).

It is intended to ensure that ex-servicemen who obtain farms under it will not waste many years of their lives in futile effort, but will have
reasonable prospects of being able to live on a proper standard and
avoid becoming over-burdened with financial obligations.

According to Cresswell (1988:272), “This was an improvement on the previous
group settlement scheme as it allowed for greater areas of cleared pasture, and the
standard of housing was much improved.”

Despite such optimism and conviction that this scheme was indeed different from its
predecessor, Field suggests that, “It must have taken blind optimism to stare down
the vacant windows of abandoned houses” (Field 1963:24). The rural ethos, which
was the foundation of the previous scheme was however, still a strong political and
social force in the 1940s as Western Australia’s economy was still based firmly on
agriculture and the income from primary production was still double that from

The Leeuwin-Naturaliste Region, which contained many abandoned group settlement
properties, became part of the dairy section of the WSLSS. By 1947, ten dairy farms
had been allocated in the Karridale-Kurdarup area (Watson 1997:404) and Sabina
Vale near Busselton was being used to breed heifers for the scheme (Barrett
1965:34). During the life of the scheme 179 farms were established which covered
122,900 acres allotted mostly in the tobacco and dairy mixed farming districts
between Busselton and Augusta extending eastwards to Manjimup. It is not known
exactly how many of these properties were in the Leeuwin – Naturaliste Region.
Whilst this second attempt at a post-war land settlement scheme in the Leeuwin-Naturaliste Region has been regarded as slightly more successful than the first, it faced many similar difficulties as it was still based on finding a short term solution for securing employment and accommodation for returned service personnel rather than a long term vision for the sustainability of the region. There is evidence that the WSLSS was also under-resourced and lacked appropriate skill levels in planners and administrators and it appears that there was a clear failure to learn from the many environmental and social mistakes of the first scheme.

**Operations and Difficulties**

This scheme was part of the Commonwealth War Service Land Settlement Agreement. In Western Australia the scheme was administered by a land settlement board, which was directly supervised by the Minister for Lands (Fischer 1963:3-8). The scheme involved the acquisition of holdings from the Rural and Industries Bank, many of which were forfeited properties from the group settlement scheme of the 1920s (WA Government 1948:10). After World War II the Rural and Industries Bank held 495 reverted dairy farms 225 of which were deemed appropriate for the WSLSS (Field 1963:25). Further struggling properties were also sold to the scheme in response to land settlement board requests (Field 1963:25). Following an inspection by the Land Settlement Board many were considered with extensive reconditioning to be suitable for the War Service Land Settlement Scheme (WA Government 1948:10). Work on these properties began in December 1945 with the carrying capacity expected to be 35 to 65 cow units significantly more than the 6 to 8 cows allocated to the previous group settlers (WA Government 1948:10).
All service personnel who had provided six months service and members of citizen forces were eligible to join this scheme. Again like the previous scheme, experience in the agricultural industry was not viewed as a necessary prerequisite for taking on a WSLSS property. Women were also eligible. However, it appears that none were allocated lots in Western Australia (Fischer 1963:11). The scheme offered 12 months assistance and free rent, with minimum payment of £6-12-0 for single men with £2 extra for families, with repayments beginning after 12 months (Fischer 1963:11). Each farm was allocated:

1. a prefab asbestos house of 900 square feet that was designed for future expansion by owner
2. a water supply
3. utility buildings
4. fenced paddocks
5. money for farm machinery
6. a car
7. 200 acres minimum land for a dairy farm. (Field 1963:23).

Some established farmers were also eligible to join the scheme and thus attain these benefits (Barret 1965:35). According to Field (1963:25), this was known as the “vendors nominee” system where ex-service men could place their property in the hands of WSLSS and in turn would be assigned their property.

Three boards co-administered the Scheme, firstly the Land Settlement Board secondly, the Land Purchase Board and thirdly the Allotment Board. Funds for the
scheme were allocated from the Commonwealth War Service Land Settlement Act and additional monies were to come from the state treasury (Barrett 1965:7). The Commonwealth had the right to approve or disapprove of submissions for expenditure with the state taking two fifths of loss plus all administration costs (Barret 1965:5&6). In contrast to the earlier group settlement scheme the WSLSS aimed to settle farmers on developed land rather than providing them with sustenance payments during the clearing process (Field 1963:22). All farms were also ideally to have the same economic potential. It appears however that there was still a significant shortfall in the experience of the planners with this second scheme with much reliance placed on fact-finding surveys of adjoining farms (Field 1963:23). A field superintendent inspected properties each year (Barret 1965:37).

Like the first scheme, the WSLSS was under-prepared and by 1948 it was under pressure mainly due to the high capital outlay and lack of machinery. For example there were only 3 bulldozers and 3 crawler type tractors in the state at this time. Despite the unavailability of heavy machinery, by the end of 1948 some 9,936 acres had been cleared (Fyfe 1948:4). Although these new farms were to be established on existing cleared land, some of these properties had been abandoned for 10 – 20 years and thus required the removal of substantial regrowth (Fyfe 1948:7). By 1952, 1.3 million acres containing 498 placements had been allocated at a cost of 3.2 million pounds (Fischer 1963:27). As the scheme progressed it also began once again to clear new land, resulting in an additional 1,005 farms on 950,000 acres of virgin land (Fischer 1963:40). The scheme overall cost £67,500,500 with 50% more land being cleared in the south west to facilitate an increase in agricultural production in the region (Field 1963:21).
The WSLSS also provided some stimulus to the local economy through land purchases, clearing and closer settlement. There was also an increased demand for plant, labour and livestock feed. In addition there were improvements in infrastructure such as roads and the handling of agricultural produce (Field 1963:27). According to Field (1963:28), “Country towns took on new life, the stock firms and other retailers were supplying increased consumer goods to country homes, and the difference between urban and country life was greatly narrowed.” This second scheme also provided significant improvements in housing. The government housing provided for the WSLSS was considered superior to the timber houses of the previous scheme and unlike the previous scheme the houses were built first, thus negating the need for new families to live in tin sheds for extended periods until their homes were completed as occurred in the 1920s.

The accommodation provided by the WSLSS comprised a compact prefabricated asbestos cottage of 900 square feet, consisting of two bedrooms, lounge room and kitchen, having front and back verandas, with bathroom and laundry on the back veranda. The verandas were designed to be enclosed at a later date to form a 3.6m by 2.4m (12f by 8f) sleep out for families. The houses were constructed with a timber framework, which was covered externally with fibrolite, and roofed with galvanised iron. Internally the house was lined with plasterboard (Barrett 1965:46). Due to the Commonwealth’s minimum requirement that War Service Land Settlement houses were to be equal to one constructed by a basic wage earner in the city the original group settlement scheme houses were deemed unsuitable for refurbishment (WAGOVT 1948:94).
Like the first scheme, this second attempt at closer settlement in the southwest encountered many difficulties, and resulted in some farmers giving up and walking off their allotments (Field 1963:25). Field suggests that “Australians, unlike their old world counterparts, have never adopted a strong attachment to place and are able to assess property unemotionally.” (Field 1963:36). Most dairy leases appear to have survived, although Barrett (1965:33) notes that a few struggled due to poor management. He further suggests that,

“It was apparent from previous experiences of the industry in Western Australia that difficulties would arise unless the venture was based on a level of production that would be sound and financially secure, there being abundant evidence that a peasant type of farming would be disastrous” (Barrett 1965:33).

Again the unsuitability of some settlers’ poor administration and under capitalisation has been cited as producing difficulties for the scheme (Cresswell 1988:273). As previous groupies had taken on off-farm employment to supplement their meagre incomes many WSLSS farmers also found work in local sawmills (Cresswell 1988:273).

In 1951 as part of the post war development boom there was an increase in land prices in the southwest and this resulted in the scheme experiencing difficulties in purchasing suitable properties. This then led to a change of focus to vacant crown land, which required clearing. In turn this subsequently increased the costs of
development, due to the expense of machinery, a shortage of material including fencing wire and skilled labour and the time now required to prepare the properties for farming (Fischer 1963:33 and Western Australian Government 1948:93). In addition, labour was becoming more expensive at this time as the state moved towards full employment (Fyfe 1948:7).

Problems with the scheme also emerged due to inadequate planning, for example there was no trained agriculturalist on the staff of the war service land settlement branch. The Agriculture Department did provide some assistance, though most decisions were made at head office, rather than providing the location specific advice that was required (WAGOVT 1948:99). Some farms were also settled by inexperienced and undercapitalized farmers in the state’s haste to establish farms in this region (Field 1963:26). There was some recognition by the state government of the difficulties in a 1948 report which stated, “it feels that, just as in group settlement days, a heavy price is perhaps being paid for forcing development along too rapidly.” (WAGOVT 1948:103). The lack of time for adequate preparation was also acknowledged as illustrated by Fyfe (1948:31)

...the time to get soil surveys, water investigations and some experiments completed, and then actually develop the farms to a living standard may take longer than the commonwealth is prepared to allow for the rehabilitation of servicemen under the war service land settlement scheme.
According to Barrett (1965:10), the scheme was under pressure from a variety of sources including scarce labour, materials and machinery. Prices for produce were moderate and there were further pressures from applicants, ex-servicemen’s organisations and parliament. Over the course of the scheme 65 leases were returned with lack of experience and initiative given as the main reasons for lack of success (Barrett 1965:13). Other reasons for forfeiture of leases included the low educational standard of some farmers, lack of advisory personnel, unresolved difference in opinion between farmers and officials and the often-rigid attitude of dairy industry organisations.

**Dairy Industry**

Despite the failure of the post World War 1 group settlement scheme to set up a sustainable dairy industry in the Leeuwin-Naturaliste Region, 20 years later the creation of a dairy industry was again on the agenda. Whilst it was acknowledged that the establishment of economic dairy farms had been a problem in this region in the past, with many of the original group settlement holdings reverting back to the state owned Rural And Industries Bank, it was thought that with a careful review and planning these problems could be overcome. According to Field (1963:23),

> The dairy industry, though plagued with many environmental difficulties, is considered an integral segment of the state’s economy and, chiefly because of the success of some private dairy farmers, dairy farms were considered feasible developments.
At the time of this second scheme in the 1940s, a dairy farm was considered economically viable if it produced 10,000 pounds of butterfat per annum (Field 1963:23). It seems that once again, however, the WSLS failed to learn from the experience of the farmers who were part of the original group settlement scheme, as noted in a 1948 government report,

...The committee wishes to point out that it doubts whether land development in the dairying districts is being carried out in the most economical manner. It has been observed for example, that new land prepared for pasture is turned over with a Livesey disc plough, despite technical advice as to the dangers of too much surface disturbance of sandy soils. The committee noted with some concern the effect of a heavy tractor engaged in logging operations on loose karri soil and the subsequent costs involved in establishing a pasture. (WAGOVT 1948:103).

**Tobacco**

The production of tobacco crops was trialled in the Leeuwin-Naturaliste and Manjimup Regions for the first time as part of the War Service Land Settlement Scheme. The establishment of tobacco crops was in response to the large imports of the product during the immediate post war period (Barrett 1965:34). In the Leeuwin-Naturaliste Region the new tobacco industry was established at Karridale. Despite favourable conditions and the production of healthy plants the leaf did not cure properly. Thus tobacco growing did not become financially viable in this area. By the mid 1950s the experiment was considered disappointing and following an
investigation by officers of the Department of Agriculture it was recommended in a report to the commonwealth that tobacco growing should be discontinued at Karridale. The federal government agreed, and the leases concerned were transformed to dairy farms. According to Barrett (1965:34), “this was accomplished either by transferring lessees to already prepared dairy farms, or else changing the land use of the farms already occupied.” The commonwealth and state governments shared the cost of the failed project on two fifths to three-fifths basis (Fischer 1963:14).

One of the main reasons given for the failure of the tobacco enterprise in conjunction with leaf curing issues was the unsuitability of the farmers. It was recognised that very few British and Australian settlers had success with the crop (Cresswell 1988:273). According to Barrett (1965:34), “Generally speaking, the normal Australian is not easily adapted to this type of agriculture, which requires meticulous soil preparation and handling”. Field (1963:24) furthers this sentiment stating, “on trial, the “Aussie” settler of WSLS proved unwilling to follow the example of how to work a tobacco farm as set by local farmers of southern European origin”. In addition to production difficulties, there was limited demand for the product as there was a strong prejudice among smokers against the local product. The CWA halls at Kudarup, and the Anglican Church at Augusta, which are both converted tobacco-drying sheds, provide the most prominent reminders of this past land use activity in the region (Cresswell 1988:277).
Conclusion

The first group settlement scheme resulted in many positive and negative outcomes for the Leeuwin – Naturaliste Region. From a sustainable development perspective it did not achieve the primary goal of “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Collins 1998:99). This was partly due to the promotion of a monoculture farming practice, which was unsuited to the local environment and reduced its biodiversity, which increased the vulnerability of the local ecosystem. In addition it did not use the region’s limited resources wisely, for example the burning of valuable timber which is not in keeping with the sustainable development ethos of not exceeding sustainable yield and minimising the use of non-renewable resources (Hunter 1995:157). Finally the scheme also had significant social, environmental and economic costs to the local community. The scheme was an expensive financial exercise for the state, which resulted in many farmers simply walking off their land having lost everything.

It would appear that the second attempt at group settlement (WSLSS) in the southwest was only marginally more successful than the first. There seems to be clear evidence that it was also under resourced and lacked appropriate skill levels in planners and administrators. There was also clearly a failure to learn from the many environmental, social and economic mistakes of the first scheme. It seems that many recurring issues were simply addressed by giving the farmer a little more land, a few more cows and a fibro rather than timber house.
Once again this second scheme was not sustainable in the long term, as the dairy industry was to consolidate in the 1960s around the Harvey irrigation district further north. Remnants of the former dairy industry do however still exist in the Leeuwin-Naturaliste Region, and form part of the aesthetically pleasing landscape. The region’s ice-cream factory and two cheese factories have also become popular tourist attractions. It could also be argued that the cleared land and infrastructure developed to facilitate the two post war settlement schemes laid the foundations for more recent land use activities. Both the alternative lifestyle movement in the 1960s and entrepreneurial vigneron in the 1970s took advantage of the cheap farm prices following the closure of the second scheme.

The next chapter will investigate new migrant waves to the region, including the surfers and utopia seekers who introduced new land use activities from the 1960s. These groups with their strong links to the Western environmental movement of the time were perhaps the first to bring a more sustainable ethos to the region since the beginning of European settlement in 1829. The surfers initially contributed to existing land use activities picking up seasonal work with local farmers, building haystacks, milking cows and trellising grapevines. At the same time they consolidated the reputation of the region as a premier surfing destination and laid the foundation for the growth in surf tourism and associated surfing related businesses that have burgeoned in the region since the mid 1980s. Following the migration of the surfers, other people seeking a similar utopian lifestyle also became attracted to the landscape of the area. These new arrivals were part of the western hippy movement and their original intention was to live a subsistence lifestyle. However,
they soon became involved in transforming the region’s landscape through alternative and creative industries which will be discussed in the next chapter.
Chapter 7: Utopia Seekers 1960s onwards

Introduction

During the 1960s the dairy industry, which was established as part of the two post war land settlement schemes in the Leeuwin-Naturaliste region, was consolidated further north outside the region around the new Harvey irrigation system. As a result there were many former dairy properties available for sale at this time for very cheap prices. Around the same time, surfers ‘discovered’ the big waves in the Leeuwin-Naturaliste Region and had begun to drift south from metropolitan Perth. Congruent with the movement of surfers into the region, the emergence of the ‘alternative lifestyle movement’ in Western Australia provided another source of new migrants to the area. Like the surfers these people were also attracted to the cheap land and relaxed rural lifestyle that the Leeuwin-Naturaliste Region offered in the 1960s and 1970s.

Initially the purpose of many of the new arrivals was to surf or “just to be”, to plant trees and live a subsistence lifestyle (Sherwood 1999). At this time many farmhouses were available for cheap rents, and some tenancies were negotiated rent free in return for repairs to the rundown farm house (Breuger 1999). New families then began establishing a permanent presence in the community and they soon became involved in transforming the landscape through alternative and creative industries. They introduced complexity and diversity into the region through activities such as organic horticulture including the establishment of an organic vineyard, producing tofu and value adding to the remaining dairy industry by cheese making. They also
established crafts and opened galleries and introduced alternative building designs including rammed earth and mud brick.

In their pursuit of a subsistence lifestyle, and closer engagement with nature these new migrants also reintroduced an ethos of sustainability to the Leeuwin-Naturaliste Region that had been missing for more than 120 years. Unlike the previous government directed land use activity of group settlement dairy farming, these new people were individual free thinkers who were influenced by the western environmental movement of the time. They deliberately chose the Leeuwin-Naturaliste Region as a suitable location to re engage with nature and practice ecological sustainability (Sherwood 1999). Thus, although the mainstream and political recognition of sustainable development as a guiding concept only followed the release of the Bruntland Report in 1987 (Weaver & Lawton 2002:345), the principles of sustainable development were initially re-introduced in the Leeuwin-Naturaliste Region 20 years earlier by the alternative lifestylers.

For the purpose of this chapter, the people who moved to the Leeuwin-Naturaliste region in the 1960s and 1970s will be identified as surfers and alternative lifestylers. Not all surfers are alternative lifestylers and not all alternative lifestylers are surfers. It is noted that people who have sought lifestyles, which may be considered as an alternative to the urban/suburban lifestyles of most Australians, are not enthusiastic about having a label attached to their choice of lifestyle. Various names have been used in both the academic literature and wider community. These include such terms as, alternative lifestyler, hippie, drop out, counter cultural, feral, communard and flower children.
Metcalf (1995:11) states that, “‘Alternative lifestyle’ refers to a form of social life which is alternative to that which is followed by most others in society. As the term is used, it is normally assumed that the choice is for a less individualistic, more sharing style of interaction.” Seal (1974:2) suggests that there is a scale from one to ten of alternative lifestyles with group goals becoming more important than individual goals from number five, the co-operative household. Abrams and McCulloch (1976) in their study of communes in the United Kingdom state that, “The definition of a social phenomenon is an extremely difficult business, and our search for an adequate definition of a commune proved both tortuous and haphazard.” They later suggest that “…communes may be thought of, first and foremost, as attempts to institutionalise friendship on the basis of place-making.” (Abrams and McCulloch 1976:31). Schehr (1996:45) in his study of more contemporary intentional communities states, “Actors experimenting with alternative community lifestyles were searching for simplicity, reconnection with nature, pursuit of meaningful existence, and spirituality, often with the aid of mind-expanding drugs, to counter the prevalence of greed, alienation, violence and war.”

Whereas more current intentional communities are committed to a more holistic vision of community (Schehr 1997:48), Munro Clarke (1986:14) defines alternative lifestyle as “…the voluntary espousal of a lifestyle that involves low cash income, common land ownership, material simplicity and frugality, relative isolation from urban life and minimal dependence on high technology…” Cock (1979:1) provides a more broad definition stating “An ‘alternative community’ is a general term which applies to people within society, who ‘come together…consciously…to eat, work and live together as a group [with] a relatively strong ‘we -consciousness’”
In the context of the Leeuwin-Naturaliste Region there was a mix of both individuals and groups of alternative lifestylers who moved to the area in the 1960s and 1970s. The first migrants, the surfers generally moved to the region as individuals, although they did share a common bond through surfing. Many were seeking a reconnection with nature and some did share accommodation and take up employment as small groups at the wineries for example. However, surfing is intrinsically an individual activity and their strongest connection was with the surf rather than each other in a communal context. Other alternative lifestylers who moved to the region following the surfers varied in form from individuals to families to small or large communal groups or combinations of these types. All, however, including the surfers, did have a common goal of seeking out an alternative way to live their lives from the predominantly middle class suburban existence they had left behind.

**Surfers**

Following the international success of Australian surfers, including Midget Farrelly and Nat Young during the 1960s (Young 1997), people involved in surfing began to look for suitable sites around the Australian coastline that provided similar big surf conditions to those experienced in Hawaii. By 1962 surfing had become a cult in Australia following the trend in California, USA. In 1963 Midget Farelly became the first of many Australian world surfing champions, furthering its popularity (Young 1985). In the mid 1960s the surfing “safari” became popular. The safari involved groups of dedicated surfers who would head out of the major cities, travelling up and down the coast in search of the perfect wave that they had seen in surfing movies or magazines (Young 1985). In the Western Australian case this led to the discovery
of many new surf beaches around the south west coast including the now famous Margaret River breaks.

The Leeuwin-Naturaliste Region provides around 75 surfing breaks, with several producing the powerful Hawaiian style big waves that surfers were now seeking (Andrijich et al 2003:96). These sites have become collectively known as the Margaret River surf region or simply Margs. Many surfers, who were from predominantly middle class backgrounds from Perth’s western suburbs, began to drift south to the region attracted by the big surf and cheap rent / land and the availability of part time outdoor work on the local farms or vineyards that enabled them to experience the more relaxed, surfing oriented lifestyle that they were seeking.

The activity of surfing originated in Hawaii, where it is reported to have been a quasi-religious experience for over a thousand years (Flint 1999:2, Pearson 1979:31). It was Hawaiian Duke Kahanamoku who first introduced surfing to Australia in 1915. Whilst it quickly became a popular activity amongst younger members of surf lifesaving clubs throughout the country, it was the introduction of new smaller and more portable “Malibu” boards that were brought to Australia by a visiting team of American lifeguards in 1956 that sparked somewhat of a revolution in the sport (Pearson 1979:58). A number of these demonstration Malibu boards were sold to local enthusiasts and were quickly copied with a record number of 1,500 boards being produced by 1959. The original boards were solid timber, with the hollow “toothpicks” (surfboards) that evolved still being very large and heavy. Thus they were predominantly stored in surf lifesaving clubs requiring surfers to be members of
these clubs to access storage for their boards. The new smaller and lighter Malibu boards enabled the surfer to become more mobile and negated the need for surf life saving affiliation (Young 1985, Pearson 1979:59). Surfers were now able to transport their new boards efficiently on the roof of their cars to new surfing locations thus facilitating the ‘discovery’ of many new surfing destinations around the Australian coastline.

The mid 1960s and early 1970s was also an “era of social consciousness” (Young 1985) and protest against the Vietnam War with many surfers becoming involved in the so called “hippie movement” of the time (Flint 1999:4). Many dropped out and went back to nature, as Young states, “it seemed perfectly natural to rebel against the old values that sent us off to kill people”. This also led to the development of a particular surfing lifestyle known as soul surfing. According to Flint (1999:2), “...soul surfing is a lifestyle that is focussed on surfing for pleasure and the joy of being close to nature. Soul surfers live by the coast and spend as much time as they can in the sea sharing experience with their mates.” Brown suggests that this ethos involves, “engaging with nature on the spiritual level, and surfing in the wild, regardless of money and contests.” (Brown 1997:6). The Leeuwin-Naturaliste Region became one of many locations around the Australian coast that facilitated this type of new surfing lifestyle.

Many of the top surfers also began to question contests and preferred to define their craft as an art form rather than a sport (Young 1985). In the late 1960s according to Brown (1997:4) “good drugs, free love and riding free were popular ideals in a growing surfing community.” Midget Farelly suggests that, “...drugs changed the
nature of surfing in Australia; drugs brought on a lot of other connotations where people rejected pretty much everything that had gone on before and they were expecting things to be different.” (Farelly cited in Brown 1997:4). The link between drugs like marijuana contributed to the surfers getting the reputation of being “drugged out hippies” in the 1970s and 1980s (Flint 1999:2).

Thus the surfing lifestyle became part of the “alternative lifestyle revolution” of this time, with some surfers becoming hippies and some hippies living in coastal locations taking up surfing. The lifestyle became even more attractive to a generation questioning their conservative suburban lives in the 1970s, as Barton Lynch recalls, “...their lifestyle looked pretty cool, you know, and it looked free and it looked uninhibited. I was consumed by the whole concept of being a surfer, and it just looked like a great way to live. These guys just went to the beach everyday.” (Barton Lynch cited in Brown 1997:4). Surfers tended to come from middle class Australia, were white, male, fit and healthy and ready to reject the values of their upbringing often including the work ethic (Flint 1999:5).

Surfing in Australia went through a difficult period in the 1970s with the introduction of the short boards (Flint 1999:5). Australian board designers were at the forefront of this new evolution in surfing with Simon Anderson designing the first Thruster (tri fin), which he took to Bali for testing (Gabrielson 2002:2). Initially there was some resistance to the new short boards that created something of a generation gap between the older and young surfers. The shorter boards also encouraged more women to access surfing, which produced another change in the predominantly male surfing culture. However by the 1980s, new Malibu (long board) competitions had
been reintroduced and now both styles of surfing coexist on beaches throughout Australia. Surfers also began to become more organised with regard to protesting against what they view as inappropriate beachside developments in the 1980s. Despite surfing being a very individual pursuit, many surfers have banded together in various coastal locations to form Surf rider foundations, which campaign for healthy coastlines and cleaner beaches (Flint 1999:5).

**Surfing in the Leeuwin - Naturaliste Region**

*The town is called Margaret River, but to surfers from all over the world it is a wave (Carps 1999:8)*

The first people to surf the waves in the Leeuwin - Naturaliste Region were a group of people from a Perth surf lifesaving club. They returned to Perth with amateur film of their members riding the waves at Yallingup in 1958. This sparked interest from city surfers and a small group of eight or nine guys then headed south the following year with their wooden boards known as toothpicks. Amongst this first group of surfers was a chemist named Burnie Huddel, who was the first person to introduce foam boards to the region, having brought one back from a trip to Sydney in 1959 (Campbell 1999). These early surfers on “safari” would camp under trees as Carps recalls, “Sleeping in the car, under bushes, under houses, under sheets of plastic, waking up damp and shivering in a cotton sleeping bag. They generally camped wherever they thought the surf would be best in the morning.” (Carps

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17 Members of Surf Life Saving Clubs were often referred to as “clubbies” and remained a separate group from the new mobile individual surfers who no longer needed Surf Life Saving Club affiliation (Pearson 1979, Young 1985)
The introduction of the “foam board” or Malibu to Western Australia significantly increased the mobility of Perth Surfers during the late 1950s and early 1960s. As in the eastern states many surfers were originally affiliated with surf lifesaving clubs limiting their surfing to metropolitan beaches, as it was difficult to transport their long heavy boards to and from the beach (Jaggard 1997:184).

By 1961 the waves at Margaret River had developed both an interstate and international reputation with filmmaker Paul Witzig and two young surfers, Nat Young and “Gopher” (Rodney Sumpter) travelling west to shoot some sequences for the American film “Endless Summer”. Unfortunately the waves were too big for the young surfers at the time as Young recalls “...we tried to get out through the big nasty waves at Margaret River, but found ourselves washed back up on the beach after only half an hour - we couldn’t even get out the back.” Thus Margaret River did not make it into the movie; the only Australian scene to make the final cut was Bells Beach (Young 1998:37-38).

Although the waves of the Leeuwin-Naturaliste Region missed out on being featured in the film, the reputation of the region nonetheless continued to grow. As occurred on the east coast, surfers, typically, white middle class males from Perth’s western suburbs were inspired to head “down south” in search of waves like those of Sunset and Waimea Bay, Hawaii, that were pictured in the surf magazines and movies of the day. This was cutting edge surfing, there were no houses on the coast in the early 1960s and access to the breaks was via winding dirt tracks, with the completion of the journey often on foot (Carps 1999:8). According to Murray Smith, “We were motivated by the challenge of discovering new breaks and riding big waves” (Murray
Smith cited in Carps 1999:8). Yallingup became the meeting place and camping stop from which expeditions further south were launched. As a base it provided a reliable Malibu wave and the bar at Caves House Hotel a popular watering hole. “From there they would head south looking for waves, driving down tracks until they could go no further, then...they would walk for miles in the hope of finding surf. If they did, they were out there, going for it, just you and your mates on a big wild empty ocean.”(Carps 1999:8). Some of the dedicated younger surfers would even hitch down to Yallingup, with the record for consecutive visits in winter when the waves are the biggest being 14 weekends in a row (Carps 1999:9).

It is the near shore reef system along the coast of the Leeuwin-Naturaliste Ridge that produces consistent, reliable surf most of the year with the biggest waves rolling in during winter and spring. According to Andrijich et al (2003: 96) “With names like Suicides, Gallows, Guillotine, Grunters, the Boneyard and the Box, this is not a place for the timid, faint hearted or the unwary. The huge swells can drive surfers deep onto a reef and almost before a breath can be taken, drive them down again.” (Figure 7.1) The Main Break at the mouth of the Margaret River is perhaps the most famous of all the surfing locations along the Ridge and it provides the setting for several local, national and even international surfing competitions.

Some of the early surfers decided to stay on in the region and construct houses and raise families whilst others left to join the new professional surfing circuit. As Carps (1999:9) recalls,
Figure 7.1 Major Surf Breaks in the Leeuwin-Naturaliste Region

(Source: Margaret River Tourist Association Map)
If you got serious about staying you had to find more substantial accommodation. Some farmers were quite happy to rent out their old timber Groupies for five bucks a week and a hand to round up the sheep. The houses were basic, strong and secluded, which suited surfers down to the ground.

Many surfers found seasonal work with local farmers, building haystacks, milking cows and trellising grapevines; apparently the pay was minimal but enough to get them by. Despite taking up paid work in the region, surfers were not immediately welcomed into the local community. According to Carps (1999:9), “the “drop out” “hippie, “dole bludgers” and “druggies” tags would be very hard to shake. The major problem, of course, was that when the waves were good the workers just didn’t turn up. To a farmer this was simply irresponsible and lazy. To a surfer who moved here for the waves it was just a measure of his commitment. “We wait, we work, we watch the weather map, so when the day does ‘come’ you’re out there.””

During the 1970s many more surfers decided to make the Leeuwin - Naturaliste Region their permanent home including professional surfers such as Mark Warren and Robert Connelley who bought 10 acres at Margaret River in the mid 1970s (Young 1998:64). Some of the surfers who migrated to the region at this time are now the parents of a second generation of Margaret River surfers including professional surfers like Taj Burrow, and Melanie Redman (Beal 2003). Current world ranked professional surfers including Taj, Melanie and Jake Patterson all started their careers surfing the breaks off Yallingup and still call the Leeuwin-Naturaliste Region home.
Margaret River continues to be a popular destination for surfers from Perth and, in fact, all over the world. Surfing guidebooks describe it thus; “Margaret River is the focus of every surfer’s vision of this coast, offering some of the best waves in Western Australia.” (Warren 1998:205) and “Margaret River has long held the mantle of the big wave Mecca, and it so often lives up to its reputation” (Rennie 1998:163). Perhaps Carps best sums up the situation, “the car park at the point is always packed with cars these days: locals, travelling surfers and buses of tourists just wanting to see the surf. Unfortunately the experience is not one which can be seen; it can only be felt.” (Carps 1999:8).

In an effort by the Department of Conservation and Land Management (CALM) to regulate access to the coast, in 1998 a $9.00 fee to enter the Leeuwin - Naturaliste National Park was introduced. As the park provides access to many of the better surfing spots, local surfers became very vocal in protesting against this new fee through the local media and collected 12,000 signatures on two petitions to parliament. The introduction of the fees was viewed as an imposition on free access to the waves and the way of life of surfers in the region. Their cause was even highlighted on the Perth television news which prompted the opposition Labor Party to promise removal of the fee if they were elected. Some locals even removed signs notifying the public of the charges, which interestingly were not replaced (Breuger 1999). Premier Dr Gallop’s new Labor government did remove the Leeuwin-Naturaliste National Park access fees on 13th May 2001 stating "Free access to our beaches has always been a Western Australian tradition and my Government is determined to keep it that way." (Gallop 2001)
Surfing Competitions

A number of major surfing competitions are held regularly in the Leeuwin-Naturaliste Region that attract large numbers of competitors and spectators. The first major surfing competition to be held in the Leeuwin-Naturaliste Region was the Australian Championships, which were held at Margaret River in May 1969, following a demonstration event at Scarborough Beach in Perth. Despite breaking one board in the big swell and losing another in a beach fire, Nat Young won the event (Young 1998:207). The ‘nationals’ returned to Margaret River in 1973 and the local competition, the Margaret River Classic that is held annually in November began in 1976. The first international surfing carnival to be held at Margaret River was the Emu Bitter Thriller in 1985, followed by the Swan Premium Thriller in 1986 (Cecins 2001).

The Margaret River Masters is an annual professional surfing event held at Surfers Point, Prevelly that is organised by Surfing WA. It is part of the world qualifying series and has been run every year since 1985 except 1988, 1991, and 1994 due to lack of sponsorship. Women’s World Tour events have also been held in the region in 1992, 1993, and 1996 and annually since 1997 (Halsall 1997:20, Cecins 2001). Despite this event being organised and controlled by outsiders it is supported by the local community many of whom are regular surfers (Halsall 1997:10 and 40). Although it could be concluded that increased tourists may reduce locals’ accessibility to the surf and that an associated increase in land values created by tourism may adversely affect the quality of life of the locals a study conducted in 1997 came to the conclusion that the majority of locals, supported the surfing event and tourism in general (Halsall 1997:12 & 40). Local government regulations do,
however, restrict major surfing carnivals to one event per year at the site, which is an A class reserve without power, reticulated water or sewage with 30% of the hire fee to be put back into coastal rehabilitation (Halsall 1997:21-23).

Surfing in the Leeuwin-Naturaliste region has also experienced tragedy. In 1996 five adults and four children were killed when a cliff face collapsed during a surfing carnival at Huzza’s Beach, Gracetown (ABC 2004). Many parts of the limestone coast are now fenced off with boardwalks providing the only access to some of the more popular beaches. This small coastal community faced another tragedy in July 2004 when a surfer was taken by a shark at Noisies surf break, Lefthanders Beach, Gracetown (Taylor 2004, ABC 2004). This was the first fatal attack by a shark that the region has ever experienced and resulted in the 2004 Quiksilver Airshow World Series surfing event which was to be held at Yallingup, close to Gracetown, being moved to Perth's Scarborough Beach (Clarke 2004). Local surfers, however, were quick to return to the water, with the President of the Margaret River Board Riders acknowledging that sharks are an inherent risk of surfing, and that most surfers have a shark story (Haigh 2004).

Local surfers have also become active through the Margaret River Chapter of the national Surfrider Foundation Australia, supporting local marine research and protection and mobilising support to stop what they consider inappropriate developments on the coastal landscape (www.surfrider.org.au). This organisation advocates sustainable management and use of the coastal zone. Its mission is “Surfrider is a non-profit organisation dedicated to the protection and enjoyment of Australia's oceans, waves and beaches for all people through Conservation,
Advocacy, Research and Education.” The Margaret River chapter has been particularly active in supporting the save Smiths Beach campaign. They prepared a submission to the Shire of Busselton in 2001 in response to the mixed use development Smiths Beach proposal championing the cause of community participation in the coastal planning and management process (SFA 2001).

Surfers in the Margaret River region have now become part of the mainstream diverse culture of the region. Although in the early years there were some conflicts with older residents, particularly with regard to their work ethic, local residents are now proud to claim surfing as part of their cultural heritage (Kelly 2003:10). Many of the original surfers have now become prominent business people and interestingly themselves less tolerant of workers who ‘disappear’ when the surf’s up. According to Andrijich et al (2003:144), “While you can still find an errant vineyard worker who misses work or a graphic designer who doesn’t make a deadline because the surf is particularly enticing, there is an increasingly stronger work ethic and greater sense of competition amongst the young.” The surfers contributed to existing land use activities picking up seasonal work with local farmers, building haystacks, milking cows and trellising grapevines, and established new enterprises such as the many artisans’ workshops whilst consolidating the reputation of the region as a premier surfing destination. It was this reputation that is credited with sparking an increase in visitation to the region and the beginning of the modern tourism industry.

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18 This campaign will be explored in more detail in chapter 9
19 The mixed use development proposal for Smiths Beach included both tourism and residential developments.
Alternative Lifestylers

Following the migration of surfers to the Leeuwin - Naturaliste Region, other people who were seeking a similar utopian lifestyle also became attracted to the area. These new migrants were attracted to the green landscapes of the area that had been created by the dairy industry and the remnant forests of tall jarrah and karri trees. This landscape combined with the close proximity to the ocean and mild climate made the Leeuwin - Naturaliste region an ideal location in Western Australia for those seeking an alternative lifestyle. Like the surfers before them these new arrivals also found that an added attraction of this region was the availability of cheap land created by the decline of the dairy industry (Sherwood 1999).

The alternative lifestylers who moved to the region during the late 1960s and early 1970s were part of the western “hippy movement”. They were usually young, from 16 to 25 years in age, mobile and from predominantly middle to upper class backgrounds. According to Sherwood (1999) “They were part of a revolt against the mainstream, part of an anti urban push, who were looking for a peaceful green environment to practice ecological sustainability, be “close to the earth”, secluded away from the polluted urban environment.” Local organic Vigneron Lyn Serventy states,

It was a culmination of that romantic period and people were coming down with ideas of let’s get back to seeing if we can live differently, raise our children differently, if we can have a different relationship with the land, and they chose this spot because it was beautiful and it was undervalued.(Serventy cited in McPherson 1999:13)
Most alternative lifestylers are searching for spiritual foundation moving from a material to spiritual existence. According to Sherwood (1999), there are two types of alternative lifestylers, firstly the deficit group, who are looking for direction. They tend to remain on the fringes and are pushed out when land values increases. In the case of the Leeuwin - Naturaliste Region most of these people have moved on out of the area to Northcliffe further south east since the real estate boom of the late 1980s. Although, according to Andrijich et al (2003:134), some of these people can still be found in the region,

Given the carefree lifestyle that is possible here, it is hardly surprising that there are some with little visible means of support who like to dally in the region. Some of these have found cheap accommodation by sharing with others or camping out in the forests or in their cars by the beach.

The second group are the growth group. They tend to be older usually 25 years plus often with children and tend to be more permanent settlers. They come predominantly from middle class backgrounds and have a sense of power to change the world. There is also a third group known as Ferals or “freedom travellers”. This group tends to be more mobile and itinerant, usually younger without children. In the south west of Western Australia this group move through the forests actively
protesting against old growth logging. When in the Leeuwin - Naturaliste Region they often stop at the Carters road community\textsuperscript{20} (Breuger 1999).

In terms of land use the initial purpose for many of these new migrants from the city was “just to be” to plant trees and live a subsistence lifestyle (Sherwood 1999). However, many were also skilled artisans who have developed the numerous artistic industries that can now be found in the region including, pottery, furniture making, woodturning, glass blowing, jewellery making, painting and sculpting. Many of these artisans do not identify as being hippies as potter Ian Dowling says “Dropping out was never an option they considered. These are hard workers, risk takers, driven people. They need to be working with their hands, they have to be making things, and they never lose that.” (Ian Potter cited in Andrijich et al 2003:142) Others purchased property with a view to making a living from the land. According to Andrijich et al (2004:165), “Many professional people came wanting to ‘get their hands dirty’.” Like the surfers, the alternative lifestylers have also provided essential seasonal labour for farmers and Vignerons whose industries were much less mechanised in those days. In addition they have established two alternative schools, Nindamurra at Margaret River and the Steiner school at Yallingup to offer an alternative education system for the regions children (Sherwood 1999).

During the past 30 years the people who moved to the Leeuwin - Naturaliste Region seeking an alternative lifestyle have become an important part of the local community. An important component of the identity of the region is now linked with this alternative heritage, which is a major draw card for tourists. The wider

\textsuperscript{20} The Carters Road community is an intentional community located in the central area of the Leeuwin-Naturaliste Region.
community has also adopted some of the “green” and sustainable ideals of these people, who have often become less radical through working within the wider community. Traditionally the alternative community has expressed reservations about tourism and they actively protested against the construction of a new airport at Margaret River. However some are now expressing an interest in becoming involved in the industry and setting an example for small-scale sustainable tourism development (Breuger 1999). Others, however, have been moving further south to quieter locations such as Karridale and Augusta, as the proliferation of coffee shops and cafés in Margaret River is seen by some of the original alternative lifestylers as signalling the coming of the yuppies21 (Andrijich et al 2003:144).

An organic vineyard

Peter and Lyn Serventy came to Margaret River in the early 1970s moving from Darwin where they had become disillusioned with the political climate and mainstream Australian society. They purchased a property just south of town, which had originally been a dairy farm, but was running sheep at that time. It was run down and thick with regrowth which the Serventys cleared to grow organic vegetables. However, they soon decided that they needed a more substantial income to raise their family and thus diversified into organic wine production, which has been very successful venture for them (Serventy 1999).

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21 Yuppie is short for Young Urban Professional. This term came to prominence in the 1980s to describe upper middle class well educated people in their 20s and 30s who seem to have more materialistic values and less time for the social and environmental causes that inspired the previous alternative lifestyle generation (http://en.wikipedia.org/wiki/Yuppie)
The Serventys did encounter some interest by the local community, according to Peter, “the locals thought we were a bunch of hippies trying to grow grapes” (Serventy 1999). Lyn recalls, “I remember a farmer near us asking us if we were surfies or hippies when we first arrived. Since I had not actually managed to stand up on a surfboard and I looked down and I had on a long Indian Skirt, I said well we must be hippies and he seemed to accept that quite happily.” (Lyn Serventy cited in McPherson 1999:12). Lyn further states that “…the local dairy community was bewildered, “…suddenly there were people coming down who didn’t necessarily believe in the work ethic and perhaps were quite content to be on the dole and do some surfing, perhaps a bit of work. For many of the resident locals this was a total outrage to their whole ethos of what they had done and worked and actually managed to survive.” (Serventy cited in McPherson 1999:13)

**Rajneesh**

The Rajneesh, Sannyasins or Orange People as they were commonly known in Western Australia had a presence in the Leeuwin - Naturaliste Region from the 1970s to the early 1980s. This group who followed the Bhagwan Shree Rajneesh (also known as Osho) attracted wealthy people who would buy up land in the area. They were not, however, widely welcomed by the local community including other alternative lifestylers and a residents’ movement was actually formed to try to stop them from purchasing properties in the region (Sherwood 1999). One of the reasons the Rajneesh were unpopular was because they were known for bypassing local government land regulations, which resulted in tighter restrictions on other groups who wished to apply for multiple occupancies. In one case, they rented a property from a local farmer who was away at the time; they did not get the necessary local
government approvals for their activities and thus created “bad vibes” within the local community (Breuger 1999).

This group was highly visible in the community primarily due to the way that they dressed in orange and red clothing. Some locals were not concerned about the different values of the Orange People, suggesting that they brought a distinctive image to the area, particularly through their colourful dress. Others linked their presence with the first visible signs of drugs in the region, although this was not always regarded as a negative by community members as this quote by an oral history project participant acknowledges, “one of the first times they in fact grew marijuana back in the 70s, but that was exciting” (Kelly 2003:9). Whilst some Rajneesh followers moved out of the area following the Bhagwan’s death and a change in the movement’s structure in the mid 1980s, many stayed in the area, albeit less visible as they no longer wear their colourful orange clothing.

**Intentional Communities - Boranup Case Study**

The Boranup community was formed in 1980. The community came about through an alliance between the ‘down to earth group’, a local real-estate agent and some individuals who responded to advertisements at the Sundance Whole Food Shop. The new members held workshops to define the preferred community model (Breuger 1999). The group then purchased a 100ha property south of the Margaret River Township for just over $100,000, which was quite expensive at that time. It was a farming property that was only 10% cleared. Apparently the previous owner had wanted to develop chalets but the local council had rejected the proposal. It took a further year for the paperwork with the state government and local shire to be
processed to again multiple occupancy approval. Originally there were 22 shares, which had grown to 39 by 1999 (Breuger 1999). All new members have to be approved by the existing shareholders who manage the land holding company which charges individual households a peppercorn rent.

The original objective of the community was to grow organic fruit and vegetables; however, grasshoppers ate the first plantings. Now people have their own gardens (the Breuger household also has a cow) but share resources e.g. a tractor and an old farmhouse, which is used by the teenagers. Community members must still participate in 25 hours of community work per year. Some of these activities are held during busy bees to maintain firebreaks or remove fallen trees. Each member also pays an annual levy for property rates, communal infrastructure and improvements to the property that gives the group around $8,000 working capital per annum. The group has also discussed the possibility of discounting the levy in return for more labour hours (Breuger 1999).

Labour is exchanged within the group and the wider community. The Boranup community has its own fire unit and members have participated in fire fighting courses, they are well respected in the Margaret River community through their involvement with the fire brigade (Breuger 1999). Some members have also been involved with other community organisations and even members of the local shire council (Breuger 1999). Community members also take an active interest in the development of the wider community; for example they are concerned over the issue of septic tanks on the limestone ridge and the new development proposal at Hamelin Bay. They understand that Margaret River was a dying place in the 1970s. Thus
some farmers were glad of the opportunity to subdivide in the 1980s. However, many now feel that now the place is losing its authenticity (Breuger 1999).

Initially there was strong resistance from the local farming community, one anecdotal story suggests that the shire grader used to stop before the Boranup community’s boundary due to the old shire engineer’s prejudices (Breuger 1999). According to Breuger, “people from outside perceived us as a hippie commune; however we don’t want to be seen as an alternative extreme. We are involved in the wider community and prefer a doing rather than being creative image” (Breuger 1999). The Boranup Community is also discussing a possible move into small-scale tourism as a future option for the community. According to Sherwood (1999) the Boranup community has gone through a transformation of ideals, moving from idealism to a commercial venture. They are still the only multiple occupancy in the region despite their success being used as a model by Peter Glee who worked on the Leeuwin - Naturaliste Ridge strategy and proposed that low grade farming areas could be suitable for multiple occupancies following community workshops in the mid 1980s (Breuger 1999). Current Shire policy is one person per hectare for intentional communities, though some other land in the region is also shared or owned by three to four people and some people also share one large community house (Breuger 1999).

**Alternative Architecture**

The alternative lifestylers were also largely responsible for the introduction of a more creative style of architecture to the Leeuwin-Naturaliste Region. According to Cullen et al (1999:16) “The late 1960s saw the arrival of the hippies and surfies who
‘discovered’ Margaret River as an alternative place to live. They built simple, but often wonderful, structures from second hand and salvaged material. At the time, a relaxed building inspector and even more relaxed planning controls led to a small explosion in alternative homes. Lifestyle became integral with housing and the owner-builder epoch reached its peak.” From the mid 1970s rammed earth, mud brick, straw bail and limestone were introduced to the region as significant building materials. Local builders and artisans have created a distinctive Margaret River architectural style using these materials to build houses, wineries and even churches which now form an important element of the region’s cultural landscape and part of the regions appeal as a tourist destination (Cullen et al 1999:16, Wiltshire 2000:87) (Plate 7.2)

This new type of architecture is based on a community approach and a strong sense of place. The construction of the new rammed earth Catholic Church in 1982 provides an example of community involvement as recounted by the architect Chris Wilcox, (Cited in Wiltshire 2000:87)

Rammed earth as a material has great humility, and this appealed to the Catholic community. Its use also provided an opportunity for unskilled labour to be involved. Many were able to give time and raw materials (rather than money) to the project, so I went to work each day with a new team of volunteer labourers. The entire community was behind this project, not just those involved with the church, so for me it was a lovely introduction to Margaret River.
Plate 7.2 Alternative Architecture in the Leeuwin-Naturaliste Region, St Thomas More Catholic Church, Margaret River

(Source: Andrijich 2003:129)
The construction of buildings using these new materials which were designed as an extension of the landscape have provided a lasting reminder of the contribution of the alternative lifestyle seekers who have been migrating to the region since the 1960s. People seeking an ‘alternative lifestyle’ are still attracted to the area. However, these days much more capital investment is required to achieve this dream in the Leeuwin-Naturaliste Region which has been undergoing a real estate boom since the late 1980s.

**Conclusion**

From the 1960s a new wave of land users which is comprised of two main types, the surfers and the alternative lifestylers have moved into the Leeuwin-Naturaliste Region. They brought with them new attitudes towards the landscape and introduced more sustainable land use practices. This was perhaps the first time the region had experienced such a change in values towards its environment since European occupation. These changing ideas were greatly influenced by the western environmental movement of the time which itself was beginning to investigate Indigenous knowledge and land use management practices and Aboriginal peoples’ spiritual connections to the landscape.

These people have also become active in the decision-making about future land uses in the region and have been at the forefront of opposition to development proposals that they view as unsustainable. They are concerned about what they see as a devaluation of the region’s unique cultural and physical landscapes and a loss of a sense of place (Wiltshire 2000:106-7). Lyn Serventy sums up their ongoing struggle against what they view as inappropriate high density development,
At the outset I was wide-eyed and optimistic. I believed we would ‘win’ by putting in place firm planning guidelines. I know now that it is an ongoing process, and you are either in or out of it. I have never been able to pull out of it. (Serventy cited in Wiltshire 2000:107).

Surfing, the many and diverse land use activities including the distinctive style of mud brick architecture that the surfers and alternative lifestylers introduced to the region now make up part of the unique cultural landscape. These elements, activities and most importantly people also contribute significantly to the region’s attractiveness as a tourist destination. In addition these people also provided much of the casual labour force that has been required to develop the now world famous viticultural industry in the region. Like the alternative lifestylers and surfers, before them, the vigneronswere also able to take advantage of the relatively cheap land prices in the 1970s with the added bonus of a ready made seasonal workforce.

The first modern vineyard, Vasse Felix was established by Dr Tom Cullity in 1967 with a further 86 vineyards being established during the following 35 years as the demand for table wines in Australia steadily increased. It was mostly people from professional backgrounds from outside the region rather than local agriculturalists who established the new viticultural industry in the Leeuwin-Naturaliste Region, although there were a few local farmers who diversified into wine production. Many purchased marginal dairy farms, and began as part time farmers, attending to their vines on the weekends whilst they worked often outside the region to earn the necessary income until the vines became productive (Halliday 1982). Viticulture is now a well-established, successful land use in the Leeuwin-Naturaliste Region with
many vineyards also diversifying into tourism through the provision of cellar door sales, restaurants and chalet style accommodation. The establishment of the wine industry, its contribution to regional development and its approach towards sustainable land use practices will be discussed in the next chapter.
Chapter 8 Viticulture Industry late 1960s onwards

Introduction

The modern viticulture industry in the Leeuwin - Naturaliste Region has proven to be a most successful land use over the last 35 years. It has contributed to the diversification of the area’s economic base, provided employment opportunities and has played a significant part in changing the region’s identity from a poor backward agricultural region to a modern, internationally recognized wine producing region.

Vines had been grown in the area since European settlement in the 1830s. However, it was not until the late 1960s that the current commercial industry was established.

In the mid 1950s there were environmental problems emerging in the Swan Valley viticultural region near Perth that created the need to look elsewhere for good viticultural land (Jenkins 1997). It was Dr John Gladstones in the mid 1960s who suggested that the Margaret River should be the next prime wine region based on its suitable climate of lower summer temperatures, higher rainfall, minimum frost and hail risk and much lower ripening period cloudiness (Gladstones 1965). The valleys of the Margaret River Plateau also provided other important environmental elements required for viticulture such as aspect, slope, drainage and deep gravelly sandy loam soils. At this time there were also changes emerging in the drinking habits of Western Australians towards greater wine consumption. This was boosting demand for locally produced wines. Australians now consume an average of 26 bottles of wine each per year, the most of any English-speaking country (Wiltshire 2000:61)

This relatively new industry in the region was established by private initiative, which has been strongly supported by government technical advice through the Department of Agriculture. However, like all previous land uses in the Leeuwin-Naturaliste
Region, viticulture has also experienced some difficulties. These include increased bird damage due to the removal of redgum trees which provide their natural food source, the need to irrigate in the summer months and plant disease such as couture which stimulates abortion of the bunch during or after a flower set. Solutions to many of these problems have now been found including replanting early flowering redgum close to the vines, sinking bores and implementing strict quarantine measures (Halliday 1982:72). Since the first experimental plantings in 1966, 87 commercial vineyards have been established in the Leeuwin-Naturaliste Region. In recent years many have expanded significantly with some moving directly into the tourism industry through cellar door sales and the provision of restaurants and chalet style accommodation.

Viticulture and the associated wine tourism industry that has emerged in the Leeuwin-Naturaliste area have contributed considerably to regional development in this once struggling region. However, new environmental, social and economic pressures have surfaced which require investigation if this new land use is to become more sustainable and long lasting than its predecessors. This chapter will examine the history of viticulture in the region and explore the issues that will determine if this land use will provide a sustainable future for the region’s communities.

Vines Before 1965

The cultivation of vines in the Leeuwin-Naturaliste region is not an entirely new pursuit. In fact vines have been grown in the region since the beginning of European occupation (Cresswell 1988:322). The first European settlers including the Bussell family planted vines in the region in the 1830s. Wine would have been part of the
staple diet of the landed gentry in Europe at this time and the new settlers would have brought this tradition with them to the new country. Production of grapes is noted in the agricultural statistics for the region from early European settlement (Tables 8.1 and 8.2) up until the end of the 19th century.

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Table 8.1 Acreage under vine in the Sussex Region 1837-1880

(Source Cowcher 1981).

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<td>1156</td>
</tr>
<tr>
<td>1891</td>
<td>158</td>
<td>1899</td>
<td>1011</td>
</tr>
<tr>
<td>1892</td>
<td>122</td>
<td>1900</td>
<td>1900</td>
</tr>
</tbody>
</table>

Table 8.2 Wine Production in the Sussex Region 1885 – 1900.

(Source: Western Australian Government Blue Books 1835 – 1900)

Further evidence of the successful cultivation of vines in the region prior to the 1960s is provided by the various migrant families who settled in the region in the

22 The Leeuwin-Naturaliste Region was known as the Sussex region from 1835 to 1900.
early to mid 20th century, many of whom grew wine grapes for their own consumption (Cresswell 1988:322). Their varieties included Muscatel, Black Prince, Constantia, White Muscat, Black currant, Ave Maria and Red Malaga. Jimmy Meleri was one of these migrants who planted part of his 560-acre farm at Yallingup with Dorradillo vines in the 1910s. Meleri’s first vintage was 1917 and apparently he used to take the wine to local dances and sell it for a shilling a bottle (Jenkins 1997:48). The Lepidi family at Metricup also grew vines until the 1950s with other families such as the Mammone, Credaros, Palandris, Miaolos and Tuia families also involved in growing grapes (Cresswell 1988:322 & Jenkins 1997:48).

**Origins of the Modern Viticulture Industry**

Although it appears that there has been quite a strong tradition of vine cultivation in the Leeuwin-Naturaliste Region dating back more than 160 years, the modern commercial viticulture industry traces its origins only to the mid 1960s when the region was ‘discovered’ as having potential for wine production. One of the factors contributing to the perceived need to identify ‘new’ viticultural regions in south Western Australia was the environmental problems that were emerging in the Swan Valley viticulture region in the mid 1950s (Jenkins 1997:1). At this time commercial viticulture production in Western Australia was concentrated in the Swan Valley close to suburban Perth and in addition to environmental issues, urban growth was also beginning to encroach on the Valley, which would limit future opportunities for expansion. The major trigger for the search for new viticultural lands down south, however, was the increased demand for table wines that began to burgeon in the mid 1960s. Prior to this time Western Australians beverage of choice was more often beer than wine. This change in palates is probably strongly linked to post war
migration of large numbers of southern Europeans and their subsequent influence in broadening the appeal of wine (Macionis 1997).

The proposed decentralization of the viticultural industry further south also received support from the then minister for industrial development Charles Court, who was later to become Premier of Western Australia (1974-1982). The first state government experimental vineyard was at Forest Hill near Mt Barker approximately 50km north of the south coast city of Albany. The first crop planted there failed but the government viticulturist Bill Jamieson persevered and by 1970 the harvested grapes were being sent to Swan Valley winemakers, the Manns, who created a notable Cabernet Sauvignon (Jenkins 1997:1-2). Mt Barker, like the Margaret River region is now a premier wine making region in Western Australia, specialising in colder climate varieties of grapes.

It was a visiting American horticulturalist in 1956, Professor Olmo, who was the first scientist to suggest that the southwest region had potential for growing vines because of lower summer temperatures and higher rainfall. He advocated that, “In the 30-35 inch zone the vine development can be expected to be very good on deep loamy soils.” (Olmo 1956:31). He further stated that, “For the production of quality table wines, the Swan Valley and other contiguous areas are not as well located as districts in the south.” and “The temperature summations indicate that the area is equivalent or better than other areas to be found in the present quality wine districts of Australia or California.” (Olmo 1979:26). One region Olmo did discount though was the coastal area as he thought there would be too much cloud which disrupts the ripening of the grapes.
John Gladstones of the Department of Agriculture furthered Olmo’s suggestions that the southwest was suitable for vine production in his now famous 1965 Journal of Australian Institute of Agricultural Science article, “The climate and Soils of South Western Australia in Relation to Vinegrowing”(Gladstones 1965). He stated specifically that the Busselton-Margaret River region warranted consideration as a suitable site for commercial viticulture,

Being virtually frost-free, and having a much lower ripening period cloudiness, rainfall and hail risk than Manjimup and Mt Barker, it has distinct advantages over both those areas, and indeed over all other Australian vine districts with comparable temperature summations. (Gladstones 1965).

Much of the speculation regarding the suitability of the region for viticulture was based on climate as Gladstones acknowledged in 1965 there was little comprehensive information available on the soils of the region. In fact a fully complete survey of the soils of this region was not completed until 1988, well after the establishment of this new land use in the region (Tille & Lantazke 1988).

Following the publication of Dr Gladstone’s article, a community meeting chaired by local medical practitioner, Dr Cullen was held at the Busselton Hotel in July 1966. The main objective of this meeting that was attended by approximately 60 people was to discuss the possibility of planting vines in the region and John Gladstones was one of the guest speakers (Andrijich et al 2003:172). Dr Gladstones was a lecturer in agronomy at the University of Western Australia who had undertaken post graduate
studies in lupins, which were grown to improve the vineyard soils. His 1965 article along with a follow up paper in 1966, had recommended that Capel, Vasse, Cowaramup-Bramely and Forest Grove would be suitable sites for vine production.

According to Jenkins (1997:7), “At this time most of the big timber had been cleared out, whole milk quotas to help farmers and the growth of surfing and tourism had not yet arrived, and the whole area overall was depressed and backward.” And “Finally the labour situation would be favorable. At present the trend is for labour to have to move out of the district through lack of opportunity. Nevertheless the generally congenial living conditions are such that labour should not be difficult to attract and keep.” (Gladstones cited in Jenkins 1997:8). Following this meeting in August there was a debate in the local newspaper where Bill Jamieson, the government agriculturalist, was quoted as saying the estimated profits were exaggerated, but the Department of Agriculture would supply advice and vine cuttings to those who wished to embark on this new agricultural pursuit. John Gladstones responded in a letter to the editor that, “All known theoretical considerations point to a very good potential indeed.” (Gladstones cited in Jenkins 1997:8).

Following the public meeting, trial vines were planted by some enterprising individuals. Bill Michin planted half an acre of Cabernet Savignon and Rhine Riesling at Vasse and Dr Cullity planted a quarter of an acre at Burekup. Both plantings were successful, though it appears that Mr Minchin was not interested in a commercial venture. A further experimental plot was planted opposite the present location of "Vasse Felix" by Dr Cullity, Mr Juniper and Dr Cullen. The success of this venture prompted Dr Cullity to establish the first commercial vineyard in the
region “Vasse Felix” in 1967 (Cresswell 1988:323). From this humble beginning the industry grew steadily and by 1982 there were 18 wineries and five additional vineyards located in the Leeuwin – Naturaliste Region (Halliday 1982:73). This new land use activity continued to burgeon with 47 wineries in operation in 1997 and by 2004 there were 87 commercial vineyards operating in the Leeuwin-Naturaliste Region (Table 8.3, Figure 8.1).

<table>
<thead>
<tr>
<th>Winery</th>
<th>Date</th>
<th>Winery</th>
<th>Date</th>
<th>Winery</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moss Wood</td>
<td>1969</td>
<td>Brookland Valley</td>
<td>1984</td>
<td>Virgin Block</td>
<td>1995</td>
</tr>
<tr>
<td>Cape Mentelle</td>
<td>1970</td>
<td>Berry Farm</td>
<td>1985</td>
<td>Brookwood Estate</td>
<td>1996</td>
</tr>
<tr>
<td>Cullens</td>
<td>1971</td>
<td>Devils Lair</td>
<td>1985</td>
<td>Adinfern</td>
<td>1996</td>
</tr>
<tr>
<td>Hay Shed Hill</td>
<td>1973</td>
<td>Fremoy</td>
<td>1985</td>
<td>Cape Grace</td>
<td>1996</td>
</tr>
<tr>
<td>Woodlands</td>
<td>1973</td>
<td>Island Brook</td>
<td>1985</td>
<td>Tassell Park</td>
<td>1998</td>
</tr>
<tr>
<td>Leeuwin Estate</td>
<td>1974</td>
<td>Howard Park</td>
<td>1986</td>
<td>Cape Lavender</td>
<td>1998</td>
</tr>
<tr>
<td>Evans &amp; Tate</td>
<td>1975</td>
<td>Rivendell</td>
<td>1987</td>
<td>Church View</td>
<td>1998</td>
</tr>
<tr>
<td>Cape Clairault</td>
<td>1976</td>
<td>Arlewood</td>
<td>1988</td>
<td>We’re Wines</td>
<td>1999</td>
</tr>
<tr>
<td>Redgate</td>
<td>1977</td>
<td>Carbunup Estate</td>
<td>1989</td>
<td>Flying Fish Cove</td>
<td>2000</td>
</tr>
<tr>
<td>Hunts Fox Haven</td>
<td>1978</td>
<td>Driftwood</td>
<td>1989</td>
<td>Yungarra Estate</td>
<td>N/a</td>
</tr>
<tr>
<td>Ribbon vale</td>
<td>1978</td>
<td>Becketts Flat</td>
<td>1992</td>
<td>Bettenay Wines</td>
<td>N/a</td>
</tr>
<tr>
<td>Hotham Valley Wildwood</td>
<td>1980</td>
<td>Hamelin Bay</td>
<td>1992</td>
<td>Bunker Bay</td>
<td>N/a</td>
</tr>
<tr>
<td>Green Valley</td>
<td>1980</td>
<td>Aquila</td>
<td>1993</td>
<td>Eaglevale</td>
<td>N/a</td>
</tr>
<tr>
<td>Rosa Brook</td>
<td>1980</td>
<td>Stellar Ridge</td>
<td>1993</td>
<td>Indijup Point</td>
<td>N/a</td>
</tr>
<tr>
<td>Woody Nook</td>
<td>1982</td>
<td>Settlers Ridge</td>
<td>1993</td>
<td>Olsen</td>
<td>N/a</td>
</tr>
<tr>
<td>Wildwood</td>
<td>1982</td>
<td>Marri Wood Park</td>
<td>1993</td>
<td>Peace Tree Estate</td>
<td>N/a</td>
</tr>
<tr>
<td>Lenton Brac</td>
<td>1982</td>
<td>Swallows Welcome</td>
<td>1994</td>
<td>Random Valley Organics</td>
<td>N/a</td>
</tr>
<tr>
<td>Serventy</td>
<td>1984</td>
<td>Edwards</td>
<td>1994</td>
<td>Rockfield Estate</td>
<td>N/a</td>
</tr>
</tbody>
</table>

Table 8.3 Vineyard Establishment in the Leeuwin-Naturaliste Region
(Source: Personal Communication and Jenkins 1997:9)
Reasons for entering the Viticultural Industry

Medical practitioners were at the forefront of the newly emerging modern viticultural industry in the Leeuwin – Naturaliste Region. According to Jenkins (1997:12), there is a long history of medical practitioners being involved in viticulture from the second century in Rome to more recent well known Australian winemakers including Lindeman, Penfold and Angove. He quotes Dr Max Lake who suggests that there are many synergies between medical training and wine-making science, “Botany, biochemistry, pharmacology and bacteriology all combine to take the physician within an acre of mastering the theory and technique of winemaking.” (Lake 1967 quoted in Jenkins 1997:12). Pioneering winemaker in the Leeuwin-Naturaliste Region, Dr Tom Cullity, provides an additional explanation,

Winemaking is an attractive thing to do, it’s civilized – but it’s also critical….So perhaps there’s an affinity with what we have to do in medicine: you look at the facts, make a decision, and live with the
reality that you take high risks. We are not frightened by critical chemical and other decisions. (Cullity cited in Jenkins 1997:12).

This new viticultural industry in the Leeuwin-Naturaliste Region continued to attract many from professional backgrounds from outside the area rather than local agriculturalists although there were a few local farmers like the Hohnen Family (Cape Mentelle 1970), the Wrights (Wrights 1973), the Middletons (Sussex Vale 1973) and the Huttons (Graylyn 1975) who diversified into wine production (Andrijich et al at 2003:178-183). Two Swan Valley wineries (Evans & Tate and Sandalford) also established vineyards in the Region. According to Dr Cullity, “The attitude suitable to intensive agriculture and critical wine making procedures is foreign to the instincts of people who graze cattle and milk.” (Cullity 1987:3). Bill Jamieson recalls that, “some of the locals thought vine growing was a pretty funny way of farming, and I can remember people from the local shire doing a bit of sniggering among themselves when they saw what we were trying to do. There hasn’t been much of that for a while.” (Jamieson cited in Jenkins 1997:3).

Thus it was predominantly outside interests that purchased the marginal dairy farms and diversified the agricultural base of the area by introducing the new land use of viticulture. There are many and varied reasons for this outside interest in the new viticultural industry. According to a survey conducted by Jay (1979) as part of a masters thesis, the major reasons people entered the viticultural industry in the Leeuwin - Naturaliste Region were related positively to a set of environmental conditions. “The general economic and specific agricultural outlooks, and the availability of finance and technical expertise were the most important environmental
antecedents.” (Jay 1979). The decision to enter the industry was also related to strong personal interest in wines, successful winemaking and vineyard lifestyle. Many of the individuals involved were also well educated and had favourable attitudes towards education and science. Personal communication with those interested in winemaking was also often a more important factor than mass media in the decision. (Jay 1979).

Dr Cullity backs up this finding asserting that, “The motive for the first planting near Margaret River was not commercial. It was a doubtful proposition without backup. The only aim was to make the best possible wine. There seemed no reason why this should not be done and it was hard to understand why nobody had done this and why nobody showed any sign of doing it.” (Cullity 1987:1). Dr Cullity was perhaps typical of the new wine entrepreneur in the region. He was not even familiar with the local landscape as he states, “I had never been south of Bunbury in my life, had no practical bent, had never changed a car tyre, did not know what a weed was and knew nothing about vines or winemaking… I was a busy physician, could get away most weekends, and used to rise about 3am, leave Perth in a Peugeot 403 down the inland road, (before the coast road was sealed), and spend the weekend looking for suitable available land south of Busselton.” (Cullity 1987:3). Dr Cullity’s interest in growing vines in the region had begun when his brother brought John Gladstones’ article to his attention in 1966. Additional influences included Jack Mann from Houghton’s Winery in the Swan Valley and Bill Jamieson from the Department of Agriculture who were also personal friends of Tom’s. (Cullity 1987:3).

Many of the new viticulturists began as part time farmers; some would attend to their
vines on the weekends whilst others would leave their families to manage the properties as they worked outside the region to earn the necessary income until the vines became productive. Ani Lewis was one partner who managed her family’s vineyard, Cape Clairault alone with her 4 young children whilst her husband was away up north earning an income as a geologist six weeks on three weeks off. Ani recalls “I sometimes had to leave the kids in the house while I was out among the vines. In case something happened to me, I put food on the bottom shelf of the fridge and taught Matthew, our eldest, to look after himself when he wasn’t much more than two.” (Ani Lewis cited in Jenkins 1997:38). Some of the new arrivals also found work as doctors or teachers in the local community. Table 8.4 provides information on the background occupations of many of the new viticulturalists in the Leeuwin-Naturaliste Region.

<table>
<thead>
<tr>
<th>Vineyard</th>
<th>Established</th>
<th>Owners</th>
<th>Owners Background</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashbrook</td>
<td>1976</td>
<td>Tony Devitt</td>
<td>Senior viticulturist Dept Agriculture</td>
</tr>
<tr>
<td>Cape Mentelle</td>
<td>1969</td>
<td>David Hohnen</td>
<td>Professional oenologist</td>
</tr>
<tr>
<td>Chateau Xanadu</td>
<td>1979</td>
<td>Dr John Lagan</td>
<td>Medical practitioner</td>
</tr>
<tr>
<td>Clairault</td>
<td>1976</td>
<td>Ian and Ani Lewis</td>
<td>Geologist and school teacher</td>
</tr>
<tr>
<td>Willyabrup</td>
<td>1971</td>
<td>Dr Cullen</td>
<td>Medical practitioner</td>
</tr>
<tr>
<td>Gherardi wines</td>
<td>1979</td>
<td>Peter Gherardi</td>
<td>Viticulturist and oenologist Dept Agric</td>
</tr>
<tr>
<td>Gillespi</td>
<td>1976</td>
<td>Alistar Gillespi</td>
<td>Works for Vasse Felix</td>
</tr>
<tr>
<td>Graylyn Cellars</td>
<td>1975</td>
<td>Graham and Merilyn</td>
<td>Graziers</td>
</tr>
<tr>
<td>Happ’s</td>
<td>1978</td>
<td>Erl Happ</td>
<td>Economics teacher</td>
</tr>
<tr>
<td>Leeuwin Estate</td>
<td>1974</td>
<td>Denis Horgan</td>
<td>Perth Businessman</td>
</tr>
<tr>
<td>Moss Wood</td>
<td>1969</td>
<td>Dr Bill Pannel</td>
<td>Medical practitioner</td>
</tr>
<tr>
<td>Pierro</td>
<td>1980</td>
<td>Dr Michael Peterkin</td>
<td>Medical practitioner</td>
</tr>
<tr>
<td>Redbrook</td>
<td>1974</td>
<td>Evans and Tate</td>
<td>Winemaking company</td>
</tr>
<tr>
<td>Redgate</td>
<td>1977</td>
<td>Bill Ullinger</td>
<td>Civil engineer</td>
</tr>
<tr>
<td>Thomas Wines</td>
<td>1976</td>
<td>Gill and Janet Thomas</td>
<td>Pharmacist &amp; Medical practitioner</td>
</tr>
<tr>
<td>Vasse Felix</td>
<td>1967</td>
<td>Tom Cullity</td>
<td>Medical Practitioner</td>
</tr>
<tr>
<td>Willespie</td>
<td>1976</td>
<td>K &amp; M Squance</td>
<td>Headmaster primary school</td>
</tr>
<tr>
<td>Woodlands</td>
<td>1974</td>
<td>David &amp; Heather Watson</td>
<td>Surveyor &amp; Lawyer</td>
</tr>
<tr>
<td>Wrights</td>
<td>1974</td>
<td>Henry &amp; Maureen Wright</td>
<td>Civil servant, Kenya</td>
</tr>
</tbody>
</table>

Table 8.4 Background Occupation of Early Viticulturalist’s in the Leeuwin-Naturaliste Region

**Location of the Vineyards**

In addition to the favourable frost-free climate found in the Leeuwin – Naturaliste Region, vines also require quite specific soil characteristics including aspect, slope and drainage. The most suitable soils for viticulture are the forest grove gravelly sandy loams which occur in the valleys of the region’s plateaus. Gladstones (1990:76) identifies that, “The vineyard soils are derived either from laterite or from the underlying country rock at lower levels in the valleys, and are found chiefly in the drainage basins of creeks and small rivers running north-east or north into Geographe Bay, west into the Indian Ocean, and south-east into the lower reaches of the Blackwood River.” According to Andrijich et al (2003:212) “The boundaries of the wine region are those suggested by Dr John Gladstones. It is that part of south-western Australia to the west of longitude 115 degrees 18’E. The eastern boundary, now referred to as the Gladstone’s Line, runs from the coast just west of Busselton to the Southern Ocean near Snake Springs to the east of Augusta.”

A minimum of 30ha of land is required to establish commercial vineyard. North and east facing slopes of less than 15 degrees are most suitable as there is less wind exposure. The soils should be free draining and at least 50cm deep (SAMR 1992:35). Andrijich et al (2003:215) suggests, “It is the physical structural composition rather than the chemical make up or its level of fertility and richness that determines the suitability of soil for viticulture. The best soils have depth to allow the roots to penetrate so they can sustain the vine in those critical months of late summer just before harvest.” Established Vineyards in the region also require irrigation, usually from dams as there is no underground supply and many of the local creeks are saline (Davidson 1993:12). Summer irrigation essential for quality
production and around 2000 - 4000 cubic metres of water is required per hectare (SAMR 1992:35). The areas that provide the necessary physical conditions are scattered throughout the western part of the Leeuwin-Naturaliste Region with a significant concentration in the Willyabrup Valley north of the Township of Margaret River. The advantageous conditions of this part of the region have enabled the production of a large variety of grapes (Gladstones 1990:76-77). As shown in Figure 8.2 the earliest vineyards (shaded yellow) were established in the 1970s in the Willyabrup Valley North West of the township of Cowaramup and to the south west of the Township of Margaret River. During the 1980s (shaded red) new vineyards were established further out from the Willyabrup Valley and to the south of Margaret River. Then in the 1990s 23 new vineyards (shaded green) were established even further out from the original core groups. Thus the establishment of vineyards in the Leeuwin-Naturaliste Region has followed a roughly radial pattern since the late 1960s. It is also worth noting, that although this wine region is often referred to as the Margaret River Wine Region, over 50% of the wineries are actually located in the Shire of Busselton.

In addition to choosing suitable locations, the success of this new land use was also assisted by technical advice and support from the Department of Agriculture. Bill Jamieson, an agricultural officer with the Department, used to advise new viticulturalists on the basic skills, site and soil selection, varieties, pruning, trellising and general agricultural knowledge (Jenkins 1997:2). Bill was supportive of the new viticulture industry as Cullity (1987:5) states, “Bill Jamieson of the Department of Agriculture was most helpful. When it was departmentally inconvenient to foster, at
Figure 8.2 Leeuwin-Naturaliste Wine Region

(Map continues on following page)
Figure 8.2 Leeuwin-Naturaliste Wine Region

(Source: http://www.mronline.com.au)
this time, another gestating wine region, he supported this amateur venture in the south west and was generous in giving advice.”

By the early 1990s Dr Gladstones however, was once again advocating an extension of the current industry further south near Karridale, east to Rosa Glen, and north to Yallingup (Gladstones 1990:76-77). He also suggested that the region could produce commercial and superior bulk wines in the future (Gladstones 1990:78). New vineyards are continuing to be established in the Leeuwin-Naturaliste with a further five starting operation in the new millennium. There is also significant growth in the Western Australian viticulture industry outside the Leeuwin-Naturaliste Region in places like Mt Barker and Manjimup with some Margaret River wineries also purchasing land in these new regions to grow vines.

There is pressure to keep the region a premium wine production area rather than moving to the production of bulk wine, although some vineyards do import grapes from regions outside the Leeuwin-Naturaliste Region to meet demand for Margaret River Region product and one vineyard released a cask wine product in 2004.

**Difficulties**

It has not all been smooth sailing for the vigneron in the Leeuwin – Naturaliste Region; this new land use like its predecessors has experienced a number of difficulties. Clearing of the remnant vegetation, disruption to the local ecosystem and the introduction of foreign plant species has created some problems. For example, birds can be a major issue unless their natural food source the Redgum (Marri) flower blooms early or the vintage is late. In addition, as the Marri country
provides suitable soils for vines many trees have been cleared resulting in an overall reduction of flowers for the birds (Davidson 1993:14). At times some vineyards have reported up to 70 percent losses due to damage by birds (WAPC&AWA 1997:8). The chemical solution, Mesurol spray has proven to be ineffective as silver-eyes are migratory, and new birds arrive all the time that are ignorant of the indigestion impact of this spray (Halliday 1982:74). Nets and noise control are marginally effective, but the more sustainable and best solution has been found to plant early flowering redgums in close proximity to the vines (Halliday 1982:91). Other management techniques for the birds that have been tried include scarecrows, rubber snakes, air guns sunflowers and the sacrificial plantings of varieties such as sauvignon Blanc with the expectation that they will satisfy the birds who will then move on (Andrijich et al 2003:190) In the early 1990s falcons could be hired to scare the birds, however the Department of Conservation has since banned this practice.

Other difficulties faced by viticulturalists in the Leeuwin-Naturaliste have included Kangaroos and vine diseases such as Botrytis and Downy Mildew that can result in a significant loss of yield (Halliday 1982:74 and Department of Agriculture 2000, 2002). In recent years the culling of Kangaroos has been discouraged and the numbers of these creatures that have developed a particular taste for grapes has significantly increased. Some Vignerons are now erecting mesh fences around their vineyards in an effort to keep the kangaroos out (Andrijich et al 2003:190). The viticultural industry in Western Australia has always been strictly protected through quarantine measures. This meant that initially vines could not be imported for fear of disease. In recent years importation of stock has been permitted, however vines must be certified disease free and spend two years in quarantine (Jenkins 1997:3).
Another significant problem encountered by the wine industry in the Leeuwin-Naturaliste Region that has been widely reported has been the issue of reliable labour. At times the vigneron has found it difficult to get their fruit picked at harvest time, particularly on days when the surf is up. It is well known that on such days, surfers would not turn up or leave the vineyards to surf rather than pick grapes. According to Andrijich et al (2003:190) “When the swell is building faster than the sugars in the grapes, not even attractive pay rates will bring the pickers back.” This has led to many wineries now using mechanical harvesters. “Mechanical harvesting is a little hard on the grapes, but the attraction is that harvesters don’t surf.” (Andrijich et al 2003:190).

In more recent times some potential new problems have emerged as the viticultural industry continues to expand closer to residential areas and or tourism accommodation developments are constructed too close to wineries. According to the Department of Agriculture (2001:14) these issues include windborne dust from weed control activities, an unpleasant odour from manures, nuisance noise from day time operation of mechanical equipment, adverse effects from chemical sprays on people and animals and night-time noise during harvest. The department provides advice to vigneron on how to deal with these potential difficulties. There are also a number of government regulations in place to try to minimise these impacts and disputes can be referred to the Agricultural Practices Board for mediation (Department of Agriculture 2001:13).

**Viticulture, the Economy and Land Development**

The Leeuwin-Naturaliste Wine region, which is commonly referred to as the
Margaret River wine region, has emerged as an important site of boutique premium wine production in Australia. In the mid 1990s Margaret River wines held 20% of the premium Australian wine market, despite producing only 0.56% of Australian wine (Wiley 1996:41). It appears that the region will continue to produce quality wines, with some in the industry suggesting that the new challenge for vigneron is international marketing. Dennis Horgan suggests,

Margaret River is blessed with the beauty and attractions of its natural environment which makes it a potential Mecca for overseas visitors. These people return home as outstanding ambassadors for the wines of the region. The challenge for the whole industry is to encourage these visitors into our environment and provide them with an experience that allows them to take home an enthusiastic knowledge of the outstanding quality of the wines of the Margaret River District, preferably with details of where these wines can be obtained in their own country.

(Dennis Hogan, Founder of Leeuwin Estate cited in Wiley 1996:41).

In the early years, Margaret River wines were only available in Western Australia and even then in some cases only in a few select liquor outlets in Perth’s more affluent Western suburbs. This distribution problem encouraged many wineries to an open cellar door policy to provide a point of sale for wines. From the seven cellar doors that were open in the Leeuwin-Naturaliste Region in the late 1970s there are now some 65-cellar door operations providing tastings and selling wine direct to consumers (Sanders 2004:5). Into the new millennium, Margaret River wines are available in all states in Australia and a number of local wineries are also
successfully exporting to countries such as the UK, Singapore and USA (ABS 2003:26).

Viticulture in the Leeuwin-Naturaliste Region has had a significant impact on the area’s local economy. When the wineries were first establishing in the late 1960s and early 1970s the region was a depressed economic area that had only experienced marginal population growth since the 1950s (Figure 8.3). According to Cullen et al (1999:126) “Wine has changed the face and fortunes of Margaret River. The last quarter of the twentieth century was the major turning point. Timber and dairy had their day, but even at their height, the district remained one of the poorest in Western Australia.” Andrijich (2003:38) describes the situation at that time stating, “The economy of the area was sluggish in the 1960s and 1970s, when Margaret River could have been fairly described as ‘a stagnant backwater’.”

![Population of the Leeuwin-Naturaliste Region 1961-2001](image)

**Figure 8.3: Population of the Margaret River Region 1961-2001**

(Source ABS Census Data 1961-2001)
Another who remembers those times is David Hohnen who suggested, “The local economy was hardly vibrant. Cattle prices had gone through the floor, with predictable effect on the farms.” (David Hohnen cited in Jamieson 1997:27).

Even those who were involved in establishing the wine industry in the early 1970s expressed concern about the region’s potential. Moss Wood Founder, Bill Pannell, provides an example,

At one point, I thought about going to be the doctor in Margaret River (the one that was there had left) but I was advised against it. People said the place was too backward and that the hospital would soon close down. It’s hard to imagine what the south-west was like then. When we first moved to Busselton in 1970 there was nothing, literally nothing, to do in the evening. (cited in Jamieson 1997:18).

Eithne Lagan, co founder of Chateau Xanadu, provides a similar perspective, “Margaret River’s only cultural establishment was the public library.” (Cited in Jamieson 1997:42).

The process of establishing the modern viticultural industry in the Leeuwin-Naturaliste Region has resulted in a significant economic and population turnaround for the area. During the past 30 years the region has experienced unprecedented land development, strong economic and employment growth, increased investment and a population boom. For example, between 1991 and 2001 the population of the region increased by 65% (ABS 2001). Whilst much of this more recent activity is related to
broader tourism developments, viticulture and the opening of cellar doors have been a significant contributor to the area’s attractiveness as a tourism destination (Sanders 2004).

Viticulture has become a major source of income and employment in the region with reports estimating that in 1997, it injected more than $70 million into the regions economy with additional flow on economic benefits from tourism, contributing greatly to the area. (WAPC&AWA 1997:8). By the year 2000 there were 2,500 hectares of vines planted in the Leeuwin-Naturaliste Region (Wiltshire 2000:61) and in 2003 the grape crush was 22,172 tonnes with an estimated value of $35.1 million (SWDC 2003). Although viticulture has contributed significantly to the regions economy, it has also played a role in the marginalisation of some existing land uses. For example grazing and dairy activities have declined in the region as agricultural land has become more valuable for vine production, tourism related enterprises and residential land development (SAMR 1992:57). According to Andrijich et al (2003:134),

The substantial price rises that have accompanied the demand for viticultural land have made farming uneconomic for all but the largest and most mechanically efficient dairy farmers. Low returns from beef and dairy farming, together with significantly higher land rates that resulted from rises in property values, have meant those wishing to remain on the land need an alternative or supplementary income. Although reluctant to leave behind a lifestyle and an area
that they have loved, selling out has become a necessary – and lucrative – option.

Although the rapid expansion of the viticultural industry in the Leeuwin-Naturaliste region during the 1990s and early 2000s provided a significant boost to the area’s economy, there are now signs that this growth is not economically sustainable. In 2005 it was reported in the Western Australian media that a number of local wineries were experiencing serious financial difficulties mainly due to the oversupply of grapes that has been encouraged by tax-effective growing schemes. Amongst the casualties have been some of the oldest wine enterprises including Evans and Tate, Xandadu Wines and Abbey Vale (The West Australian 30 June 2005). In an effort to address the problem the state’s wine industry is approaching the government to match industry contributions to fund a marketing push into the United States (The West Australian, July 26, 2005). Whilst this may provide a solution it is an expensive option and there are some in the industry like Mr Michael Calneggia, Managing Director of Australian Wine Holdings who are suggesting that the time may have come to think about reducing the number of acres under vine, “They ripped out 100,000 acres of vines in Modesto, California, in the past four years and that’s what we need here.” (Calneggia cited in the West Australian July 26, 2005).

Conclusion

The continuing expansion of the viticultural industry in the Leeuwin-Naturaliste Region has created further land use issues for the area’s local communities. In

23 Reports on this subject were published in the West Australian newspaper on 30th June, July 1, July 2, July 7, July 19 and July 26 2005
addition, in recent times it has emerged that this level of growth is not economically sustainable. Whilst it is widely recognized that the relatively new wine industry and associated wine tourism industry has created many positive benefits for both the economy and local community, some negative impacts can also be identified. The positive impacts include, increased expenditure by visitors, an increased sense of place and value amongst the local community, increased sensitivity to environmental issues by visitors and wine producers, education and employment opportunities including better wages, working conditions and social status and flow on entrepreneurial activities related to wine tourism (Skinner 2001). Meanwhile the negative impacts can include such issues as environmental degradation, pollution, aesthetic issues, loss of control over planning and regulation, locals being forced off their land due to increased land values, unemployment due to high inbound migration economic leakages, and loss of lifestyle and amenity due to mass tourism invading local communities. (Skinner 2001).

In recent years some of the smaller family owned wineries have also been taken over by large corporations. For example the Vasse Felix winery that was established by one of the founders of the modern wine industry Dr Tom Cullity in 1967 was purchased in 1987 by the Heytsbury group of companies, which is chaired by Janet Holmes a Court (www.vassefelix.com.au). According to Andrijich et al (2003:198) “The scale of wine making in Margaret River has changed dramatically. It is now big business and has the infrastructure to match. There is a great deal of investment in the region and in individual wineries. While small wineries still exist, and in many cases flourish, the industry has now become dominated by the corporate world.”
Viticulture has emerged over the past 30 years to now be regarded as perhaps the most important land use activity in the Leeuwin-Naturaliste Region. Although many of the land use activities that preceded viticulture in the area still exist, it is viticulture and wine tourism that now dominate much of the discussion of land use in the region. This land use has evolved from humble beginnings with part time farmers from predominantly, professional non-farming backgrounds to multinational corporations now having an interest in viticulture and wine tourism in the region. Like many of the previous land use activities in the region, viticulture has experienced a rapid growth phase and there are now signs emerging that it needs to act quickly to address some important issues related to both its environmental and economic sustainability to ensure its long term future.

The government through its relevant agencies is providing guidance on environmental management through the publication of the Environmental Management Guidelines for vineyards 2001 (Department of Agriculture 2001). In addition the government is addressing the threat imposed by ever increasing land values by placing development protection over land that is deemed essential for agricultural production in the southwest. The issue of economic sustainability is one that needs to be addressed by the industry itself and there are some difficult decisions to be made. Whilst in the first instance their approach is to try and tap into new export markets, the issue of the oversupply of wine product may force a rationalisation of the industry with further business casualties. It is likely that this will have some flow on effect to the economic and social well being of the regions communities in the short term. In the immediate future, the availability of cheap wine may have the effect of increasing some wine tourism to the region.
Wine tourism will be explored in more depth as a case study in the next chapter which will investigate the role of another relatively new land use activity in the area, tourism. Like many of the land uses that preceded it, tourism is not an entirely new phenomenon in the area. What is new is the scale and speed of tourism development experienced during the past 20 years. The following chapter will explore the rapid growth in the tourism industry since the 1980s. It will investigate the role of past land use activities in the current tourism product mix and examine how the development of this newest land use needs to be carefully planned and managed to minimise adverse environmental, social, cultural and economic impacts on the local community and landscape.
Chapter 9 Tourism 1980s onwards

Introduction

The Leeuwin-Naturaliste Region is currently experiencing unprecedented growth in tourism activities. This most recent wave of land use action provides yet another example of land use activities largely driven by interests from outside the region. There are some examples of local community members engaging in this new industry, perhaps including some who realised they missed an opportunity by not investing in the viticultural industry but mostly this new land use is being developed by the contribution of finance and entrepreneurs from outside the region. Since the mid 1980s the area has experienced phenomenal increase in tourism related developments including the construction of numerous resorts and the refurbishment and expansion of many others. A number of the small coastal settlements such as Bunker Bay, Prevelly, Gracetown and Yallingup dotted around the edge of the region have also become popular for the purchase weekend and holiday homes and are under enormous pressure to expand.

Tourism development has also triggered significant urban expansion of the regions main settlements of Busselton, Margaret River and Dunsborough with plans now on the drawing board to create a large town at the tiny hamlet of Vasse to accommodate some 7000 new residents (Dortch 2003). It is the sustainability of this associated urban expansion that has created the most community concerned with significant anti development protests occurring in reaction to proposed developments at Gnarabup and Smiths Beach.
Within the Leeuwin-Naturaliste region tourism has developed quite differently. In the north in the Shire of Busselton there has been a move towards large-scale developments with significant infrastructure such as canal marinas and international hotels, whereas further south in the Margaret River region tourism has generally been lower key with the exception of the Gnarabup Beach development, which will be examined later in this chapter. Partly this difference can be explained by the different geography of the two areas as explained in Chapter Three but in addition the cultural heritage of the two shires, their prior involvement in tourism before the 1980s and the make up of the two shire councils provides more understanding of the types of tourism developments that are presently occurring in each local government area.

Following a brief outline of the history of tourism in the Leeuwin-Naturaliste Region, this chapter will then explore in more detail two specific case studies of tourism land use in the region. The first case study will investigate the phenomenon of weekend and holiday homes and the pressures for urban style development, whilst the second case study will link to the previous chapter and delve into the relationship between wine and tourism, and the importance of this relationship to the Leeuwin-Naturaliste Region.

History of tourism in the region

Tourism is not a new phenomenon in the Margaret River Region. What is new is the scale and speed of tourism development experienced during the past 20 years. Travel to and within the region was common in pre European times. The original custodians of this land, the Pibelmen and Wardandi Nyungar people would traverse
the region to visit with friends and family to participate in ceremony or share in a bountiful catch. They also had a system of temporary housing that perhaps had some similarities to the European system of summer and winter residences. Unlike their European counterparts, however, the Nyungar people did not construct grand houses or estates, but rather they were much more flexible with their locations, camping in the countryside, constructing temporary shelters known as mia-mia’s from local vegetation close to seasonal food sources (Collard 1994, Green 1984:14 & Hammond 1980:25).

The Wardandi and Pibelmen Nyungar people would have also been accustomed to hosting guests visiting from outside the region. According to Palmer (1999:106) “…Nyungars were well accustomed to regular visits from ‘outsiders’. There is much evidence that Aboriginal groups regularly visited country that was controlled by others, sometimes travelling hundreds of miles.” It was within this spirit of hospitality that the Nyungar people initially welcomed the first Europeans accepting them as djanga or returned spirits of the dead (Collard 1994:55, Palmer 1990:107). According to Collard (1994:55),

…the Nyungar appear to have been amongst the most obliging group of Aboriginals in the history of European settlement of Australia. From the outset they acted as guides to assist the Wedjela explorers by showing them Nyungar paths, camping places and water holes.

The early Dutch, French and English navigators who charted much of the coastline of the Margaret River region were also travellers, who anchored in the sheltered bays
of the region (Marchant 1982). In addition to collecting scientific data about this new land, crews would also have engaged in some rest and relaxation on dry land. There would also have been some cultural observations of the local Indigenous people and probably some activities that we would now label sex tourism. Following the establishment of a permanent settlement by the British at Augusta, many of the new arrivals would have played host to passing travelers in this remote colonial outpost. Whalers and Sealers mostly from America became regular visitors to Augusta. They would purchase local fresh produce and participate in social activities with the locals. Some local girls even married these transient visitors creating permanent links between these hosts and guests (Cresswell 1988:53-54). Following the move of the settlement north to Busselton, the early Europeans would have continued to receive guests including government officials and passing traders.

The establishment and expansion of a large-scale timber industry in the region during the second half of the 19th century brought more visitors to the area. Transient workers would have needed to be housed in guesthouses, and traveling business people would have patronized local inns. The discovery of the region by more leisure-oriented tourists, however, did not occur until the turn of the 20th century. Perhaps the first to recognize the region’s commercial tourism potential was the Chief inspector of Lands, Erskine May who suggested that the forests of Margaret River could provide a sanatorium ‘to the goldfields especially, the Margaret River should be the Blue Mountains of NSW, the Derwent of Tasmania or the lakes of New Zealand when they are taking a holiday’ (Western Australian Year Book 1901).
Most of the early post contact tourism activities in the Leeuwin-Naturaliste Region were relatively low key involving mostly business travel and visiting friends and relatives. It was the caves under the forest that were discovered at the turn of the 20th century that proved to be the region’s first major tourist attraction encouraging significant leisure oriented visitation (Plates 9.1 & 9.2). The historic Caves House at Yallingup was established in 1903 in response to growing demand for accommodation close to the Ngili Caves, where tours began in 1900 (WATC) (Plate 9.2). Caves House also quickly became a popular destination for young honeymooners from Perth (Sanders 2000:47). Several other caves in the region were also opened to tourism around this time including Lake Cave (1901), Mammoth Cave (1904), Moondyne Cave (1911), Calgardup Cave (1904) and Giants Cave (1905) which included a substantial platform at the base for picnics. Many of these caves were administered by the Caves Board and actively promoted by the Western Australian Government Tourist Bureau. They also gained international attention when the Empire parliamentary delegation and associated press delegation were taken on tours of the caves whilst in Western Australia to view the Group Settlement scheme in 1925.

At this time the Leeuwin-Naturaliste Region was still a relatively isolated destination and difficult for tourists to access. This situation was to change 20 years after the opening up of the caves by the construction of infrastructure associated with the Group Settlement Scheme. A railway link from Augusta through Margaret River and Busselton to Perth was established during the 1920s and 1930s for the group settlers,
Plate 9.1 Caves

(Source: Litchfield 2000:51)

Plate 9.2 Caves House

(Source: Litchfield 2000:94)
but it also provided the opportunity for weekend rail excursions to the region by metropolitan residents thus opening up the area to mass tourism (Hewett 1975). As had occurred in Britain and America 50 years earlier, affordable transport to coastal and scenic locations proved very popular (Pearce et al 1998:xxi). This new found destination status was relatively short lived however; with the impacts of the Great Depression and World War II slowing this new tourist trade almost to a complete halt which resulted in the region falling into tourism obscurity again until the 1960s.

It was the post war economic boom that largely facilitated a renewed interest in the region in the 1960s. As in the rest of Australia there was close to full employment, paid holiday leave and ever increasing automobile ownership (Hall 2003:53). During the 1960s and 1970s Busselton in the north of the Margaret River Region emerged as a popular caravanning destination for visitors from Perth with caravan ownership more than doubling in WA between 1975 and 1980 from 4,934 to 9,322 (ABS 2002). This resulted in the proliferation of the number of caravan parks along the coastal strip south of Busselton towards the township of Dunsborough during the 1970s. These caravan parks have continued to remain popular as a relatively cheap holiday destination for families from Perth. Some of the caravan parks have also recently modernized, transforming themselves into holiday resorts, offering a broader range of accommodation options up to five star cabins to suit the changing demographic of visitors, many of whom are more interested in visiting the wineries than holidaying with children by the sea.

The early 1980s can be identified as the start of the current tourism boom in the Leeuwin-Naturaliste Region. It was the significant improvements in the road system
linking the region to the Perth metropolitan area and within the region at this time that triggered a corresponding growth in visitor numbers (Haynes 1989). The renewed interest in the region was also partly driven by the establishment and expansion of a significant new attraction, the wineries. From just six cellar door establishments in the early 1970s this number increased by an additional 11 in the 1980s and a further 14 in the early 1990s.

The increasing trend towards cultural and ecotourism during this time was also a bonus for this region which boasts a unique natural environment including the largest remnant Tuart Forest in the world, old growth Karri forest, spectacular coastline, world class surfing and the limestone caves that had first become popular attractions at the turn of the 19th century. The region also contains a rich and diverse cultural history from traditional Aboriginal culture that can now be experienced at the Wardan Cultural Centre at Injidup, to early European history preserved by the National Trust at Wonnerup and Ellensbrook, the Busselton Jetty that was constructed to service the timber industry, to the old groupie houses dotted through the countryside and the unique mud brick architecture that was brought to the region by the utopia seekers of the 1960s and 1970s.

In 2004, 1.1 million domestic visitors and 84,000 international visitors stayed overnight in the Leeuwin-Naturaliste Region with the average visit being 3-4 nights for both groups. In addition the region received a further 541,000 domestic day trip visitors. The Shire of Busselton continues to receive the highest proportion of intrastate visitors (88%) whilst the Shire of Augusta Margaret River receives 20% interstate and 10% international visitors. Most people visit the region for holiday or
leisure purposes. The preferred accommodation is a hotel, motel or resort (34%), however, a significant proportion also stay with friends and relatives (20%) in rented houses (12%) or caravan parks (18%). Access to the region is largely facilitated by private or rental vehicles (95%) (Tourism Western Australia 2004d, 2004e). Visitation to the region is expected to continue to grow with a number of new accommodation developments totalling $180.1 million currently in the planning or construction phases to facilitate this expected increasing demand (Tourism Western Australia 2004c).

**Case study one – Coastal Holiday Towns**

*Twenty years ago you could not sell a block in the main street. Now you need several hundred thousand dollars in your hand before you even start looking, and there's not much available*


The coastal communities of Yallingup, Gracetown and Prevelly in the Leeuwin – Naturaliste Region provide an interesting case study of the growing development pressures experienced by many small coastal communities in Australia, as they become more popular and accessible. This process is part of a broader national trend of non-metropolitan population growth in Australia that has been widely documented (Holmes 1994, Hugo 1994 & Sant & Simons 1993). Many have become attractive destinations for a wealthier urban clientele who purchase holiday homes, and bring with them their own values and lifestyles which often results in pressure to upgrade facilities in these towns (Coppock (1977)., Craik (1991)., Turner & Ash (1975).,
Stadel & Selwood (1996). & Selwood et al (1996). In the extreme case as observed
on the Gold Coast this process can lead to the complete transformation of small
towns to major urban centres. The coastal communities of Prevelly, Gracetown and
Yallingup are located adjacent to scenic bays in the south west corner of Western
Australia between 250km and 300km south of Perth. This places them within easy
“weekender” distance for metropolitan residents.

Historical Development

Coastal subdivisions are not a new phenomenon and in fact are a common feature of
the Australian landscape, providing seaside homes for retirement or holidays (Sant
and Simons 1993, Holmes 1994, Craik 1991, Hugo 1994). In Western Australia the
number of these developments has expanded significantly during the past 30 years
with improvements in road transport, which allows greater accessibility to these
often otherwise remote locations. In the early days they provided an alternative
place of residence for the farming community after harvest and a sanctuary for city
dwellers wishing to escape (Mouritz 1984:ii13). With the 1980s “farm crisis”,
country ownership of these properties has decreased and in the case of Prevelly,
Gracetown and Yallingup, over 50% of properties are now owned by Perth residents
(AMR & Busselton Rate Books 1997).

Yallingup has been a popular tourist destination since the turn of the last century
with the picturesque Caves Lodge providing a popular honeymoon location. For
more than 40 years the beaches at Yallingup have also been favourite destinations for
city surfers, escaping the crowded metropolitan beaches, and searching for the
ultimate waves (Cape to Cape 1998:1). Yallingup beach subdivision was one of the
first such coastal developments in the region, being established by Tim Hammond in 1958 (Edwards 1989:111).

Prevelly Park was the next subdivision created in the Leeuwin - Naturaliste Region. Development was initiated by Geoff and Cheryl Edwards, who placed an advertisement in the ‘West Australian’ newspaper in 1951 looking for suitable land to purchase to develop a holiday resort. They chose beachfront land near Margaret River from three other replies from Albany, Denmark and Busselton. At this time there were a couple of squatters shacks already located at Prevelly, however there were no services such as water, sewage or electricity (Edwards 1989:63-64). Construction of a caravan park began in 1953, with the new shop opening on Christmas Day that year (Edwards 1989:84). In 1954 a new fishing track was constructed and in 1957 a bitumen road to the new settlement was completed (Edwards 1989:90&105). The remainder of the original 100 acre location was purchased by the Edwardses in 1959 and subdivided into 38 blocks, as the beginning of the future tourist resort town of Prevelly Park. It is interesting to note that the prime motivation for the Edwardses creating the township of Prevelly was their desire to create a market for their shop, as Geoff Edwards explains,

We thought it would be a good idea to sell a few blocks as the money from them would help us to pay off our debts and if people built their own cottages it could increase turnover at the shop and also help us to get the SEC [electricity] and telephone down to Prevelly Park. (Edwards 1989:105).
This “holiday town” concept however was not instantly successful, with the Edwards finding it difficult to secure financing. Strong initial public interest was undermined by the banks, which showed little faith in the project, and by the reluctance of the financial institutions to back the venture and the slow development approvals. This forced the re-advertisement of the blocks on easy terms the following summer, resulting in the sale of 20 blocks (Edwards 1989:114). Further land north of the lake was subdivided in 1978 following an upswing in interest in the region as a holiday destination in the late 1970s (Cresswell 1988:295). During the 1980s there was a proposal from a Japanese company to construct a residential links golf course with a five star hotel. This proposal brought widespread community protest that lasted for over a decade. In the end, the community settled for a relatively low-key development, Gnarabup Beach subdivision that has still nearly doubled the size of the town (The Augusta Margaret River Mail 1998:1).

Gracetown at Cowaramup Bay is another coastal nodal settlement in the region that was developed as a tourist town in the 1960s. The area was first used by the Bussells to graze cattle from their homestead at Ellensbrook, although the first track into the bay did not appear until 1917-18. Mr Arthur Sutton is reported to have put through two further tracks in 1920. It was at this time that Chinese commercial fisherman, Herb Sankwey, constructed the first shack at the bay. Group settlers were regular summer visitors to the bay during the 1920s and 30s as it became a popular holiday and picnic spot by the sea. In 1957 a gravel road into the Bay was constructed, and a township was gazetted in 1963, SEC Power was linked to the town in 1969 and by 1988 there were, 149 houses (mostly of fibro cement and timber construction), 60 families mostly from city, and services including a general store, liquor store, motel
and restaurant. In 1980 a progress association was formed with their efforts resulting in the construction of a tennis court, pavilion, sports area and boat ramp. Development continued until the late 1980s with many new residences constructed of brick and natural stone, however development stopped at the end of the decade due to lack of water (Blond 1987).

Community Structure

In the past the case study towns generally comprised small-scale developments, perhaps only a couple of steps up from the traditional fishing shacks which preceded them. In recent years, however, there has been immense pressure to upgrade as the towns have come to appeal to a more affluent clientele from Perth’s western suburbs. This trend towards increasing city ownership has been identified internationally by Turner and Ash (1975: 122) who state,

> Particularly sad are the ghost villages springing up around the world, created by rich city dwellers buying second homes in picturesque farms and villages, paying sums which the local population cannot afford.

In 1997 city residents accounted for more than 50% of property ownership in each of these coastal communities according to the 1997 rate books from the Shires of Augusta-Margaret River and Busselton (Figures 9.1,9.2,9.3). Yallingup has always proved attractive to residents from Perth’s Western coastal suburbs and this is reflected in the property ownership by local government areas. Figure 9.1, shows that the percentage of ownership from the city was 70.6%, with only 7.9% of ownership from country areas. This may stem from the fact that Yallingup was the first area
developed by city surfers from the coastal suburbs, who would travel down to the region in search of uncrowded beaches with great waves. Anecdotal evidence suggests that families of these surfers were the first to invest in holiday homes at Yallingup. Gracetown, by contrast, hosts a higher percentage of country ownership as illustrated in Figure 9.2. The 23.8% country ownership perhaps reflects the farming origin of this town. 53.7% of ownership however was still in the hands of city residents again, predominantly from Perth’s western suburbs. Prevelly has recently undergone significant expansion with the development of a new subdivision, Gnarabup, which has considerably increased the size of the town. The property ownership figures reflect the fact that a large number of single residential lots are still held by the property developers in West Perth. Some of the high country percentage may also include some local Prevelly residents who chose to have their rates sent to a post box at the local post office in Margaret River (Figure 9.3). The new subdivision has been heavily promoted as an investment opportunity with many of the new homes constructed as rentable holiday units rather than permanent residences or family holiday homes (Margaret River Tourist Bureau).

What are the implications of the redevelopment occurring in the towns of Prevelly, Gracetown and Yallingup for the existing social, economic and environmental structures of these localities? Many of the new-comers will bring their own values and lifestyles to the towns that perhaps could produce conflict as the existing communities, both permanent and transient, come to terms with the changes. Selwood et al (1996) suggest that in Peaceful Bay, a similar holiday town on the
Figure 9.1 Property Ownership Yallingup

(Source: Shire of Busselton Rate Books)
Figure 9.2 Property Ownership Gracetown

(Source: Shire of Augusta Margaret River Rate Books)
Figure 9.3 Property Ownership Prevelly

(Source: Shire of Augusta Margaret River Rate Books)
south coast, many long term residents view upgrading and development with
disfavour and are concerned about subsequent rises in rates. As already noted there
was enormous community protest at proposals to further develop Prevelly, and whilst
additional development in Gracetown and Yallingup is not presently an option due to
the lack of available potable water, the current trend of renewal could also provide
potential problems.

Many of the newly remodelled houses are also being offered as rentable holiday units
rather than traditional family holiday homes. According to a CALM visitor survey in
1982 most houses were owned by one family, and occupied for less than 15 weeks
per year (Mouritz 1984:14). The new trend of higher frequency, commercial letting
of properties is contributing to changes in the character and sense of community in
these towns. The higher turnover rate of possibly shorter stays results in an
identifiable breakdown in community networks, which have developed over many
years as many of the holiday makers would have come to know each other well from
numerous past vacations (Selwood et al 1996:153). The increasing investment
opportunities in these towns due to buoyant real estate prices also results in more
frequent turnover of property ownership, which will contribute to a further decline in
community ties. There may also be economic consequences for the local permanent
population in that shorter stay visitors are more likely to bring their supplies with
them from the city rather than frequenting the local shops.

**Recent Changes and Development Issues**

Of course the changes currently being experienced in the localities of Prevelly,
Gracetown and Yallingup are neither new nor unique on the national scale. Craik
(1991:46), in her discussion of resort tourism identified that “During the 1980s the scale of change was transformed with a new generation of international standard accommodation and self contained resorts becoming popular.” With these changes, there is also increased pressure on coastal communities to upgrade and provide higher amenities, in order to sustain investment returns. Whilst the case study towns have so far remained removed from much of the pressure to upgrade to international standard, the region as a whole, particularly the coastal strip along Geographe Bay south of Busselton appears to moving down this development path.

The recently completed Radisson resort project near Dunsborough is very reminiscent of complexes traditionally associated with resort towns in Queensland. In 2004 there were also an additional 180.1 million dollars worth of tourist accommodation projects under construction or in the planning stages in the region (Tourism Western Australia 2004c). A new airport was also opened in Busselton in 1988, placing the region within a 30-minute journey of the city, with marketing campaigns now offering flights to the region for “lunch at a Margaret River Winery.” This new travel option may also make the region more accessible to foreign tourists who rarely travel more than an hour out of the city of Perth (WATC). Certainly there is the potential for the region to be marketed to the Malaysian and Indonesian tourists and investors, similar to the Gold Coast experience with the Japanese. A large influx of overseas visitors could result in inevitable pressure for facilities in the region to upgrade to an international standard.

The process of change currently being experienced in the Leeuwin-Naturaliste Region would place it well into the third stage of Butler’s (1980) model of a tourist
cycle of evolution. The region was thoroughly explored during the late 1950s and early 60s with the host community generally embracing tourism and the relatively small number of tourists during the 1970s. Since the 1980s, however, the region has been undergoing a process of accelerated development. Development as defined by Butler (1980:8), involves a well defined tourism market area, heavy advertising, some facilities provided by external organisations, and some imported labour. In addition there will be changes to the physical appearance of the area and finally the number of tourists during the peak season will equal or exceed locals. The significant number of new projects in the planning stage for the region would suggest that it is going to continue in the development stage in the short term, with increasing numbers of visitors making tourism the most significant industry in the Leeuwin-Naturaliste Region. This development however, has not occurred without some community protest, indicating a change in attitudes towards tourism in the area.

The Augusta Margaret River Shire council, which incorporates the communities of Prevelly and Gracetown but not Yallingup, has documented changing attitudes towards tourism and Gracetown, identifying that, “Already there is a strong perception in the community that tourism has the potential to become an element detrimental to the Shire’s natural attributes and the social fabric of the community.” (AMR 1992:41). Commentary in the local newspaper and personal communication with locals would suggest that there is some feeling of “being sold out” with regard to the development of the subdivision at Prevelly. Further north in the Shire of Busselton there has also been significant community opposition to a proposed new development at Smiths Beach just south of Yallingup.
There are three important issues involved in any further development or expansion of the coastal towns of Prevelly, Gracetown and Yallingup. The first and perhaps most significant is the lack of available water, the second is the Leeuwin - Naturaliste National Park which surrounds each settlement and the third issue in the wider region is agricultural land use. Water supplies are very limited in the Leeuwin - Naturaliste Ridge, due to the porosity of the soils and limestone. The rapid channel flow in the limestone also restricts the development of a water table which therefore requires water to be piped in from elsewhere in the region, which itself is also not well endowed with natural sources (AMR 1992:7-9). In the past it was a development requirement that each dwelling in Prevelly and Gracetown had a 92,000litre water tank (Ahola 1999). Prevelly has recently connected to scheme water following the construction of Ten Mile Brook Dam at Margaret River. At Prevelly, the developer paid for the town to be connected to scheme water from the new Ten-Mile Brook dam in order to gain approval for the Gnarabup Beach development (Ahola 1999). This has had the effect of doubling the size of the town with various social and environmental impacts. In addition to the issue of potable water, the lack of sewage facilities in these communities may also prove a long-term hazard.

Thus whilst it appears that water was not a great consideration in the initial formation of the case study communities it is now a serious problem, which has resulted in discussion on the feasibility of large scale infrastructure programs such as dams and pipelines. This has included a proposal to construct a dam on Ellen Brook to supply Gracetown with scheme water (WAWA 1987:1). According to the Water Authority of Western Australia (WAWA), Gracetown is one of the largest country towns in Western Australia not serviced by a reticulated water supply (WAWA 1987:1).
Environmental Protection Authority (EPA) however has concluded that this proposal is unacceptable due to adverse environmental impacts in a sensitive conservation area.

The EPA further questions, “Whether a community such as Gracetown, which was developed and has expanded without a reticulated water supply, could be equated with Perth and therefore require the same standard of service…”. They note that a condition of sale of the lots was that neither the government nor the local authority would be responsible for the provision of water (EPA 1987:4-5). There would also be the “…possibility that the Water Authority would encourage additional land release and subdivision in Gracetown in order to reduce the per service capital costs”. (EPA 1987:5). The WAWA in fact noted that the Department of Lands Administration (DOLA) could subdivide a further 60 blocks but that additional expansion was restricted due to topography (WAWA 1987:2). The EPA suggests that the community may have to accept that the Water Authority has access to a finite resource, and review their expectations. (EPA 1987:10).

The current policy of consolidation of the Leeuwin - Naturaliste National Park which surrounds all three towns also provides a development issue. The Department of Conservation and Land Management (CALM) as the manager of the largest national park in the region, actively encourages the “Rationalisation of National Park upon subdivision application” This policy is part of the CALM Act of Parliament which clearly states that “all sub-division and development will require thorough assessment by CALM to ascertain their impact on the [National Park] and where appropriate, to negotiate consolidation of boundaries” (Sec 16 of CALM Act 1984)
The overall objective of this policy is to try and link up the park all the way along the west coast which would prove more ecologically appropriate and be easier to manage than the present system where large parts of the park are fragmented. Thus, whilst these land trades may have some environmental merit they will also impact on the future development of the Leeuwin - Naturaliste coastal region which includes the three case study towns.

The final major influencing factor impacting on the development of the broader Leeuwin - Naturaliste region, which may also have some effect on the coastal communities is the concern for protecting the region’s remaining productive agricultural land. There are already concerns that tourist developments will place restrictions on agricultural activities and that land will be zoned exclusively for agricultural use (MOP 1997:23-24). Presently, Agriculture WA does not encourage further residential development on agriculturally productive land in the region. This is also a significant issue for potential future developers in the towns who use the “rural outlook” particularly the many wineries to attract continued future investment.

The favourable aesthetics of a waterfront location for development can be a strong marketing tool. Land by the sea also generally commands higher prices than that located inland in Western Australia. Thus, although the local shire is promoting the further development of Cowaramup which is some 15km inland from Gracetown as the “Gateway to the viticultural area” and some development is occurring, it is not likely to reduce the perceived demand for more coastal subdivision in the area (AMR 1992:48). There is also strong market demand, mostly from Perth residents for coastal investment properties in this region. This is reflected in promotion material
for the Gnarabup beach subdivision which quotes growth in residential land values in
the region as increasing by 700% between 1980 and 1992 (Gnarabup Beach
Brochure). The developers also utilise marketing slogans such as Gnarabup Beach
“...is the only ocean side development in the region offering fully serviced
homesites.” And “As the last land approved for residential development on the entire
Leeuwin – Naturaliste coastline, it offers a rare and outstanding investment
opportunity.” Images and narrative of the environment also feature heavily in the
advertising material, which interestingly omits any pictures or mention of the
suburban style development that is actually occurring.

The Ministry of Planning’s objectives for the Leeuwin - Naturaliste Region, which
includes the towns of Yallingup, Prevelly and Gracetown, is “To conserve the wild
costal landscape between Caves Road and the coast” “To protect the important
resources of the area, especially surface and ground water, and to promote means of
disposal of waste water that are sensitive to the environment.” (MP 1997:3). Whilst
the planning objectives in the coastal nodes allow for a mix of tourism and
residential use, “Development will not be supported where it will adversely affect the
quality of surface and ground water resources.” (MP 1997:16). “Much of the
residential demand and growth has occurred in coastal areas, but community
preference has been expressed for future growth to be diverted to established inland
settlements. Coastal areas, especially along the ridge, are highly valued for their
intrinsic, tourism and recreation values.” (p11). The Augusta - Margaret River Shire
approved a southerly extension of the Prevelly Park townsite in the early 1990s.
However it states that townsite expansion for residential purposes in Gracetown is

24 By 2005 the Ministry of Planning had been restructured into the current Department of Planning
and Infrastructure.
inappropriate, and that future development should be dependant on water supply (AMR 1992:49).

As occurs in many regions where tourism takes off in a short space of time, not all members of the community accept the rapid pace of development and some begin the struggle to “save” their communities from the often real economic, social and environmental threats that uncontrolled tourism development can bring. Examples of community action against tourism development proposals have strong traditions in places like Noosa (Cato 1979), Byron Bay (Mordaunt & Bradbury 1996), Ningaloo (www.save-ningaloo.org) and also the Margaret River Region. The first major community objection to the process of accelerated tourism development in the Leeuwin-Naturaliste region occurred in the late 1980s in response to a development application from a Japanese Company to the local council to construct a residential links golf course estate with a five star hotel at Prevelly Park. This proposal brought widespread community protest that lasted for over a decade. In the end the community settled for a relatively low-key development, Gnarabup Beach subdivision that has still nearly doubled the size of the town (Sanders 2000:48).

The second and more recent major community protest against tourism development occurred at Smiths Beach in the Busselton Shire. In February 2001 following a major protest at the beach in January 2001 that received significant media (both print and television) exposure and 3000 submissions to council, the development application was withdrawn in response to the overwhelming negative community feeling (Plate 9.3). The Smiths Beach Action Group is “a community organisation that was formed specifically to protect the Smiths Beach area from inappropriate
development.” They are still actively gathering support as the council changes its Town Planning Scheme and the developer reinvestigates development options.

Plate 9.3 Smiths Beach Action Day January 2001
(Source: http://www.savesmithsbeach.com/)

In January 2003 the state government announced tough new development restrictions in the south west of the state including the Margaret River Region to “stop it becoming an exclusive playground for the rich.” (Pennells 2003). The Minister for Planning and Infrastructure was quoted as saying that “…no area of WA would be allowed to become a clone of Surfers Paradise” and specifically proclaimed tighter restrictions on development at Smiths Beach limiting the area for residential development on the site to just 30% (Pennells 2003). In April 2003 the Busselton Shire Council passed amendments to its town-planning scheme in a move to regulate residential development at Smiths Beach. This will bring the Shire’s scheme into line with changes made by the planning minister to develop Smiths Beach as a tourist
node. The Smiths Beach Action group is reported to be pleased with the changes, but is concerned that the developer has not given up on a major township development, whilst the developer is stating that legal action is still a possibility (Macrae 2003 & ABC news online). In 2003 there again was significant public opposition noted against a proposed 10 two-bedroom Guesthouse development at Injidup three kilometres south of Smiths Beach. However, despite 151 public submissions against the 10-suite guesthouse the development was approved by council (Turner 2003).

In response to such strong community opposition to tourism and residential development on the Leeuwin-Naturaliste Ridge, there are now plans on the drawing board to create a large town at the tiny inland hamlet of Vasse to accommodate some 7000 new residents who are expected to migrate to the region in response to the tourism driven development boom that continues to grow (Dortch 2003:11).

Case study two - Wine Tourism

Wine has changed the face and fortunes of Margaret River. The last quarter of the twentieth century was the major turning point. Timber and dairy had their day, but even at their height, the district remained one of the poorest in Western Australia. (Cullen et al 1999:126)

Whilst tourism is deliberately utilised by many planners and policy makers in regional destinations across Australia as an important economic development tool, this process in the Leeuwin-Naturaliste Region was, initially, much more organic and
evolutionary. When the local wine industry began in the late 1960s many local residents were sceptical of the potential of viticulture to provide regional development opportunities for the region. As discussed in the previous chapter it was predominantly outside investors who purchased the marginal dairy farms and diversified the agricultural base of the area. They were greatly assisted by the casual labour of the surfers and utopia seekers who had also started to migrate to the region from the 1960s attracted by the lifestyle and relatively cheap land and favourable living costs. Viticulture did however prove to be a successful land use and further diversification into wine tourism activities helped to trigger the rediscovery of the Leeuwin-Naturaliste Region as an important tourism destination in the early 1980s. Wine tourism is now an integral part of the region’s tourism experience and the region’s most well-known attraction. This case study will review the development of this special interest area of tourism in the region and explore the importance of wine tourism’s contribution towards a sustainable future for the region.

History of wine tourism

Wine tourism is defined by Macionis as “visitation to vineyards, wineries, wine festivals and wine shows for which grape tasting and / or experiencing the attributes of a grape wine region are the prime motivating factors for visitors.” The first vineyards to engage in wine tourism activities and establish cellar door sales in the Leeuwin-Naturaliste Region were the Leeuwin Estate, Cape Mentelle, Vasse Felix, Gralyn, Cullen and Ashbrook in the late 1970s. (Table 9.1). By this time, wines produced in the Leeuwin-Naturaliste region were already gaining a solid reputation for fine quality. At first, cellar doors sales (hereafter cellar doors) were established to provide a point of sale for the wines that, at that time, were only available at a few
select outlets in Perth. With the increase in visitation to the region, combined with
the increase in the number of vineyards being established, more and more cellar
doors became open to the public. Thus, from the seven cellar door operations that
were open in the late 1970s, the wine tourism industry in the region had grown to
include more than 65 cellar door businesses by 2003 (Table 9.1 & Figure 9.4). A
survey conducted in 1996 revealed that 93% of visitors to the region stating that they
had visited or intended to visit the wineries (Morris & King 1998:219).

<table>
<thead>
<tr>
<th>Winery</th>
<th>Establishment Date</th>
<th>Cellar Door Open</th>
<th>Additional Tourist Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ashbrook Estate</td>
<td>1976</td>
<td>1970s</td>
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<tr>
<td>Vasse Felix</td>
<td>1967</td>
<td>1970s</td>
<td>Cafe</td>
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<td>Cullens</td>
<td>1971</td>
<td>1976</td>
<td>Restaurant</td>
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<tr>
<td>Cape Mentelle</td>
<td>1970</td>
<td>1978</td>
<td>Picnic Area</td>
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<td>Graylyn</td>
<td>1975</td>
<td>1978</td>
<td>Gallery</td>
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<tr>
<td>Leeuwin Estate</td>
<td>1974</td>
<td>1978</td>
<td>Restaurant, concerts, conferences</td>
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<tr>
<td>Pierro</td>
<td>1977</td>
<td>1979</td>
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<tr>
<td>Chateau Xanadu</td>
<td>1977</td>
<td>1981</td>
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<td>Happs</td>
<td>1978</td>
<td>1981</td>
<td>Pottery</td>
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<td>Redgate</td>
<td>1977</td>
<td>1981</td>
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<td>1976</td>
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<td>Food, Bar, Picnic Area</td>
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<td>1985</td>
<td>1985</td>
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<td>1982</td>
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<td>1980</td>
<td>1987</td>
<td>Restaurant, café, chalets</td>
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<td>1975</td>
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<td>1984</td>
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<td>1986</td>
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<td>Year 2</td>
<td>Features</td>
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<td>1984</td>
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<td>1988</td>
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<td>1998</td>
<td>2003</td>
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<td>1998</td>
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<td>1992</td>
<td>2003</td>
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<td>Virgin Block</td>
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<td>2003</td>
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<td>We’re Wines</td>
<td>1999</td>
<td>2003</td>
<td>Picnic area</td>
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<td>Windance Estate</td>
<td>1998</td>
<td>2003</td>
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</tbody>
</table>

Table 9.1: Wineries and cellar doors in the Leeuwin-Naturaliste Region 2003

(Jenkins 1997: and Personal Communication)

![Number of Cellar Doors in the Margaret River Region](image)

Figure 9.4: Establishment of Cellar Doors in the Leeuwin-Naturaliste Region

(Jenkins 1997: and Personal Communication)
In addition to cellar door facilities, many wineries have become even more integrated into the tourism industry through the provision of additional visitor services such as restaurants, cafes, picnic areas, art galleries, conference facilities and live entertainment. The oldest wineries were the first to establish these additional tourist facilities. Cullen’s opened a restaurant in 1981, whilst Gralyn and Happs had opened galleries and pottery sales in 1978 and 1979. The Leeuwin Estate, established in 1974 opened a restaurant in 1984 and the following year began hosting its now famous Leeuwin Estate concerts on site. The first concert was a result of the owners of the winery, the Horgans, underwriting an Australian Tour of the London Philharmonic Orchestra on the condition that the orchestra performed one concert at the Leeuwin Estate. The concert was a success and in subsequent years the Horgans have been able to attract many famous artists to play at the Estate’s annual concert. By 1997 over 100,000 people had attended a Leeuwin Estate Concert (Jamieson 1997:34).

Cellar door operations have now become an integral part of the tourism landscape of the Leeuwin-Naturaliste region, with many wineries now also integrating fine food and the visual and performing arts into the winery experience. In addition to the wineries expanding into tourism, a number of outside tourism operators have also integrated the region’s wine and wineries into their operations. These activities range from a bottle of local wine being offered as first prize to the fastest canoe paddlers down the Margaret River on the Bush Tucker Tour to winery tours by vintage car, horse and carriage or tour bus to the Margaret River Wine Festival and regional wines are being featured on the menus of local restaurants.
The wineries did not just trigger the rediscovery of the Leeuwin-Naturaliste Region as a tourism destination in the 1980s and then fade into the background. They have continued to develop, expanding in number and in the range of facilities they provide. In addition to giving the region a high national and international profile, they continue to provide the region with a clear identity and a marketable image. The formation of strong linkages with the broader tourism sector has also provided mutual benefits for the development of the region. According to Wiltshire (2000:63) “It seems that every year the Cape brings not only new vintages and new planting, but the opening of art galleries and restaurants, bed and breakfast lodges and well appointed hotels. Wine and tourism have become perfect partners in this playground that, from the traveller’s point of view, seems to have it all.”

Regional Development

As previously mentioned, the Leeuwin-Naturaliste Region has not always been a glamorous tourism destination. Following a long history of the introduction of various land uses by different groups of people, mostly with only marginal success, it was the introduction of viticulture that has proved perhaps the most successful local land use since European occupation in 1830. In the mid 1970s the Leeuwin-Naturaliste Region was a depressed economic area that had only experienced marginal population growth since the 1950s (Figure 9.5)

Andrijich (2003:38) describes the situation at that time stating, “The economy of the area was sluggish in the 1960s and 1970s, when Margaret River could have been fairly described as ‘a stagnant backwater’.” Another who remembers those times is David Hohen who suggested, “The local economy was hardly vibrant. Cattle prices
had gone through the floor, with predictable effect on the farms.” (David Hohnen cited in Jamieson 1997:27).

Figure 9.5: Population of the Leeuwin-Naturaliste Region 1954-2000

(Source ABS Census Data 1954-2000)

The development of wine tourism was not something that was initially planned by policy makers in the region or even at the state level. It was a process that evolved through the establishment of the modern viticultural industry, largely by a small number of non-local individuals from the late 1960s. Jolly (2002:5) suggests that this process has become a national phenomena with the growth of wine tourism related to “…the phenomenal success of Australia’s wine producers in selling their product to Australia and the world rather than any coordinated effort by the tourism industry.” Word of the success of this new enterprise in the Leeuwin-Naturaliste Region spread quickly and, by 2000, there were 48 commercial vineyards operating in the region contributing an estimated $23 million annually to the local economy (Department of Local Government and Regional Development 2002:2). This Figure is just for value
of wine production. Adding the value of wine tourism further enhances the impact of this sector. Thus viticulture and wine tourism have significantly contributed to the broadening of the region’s economic base and provided numerous and varied employment opportunities.

Viticulture and wine tourism are also credited with sparking the rediscovery of the region as a tourism destination by providing a major attraction and thus encouraging increased visitation to the region. This in turn has sparked a tourism development boom to provide the necessary infrastructure and hospitality services to accommodate an estimated 1.5 million visitors per year (Shire of Augusta Margaret River). This activity has further strengthened the region’s economy. In addition to the economic turnaround that the region has experienced since the mid 1980s many social benefits have also accrued and it can no longer be said that there is nothing for the local population to do in the evening or that the only cultural institution is the local library.

The challenge for the region now is how to manage this development boom and ensure a sustainable future for the region’s population. There have already been major community protests over significant tourism developments at Prevelly and Smiths Beach and some would argue that parts of the region are beginning to resemble suburbia and that viticulture is pushing up agricultural land prices which makes it harder for other farmers to make a living (Sanders 2000, Macrae 2003, MacPherson 1999, Pennells 2003). As mentioned in the previous chapter there are signs emerging that the rapid expansion of the viticultural industry in the Leeuwin-Naturaliste Region is not economically sustainable. Whilst in the short term the
availability of cheap wines may provide a stimulus for increased wine tourism activity, in the medium to long term, some wine tourism facilities may disappear if wineries are forced to rationalise their operations.

If the wine tourism industry in the Leeuwin-Naturaliste Region were placed into the conceptual framework of Butler’s lifecycle of tourism evolution it would clearly be in the fourth stage of consolidation (Butler 1980). Wine tourism in the region has moved through the stages of exploration, involvement and development within a 30 year period and now exhibits characteristics of Butler’s stage four (Skinner 2001). These include elements such as viticulture being the area’s hallmark, there are extensive guidebooks published on the region, mass tourism has arrived with tourist numbers overwhelming locals in peak periods creating some frustration and even resentment, established wineries continue to grow and further develop tourism enterprises, some smaller wineries have sold out to large corporations, others have floated on the stock exchange, there is strong pressure for further tourism development and residential subdivision and increasing land prices have made some areas in the region a playground for the rich. It could also perhaps be argued that the wine tourism industry in the region is also starting to exhibit characteristics of stage 5 (Stagnation) of Butlers model. These include the development of alternative attractions such as the new chocolate factory, infrastructure improvements to handle large crowds, and the movement of grape growing by some corporate vineyards to areas outside the Leeuwin-Naturaliste region where land prices are cheaper.

Wine Tourism Development Issues

The local strategic plan for the wine region in the Leeuwin-Naturaliste Region
clearly identifies wine tourism as an important companion to viticultural land use in the region with strategy 13 outlining a major objective as “to improve profitability for wineries by increasing wine tourism.” (Wine Industry of Western Australia 1997:15). The local community through their elected representatives in the Shire of Augusta Margaret River have however identified that tourist development in agricultural areas is not entirely compatible stating in their rural strategy,

Restriction on farm practices as a result of the proximity of tourist development is however, a potential problem that can only be overcome by precluding larger tourist developments from certain areas and requiring other tourist development in general farming areas to be limited in scale and ancillary to farming uses. (Shire of Augusta Margaret River 1992:51).

The introduction of tourism as a companion to viticulture has also created some land use conflicts. One prominent example is the use of audible bird-scaring devices such as alarms and gas guns/cannons. This practice has become less acceptable over the years as people have moved into the area seeking a “rural” lifestyle. Another issue is the use of chemical spays in the vineyards where they are located close to tourism amenities. There is now an Agricultural Disputes (Resolution) Act 1997 that deals with disputes concerning nuisance actions against agricultural operations where land is zoned rural. (Western Australian Planning Commission and Agriculture Western Australia 1997:9). Another danger to the industry is the intrusion of residential land uses. Some people in the community see this process as a more considerable threat than the birds (Western Australian Planning Commission and Agriculture Western
Australia 1997:8). Of course there is also the threat that attention will be diverted from the objective of producing fine quality boutique wines in the region to focus on satisfying the needs of mass tourism, as Crocket (1998:185) states, “The wine industry will always need to be creating premium wines as well as focus on the position and type of wine tourism product, if it is to be successful in regard to wine tourism.”

The Augusta Margaret River Shire’s policy on tourism development associated with wineries is that accommodation may be “Provided that all other issues relating to the siting of tourist accommodation and other forms of tourist development are accommodated, joint land use is considered acceptable. It is up to the land owner to ensure that conflict between the two operations such as spraying etc., do not arise.” (SAMR 1992:55). Proposals are also subject to minimum road standards, water supply, effluent disposal, management arrangements and visual impact analysis. (SAMR 1992:56).

**Wine Tourism Conclusion**

Wine tourism is credited with sparking the economic turn around that the Leeuwin-Naturaliste Region has been experiencing since the 1980s. The development process of this relatively new industry was initially quite organic and evolutionary and its success has largely been a product of time, place and hard working entrepreneurs rather than the deliberate application of tourism as an economic development tool. This case study highlights the fact that despite some initial local community scepticism about the ability of the wine industry to provide a sustainable future, community attitudes will change over time as economic and social benefits accrue.
It also highlights the need for a holistic approach to sustainability, not only of the front line tourism product, but also of the industries that support it, in this case viticulture. Whilst the current economic problems emerging in the viticultural industry in the Leeuwin-Naturaliste region may provide a short term boost to wine tourism in the area, in the longer term, the fate of the wine tourism industry will ultimately be linked to the future of wine production.

**Linking the past to a sustainable future through tourism**

The Leeuwin-Naturaliste Region is now widely promoted as one of the must-see destinations in Australia. With its attractive mix of wineries, spectacular coastline, big surf, cheese and chocolate factories, diverse accommodation choices and fine food, the region has been experiencing phenomenal growth in tourism since the early 1980s (Figure 9.6). Whilst this growth has significant economic benefits for the region, the question to be asked now is if tourism can provide a sustainable future for the region’s communities? This thesis argues that the key to tourism being sustainable is to manage the accelerated pace of development and maintain elements of the many diverse past land uses as they all contribute to the unique tourism experience that this region has to offer present and future visitors.

As been discussed in this chapter, wine tourism and holiday accommodation are driving much of the current development. As visitation to the Leeuwin-Naturaliste Region continues to increase it is creating significant change to the local landscape. From the once sleepy holiday towns and family caravan parks and cellar door establishments in old sheds it is evolving to accommodate large five star resort developments, mini mansion holiday homes and sophisticated wine tourism
Figure 9.6 Tourism Product in the Leeuwin-Naturaliste Region 2005

(Source: Margaret River Tourist Association 2005)
Figure 9.6 Tourism Product in the Leeuwin-Naturaliste Region 2005

(Source: Margaret River Tourist Association 2005)
operations that include restaurants, galleries and concerts. Some of the region’s towns have also undergone a significant transformation from small rural villages to major service centres with all the accoutrements of suburbia. Dunsborough is perhaps the most pronounced example of this trend with the town centre undergoing several makeovers in the last 20 years to now accommodate large shopping malls and the inclusion of major national and international brand retail and food outlets. The town has also expanded considerably with new suburbs including a golf course estate which is reminiscent of the suburban design that can be found in any major city in Australia.

In addition to urban sprawl, there is an added element of increased industrialization of the region’s rural landscape with numerous “factories” such as the chocolate, cheese, ice-cream and fudge factories proving to be popular tourist attractions. There has also been significant investment in upgrading existing tourist attractions. This includes the new 3.5 million dollar underwater observatory at the end of the Busselton Jetty, a 3 million dollar investment in upgrading access to the region’s caves, 15 million dollars to upgrade the region’s lighthouse precincts and 1 million dollars to improve roads in the national park (WATC 2003a).

Many of these new developments, like much of the existing tourism product, are strongly linked to the region’s past land use activities. These include experiencing Indigenous culture at the Wardan Centre, observing the lifestyle of early settlers at national trust properties like Ellensbrook, utilising infrastructure such as the Busselton Jetty that was created to service the timber industry, enjoying the agricultural scenery shaped by the dairy industry, learning to surf or admiring the
mud brick architecture that was brought to the region by the utopia seekers or participating in one of the area’s most popular attractions, sampling wines at a cellar door. Thus it could be argued that through tourism the past has become the present and could provide the key to a sustainable future if tourism land use is carefully managed.

**Conclusion**

The challenge for the Leeuwin-Naturaliste Region now is to manage the accelerated pace of tourism development according to the principles of sustainable development recognizing that the past has contributed significantly to the tourism product mix of the present and future. Like many coastal destinations around Australia, the Leeuwin-Naturaliste Region is experiencing enormous development pressures associated with tourism. In addition to the identifiable social, economic and environmental impacts of tourism, there is also the danger of the area becoming a homogenous resort location, losing its unique identity and authentic experiences as branded facilities and services to attract and accommodate mass markets are constructed (Morgan 1998). The community must work with all levels of government and the tourism industry to protect and enhance the unique character of the Leeuwin-Naturaliste region, preserving its sense of place, which includes a diverse land use history whilst facilitating the need for sustainable economic growth that includes tourism development.

In the new millennium the communities and local governments in the Leeuwin-Naturaliste Region have begun to positively engage with the concept of sustainable development not only for tourism but for the landscape as a whole. A number of
sustainable development projects have been initiated in partnership with various state and commonwealth government agencies. The following chapter will briefly outline some of the sustainability projects that have commenced in the region and investigate their role as a mechanism for a change in attitudes and policy making amongst community members and local government. It will seek to determine if there is a significant change away from the long history of new land use activities being introduced from outside the region towards the region’s development stakeholders actively pursuing a sustainable future from within or if this new approach is still being driven from outside.
Chapter 10 Towards a Sustainable Future

Introduction

As the Leeuwin-Naturaliste Region moves into the new millennium, a number of key projects related to the sustainability of the region have commenced. Some of the major initiatives include the Biodiversity Incentive Strategy for Private Land Use in the Busselton Shire, the Shire of Busselton Environment Strategy, Geocatch, and the CSIRO Sustainable Future Project which involves collaboration between a federal government agency and the Shire of Augusta Margaret River. In addition to these internally and partnership driven projects, numerous state government agencies that have jurisdiction over various land use activities in the region have also created strategic plans to assist the local community to choose a path of sustainable development for the future. These strategies include the Western Australian Tourism Product and Infrastructure Development Plan (Western Australian Tourism Commission 2003), the Margaret River (East) Structure Plan for Wine Excellence (Ministry of Planning 2002), the Augusta-Margaret River Land Release Plan (Ministry of Planning 2000), the Leeuwin-Naturaliste Ridge Statement of Planning Policy (Ministry of Planning 1998), the proposed Capes Marine Conservation reserve (Department of Conservation and Land Management 2003), the Leeuwin-Naturaliste National Park Management Strategy (Department of Conservation and Land Management 1987), the Forest Management Plan 2004-2013 (Department of Conservation and Land Management 2004b) the Draft Environmental Management Plan for Vineyards (Department of Agriculture 2001) and the Sustainable Rural Development Program (Department of Agriculture 1996/97).
These state and local projects mark a significant change in policy direction for Western Australia and the Leeuwin-Naturaliste Region since the time of the formal endorsement of the National Strategy for Ecologically Sustainable Development that was signed by the Council of Australian Governments in 1992 (Department of Environment and Heritage 2004:1). The commonwealth government has provided a clear set of environmental objectives for the nation as outlined in the Australia: State of the Environment 1996 report. In 1999 the Western Australian state government also acknowledged the requirement for all of its relevant state government agencies to develop an environmental monitoring and reporting system. This reporting system is managed by the Department of Environmental Protection who have provided guidelines in the Environment Western Australia 1998: State of the Environment report (Ministry of Planning 2000:17). In addition a number of state government agencies with jurisdiction over environmental matters have recently (2002) been amalgamated. For example the new Department of Environment, which incorporates the previous Water and Rivers Commission, Department of Environmental Protection and Keep Australia Beautiful Council, and the new Department of Local Government and Regional Development which now incorporates the regional functions of the Department of Commerce and Trade (www.environment.wa.gov.au and www.dlgrd.wa.gov.au).

The aim of this chapter is to briefly outline a selection of the major new sustainable development projects that have commenced in the Leeuwin-Naturaliste Region and to investigate their role as a mechanism for a potential change in attitudes and policy making amongst community members and local governments. It will investigate whether these projects mark a shift from waiting for sustainable activities to be
introduced to the region from outside towards actively pursuing a sustainable future for the region from within or whether these initiatives are still largely driven from the outside. The changing role of local government will also been examined as they are actively encouraged by the state government to move beyond their core business of “roads, rates and rubbish” and take on the responsibility for a much wider range of polices and actions. It appears that these relatively new sustainability projects mark a significant move away from the frontier ethic that has persisted in Western Australia and the Leeuwin-Naturaliste Region since colonisation. This chapter will document this comparatively recent recognition that the region’s natural resources are in fact finite and that measures need to be introduced to ensure that sustainable land uses practices are adopted to ensure a future for the region’s environment, people and economy.

Many of the new sustainable development projects that have commenced in the Leeuwin-Naturaliste Region have a strong focus on the environmental element of the sustainable development ethos. This is in line with the federal and state government approaches to the concept of SD that includes the addition of “E” (Ecologically) i.e. ESD as was discussed in chapter two. Thus whilst these projects are signifying a shift in thinking away from the persistent frontier ethic there is still quite some way to go before the more holistic approach to sustainable development that also incorporates socio-cultural and economic elements is fully endorsed and implemented.

The three main sustainability projects that will be the focus of this chapter include the Shire of Augusta-Margaret River Sustainable Future Project, the Geographe
Catchment Council and the Busselton Biodiversity and Environmental Strategy. These projects were chosen as important examples of a change in focus by the local community from a long history of migration of various groups from outside engaging in new land use activities in the region to the local community proactively engaging in a sustainable future from within the region. This chapter will also provide a brief analysis of the Local Agenda 21 process and identify why the regions communities have chosen not to implement a formal Local Agenda 21 program at this point in time.

**Shire of Augusta-Margaret River Sustainability Projects**

Like the Shire of Busselton to the north, the Shire of Augusta-Margaret River has begun to embrace the concept of sustainable development. From the environmental perspective the Shire hosts numerous community based environmental management groups including the Cape to Cape Alliance, The Cape to Cape Catchments Group, the Leeuwin Conservation Group, the Lower Blackwood Conservation District Committee and the South West Catchments Council. They also now have a strategic planning and environment department within the shire that also includes the cultural element of sustainable development. This new department aims to “…provide a more creative approach to planning for our communities in a way which preserves and enhances biodiversity values and cultural heritage.” (Augusta Margaret River Shire Council 2004). The Council’s strategic plan now also covers desired outcomes in the areas of environmental protection and development, people and community and economic development, which in theory provides a holistic structure for sustainable development in the shire (Shire of Augusta Margaret River 2001).
In addition, the council’s website states that their primary focus during 2004 is “to provide a framework for application of sustainability principles; reflecting this in process and providing a mechanism for implementation and measurement”. They then list their key strategic and environment projects for 2004 as the following, the Biodiversity Project, Coastal Management Plan, Strategic Plan and the Cowaramup Townsite Strategy. Other important strategic projects also under way in the shire are listed in table 10.1.

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<td>Witchcliffe Detailed Outline Plan</td>
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<td>Yalgardup Village</td>
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Table 10.1 Shire of Augusta-Margaret River Strategic and Environment Projects 2004

(Source: www.amrsc.wa.gov.au/devel/stratplanning.html)
Augusta-Margaret River Sustainable Future Project

The Augusta-Margaret River Sustainable Future Project is a partnership project between the shire and the Commonwealth Science and Industry Research Organisation (CSIRO) Sustainable Ecosystems. It involves the shire and the community working with this Federal government agency to develop a better system for making decisions that affect how the region develops in the future. The aim of the project is “to ensure the Augusta-Margaret River remains a vibrant region with a great quality of life for all.” (Augusta Margaret River Shire Council 2004). The objectives of the project are;

- A process that builds on previous and existing visions, plans and initiatives in the region
- A community vision of sustainability that takes into account local economic, social and environmental values
- Practical strategies for developing a sustainable future that includes ways to measure our progress
- A futures tool kit to help us explore ‘what if’ scenarios to assist planning
- Local capacity to use ‘systems thinking’ and computer tools to explore flow-on impacts of planning strategy options
- Links and learning to other regions in Australia that are undergoing a similar process

This project was initiated by the local Augusta-Margaret River Council. The Council was aware of the work in which the CSIRO was involved in the nearby Tapestry
The council approached the CSIRO with the intention of engaging them to undertake a systems thinking workshop centred on the issue of strata titles. This initial proposal included the Shire of Busselton and was to focus only on tourism (Eastern Metropolitan Regional Council 2003:11). However, following further consultation with the CSIRO the Shire of Augusta-Margaret River became very interested in the Regional Development Futures Program that was being used in Wollongong, on the central coast of NSW and Campbelltown/Camden south of Sydney. At this time the Shire of Busselton indicated that they were not ready to undertake such a large project, so the Shire of Augusta-Margaret River engaged in a joint partnership with CSIRO. This project has a budget of $500,000 of which each partner contributes $250,000. The project has a site manager who is based in Margaret River and employed by the council. The main research team is located at CSIRO in Canberra (Kelly 2004).

According to the CSIRO, the project’s framework is based on a ‘whole-of-community’ approach to chart, realise and monitor the community’s desired development pathway which involves a process of qualitatively and quantitatively assessing economic, social and environmental factors (Augusta Margaret River Shire Council 2004a: 1). The Shire President stated at the launch of the project that,

The Shire has embarked on this project because we can no longer afford as a shire to develop without a clear understanding of the ramifications of our decision making…. We must determine what the

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25 The Tapestry region is a collection of six local governments to the north of the Leeuwin-Naturaliste Region including the regional city of Bunbury. For further information on the Tapestry Project see (Sofield and Pederson 2000)
future is that we want, not based on assumption, not based on gut feel, not based on the desired future of a few vocal interest groups but based on broad consultation and sound science… It makes sense then that as a community in partnership with other stakeholders that our decisions lead to a future that we want, not a future arrived at by a series of random events or worse still a future determined by others who see the region as an opportunity to make money (Augusta Margaret River Shire Council 2004b).

The sustainable futures project recently completed the foundation stage which has involved the development of a regional profile and the documentation of oral histories to form an historical overview. The project team is now in the process of creating a searchable inventory of all information sources related to the region. The project has involved extensive community consultation facilitated through the use of ‘project champions’ or leaders in the local community who have encouraged others to actively participate (Kelly 2004). From this consultation four critical areas related to the community’s future have been identified. These include, water, population, globalisation and technology and the underbelly or widening socio-economic gap of residents (Kelly 2004).

This joint partnership project marks an important step towards sustainable development for the communities located in the Shire of Augusta-Margaret River. The $250,000 investment by the council indicates a strong commitment to this relatively new ethos of sustainable development. It is important to note at this point that no consultation was conducted with the local Nyungar people in this project,
with the reason for this given by the project co-ordinator as there were not very many Nyungar people living in the Shire (Kelly 2004). According to the 2001 census there were 69 people who identified as being of Indigenous origin in the Shire of Augusta Margaret River which does represent only 0.7% of the total population (ABS 2001). However, it is a major contention of this thesis that to move forward in a sustainable manner, the region has much to learn from its non European past.

Whilst an important inclusion in the Regional Development Futures Framework of this project is the inclusion of oral history, it has only focussed on the recent land use activities that were within the living memory of the 51 participants and it does not include any Indigenous history (Kelly 2003). It is acknowledged that looking back into the past to “develop an understanding about key past events, strategies, actions and the way people in the region have responded to change” (Kelly 2003:2) is important and indeed is the focus of this thesis, relying solely on oral histories is somewhat limiting. It does, however, provide a first step in encouraging the community to look back to place the present in the context of past events and strategies that can be used or discarded in the future. This region has a long history of not learning from the past as new groups have migrated to the region introducing new land use activities so this project is providing a process for the community to link the past to the future. This is particularly important in the context of the region’s newest land use activity of tourism where much of the present and future tourism product is directly linked to past land use activities.

One interesting outcome of the oral history section of the sustainable Futures Project was the reporting of the impact of policy on the environment-people relationship.
According to Kelly (2003:25), “Participants in the oral history groups frequently raised the notion that policy change had impacted on the relationship they felt with the natural environment” They felt that changes in licensing, legislation and council planning had significantly impacted on their freedom and that they had become disempowered from decision making processes. They reported that whilst they were concerned about recent large scale developments and the impact that they had on the local environment they also felt that they were being restricted, particularly in relation to land clearing, burning off, access to river and coastal areas, fishing licences, driving and riding on the beaches (Kelly 2003:26). These responses indicate that older members of the community (participants in this study were aged 56-92 years) are happy to use sustainable principles to stop large developments with many referring to the Gold Coast as an example of what they don’t want but they don’t necessarily wish to engage sustainable principles on the individual level (Kelly 2003:31). Thus there appears to be some limitations with this new council-funded push towards sustainable development which will require further research.

**Shire of Busselton Sustainability Projects**

The Shire of Busselton in the north of the Leeuwin-Naturaliste Region like the Shire of Augusta-Margaret River has also begun to engage with the concept of sustainable development. In contrast to the more holistic approach of their southern neighbour, the Shire of Busselton has initially focussed specifically on the environmental aspect of sustainability. According to the Shire’s Final Draft Environmental Strategy (Eastern Metropolitan Regional Council 2003:v), “There are twelve (12) key community groups operating in the Shire and requiring support and financial assistance to undertake environmental activities that benefit the area.” The shire
estimates that they spent $724,915 on environmental activities in 2002/03 with approximately half of this amount dedicated to recycling collection and activity associated with the Meelup Regional Park. (Eastern Metropolitan Regional Council 2003:vi). The Shire has also recently initiated (September 2004) a review of its 10 year old rural strategy that was adopted in 1993. This review indicates a move towards a more holistic approach to sustainable development at least in the non urban parts of the shire as they state, “The Review will examine a broad range of land use, environmental, social and economic issues related to the current and future planning and development of the rural areas of the shire.” (Busselton Shire Council 2004:1).

Geographe Catchment Council – Geocatch

Geocatch is part of a broad Australian trend towards the formation of integrated catchment groups involved in the environmental protection of specific water catchment zones. In Western Australia, groups throughout the state have developed different approaches to integrated catchment management based on the historical land use activities of their regions. The Geocatch project which is in effect a subgroup of the South West Catchments Council was formed as a response to the major issues of soil erosion, eutrophication, salinity and biodiversity and the need to maintain agricultural expansion in the region (Bellamy et al 2002:187). According to Robertson, “…the 1970s saw in WA, the ‘end of the dream’, that agricultural technology could no longer turn ‘any and all land’ into profitable farming country.” (Robertson 1989 cited in Bellamy et al 2002:188).

In 1982, the state government amended the Soil and Land Conservation Act 1945 in response to an increasing concern for the environment and the acknowledgement that
land clearing caused salinity. This legislative change resulted in the tightening of restrictions on land clearing and provision a legal basis for the establishment of Land Conservation Districts. Under this system groups of land users determine the boundaries of a Land Conservation District and make an application to the Minister for Agriculture for a Land Conservation District Committee to be appointed (Bellamy et al 2002:188). There are three Land Conservation District Committees in the Shire of Busselton, Vasse-Wonnerup LCDC, Sussex LCDC and Yallingup LCDC (Geocatch 2004).

In the Western Australian context no new legislation or agencies have been established to administer land conservation, but it has been organised in a spirit of cooperation and coordination between various state government agencies, local government and the community since the release of the government’s policy to guide integrated catchment management in 1988 (Bellamy 2002:189). As Bellamy et al (2002:194) state “No single group or agency has overall responsibility for catchment management in WA and there is no legislation that provides a total framework.” The preferred policy framework is for regional and sub-regional natural resource management rather than a state-wide integrated catchment management approach favoured by some of the other states (Standing Committee on Salinity Management 2000). This appears to make sense in a state as large and regionally diverse as Western Australia, however, it does require a lot of coordination between statutory bodies, boards and councils, local government, regional groups and catchment groups. Under this system the Leeuwin-Naturaliste Region falls within the geographical boundaries of the South West Catchments Council. Within this group there are three sub groups which operate in parts of the Leeuwin-Naturaliste Region,
The Blackwood Basin Group, the Cape to Cape Catchment group and the Geographe Catchment Council (Geocatch).

The Geographe Catchment Council (Geo Catch) is a community based management body that was formed in 1997 “to deal with land and water issues using an integrated catchment management approach” in the north of the Leeuwin-Naturaliste Region (Geocatch 2004) (Figure 10.1). It is a cooperative organisation that is sponsored by the Department of Environment and includes membership from both the Shire of Busselton and the neighbouring Shire of Capel26 as well as representatives from various relevant state government agencies27. The Shire of Busselton through its Environmental Strategy encourages all landowners to work with Geocatch and other catchment groups and Land Conservation Committees (Eastern Metropolitan Regional Council 2003:v). The Geocatch council is made up of 11 community members including the two shire presidents and one representative each from the four government agencies involved in the project. The mission of Geocatch is “To work with the community and management agencies, to manage the catchment of Geographe Bay and its marine environment so that natural systems, people and their activities co-exist in a healthy, productive and sustainable way.” (Geocatch 2004).

Geocatch runs a network centre in Busselton in the local offices of the Department of the Environment. It is staffed by six full time employees whose primary role is to coordinate the organisation’s activities and publish a quarterly newsletter to update

26 The Shire of Capel is the neighbouring local government area to the north of the Leeuwin-Naturaliste Region.

27 Designated positions on the Geocatch committee are held for senior representatives of the Department of Environment, Department of Conservation and Land Management, Department of Planning and Infrastructure and Department of Agriculture.
the wider community on their activities. The organisation has also authored a catchment management strategy that has identified 13 key issues that were of concern to the local community. These are;

1. Eutrophication of waterways
2. Loss of native vegetation
3. Impacts of land use on marine areas
4. Best land use management practices
5. Use of water resources
6. Drain management
7. Wetlands
8. The community’s voice in the catchment
9. Coastal / shoreline change
10. Waste disposal
11. Pests and weeds
12. Salinity
13. Cultural Resources

This strategy document prioritises and offers solutions to these issues and is currently in the process of being updated to reflect the present situation in the region. In addition to this strategic policy document, Geocatch has also commissioned a number of additional studies related to the environmental sustainability of the region and undertaken numerous projects to enhance the well being of the catchment area. Current projects include River action plans, the Lower Vasse River cleanup program, Ribbons of Blue, Abba Plains Biodiversity Project, Dairy Catch and the Geographe Weed Action Group. Completed projects administered by Geocatch include, Streamlining, Remnant Vegetation Strategy, Handbook and GIS CD, Toby Inlet Entrance Management Study, Community Water, Land & Life Grants, Geographe Catchment Weed Management Plan, fish Monitoring, Frog Watch and the Clean Drains Program (Geocatch 2004). In addition Geocatch engages is a number of partnership projects with other like-minded organisations.
According to Mitchell and Hollick (1993:739), whilst the original intention of community based catchment groups was to provide an advisory role they are now actively involved in decision making and the implementation of practical projects. This has facilitated greater community involvement in defining problems and developing strategies, although they still rely heavily on strong coordination and cooperation and the delimitation of specific roles and responsibilities. The process of community based land care is relatively new in the Shire of Busselton and the Leeuwin-Naturaliste Region; however, it already appears to be encouraging strong integration and involvement of the various stakeholder groups. Progress will need to be monitored in the longer term to ensure that land care processes do not become over bureaucratised and that they remain community led.

Most of the funding for regional land care activities still comes from the Federal government through the Natural Heritage Trust. However, community groups are now also accessing funding through state government agencies including the Department of Agriculture, Department of Local Government and Regional Development and the Department of Employment and Training (Bellamy 2002:205). The maintenance of strong community participation in land care activities is supported through various state government initiatives which recognise the importance of community based knowledge networks. These programs include the ‘supporting communities’ the formation of LCDC clusters, the Progress Rural Western Australia Program and ‘Farm Biz’ under the guidance of the Department of Agriculture (Bellamy 2002:207-11).
Busselton Biodiversity Incentive Strategy

In response to its identification as an important ‘biodiversity hotspot’, the Shire of Busselton has developed a biodiversity incentive strategy to protect its remaining ecological heritage. According to White (2002:1),

With regard to biodiversity the Shire of Busselton is considered a hot spot within Western Australia owing to the considerable number of rare plants that occur here. The Shire contains more declared rare flora (DRF) than any other municipality in Western Australia and of the 15 critically endangered DRF in the South-West Region of the Department of Conservation and Land Management, 13 are endemic to the Busselton Shire.

It has also been recognised that the biodiversity values in the shire are under extreme pressure from historical land clearing for agricultural activities and recent changes in land use activities including the significant growth in residential and tourism development.

In response to these pressures, in 2002 the Shire of Busselton commissioned an environmental strategy and resolved to form a Busselton Shire Environmental Advisory Council “to advise Council on matters relating to the preservation and enhancement of the environmental values within the Shire of Busselton.” (Shire of Busselton 2002). The shire’s new environmental strategy identifies that there are seven threatened ecological communities, 42 declared rare flora species, 163 priority listed flora species and 30 vulnerable and threatened fauna species with the councils...
boundaries (Eastern Metropolitan Regional Council 2003:iii). The strategy
document provides 66 actions to address the future of the region’s biodiversity
grouped into six key themes. These key areas for action include the following, 1.
Biodiversity, 2. Coastal Management, 3. Wetlands and Waterways, 4. Agricultural
Funding and Resources and 8. Waste Management (Eastern Metropolitan Regional
Council 2003).

In addition to commissioning a comprehensive environmental strategy for the shire,
the local council has also introduced a Biodiversity Incentive Strategy for Private
Land Use in the Busselton Shire. This strategy was initially funded through a
$38,500 grant from the Natural Heritage Trust (White 2002:i). The Shire recognises
that its local environment is under extreme pressure due to a rapid growth rate and
that it needs “to effectively balance the protection of biodiversity values with the
needs of a growing and changing community.” (White 2002:i). Half the Shire’s
remaining bushland is on private land. Thus this project jointly funded by the Shire
and the National Heritage Trust provides a package of planning and financial
incentives to landholders who voluntarily choose to protect and manage conservation
values on their property (White 2002).

The biodiversity incentive program provides a structure for future subdivision rights
through the application of conservation covenants and bushland protection zones as
an incentive to encourage the voluntary protection of bushland and wetland
biodiversity values. It has been estimated that this scheme will provide a cost
effective mechanism for protecting the local environment with the protection of
1,000 hectares of bush land costing only $15,000 (Department of Transport and Regional Services 2002). The program contains two main elements, a subdivision incentive and rate rebates. The subdivision incentive offers subdivision opportunities to qualifying landowners in exchange for the long term protection of the biodiversity values present on their land. The program provides a comprehensive list of operational guidelines and regulations to guide potential subdivision applications through the approval process. The outcome for land holders is one additional lot per subdivision less than 40ha or subdivision based on a ratio of one lot per 20 hectares with a maximum of 3 lots in total. To be eligible for the second element of the program, rebates for bush land, property owners must have a minimum of 5 hectares of bush in fair condition. Those committed to strategic revegetation may also be eligible for a rebate. Landholders must take out a conservation covenant or a ten-year management agreement with the shire, which includes Land for Wildlife membership (Shire of Busselton 2002).

The biodiversity incentive scheme marks a move away from the traditional regulatory approach to conservation, which often imposes a financial disincentive through opportunity costs and the expenses associated with fencing and managing conservation areas (White 2002iv, v). Federal and State legislation such as the Commonwealth Environmental Protection Act 1999, the Conservation and Land Management Act 1984, Soil and Conservation Act 1945 (amended 1982) and local government town planning schemes still exist to provide a framework for environmental protection. However, this relatively new incentive approach is now

28 Qualifying landholders must also meet all other relevant strategic and statutory planning considerations pertaining to the subject land. (White 2002:11)
widely favoured by both the state and commonwealth governments. Both levels of government have published biodiversity incentive strategy guides including the *National Local Government Biodiversity Strategy* (Berwick and Thorman 1998), *Incentives for Sustainable Land Management: Community Cost Sharing to Conserve Biodiversity on Private Lands- a Guide to Local Government* (Bateson 2000) and *Biodiversity Incentive Programs in Western Australia: a Guide for Facilitators and Co-ordinators of Natural Resources Management to Assist Landholders with Biodiversity Conservation on Private Land Including Natural Wetlands* (Government of Western Australia 2004).

This change in the commonwealth government’s policy focus on biodiversity stems from the signing of the International Convention on Biological Diversity in 1993 which has committed Australia to a number of biodiversity objectives including the use of incentive mechanisms (Young et al 1996:1). This new focus has also seen a shift in thinking about conservation issues, from locking up endangered resources to a more holistic approach including the integration of economic and social objectives of development (Young et al 1996:6). This new approach has necessarily included the introduction of measures to encourage environmental protection on private lands such as the Busselton Biodiversity Project. The government has recognised the role of the community and their interconnectedness with their local environments and the contribution that they can make to addressing environmental issues. As Young et al (1996:6) state,
By making people think of natural resources as involving their backyards as well as national parks, we can move away from viewing biodiversity as something separate from human activity, and towards seeing it as a necessary part of our everyday existence.

Thus the Shire of Busselton Biodiversity Strategy provides a key example of this new national policy shift. However, whilst it does involve community input and is administered by local government, it is essentially a result of a top down outside approach as all land use direction in the Leeuwin-Naturaliste Region has been since European settlement. Having said this, new conservation initiatives like the sustainability development project and Geocatch and other sustainable development projects require strong community support at the local level to be successful. This element of empowering local communities by providing state and federal support appears to be the preferred method by government which recognises that the third tier of government, local government, has an important role to play in administering such programs.

**Local Agenda 21**

Another top down approach to sustainability that came from an international forum is Local Agenda 21. This is an international program that provides a framework for implementing sustainable development at a local level by building on existing programs, activities and policies. It has been developed from Agenda 21 the global blueprint for sustainability that was ratified at the United Nations Conference on Environment and Development in 1992 (the Rio Earth Summit). Australia implemented a national Local Agenda 21 program in 1997; however, to date not
many local councils have taken up this approach. (Department of Environment and Heritage 2004:1) To encourage their involvement, the commonwealth government has published a 190-page guide (Our Community Our Future: A Guide to Local Agenda 21) to assist local government to become involved in Local Agenda 21 activity and sponsors a Local Agenda 21 award in the National Awards for Innovation and Excellence in Local Government (Department of Environment and Heritage 2004).

Unlike other sustainable development initiatives that have been taken up quite quickly by the two local governments in the Leeuwin-Naturaliste Region, neither local council has gone through the formal process of implementing a formal Local Agenda 21 program. This is not unusual in the Western Australian context as according to research presented by Graham Marshall (Western Australian Department of Environmental Protection) at the National Sustaining our Futures Conference held in Adelaide in 2002 only nine of the 144 Western Australian Local Governments have formally embraced Local Agenda 21 (Marshall 2002:1).

Marshall (2002:1) identified that the low level of adoption of Local Agenda 21 in WA was attributable to the ambiguity of the definition of Sustainable Development, “In essence, people involved with local government appear to hold competing views about what, exactly, is to be sustained.” He also discovered that those councils that had adopted a formal Local Agenda 21 process had a ‘key champion’, “…a person who raised and promoted the requirement for council to pursue LA21.” Additional reasons for the failure of local governments to adopt a formal Local Agenda 21 process include; the necessary change in attitude has not yet occurred in local
government; lack of sustainability indicators; fear of uncertainty among local
government decision makers; cost of implementation; general lack of understanding
of sustainable development; lack of urgency for pro environmental decisions; short
term business administration cycles; pro development councillors and the perception
that no direct requirement was coming from the state or federal government for local
councils to adopt Local Agenda 21 (Marshall 2002:6).

Another study presented at the same conference by Stephanie Price also identified
the constraints limiting the capacity of local governments in Western Australia to
implement Local Agenda 21. This research was founded on a web-based survey of
69 local governments in Western Australia. Price (2002:1) found that the major
constraints included: inadequate legislative authority; inadequate resources; lack of
awareness of the aims of LA21; inadequate expertise in environmental management;
not a council priority, not a community priority; belief that some of the aims of LA21
are not applicable to local government; and constraints relating to the external
support from state and federal government agencies.

Marshall’s research did, however, acknowledge that many local governments are
implementing activities consistent with Local Agenda 21 principles under another
name or banner (Marshall 2002:6). This theme would be consistent with what is
occurring in the Leeuwin-Naturaliste Region, which has clearly begun to take up the
concept of sustainable development through the numerous community based projects
that have been outlined in this chapter, such as the Augusta Margaret River
Sustainable Futures Project, Geocatch and the Busselton Biodiversity Project. It
would appear that these projects have been ‘sold’ to the local community as more
hands on community based rather than government directed even though they are part of broader state and federal policy agendas. The Local Agenda 21 process places more emphasis on local government direction rather than informal and formal community networks which appear to be supported rather than directed by local government even though in some cases like the Augusta Margaret River Sustainability Project and the Busselton Biodiversity Project they are strongly administered and funded by local government.

Conclusion
It is clear that, although the local governments in the Leeuwin-Naturaliste Region are yet to adopt a formal Local Agenda 21 process, the communities in the region are beginning to embrace the concept of sustainable development through the formation of various community based action groups and the implementation of numerous sustainable development projects. Projects like the Shire of Augusta-Margaret River Sustainable Future Project, the Geographe Catchment Council and the Busselton Biodiversity and Environmental Strategy indicate that there is a move in the direction towards a more sustainable approach to land use management in the Region. There must however be some caution in the optimistic reporting of such a significant change in ethos as it ought to be noted that at present many of these projects are focusing primarily on the environmental aspect of sustainable development. It would appear that there is a much slower uptake of the more holistic approach to sustainable development that also includes economic and socio-cultural aspects and much more research is required into how the principles of indigenous cosmology might also be included.
Whilst many of these projects are community based they are nonetheless often part of broader state and federal government policy agendas that are being driven by the process of globalisation and Australia’s commitment to a number of international environmental agreements. Thus whilst these local initiatives are being promoted as grass roots community projects they in fact are strongly linked to national programs. Thus on the one hand it could be argued that yet again land use activities in the Leeuwin-Naturaliste Region are being influenced by new ideas being brought in from outside the region. Numerous experts and consultants have been visiting the region bringing their expertise to assist the local community with these relatively new projects. On the other hand it would appear that the local communities through their local councils are actively seeking this assistance to help them develop sustainable futures from within.

Even though many of these local projects are being influenced by activities from outside the region, from the state, national and international arenas, it can be identified that for perhaps the first time these newcomers are not impacting on the region from a frontier “environmental exploitation’ perspective but rather from a more sustainable development ethos. The main question to be answered now that requires substantial further research is; are the communities and in particular local governments who are shouldering a lot of the extra workload beyond their traditional core duties still being exploited, but this time for the greater environmental good?

The concluding chapter will review all of the past land use activities of the Leeuwin-Naturaliste region and argue that, whilst the region has a strong history of environmental exploitation based on a persistent frontier ethic, it appears that as it
moves into the new millennium there is finally a recognition emerging of the benefits of a more sustainable approach to future development. The community and stakeholders appear to be acknowledging that more integrated planning that learns from the past and incorporates a more inter-sectorial, holistic and sustainable approach to land use and regional development in the area is now required. The degree to which this change in ethos has come from within the community or from the involvement of outsiders in locally based projects should be the focus of significant further future research. For the purpose of this thesis there does appear to be an identifiable change in attitude away from the dominant frontier ethic even if the ideas and people are still being imported from outside, albeit as temporary migrants rather than permanent new settlers. The main point is that the communities are being encouraged to take ownership of their futures and they are being provided with the information and expertise to facilitate riding the wave of sustainability all the way to the shore in the long term.
Chapter 11 Conclusion

Introduction
The road to sustainability since European occupation in the Leeuwin-Naturaliste Region has been a long one lasting more than 175 years. It is only now in the new millennium that the region’s communities are beginning to engage with the concept of sustainable development encouraged by various commonwealth and state government agencies. Before European occupation in 1830 the regions physical landscape had been managed in a relatively ecologically sustainable manner for at least 40,000 years, possibly even longer. Since this time it appears that the region has undergone a process of land use trial and error. This has involved various groups of people migrating to the region from outside introducing a variety of land uses through time resulting in the present cultural landscape of the region. This thesis has argued that a detailed knowledge of these historical processes is essential to the understanding present land use conflicts and will contribute to the development of sustainable solutions for the future.

This concluding chapter briefly summarises the seven distinct waves of land use experienced in the region since 1830 outlining the region’s strong history of environmental exploitation based on a persistent frontier ethic. This belief in the ability of humans to master nature and transform the environment for economic purposes has been a consistent theme in the region for most of the past 175 years. The chapter will provide an update of the current status of the historical land use activities, a “where are they now” section, and then move on to a discussion of recent changes and the introduction of more integrated planning based on sustainable
development principles. Finally it will be argued that this change in attitude should be encouraged and supported and that community driven mechanisms and processes should continue to be developed. If they are not, then the most recent land use activity of tourism could take over as the next economic quick fix as has occurred with the introduction of various land use activities in the region in the past. Tourism does have the potential to be more sustainable than past land uses if it, along with all the other existing land uses which make up part of the tourism product, are incorporated into a diverse economic, socio-cultural and environmentally sustainable future.

**Historical land use summary**

The Leeuwin-Naturaliste Region has a long history of diverse land use activities initiated by different groups through time. The establishment of these land uses has been influenced by the unique physical geography of this region. In some cases the lack of success of some of these land use activities can be partly attributed to a lack of understanding of the regions physical setting. All five of the distinct physiographic areas in the Leeuwin-Naturaliste region contain important physical resources that have undergone some form of transformation as these resources have been ‘discovered’ and utilised by various groups since European occupation. It should be noted here that the local Wardandi and Pibelmen also altered the region’s physical setting predominantly through their use of fire for many thousands of years before the arrival of European occupation. However, Europeans have created more change in a much shorter period of time.
The Swan Coastal Plain in the north has undergone extensive drainage works to enhance the agricultural productivity of its swampy but fertile soils. The Southern Coastal Plain in the south was denuded of most of its tall karri trees during the height of the timber industry’s activities during the late 1800s. However it has experienced less intensive agricultural activity due to its poor swampy soils of unfertile bleached sands. The Leeuwin-Naturaliste Ridge along the west coast, which is characterized by limestone cliffs and coastal granite outcrops, has more recently experienced development pressures directly related to tourism. The inland Margaret River Plateau, now supports viticulture in its fertile valleys following land clearing associated with the two group settlement schemes and the attempt to establish dairy farms on this landscape. Finally the gently undulating Blackwood plateau, that once hosted thick jarrah forests, has been transformed into grazing pasture following intensive logging activities (Tille and Lantzke 1988).

This section of the thesis will briefly summarise the main land uses that have occurred in this physical environment since European occupation including:

1. Early European settlement from the 1830s
2. The timber industry from the 1850s
3. The Group Settlement Schemes and the establishment of a dairy industry from the 1920s
4. The alternative lifestylers from the 1960s
5. The viticultural industry from the 1970s
6. Tourism development from the 1980s
Before the arrival of Europeans, the Wardandi (*The people that live by the ocean and follow the forest paths*) and Pibelmen (*The people with plenty*) Nyungar people had managed the region’s resources for more than 40 000 years (Collard 1994). Despite the common perception amongst the early European explorers and settlers that they were encountering a “terra nullius” or even “wilderness”, environment, the “natural” landscape they observed had been significantly altered by the cultural practices of the Nyungar people over a significant period of time. The original Indigenous custodians’ system of land use is described as hunter-gatherer, which included the utilisation of fire stick farming techniques.

The Wardandi and Pibelmen Nyungar system of land use involved following a pattern of seasonal movement within their tribal territory, in search of food, constructing temporary housing known as mia-mia from the vegetation close to their food source to protect them from the weather (Green 1994). As hunter-gatherers, they would move on to a new location when the local food source became insufficient (Howard 1979:91). The Nyungar men hunted large game and birds and caught fish, whilst the women and children harvested root crops and collected fruit and nuts, yams and bracken ferns (Meagher and Ride 1979:71-76). Archaeological excavations at both Devil’s Lair and Mammoth Caves on the Leeuwin – Naturaliste ridge confirm that the Nyungar system of land use had been in place in this region for at least 37,000 years before the arrival of Europeans (Hallam 1975:99). This thesis does acknowledge that Indigenous land use activities did have a significant impact on the landscape, particularly through their use of fire. However through their cosmology these activities were more intrinsically linked to the environment than the subsequent land uses introduced by Europeans from the 1830s.
The first Europeans to introduce new land use activities to the Leeuwin-Naturaliste Region arrived in 1830 following the establishment of a sub colony at Augusta on Flinders Bay. It was believed at that time that the tall karri timber found in the region was a signifier of promising fertile soils and thus this new settlement at Augusta was to produce livestock and grains for export back to the Swan River and beyond. It was also believed that Augusta would prove to be an important trading stop for vessels traveling to the eastern colonies and it would one day ‘boast a fine port and become a fine city’ (Creswell 1988:32). This preliminary frontier settlement was, however, short lived due to unfavourable conditions including isolation, lack of government assistance, no transportation, poor soils and the immense difficulty of clearing karri country with English axes (Shann 1926:69). By the mid 1830s most of its residents had moved north to create a new settlement on Geographe Bay which is now known as Busselton. Agricultural pursuits at this new location were marginally more successful as they were farming on slightly better country. Geographe Bay also offered a safe anchorage, which attracted more shipping and thus easier access to the Swan River settlement market (Hasluck 1955:143). The frontier ethic, however, persisted at this new location through the need for survival in this unfamiliar landscape. Resources were perceived to be limitless and it was thought capital and hard work would bring rewards.

This frontier ethic also created tensions with the local Wardandi and Piblemen people whose traditional lands were being invaded and usurped. It is understandable that tensions were quick to inflame at the Geographe Bay settlement as not only did this area provide better pastures for the English settlers but it was also prime hunting ground for the local Wardandi Nyungar people. Although relations between
Nyungar people and the new arrivals appear to have been cordial initially, by 1837, they had deteriorated as the settlers began to complain of the noise the Aboriginal People made. In June 1837 nine Aboriginal people were killed after they slaughtered a cow and ate it (Hasluck 1955:164). The following month, Constable Elijah Dawson was speared whilst sitting in his cottage. In 1841, George Layman was killed and seven Aboriginal people were shot whilst the military searched for his attacker. An Aboriginal leader Gaware was shot two weeks later (Hasluck 1955:219). There were also numerous conflicts over thefts of property and killing of stock both European and Aboriginal as the two groups continued to struggle for control of the land and its resources.

The next significant land use to move into the Leeuwin-Naturaliste Region was the timber industry. The region was well endowed with ancient virgin jarrah and karri forests on the plateaus; however, during the first twenty years of European settlement, none of the new arrivals had the necessary capital to finance its extraction. Although there were a couple of successful attempts at exporting timber from the region prior to 1850 it was the arrival of convicts in Western Australia in 1851 that provided the necessary cost effective labour to really establish a large scale timber industry in the region (Kinsella 1990:2-3). In addition to providing a ready source of cheap labour for the local timber industry, the huge public works program that the new convicts were employed to undertake in the southwest of the state further increased local demand for the region’s hardwoods (Kinsella 1990, Fall 1972).
During the next phase of the development of the timber industry from the 1860s, major entrepreneurs transformed the industry from struggling, small scale concerns reliant on convict labour to a large scale, well financed, automated industry which significantly changed the local environment and cultural landscape. Timber entrepreneurs invested heavily in major infrastructure and new technology (Thomas 1929 and Cresswell 1988). This included the development of port facilities, railways, roads and townships and it opened up the landscape, through the removal of the tall timber, which facilitated further agricultural expansion, which had always been a priority for the colony. The mechanization of the industry during this time did, however, contribute to unsustainable practices based on the persistent belief championed by John Forest as late as 1890 that the forests were still inexhaustible (Western Australian Parliamentary Debates 1890). This attitude proved to be totally misguided and by 1913, primarily due to the exhaustion of commercially extractable timber supplies, all the major mills had closed in the Leeuwin - Naturaliste Region.

The next land use to be established in the Leeuwin – Naturaliste Region was the Group Settlement Scheme, which operated from 1921 to 1930. This land settlement scheme is credited as the brainchild of Premier James Mitchell who firmly believed that previous land settlement in the south west including the Leeuwin-Naturaliste Region had failed due to the inefficiency of the settlers rather that the unsuitability of the land for intensive agriculture. There was also a prevailing belief in Western Australia at that time that everyman [sic] should have a chance to be a farmer and it was necessary to settle as many families as possible in the bush. Although this scheme began as a soldier settlement scheme it became part of a significant 6,000 family British migration program (Gabbedy 1988). The main land use objective of
the scheme was to establish a dairy industry in the region to address Western Australia’s reliance on the importation of dairy products.

The group settlement scheme encountered many difficulties and its participants endured many hardships and isolation. Major impediments to the success of the scheme included lack of reliable transport, underestimation of the time, labour and capital involved in clearing, incorrect ploughing techniques, expensive fertilisers and poor animal husbandry. Then there was the problem of what to do with the milk, which was not a marketable commodity due to the distance from the main market of Perth (Gabeddy 1988:93). There were however, some positive benefits associated with the scheme including the establishment of new townships and significant improvements in transport and communication including roadworks and a rail link to Perth (Field 1963:18). In the end, however, whilst the group settlement scheme could be described as a visionary project it could be argued that it lacked adequate planning and the many difficulties including inadequate farm sizes contributed to the abandonment or amalgamation of many farms (Bolton 1994:47).

Following World War II it was once again deemed necessary by the government to institute another land settlement scheme in the south west of Western Australia to accommodate returning soldiers. The War Service Land Settlement Scheme (WSLSS) ran from 1945 to 1963 (Fischer 1973: 39). Unlike the first scheme, this one was initially only to develop farms on already cleared land that was regarded as suitable for agricultural pursuits. The Leeuwin-Naturaliste Region, which contained many abandoned former group settlement scheme properties, became part of the dairy section of the WSLSS. Tobacco was also trailed at Karridale, but problems
with leaf curing resulted in these farms reverting to dairy production (Barrett 1965:34).

Like the first group settlement scheme, the WSLSS was under prepared and by 1948 was under pressure mainly due to the high capital outlay and lack of machinery. Whilst overall this second attempt at a group settlement scheme in the Leeuwin-Naturaliste Region was more successful than the first it also faced many of the same problems such as the unsuitability of some settlers, poor administration, undercapitalization and inappropriate farming practices such as again ploughing the soils too deep. The WSLSS did re-establish a dairy industry in the region advancing farm quality and increasing production. However this success was relatively short lived with the dairy industry largely moving north out of the Leeuwin-Naturaliste Region and consolidating around the new Harvey irrigation district further north when it was opened up in the 1960s. An important by product of the land settlement schemes in the context of future tourism development in the region was the establishment of numerous summer fishing camps around the coast. The access to locations such as Prevelly and Gracetown contributed to them becoming popular holiday town destinations for people from the metropolitan area from the late 1960s.

Surfers and people seeking alternative lifestyles began to move from Perth down to the Leeuwin-Naturaliste Region in the early 1960s. The surfers were part of the 1960s surf culture that became prominent around the beaches of Australia and the USA at this time (Young 1997). Many of these surfers, who were predominantly from middle class backgrounds, took advantage of the low-priced land that had become available in the Leeuwin-Naturaliste Region as a result of a large proportion of the dairy industry
moving out of the region north to Harvey. Others were able to secure cheap accommodation in old group settlement houses. The surfers contributed to existing land use activities picking up seasonal work with local farmers, building haystacks, milking cows and trellising grapevines, whilst consolidating the reputation of the region as a premier surfing destination (Carps 1999). This reputation sparked an increase in visitation to the region and the beginning of the modern tourism industry.

Following the migration of surfers, other people who were seeking a similar utopian lifestyle also became attracted to the area. These people were attracted to the green landscapes, the dairy country and regrowth forests of this area. In terms of land use, the original intention of these new arrivals was “just to be”, to plant trees and live a subsistence lifestyle (Sherwood 1999). Utopia seeking families then began establishing a permanent presence in the community and they soon became involved in transforming the landscape through alternative and creative industries. They introduced complexity and diversity into the region through activities such producing tofu and value adding to the remaining dairy industry by cheese making. They also established crafts and opened galleries and introduced alternative building designs including rammed earth and mud brick. The production of organic fruits and vegetables was also introduced, including the establishment of an organic vineyard (MacPherson 1999:12-13).

The fifth land use to be introduced to the Leeuwin-Naturaliste Region was viticulture in the late 1960s. Vines had been grown in the area since European settlement in the 1830s. However, it was not until the 1960s that the current commercial industry was established. Dr John Gladstones, in the mid 1960s, suggested that the Margaret
River area should be the next prime wine region based on its suitable climate of lower summer temperatures, higher rainfall, minimum frost and hail risk and much lower ripening period cloudiness (Gladstones 1965). The valleys of the Margaret River Plateau also provided other important environmental elements required for viticulture such as aspect, slope, drainage and deep gravelly sandy loam soils. The first vineyard, Vasse Felix, was established in 1967 with a further 87 vineyards being developed during the following 37 years as the demand for table wines in Australia steadily increased. It was mostly people from professional backgrounds from outside the region rather than local agriculturalists who established the new viticultural industry in the Leeuwin-Naturaliste Region, although there were a few local farmers who diversified into wine production (Halliday 1982).

The success of this new land use was assisted by scientific research, technical advice and support from the Department of Agriculture. However, like all previous land uses in the Leeuwin-Naturaliste Region, viticulture has also experienced some difficulties. These include increased bird damage due to the removal of their natural food source, the redgum, the need to irrigate in the summer months and plant disease such as couture which stimulates abortion of the bunch during or after a flower set. Solutions to many of these problems have now been found, including replanting early flowering redgum close to the vines, sinking bores and implementing strict quarantine measures (Halliday 1982:72, 91). Viticulture is now a well-established, land use in the Leeuwin-Naturaliste Region with many vineyards now also diversifying into tourism through the provision of cellar door sales, restaurants and chalet style accommodation.
Although viticulture has generally been a success story for the region, there are signs emerging that raise questions about its long term economic sustainability. Like many land use activities that preceded it, viticulture has experienced a boom period with a rapid expansion in the number of vineyards established during the past 20 years. This has created an oversupply of product which has led to a number of enterprises experiencing serious financial difficulties. Whilst the industry is trying to trade its way out of this problem by exploring new export opportunities, it may be necessary for some further rationalisation to occur including a reduction in the number of hectares under vine.

The current wave of land use sweeping the Leeuwin-Naturaliste Region is Tourism. Like many of the land uses that preceded it, tourism is not an entirely new phenomenon in the area. What is new is the scale and speed of tourism development experienced during the past 20 years. It was significant improvements in the road system linking the region to Perth and within the region in the early 1980s that provided a major trigger for a significant growth in visitor numbers and the start of developments associated with the modern mass tourism industry (Haynes 1989:35-39). The renewed interest in the region was also partly driven by the establishment and expansion of a significant new attraction, the wineries, and the rediscovery of the natural environment including old growth jarrah and karri forests, surf beaches and caves and cultural attractions associated with the many past land uses in the region including traditional Aboriginal culture that can now be experienced at the Wardan Cultural Centre at Injidup, early European history preserved by the National Trust at Wonnerup and Ellensbrook, the Busselton Jetty, the old groupie houses
dotted through the countryside and the unique mud brick architecture that was brought to the region by the utopia seekers of the 1960s and 1970s.

Since the mid 1980s the area has experienced phenomenal growth in this new land use activity of tourism including the construction of numerous resorts and the refurbishment and expansion of many others. A number of the small coastal settlements such as Bunker Bay, Prevelly, Gracetown and Yallingup dotted around the edge of the region have also become popular for the purchase of weekend and holiday homes and are under enormous pressure to expand. Tourism development has also triggered significant urban expansion of the region’s main settlements of Busselton, Margaret River and Dunsborough with plans now on the drawing board to create a large town at the tiny hamlet of Vasse to accommodate some 7000 new residents (Dortch 2003:11). Development plans have also recently been announced that will increase the size of Gracetown by an additional 140 residential lots. This proposal is part of the state government’s new commitment to tourism development ‘land bank’ sites and includes a land donation of 235ha to the neighbouring national park (Tourism Western Australia 2005).

**Land uses in the new millennium**

All of the post contact historical land use activities that have been discussed in this thesis still exist in the Leeuwin-Naturaliste Region and now contribute significantly to the current tourism product mix (Plate 11.1). This section of the concluding chapter will explore where each of these land uses is today, investigating how they interact with each other and determine if a more sustainable approach to their future is being pursued than has been evident in the past.
Plate 11.1 Current tourism product mix
The original custodians of the Leeuwin-Naturaliste Region the Wardandi and Pibelmen Nyungar people were largely dispossessed of their land through the process of European invasion and settlement. However, throughout the process of the waves of migration to the region, Nyungar people have maintained a presence and connection to the areas landscape although at the 2001 census only 394 residents of the region self identified as being of Indigenous origin (ABS 2001). There are a number of Nyungar organisations in the Leeuwin-Naturaliste Region including the Gnuraren Aboriginal Corporation, the Noongar Language and Cultural Centre, Wardandi Enterprise Development, the Lake Jasper Noongar Community Project and the Bibelmen Mia Aboriginal Incorporation who provide social, cultural, economic, and environmental services for local Nyungar people.

The local Nyungar people have also directly engaged with the newest land use activity in the region, tourism, through the creation of the Wardan Aboriginal Centre. This facility, which is located near Yallingup in the north of the region, offers educational programs, cultural awareness, visitor facilities and an art gallery. It was created to provide a place where the Wardandi people “can share their culture with visitors, school groups and Aboriginal people from other areas, in an effort to increase understanding and reconciliation with the wider community.” (http://www.wardan.com.au/pages/intro.html). This enterprise has been very successful hosting approximately 15,000 visitors, as well as 3,000 school children for Indigenous Educational tours, and cultural awareness camps for 300 Aboriginal Youth since opening in 2002 (Matan 2004).

The agricultural activities that were first introduced by Europeans in 1829 are also
still present in the Leeuwin-Naturaliste Region albeit with the assistance of modern technologies. There are approximately 137,000ha of farms in the area and the most recent figures published in 1997 estimated that the gross value of agricultural product from the Leeuwin-Naturaliste Region was $94 million whilst the total value added impact of Agriculture was estimated at $226 million (Cook et al 1997a,b). Interestingly the figures are higher in the Shire of Busselton even though it is often perceived as a more urban destination and covers a smaller geographical area than its southern neighbour29. Animal products derived from pasture are the most extensive agricultural land use in the region although the dollar returns per hectare are greater from activities such as intensive animal products and horticulture including viticulture (Cook et al 1997a,b).

The current agricultural activities in the region provide the rural landscapes that are appealing to the large numbers of tourists who visit the region, mostly from metropolitan Perth, each year. In addition an increasing number of agricultural food producers in the region are opening factory outlets following the successful model of the cellar door concept. They are tapping into a growing market segment that wants to see where and how food is produced and to taste and purchase it on site (Hall and Mitchell 2001). In addition some of the more historical infrastructure associated with early European agricultural activities such as the National Trust managed historic homesteads at Wonnerup and Ellensbrook have become popular tourist attractions with their images widely used in promotional material for the region. In 2002/03 the Ellensbrook Homestead received 1,046 visitors and the Wonnerup Homestead welcomed 5,199 visitors (National Trust of Australia (WA))

29 GVA $54m TVA $140m Shire of Busselton
   GVA $40m TVA $86m Shire of Augusta Margaret River (Cook et al 1997a,b)
2003). The disparity in the numbers is most likely due to access issues. Wonnerup is located on the main road into Busselton whilst Ellensbrook is located at the end of a dirt road just south of Gracetown.

Although most of the commercially extractable timber was exhausted in the region 100 years ago, small mills have continued to operate from time to time to the present day. The Department of Conservation and Land Management now manages the state forests in Western Australia and, in contrast to past timber policies, they now promote a strong focus on the value adding to the southwest’s timber resources. According to the Department of Conservation and Land Management (2004a:1), “It is now mandatory for sawmillers to maximise the quality of the products they produce from native hardwoods”. Under the new Forest Management Plan 2004-2013 significant new areas of the Leeuwin-Naturaliste Region will be incorporated into parks and reserves, particularly areas along the Blackwood River in the south of the Region. (Department of Conservation and Land Management 2004b). In response to increasingly tighter controls on the logging of old growth forest and more areas being reserved for conservation, a number of tree farms and timber plantations are being developed in the region to service the future timber industry.

The forests of the Leeuwin-Naturaliste Region including the Tuart Forest National Park and the Leeuwin-Naturaliste National Park which includes the 100 year old regrowth karri forest at Boranup have also become major tourism assets. The Department of Conservation and Land Management provides a range of visitor facilities at these locations including picnic areas, walking trails, scenic drives and camping sites (Department of Conservation and Land Management (1998).
Infrastructure associated with past timber industry activities also adds to the present tourism product mix including the major attraction of the Busselton Jetty which remains the longest wooden jetty in the southern hemisphere at 2km. In 2003 an underwater observatory was also opened at the end of the jetty creating a significant new tourism icon for the region (Cape Naturaliste Tourist Association 2004). Other key tourism links to past sawmilling activities include access roads that were created by the timber railways, the remains of the port facility at Hamelin Bay which now accommodates a caravan park and the lighthouses at Cape Leeuwin and Cape Naturaliste which are both open to the public for tours.

The dairy industry that was significantly expanded in the region as part of the two post war land settlement schemes also still operates in the Leeuwin-Naturaliste Region producing approximately 31% of the south west’s milk production. In fact in the late 1990s milk was the major agricultural product in the region with an estimated Gross Value of $41 million (Cook et al 1997a,b:3). During the 1990s there has also been a focus on value adding to the milk commodity with the establishment of Simmo’s ice-cream factory, and two cheese factories, the Margaret River Dairy Company and Fonti Farm. Like other agricultural land use activities, the dairy industry contributes to the scenic rural vista that adds to the attractiveness and diversity of the region’s tourism appeal. The infrastructure especially the roads that were developed to service the group settlement schemes and the dairy industry also facilitates greater access within the region. In addition, the old “groupie” farmhouses and sheds provide visual interest for scenic drives. Memorabilia from this era also contributes considerably to the content of the two local museums in Busselton and Augusta.
Many utopia seekers, including the alternative lifestylers and the surfers, also still reside in the Leeuwin-Naturaliste Region and new people seeking this lifestyle alternative continue to migrate to the area. They are still actively engaged in alternative and creative industries including the production of organic agricultural produce, and artisan’s workshops. Their alternative building projects including those constructed of rammed earth and mud brick also contribute to the region’s distinctive identity and tourist appeal (Andrijich et al 2003, Wiltshire 2000). In addition these people still provide a significant casual labour force for other land use activities and they continue to be actively engaged in sustainability debates and the monitoring of development activities. Some have even become directly involved in the tourism industry whilst their presence in more general terms adds to the diversity and unique sense of place that is widely promoted to visitors.

The surfing community is also still strong with the region hosting a number of important surfing carnivals throughout the year including the annual international Margaret River Masters (Cecins 2001). There are a number of surfing schools that operate in the region to teach visitors how to ride the local waves and surfing hire outlets for the more experienced board riders. Surfing has also become part of the local primary and high school’s curricula and part of the way of life in the region. In addition surfers through the Surfrider Foundation have taken on an active role to campaign for beach protection and they spearheaded opposition to the Smiths Beach development proposal (SFA 2001) Even for those visitors not wishing to venture out into the surf, it provides an important part of the region’s tourism product that visitors wish to view and often photograph.
Viticulture in the Leeuwin-Naturaliste Region has gone from strength to strength since the establishment of the modern viticultural industry in the late 1960s. In 2000, 16,413 tonnes of grapes were crushed in the region with an estimated value of $22.9 million. Much wine from this region is also now being exported to key markets including USA, UK, Switzerland, Japan and Singapore (Department of Local Government and Regional Development 2001:1). In addition there has been a continual increase in the number of vineyards to a total of 88 in 2004. Like many other land uses, viticulture has become an integral part of the local tourism product with the area now promoted nationally and internationally as the “Margaret River Wine Region.” Most vineyards have developed cellar door facilities whilst some have become even more integrated into the tourism industry by locating additional facilities on site such as restaurants, cafés, galleries and even accommodation. In 2005 economic problems have emerged in the local viticultural industry with a number of vineyards experiencing serious financial difficulties due to the oversupply of grapes. This provides yet another example of the frontier approach and boom and bust cycle that has been a constant feature of land use activities in the Leeuwin-Naturaliste Region since European settlement.

Large scale or mass tourism as the newest land use activity in the Leeuwin-Naturaliste Region is still very much in the development stage, with numerous new products, services and facilities constantly under construction. In 2002 commercial accommodation takings in the region totalled just over $30 million, making it the third highest economic activity following agriculture and viticulture (Western Australian Tourism Commission 2002a, 2002b:1). According to Tourism Western Australia in 2003 there were 573,000 domestic visitors and 25,700 international
visitors to Busselton and 490,000 domestic visitors and 64,400 international visitors to Margaret River in 2003 (Tourism Western Australia 2004a:8, Tourism Western Australia 2004b:12). These figures indicate that the north of the Leeuwin-Naturaliste Region is more popular with domestic visitors whilst the south is more popular with international visitors. In Margaret River both the international and domestic numbers have increased by 60% over the past 5 years. In Busselton international visitation has decreased by 9%. However, domestic tourism has increased by 13% (Tourism Western Australia 2004a:8, Tourism Western Australia 2004b:12).

Another issue for sustainable tourism development in the Leeuwin-Naturaliste Region is how to manage peak times. The summer period is traditionally the most popular time for visitation. During this time of high demand the region’s resources are further stretched for the duration of the region’s top three annual events. These include the Margaret River Masters Surfing Competition, and the Leeuwin Estate Concerts in April and Schoolies Week which can last for up to three weeks in November (www.police.wa.gov.au).

**From an Unsustainable Past towards a Sustainable Future?**

As noted in this chapter, all of the historical post contact land use activities introduced to the Leeuwin-Naturaliste over time by various migrant groups are all still present today in various forms (Table 11.1) These past land uses are also still contributing significantly to the most recent land use activity of tourism. The question to ask now is have these activities finally become sustainable? The agricultural sector including mixed farming, dairy and viticulture is currently
addressing the sustainability issue by focusing on a number of land use issues, including land clearing; weed control, water usage, effluent management and nutrient export (Eastern Metropolitan Regional Council 2003). Land clearing is now regulated by various state and local government planning controls, legislation and zoning. Incentive programs such as the Busselton biodiversity project are also being implemented in the region to encourage the preservation and protection of important remnant ecosystems (White 2002). The Department of Agriculture and the Water Corporation also provide guidelines and programs to help farmers manage water quality including fertilizer and nutrient application and subsequent runoff, and dairy effluent management, whilst local government provides guidance on the issue of dam construction (Eastern Metropolitan Regional Council 2003:46-47).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Augusta Margaret River</th>
<th>%</th>
<th>Busselton</th>
<th>%</th>
<th>Total %</th>
<th>source</th>
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<tbody>
<tr>
<td>Agriculture, Forestry, Fishing</td>
<td>609</td>
<td>15.5</td>
<td>772</td>
<td>9.5</td>
<td>11.5</td>
<td>ABS 2001</td>
</tr>
<tr>
<td>Mining</td>
<td>19</td>
<td>0.4</td>
<td>16</td>
<td>0.1</td>
<td>0.2</td>
<td></td>
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<tr>
<td>Manufacturing</td>
<td>547</td>
<td>13.95</td>
<td>847</td>
<td>10.5</td>
<td>11.6</td>
<td></td>
</tr>
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<td>Electricity, Gas, Water Supply</td>
<td>19</td>
<td>0.4</td>
<td>45</td>
<td>0.5</td>
<td>0.5</td>
<td></td>
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<tr>
<td>Construction</td>
<td>298</td>
<td>7.6</td>
<td>663</td>
<td>8.2</td>
<td>8.0</td>
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<tr>
<td>Wholesale Trade</td>
<td>45</td>
<td>1.1</td>
<td>253</td>
<td>3.1</td>
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<td>Retail</td>
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<td>1508</td>
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<tr>
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<td>8.1</td>
<td>869</td>
<td>10.7</td>
<td>9.9</td>
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<tr>
<td>Transport</td>
<td>43</td>
<td>1.0</td>
<td>236</td>
<td>2.9</td>
<td>2.3</td>
<td></td>
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<tr>
<td>Communication</td>
<td>11</td>
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<td>78</td>
<td>0.9</td>
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<td>Finance &amp; Insurance</td>
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<tr>
<td>Property &amp; Business Services</td>
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<td>2.8</td>
<td>671</td>
<td>8.3</td>
<td>6.5</td>
<td></td>
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<tr>
<td>Government</td>
<td>92</td>
<td>2.3</td>
<td>244</td>
<td>3.0</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>Education</td>
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<td>5.8</td>
<td>491</td>
<td>6.0</td>
<td>6.0</td>
<td></td>
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<tr>
<td>Health &amp; Community Service</td>
<td>232</td>
<td>5.9</td>
<td>712</td>
<td>8.8</td>
<td>7.8</td>
<td></td>
</tr>
<tr>
<td>Cultural &amp; Recreational</td>
<td>80</td>
<td>2.0</td>
<td>124</td>
<td>1.5</td>
<td>1.7</td>
<td></td>
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<td>Personal</td>
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<td>279</td>
<td>3.4</td>
<td>3.1</td>
<td></td>
</tr>
</tbody>
</table>

Table 11.1 Employment by sector in the Leeuwin-Naturaliste Region 2006

(Source ABS 2001)
There are other land use pressures on the region’s agricultural activities and there is potential for land use conflict as a direct result of increasing urban encroachment and tourism. Changing land use activities have increased the price of land in the Leeuwin-Naturaliste region and placed greater pressure on land and water resources in the region. In response to these identifiable pressures on agriculture in 1997 the Department of Agriculture in conjunction with the Planning Commission began a planning process for agricultural and rural land use, and developed a policy to manage the process of change and provide a focus on areas of agricultural significance (Western Australian Planning Commission & Agriculture Western Australia 1997). At the local level both Shire councils also prepared rural strategies in the early 1990s (Shire of Augusta/Margaret River 1992, Shire of Busselton 1993). The Shire of Busselton is beginning a review of their rural strategy in 2004, whilst this process is incorporated in the Sustainable Futures Project (2004-05) in the Shire of Margaret River (Kelly 2004, Busselton Shire Council 2004). At the local government level zones for agricultural purposes have been identified and restrictions have been placed on land uses that are not compatible with agriculture through their Town Planning Schemes. This system can, however, be overridden if subdivision or development applicants are not satisfied with a local government ruling and successfully take their applications to the State Planning Commission.

Like other forms of agriculture in the Leeuwin-Naturaliste Region, viticulture is also addressing many environmental land use issues. The Department of Agriculture developed an environmental management guide for viticulture in 2001 to provide best management practices for the viticulture industry. Some of the potential land use conflicts identified in the guide include impacts on nearby residents, including
broad acre farmers and tourist facilities, due to chemical spray drifts, dust, odour, night harvesting, bird scar ing devices, water eutrophication and land clearing. Another key issue is the transfer of high value viticultural land to residential development which results in the loss of that land for ever (Department of Agriculture 2001). The guidelines encourage careful site selection for the expansion of existing vineyards or the development of new ones to avoid areas close to drinking water sources and conservation wetlands and residential and tourist developments. The Department of Agriculture also has an Agricultural Practices Board which can deal with specific complaints about viticultural activities (Department of Agriculture 2001:13).

All agricultural activities in the Leeuwin-Naturaliste Region are encouraged by the relevant government agencies to adopt sustainable practices for the long term survival of their business and the local environment. In addition there are several legislative mechanisms with which they must comply. These include the Environmental Protection Act 1986, Water and Rivers Commission Act, Town Planning and Development Act 1928, the Soil and Land Conservation Act 1982 and the Agricultural Practices (Disputes) Act 1995. Agriculturalists in the region are also becoming involved in collective efforts to address environmental issues and promote sustainable practices through their membership of local land care organisations and water catchment groups.

In terms of regulations, the timber industry in the Leeuwin-Naturaliste Region is one of the most tightly controlled land use activities. In 2000 an amendment to the Conservation and Land Management Act 1984 separated the management of forests
from commercial timber operations. The Department of Conservation and Land Management administers the State Forests and National Parks in the Leeuwin-Naturaliste Region. In 2001 the state government ended all old growth logging on land vested with the Conservation Commission of Western Australia (Department of Conservation and Land Management 2004a). A new forest management plan came into effect on 1 January 2001 which is based on the principles of ecologically sustainable forest management. The Conservation Commission (2004:11) defines sustainable forest management as,

In broad terms ecologically sustainable forest management may be considered to be a management system that seeks to sustain ecosystem integrity, while continuing to provide ongoing social and economic benefits to the community through the sustainable access to wood and non-wood forest resources and enjoyment of other forest values.

The Forest Management Plan (2004) includes a significant reduction in the area available for timber harvesting and places a greater emphasis on plantations to increase the productive capacity of the timber industry.

Like agricultural activities, the region’s timber resources are also subject to a legislative framework including the Wildlife Conservation Act 1950, the Commonwealth Environment Protection and Biodiversity Conservation Act 1999, the Australian Heritage Commission Act 1975, the Bushfires Act 1954, the Soil and Land Conservation Act 1945, the Country Areas Water Supply Act 1947, the Mining
Act 1978, the Aboriginal Heritage Act 1972 and the Heritage of Western Australia Act 1990 (Conservation Commission 2004:14). In addition to legislative regulations, the local community and interested outsiders have also staged a number of protests against further logging in the Leeuwin-Naturaliste Region. However, since the signing of the Regional Forests Agreement, most of the protest activity has moved south east to locations such as Pemberton, Manjimpup and Bridgetown (www.police.wa.gov.au).

Tourism and the urban development associated with this newest land use activity have also recently come under the sustainability spotlight. Again, guidelines for the tourism industry have been developed at the national level via the Steps to Sustainable Tourism Document published by the Department of Environment and Heritage 2004. This plan provides a ten step program to sustainable tourism based on the World Tourism Organisation’s definition:

Sustainable Tourism Development meets the needs of present tourists and host regions while protecting and enhancing opportunities for the future. It is envisaged as leading to management of all resources in such a way that economic, social and aesthetic needs can be fulfilled while maintaining cultural integrity, essential ecological processes, biological diversity and life support systems. (Department of Environment and Heritage 2004b).
At the state level, Tourism Western Australia provides a framework for sustainable development through its strategic plan 2003-2008. This organisation’s mission is to “Accelerate the sustainable growth of tourism for the long term benefit of Western Australia.” (Tourism Western Australia 2003) The document further states that,

We are aiming for sustainable performance to ensure a continuing competitive and commercial return for the tourism industry, as well as other sectors of the economy which benefit from tourism. At all times, we will pay attention to the potential economic, social and environmental impacts of our actions.

Similarly the vision and mission statement of the Margaret River Tourism Association contains similar themes of maximizing benefits and promoting sustainability (www.margaretriver.com). Interestingly the other major tourism industry association in the Region, the Cape Naturaliste Tourism Association does not include the word sustainable in its membership prospectus at all, with the closest intention in its mission statement being “developing and responsibly managing our natural resources” (http://www.geographebay.com/images/Prospectus.pdf). The two local governments in the region also promote the concept of sustainable tourism development through their various governance structures, policy documents and corporate plans (www.busselton.wa.gov.au & www.amrsc.wa.gov.au).

Like all the other land use activities in the Leeuwin-Naturaliste Region, the tourism sector can be guided by sustainable policy but ultimately it is up to the corporations and individuals involved to work together with government, industry associations,
the local community and broader stakeholders to ensure that the industry as a whole is actively engaged in pursuing a sustainable future. In the Leeuwin-Naturaliste region the local community has been very active in organising protests against tourism related developments that they felt were unsustainable. In the case of the most recent protests against the Smith’s Beach development proposal they were also joined by numerous stakeholders from outside the region who joined them in fighting the perceived threat to the region’s ‘sense of place’.

**Conclusion**
The post contact land use history of the Leeuwin-Naturaliste Region including the latest sustainable development initiatives have been part of a process of migration from outside by various groups over time. In the latest case these are often consultants only staying days or weeks rather than permanent migrants. What differentiates this latest group of arrivals to the region is that they are moving away from the frontier ethic and they are bringing or sometimes strengthening/mainstreaming a growing sustainable development ethic. The myths surrounding the past paradigm of frontier ethics, including the propositions that nature is subordinate to humans, is superabundant and can be controlled by science, have largely been discredited. In the new millennium there is a growing realisation that science and technology cannot resolve the major issues of our time including resource depletion and pollution. Since the Bruntland Report of 1987 there has been a growing acceptance of the need for a new way of thinking that has been embraced by all levels of government in Australia. At the local level, communities and interested stakeholders are also taking up the sustainability challenge.
In the case of the Leeuwin-Naturaliste Region, whilst many sustainable development projects are promoted as community based, the expertise to implement these initiatives is actually migrating to the region via consultants and government agents. Thus many of the new sustainable development projects are still coming from outside as part of a broad national agenda that is linked to the international environmental agenda. This raises the question of whether it is exploitation of a different kind, not of the land but of the people and communities. In the past new land uses were often encouraged from outside for the ‘greater good’ of the state and national development. Is this new trend different? This is an area that requires further research. There is also a need for further investigation into why there has been such a strong focus on the environmental component of sustainable development in preference to a more holistic approach that also equally incorporates economic and socio-cultural parameters. On the surface it appears that the concept of sustainable development has become politicized at all levels of government, with policies developed to suit political outcomes rather than the integration of long term social, cultural, economic and environmental strategies for future generations.

This thesis has explored both the contemporary and historical processes which have played an important part in shaping the cultural landscapes of the Leeuwin-Naturaliste Region. It is this land use history that has contributed to the development issues that are currently being experienced in the region. For most of the region’s post contact history land use activities have been framed by a consistent frontier ethos and it is only relatively recently that the concept of sustainable development has begun to be embraced and promoted. This is somewhat ironic as the principles of sustainable development had previously been guiding land use practices for many
thousands of years prior to European settlement. The original custodians of the
landscape of the Leeuwin-Naturaliste Region the Wardandi and Pibelmen Nyungar
people’s economy, society and culture were inextricably linked to their local
environment creating a more holistic existence than the subsequent European
approach. This is an area where much is still to be learned from Australian
Indigenous cosmology. As a predominantly urban society, Australians are
increasingly removed from a sense of closeness to nature; however, many seek this
reunification through their leisure and holiday activities. In addition more people are
becoming aware about broader environmental issues and actively support opposition
to developments that they believe to be unsustainable regardless of their geographical
connection.

For the newest land use activity of tourism to achieve a longer life span than the
numerous post contact land use activities that have preceded it, the stakeholders both
within and external to the region need to focus on multiple land use development that
incorporates tourism as one of many land use activities rather than allowing to it ride
over the others to become the dominant force. All of these past activities remain in
the region and combined provide the diverse product which is arguably the region’s
most attractive tourism asset. This multiple land use focus must also be achieved
within a sustainable development framework that takes a more holistic approach than
that which is currently being implemented to ensure the incorporation of economic
and socio-cultural objectives in combination with environmental ones.

Despite the somewhat turbulent and exploitative post European land use history that
was largely facilitated by external forces and state development focused public
policy, the Leeuwin-Naturaliste region has survived to be ‘discovered’ as one of the
state’s premier tourism destinations. This new found tourism ‘icon’ status has,
however, brought new development pressures to the region. The local communities
must now make informed decisions about their future whilst recognising that there
are many ‘outside’ stakeholders who view the region as ‘their region’ who will also
wish to influence development decisions as demonstrated by the case of Smiths
Beach (Chapter 8). Now that more is known about the historical and contemporary
processes that have shaped the region’s present there is the opportunity for all the
region’s stakeholders to make informed decisions about its future development path
incorporating the principles of sustainable development and leaving behind the
frontier ethic that guided so many decisions of the past. There is also the opportunity
for the community and broader stakeholders to reassess the concept of sustainable
development and determine the importance of land use diversity for their future.
They need to decide if they wish to follow the government directed line focusing on
environmental sustainability or if they wish to pursue the more holistic paradigm of
sustainable development that fully incorporates economic, social and cultural issues
as the traditional custodians of the landscape had been practicing for many thousands
of years before them. This leaves us with the question, has the past always held the
key to a sustainable future?
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## Appendices

### Appendix 1: Nyungar Nomenclature for the Leeuwin – Naturaliste Region.

<table>
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<tr>
<th>European Name</th>
<th>Nyungar Name</th>
<th>Nyungar Meaning</th>
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</thead>
<tbody>
<tr>
<td>Busselton</td>
<td>Yoonderup</td>
<td>named after the great warrior</td>
</tr>
<tr>
<td>Wonnerup</td>
<td>Wonnerup</td>
<td>place of women’s digging sticks</td>
</tr>
<tr>
<td>Dunsborough</td>
<td>Quedijinup</td>
<td></td>
</tr>
<tr>
<td>Margaret River</td>
<td>Wooditchup</td>
<td>place of magic men</td>
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<tr>
<td>Augusta</td>
<td>Talanup</td>
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<tr>
<td>Devils Lair</td>
<td>Jenark Mia</td>
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<td>Cape Naturaliste</td>
<td>Kwirreejeenungup</td>
<td>place of beautiful scenery</td>
</tr>
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<td>Yallingup</td>
<td>Yallingup</td>
<td>place of love and betrothal</td>
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<td>place of the blue parroquet</td>
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<td>Quindalup</td>
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<td>Place of the short nose bandicoot</td>
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(Source: Collard 1994).
**Appendix 2: Brief biographies of the main timber entrepreneurs**

(Source: Western Australian Archives)

**Davies, Maurice Coleman**
b. 1835 London. Davies first arrived from the eastern colonies in 1875 and again in 1877. He was part owner of the Star of the South with J. Moore of Bunbury and a Timber merchant from South Australia. In 1875 he applied for timber leases at Bunbury in 1875 and between 1876 and 1883 he employed 16 Ticket-of-leave men. Davies was also a shareholder in the Jarrahdale and Rockingham Timber Company until 1878, and Established Karridale in 1879. He was also involved in the goldmining industry and was a shareholder in Western Australian Shipping Association in 1884. In 1881 he helped to form the Kimberly Pastoral Company and was managing director of this organisation until 1913. He had property holdings at Liveringa, Luluigin, Balmaningarra, Kojonup and Kattanning.

**Yelverton, Henry, Snr**
b. 1828 in England. Yelverton arrived in Australia in 1841 via a whaling boat. In 1848 he became a ship master in partnership with Curtis carting and storing sandalwood in Fremantle. In 1856 he became part owner of Guyon and in 1858 owner of an Arabian. Yelverton took up leases in the Sussex district and established a timber mill in 1853. He erected steam saw mills and cut timber orders for C.A. Manning and Couchman (Admiralty Agents). Yelverton also established timber mills at Lockeville and at Quindalup and traded timber with South Australian merchants. From 1851 to 1871 he employed 270 Ticket-of-leave men.
Yelverton, Henry, Jnr.
b. 1854. Yelverton jnr was a merchant, miller, farmer and grazier. He owned Sussex locations 665, 109 and others. He entered his father’s business as a timber contractor in 1872 and employed over 60 Ticket-of-leave men on various occasions between 1872 and 1885. He also became president of the Southern Districts Agricultural Society.

Simpson, George.
Simpson arrived in Western Australia in the 1860s from Ballarat, Victoria to organise a timber station at Geographe Bay. He became manager of the Western Australian Timber Company in 1872. Between 1866 and 1881 he employed some 150 Ticket-of-leave men.

Elderidge, William
Elderidge arrived in Western Australia in 1874 from Victoria to become manager of the Western Australian Timber Company operations at Geographe Bay. In 1875 he applied for leasehold land in Sussex for timber milling in Augusta. From 1876 to 1887 Elderidge was a timber merchant located in Busselton. From 1874 to 1876 he employed 6 Ticket-of-leave men at Lockeville. Elderidge’s forfeited timber leases were taken over by M.C. Davies.

Keyser, Charles
b. 1832 Philadelphia, USA. Keyser jumped ship at Vasse c. 1852. He became the Vasse School master in 1857, and was responsible for building the Busselton
lighthouse. By 1867 he had become a timber contractor and employed 42 ticket-of-leave men as sawyers.

**McGibbon, John**

b. 1819. McGibbon arrived in Western Australia in 1852 from the UK. He was the second clerk of the convict establishment in 1854. He employed 78 Ticket-of-leave men, mostly sawyers at Quindalup, Beelup and Mandurah from 1855 to 1873. By 1862 he had become a timber merchant in Fremantle, a merchant importer in 1871, and developed an interest in pearling in 1873. He went bankrupt in 1874.

**Toby, Jacob.**

Jacob was a master mariner stationed at Garden Island in 1832. He left the colony but returned in July 1835 only to leave for Mauritius the following month.

**Seymor, Frederick, William.**

b. 1807. Pioneer farmer at Dunsborough, only farmed 40 acres. From 1867 to 1881 he employed 7 Ticket-of-leave men.

(Source: Western Australian Archives)
Appendix 3: Details of the Group Settlement ACT 1925


GROUP SETTLERS' ADVANCES ACT 1925

TABLE OF PROVISIONS

1. Short title
2. Advancers for chattels, etc., to be a charge thereon
3. Register to be kept
4. Power of sale
5. Meaning of the words “holding” etc.

1. Short title
This Act may be cited as the Group Settlers' Advances Act 1925.

2. Advancers for chattels, etc., to be a charge thereon
Whenever live stock or other chattels are supplied by the Department of Lands and Surveys to a group settler or other person, and whenever advances are made, and so far as advances have hitherto been made, by the Department of Lands and Surveys to a group settler or other person to enable him —
(a) to acquire live stock or other chattels; or
(b) to cultivate, crop, or improve a holding,
such live stock and chattels (including the progeny of live stock) and the crops raised on such holding, while growing and afterwards when cut or severed from the soil, shall, by virtue of this Act alone, be mortgaged to and the property therein shall vest in the Minister for Lands, on behalf of His Majesty the King, until the money due from such group settler or other person to the Department of Land and Surveys in respect of such chattels or advances shall have been paid by such group settler or other person to the Minister.

3. Register to be kept
A register, with an alphabetical index of the names and addresses of all group settlers and other persons to whom chattels have been supplied or advances have been made, shall be kept at the Department of Lands and Surveys in Perth, in which a memorandum shall be registered of every statutory mortgage under this Act, and
such register shall be open to public inspection free of charge; but the *Bills of Sale Act 1899*, and its amendments shall not apply, or be deemed to have applied, to any statutory mortgage under this Act, or to any agreement, bill of sale, or other instrument, whether made before or after the commencement of this Act, whereby chattels or crops are charged with the payment of money due for chattels supplied, or with the repayment of any such advances as aforesaid; and no group settler or other person as aforesaid shall, in any proceedings in bankruptcy, be deemed the reputed owner thereof.

4. **Power of sale**

Subject to the express provisions of any such agreement, bill of sale, or instrument, the amount due for chattel supplied, or in respect of such advances as aforesaid, with interest at the agreed or prescribed rate, shall be payable on demand; and in case of default in payment the Minister for Lands, or any person acting with his authority, may enter upon any holding, and may take and continue in possession of and may remove and sell the chattels and crops, and out of the proceeds, after payment of all costs and expenses, pay and so far as the net proceeds extend satisfy the moneys due to the Department of Lands and Surveys, and any deficiency shall be payable by the group settler or other person to whom the chattels were supplied, or the advances made.

5. **Meaning of the words “holding” etc.**

In this Act the word “holding” means any land of which a group settler or other person is in occupation or entitled to occupy under the provisions of the *Land Act 1898*, the *Agricultural Lands Purchase Act 1909*, or any Act relating to closer settlement, or any regulations thereunder, and includes any land within a settlement area allotted to any person with the view to the acquisition by him of a holding as aforesaid; and the words “group settler or other person” mean a person who under any scheme for closer settlement, or on any area specified in the register under this Act, is or was in occupation of any holding or allotment; and the word “advances” includes payments made to a group settler or other person for work and labour on his holding or allotment, or on any other allotment of a group in which the holding or allotment of the settler or other person is comprised; and the word “crops” includes sown grasses for permanent pasture; and the words “*Minister for Lands*” include the Minister for Lands in office for the time being.
Appendix 4: Land Use Maps for the Leeuwin-Naturaliste Region 2000

(Source: Ministry for Planning 2000a & 2000b)