The nature and scope of wildlife tourism: capitalising on what you have!

Some data on wildlife tourism activity

Describe some forms of wildlife tourism: Why?
Move tourism beyond the big and dangerous
Importance of infrastructure
Importance of interpretation
Experience and satisfaction

Impediments to new product development as perceived by tour operators

Briefly consider how wildlife tourism has been advanced through collaboration in Australia


David Newsome, School of Environmental Science, Murdoch University, Perth, Australia
Global interest in wildlife tourism

Global market is estimated to be around 12 million trips annually (Mintel, 2008)

Up to 3 million people taking a holiday to specifically view wildlife each year

Annual growth rate has been estimated to be at around 10% and the industry is considered to be worth 37 billion Euro.
Economic benefits of wildlife tourism to Australia

Nature tourism in 2009: Total expenditure A$ 33.3 billion (TRA) (60% attributable to International Visitors)

But Tourism Research Australia’s test of who is a nature visitor is not very discriminating!

Visit NP’s and sate parks
Wildlife parks, Zoos and aquaria
Botanical and public gardens
Bushwalking
Whales and dolphins
Snorkeling
Scuba diving
Wildlife tourism in Australia

Industry is very diverse
- Biodiversity hotspot for flora
- Marine wildlife tourism
- Bird watching
- Endemic species
- Mammals (marsupials)

Businesses and NGO’s involved vary in scope
- Free range v captive

Organisations in the industry vary in size and cost structures
- High overheads eg whale watching
- Low costs eg. nocturnal tours on a demand basis

Issues include seasonality, catastrophic weather events, demand according to general economic conditions (GFC), high AU$
Successful wildlife tourism on Phillip Island, Australia

The island now has 3.5 million visitors per annum with 650,000 people attending the ‘Penguin Parade’ each year.

There is a visitor centre, ranger led excursions and talks and an mp4 audio tour available in many languages.

Range of viewing opportunities:

- Elevated tier seated viewing stadium,
- Exclusive viewing platform and boardwalk limited to 170 people a day,
- Penguin skybox which is a limited capacity elevated viewing tower supervised by a ranger,
- Ranger led Private Penguin Parade Experience
- Ranger led Ultimate Penguin Tour to a private beach (limit 10 people a day)
Wildlife tourism in the form of plants: wildflower tourism in Western Australia

Large number of species
Regional centres of endemism
Unique adaptations
Highly evolved pollination systems
Very close plant-animal relationships

Considerable resources that still need tourism product development
Limestone plain to ancient plateau

West of here lies a rocky belt of limestone interspersed with sand dunes, salt lakes, swamps, heath, woodland and low ridges. These communities sustain over 124 species of birds including the critically endangered Carnaby’s cockatoo.

Ridges of laterite rock and sand plain blanketed by deceptively diverse kwongan heath lie here and eastwards. An incredible variety of insects (jewel beetles in particular), spiders, and lizards (including geckoes, skinks, and legless lizards) live here. Also found here are honeyeater birds and small mammals such as the honey possum and fat-tailed dunnart.

Lesueur Drive takes you through the eastern section of the park. Drive through valleys of banesia woodland between the steep ‘breakaway’ hills of a 100 million year old lateritic plateau. The 300 metre high circular mesa of Mt Lesueur supports a unique collection of locally endemic plants.
Wildflower safari

There’s always something flowering throughout the year. In spring plains are ablaze from horizon to horizon with wildflowers between September and November. Here, a 10m² area may have up to 80 different species. Take a closer look to see the greatest concentration of plant species in WA. Peruse the panels then take to the trails to discover this biodiversity hotspot.

Lesueur Scenic Drive.
18km one way loop
Enjoy the spectacular scenery of steep, red, lateritic hills and flat top mesas blanketed in rich green kwongan heath with strips of white-trunked wandoon.

Wildflower discovery nodes
Numerous stopping points have been provided around the scenic drive for you to get amongst the plants. Look for the vast variety of plants which reflect the fine-scale soil mosaic beneath.

Drummonds
Experience sweeping vistas of the Park. Investigate the plant life on the wheelchair accessible path with plant information. Watch the birdlife and marvel at the scenery from lookouts and walk trails to Mt Lesueur and around Gardner Ridge.

Cockleshell Gully
Relax in the shade at Cockleshell Gully. Listen for woodland birds and bugs. Consider the traditional Yawat lifestyle prior to colonisation.

Forgotten something?

[Icons of essentials]
Why is the Mt Lesueur wildflower trail a good natural experience?

- Protected environment
- Managed access
- Management footprint small
- Trail planning and design
- Interpretation
- Natural soundscape
- Natural viewscape
- Day use areas
Guided touring – the direct experience of story
Conospermum brownii - explosive pollen release
The story of Australian grass trees
Grass trees after the passage of fire - but they are not dead!
How do grass trees survive the fires?
Retention of ash in vicinity of source
Capitalising on what you have: the case of insects and the British countryside
Brixworth Country Park, England
Dunwich Heath, England
SOLITARY BEES and WASPS

This 'quarry' area has been artificially created for the benefit of a set of insects known as solitary bees and wasps. This includes many species some of which are rare. These species require bare sand that is free draining in which they can carry out the egg-laying part of their life cycle.

The difference between bees and wasps
Bees have feather-like hairs which help to collect pollen, while wasps have unbranched hairs like you and me. Bees feed their larvae on 'honey', a mixture of pollen and nectar, while wasps feed their larvae on meat. This is in the form of other invertebrates that are paralysed by the wasp's sting. Wasps do not kill their prey so that it does not rot before the larva have time to feed upon it.

What does 'solitary' mean?
Solitary bees and wasps are in comparison to social bees and wasps, like honeybees for example. These have a 'queen' who lays eggs and a number of workers who look after them. In solitary bees and wasps a single female mates and constructs and lays eggs in a nest herself.

What are solitary bee and wasp nests?
If you look closely you will see lots of little holes in the quarry face. These are the burrows of solitary bees and wasps. The adults dig these burrows with the depth depending upon the species. Within these burrows 'cells' will be built. These cells, the number of which again will depend upon the species, is where the egg is laid and food provided for the larva when they hatch. With bees the cell will be filled with honey and the egg laid. Wasps will fill cells with paralysed prey and lay the egg. The larva will never meet their parents, but the parents leave them everything they need. They can feed on the food left for them, pupate and emerge as adults to start the life cycle again.

Communal Nesting
Although these solitary species build their nests individually, where conditions are favourable as here you get large aggregations of many species in a small area. The soil is sandy and well drained and the steep slope means it doesn't vegetate over quickly so provides the open sand ideal for digging burrows. It also faces south so heats up quickly.

Focus on the Bee Wolf (Philanthus triangulum)
The Bee Wolf is an amazing solitary digger wasp, being much the same colour and size as a normal wasp.

It digs a burrow one metre deep that goes down at first at 30 degrees, then levels out horizontally. As they prefer steep sloping banks, their burrows are often many metres underground. Off this main tunnel are up to 34 sideways tunnels that contain single nest cells. These cells are stocked with 3 to 6 honeybees that the bee wolf catches. The honeybees are usually caught while visiting flowers, but can be caught in mid-air and are then paralysed by the sting. A single bee wolf can account for 100 honeybees; however as the average honeybee hive contains 20,000 to 50,000 bees the impact is minimal. Once the nest cells have been stocked with bees a single egg is laid in each one. The cell is then sealed with a special substance, this provides the larva with a 'clue' to which way it has to break out when it has pupated and accordingly it orients itself in the right direction before it pupates. This is the only species that provides its larva with a clue to which way to go.
Artificially created site to provide nesting habitat for digger wasps (bee wolf)
The creation of a nature based tourism asset
Capitalising on what you have: the case of insects and the glow worms of Lamington National Park, Australia
Larvae of the fungus gnat
Capitalising on what you have: the case of insects and the fireflies of Kuala Selangor
Light display
Display on trees
## Visitor Numbers

<table>
<thead>
<tr>
<th>Years</th>
<th>Monthly average visitors</th>
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<td>1985 - 1991</td>
<td>250</td>
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<td>1992 - 1994</td>
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<td>2008-2010</td>
<td>5,590</td>
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<tr>
<td>2011 till May</td>
<td>6,794</td>
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A rare species recovery programme turned into a tourism attraction
Hiking, bird watching, wildflower appreciation and rare species
People able to see shy, nocturnal and rare species
Satisfaction

Visitors very satisfied

• Educational
• Seeing rare marsupials
• Close encounters of the furry kind
• Friendly, knowledgeable guide
• Natural habitat and behaviour
• Small group experience

Mean Overall Satisfaction

3.75

Range = 3 – 4

1 = very low, 4 = very high
Restaurants for wildlife: an iconic species that is difficult to see
Devil restaurants (hides and low intensity lights)

Use of ‘natural’ road kill
What distances to use?
Anticipate photography
Observation via telescope
Microphones
Specimens
Souvenirs?

Facility operated no more than 3 days in a row and on no more than 5 days within a two-week period
Tasmanian Devil
*Sarcophilus harrisii* (Harris' flesh-lover)

This hind foot print is from the largest existing marsupial carnivore. Tasmanian devils are charismatic, black and white animals as big as a medium-sized dog. Their name comes from unnerving screams, like the "screams of the damned", as they bicker over food. Harmless to people, devils are useful as bush janitors, cleaning up dead and sick animals. To do this devils' jaws are as strong as a dog four times their size! Devils can rear up to four young at a time, born only 18 days after mating! Devils are legally protected but their numbers have plummeted since the mid 1990s due to *Devil Facial Tumour Disease*. 10% of the income from these prints goes to studying and reducing effects of this disease.

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The missing elephants of Addo: it’s all about interpretive opportunity
DUNG BEETLES HAVE RIGHT OF WAY

DO NOT DRIVE OVER DUNG BEETLES
OR ELEPHANT DUNG

South African
NATIONAL PARKS
CAUTION
DUNG BEETLES
HAVE
RIGHT OF WAY

PROJECT: HONORARY RANGERS KZN REGION
Flightless dung beetle on a mission!

59% of nutrients from vegetation not assimilated by elephant leaving 41% to the decomposer system
Taking the focus away from the large, dangerous and obviously spectacular!
Opportunistic interpretation by the guide influences visitor expectation and .......... visitor satisfaction!
Re-cap so far

Examples from Australia. Wildlife tourism in the form of plants: wildflower tourism in Western Australia

Capitalising on what you have: the case of insects

A rare species recovery programme turned into a tourism attraction

Restaurants for wildlife: an iconic species that is difficult to see

The missing elephants of Addo: it’s all about interpretive opportunity
Some major points of the talk

We know that there is a high demand for wildlife tourism

Some destinations capitalise on as many aspects of their wildlife tourism as possible

Every species has a story to tell

Role of interpretation vital (eg Carnac Is)

Countries with rich resources still need professionally informed tourism development
Recognising the issues

Impediments to species becoming part of a tour
(a survey of 100 tour operators in Western Australia)

Reliability of sightings
Distance to the wildlife
Unrealistic expectations of visitors
Access
Regulations
Impacts on the animals
Weather and climate
Not enough animals
Lack of knowledge of animals and their locations
Promotion and marketing
Accommodation and services in the area
Issues and responses

Many countries and destinations do not capitalise on their wildlife tourism assets:
   Inventory of wildlife assets (eg. location, numbers, status protection and management)

Lack of product recognition
   Analysis of tourism (access, safety and accommodation)
   Funding of product development and marketing

Deficiency in quality guiding and interpretation:
   Wildlife tourism product development, visitor management, tours and interpretation

Over emphasis on other forms of tourism and/or due to competing interests, consumptive activities, land-use conflicts, influence of the matrix or a lack of adequate natural area conservation
   Understand the nature of these factors
Advancing wildlife tourism through collaboration in Australia: (STCRC reports)

Inventory of wildlife assets (Tasmanian Wildlife Inventory: developing an inventory of wildlife viewing opportunities)

Analysis of tourism (Wildlife tourism: challenges, opportunities and managing the future)

Product development and marketing (Status Assessment of Wildlife Tourism in Aus)

Wildlife tourism product development, visitor management, tours and interpretation (Developing and testing a rapid assessment framework to guide the sustainability of the marine wildlife tourism industry)

Sustainable Tourism Cooperative Research Centre (STCRC) was an Australian Cooperative Research Centre established by the Australian Government's Cooperative Research Centres Program to establish a competitive and dynamic sustainable tourism industry in Australia. It ceased to operate on 30 June 2010. 16 University partners
Advancing wildlife tourism through collaboration in Australia: (WTA)

Wildlife Tourism Australia Inc. (WTA) was established in 2002 to promote the sustainable development of a diverse wildlife tourism industry which supports conservation.

WTA has developed various policies and guidelines for best practice and have made a number of submissions relevant to the enhancement of wildlife tourism (especially related to small businesses) and the furthering of wildlife conservation.

Wildlife Tourism Australia works with government and research groups carrying out more research into the extent of and how wildlife tourism attracts and extends the stay of international and domestic tourists at wildlife tourism destinations.

Website
Workshops and conferences
launch of Adelaide’s Wildlife Trail
It's all about memorable experiences!