



**PROCEEDINGS OF THE  
FIRST INTERNATIONAL CONFERENCE  
ON MARINE MAMMAL PROTECTED AREAS**

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National Marine  
Fisheries Service  
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- NOAA National Marine Fisheries Service, Marine Mammal Health and Stranding Response Program
- NOAA National Marine Fisheries Service, Pacific Islands Regional Office
- NOAA National Marine Fisheries Service, Office of Protected Resources
- NOAA Marine Protected Areas Center
- Pacific Whale Foundation
- Pelagos Unit in Monaco
- Whale and Dolphin Conservation Society (WDCCS)

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result of the efforts of Pacific Whale Foundation to link researchers and the community, tour boats are used as observation platforms for research, and more than 1,000 individual humpback whales have been photo-identified to date. Also, more than 1,500 students and teachers participate in environmental education workshops each year. A whale festival, which began in 1999 and has become an annual event, celebrates the arrival of both the whales and the tourists. It contributes significantly to the local economy.

In 2005 at a stakeholders meeting, the idea of developing whale “birth certificates” was born. In May 2007 Ecuador formally joined the IWC. In 2008 the Ministry of Tourism declared “Whale Day” as a celebratory to be held each year on 22 June. More MPAs have been established in Ecuador in recent years. Pollution and over-fishing are among the main threats to marine mammals in the region. Efforts are underway to get government agencies, park officials, and local people to cooperate in providing more safe areas for humpback whales while at the same time providing greater economic opportunities for local communities.

*Are time/area closures the solution for the long-term sustainability of spinner dolphin tourism in Hawaiian waters?*

**Lars Bejder**

Research is showing that cetacean-oriented tourism (boat-based and swim-with) can have biologically significant impacts on dolphin communities. Repeated exposure to whale watching vessel traffic can compromise the fitness of individual dolphins, creating the potential for population-level effects. Spinner dolphins in Hawai‘i have a predictable daily movement pattern: they forage offshore at night and return to sheltered bays to rest during daytime. This set pattern renders them particularly vulnerable to disturbance, given the limited availability of sheltered waters to rest, socialize, and avoid predators. Considering the documented effects of tourism on dolphins in locations where tourism pressure is substantially less, it is likely that tourism is having an impact on spinner dolphins in Hawai‘i. Out of concern that this is the case, the Pacific Islands Regional Office of NOAA Fisheries, in collaboration with the Pacific Islands Fisheries Science Center, is developing a management plan to reduce the exposure of resting spinner dolphins to human activity in Hawaiian waters. One potential approach would focus on time/area closures of specific bays to reduce the number and intensity of interactions between humans and dolphins during critical rest periods.

Worldwide, there are various cetacean-watching codes of conduct, guidelines, and regulations. The United States was the first country with legislation to protect cetaceans from harassment, but the Marine Mammal Protection Act (1972) was not originally intended to license and regulate the commercial cetacean-watch (and swim-with) industry. Rather, it was designed primarily to minimize harassment and disturbance in a general way and to require permits for “taking” marine mammals, e.g., by deliberate hunting or through bycatch in fisheries. Therefore, commercial dolphin-watch operators in the United States are not required to obtain specific permits or training, and there is no legislative framework to regulate the commercial dolphin-watch industry in Hawai‘i. Such a framework does exist in Australia and New Zealand.



A key question is: Are time/area closures sufficient for long-term sustainability of dolphin tourism given that spinner dolphins are likely more susceptible to disturbance than, for example, bottlenose dolphins? In the short to medium term, time-area closures are likely to provide some protection for spinner dolphins. However, during daylight hours spinner dolphins spend considerable amounts of time not only in sheltered bays, but also in near-shore waters outside sheltered bays. They may be exposed to human activities (boat-based, swim-with, and kayaks) throughout much of their daytime home range. Therefore, an appropriate long-term strategy would be to regulate the commercial dolphin-viewing (and swim-with) industry through an enforceable permit system similar to those currently in place in Australia and New Zealand.

*Red Sea spinner dolphins protected, supported by controlled nature tourism*

**Giuseppe Notarbartolo di-Sciara**

Spinner dolphins throughout the tropics seek the shelter of coral reefs during daylight hours to rest. This habit brings them within easy reach of tourists and makes them vulnerable to disturbance. This had long been the case in Samadai, a small reef off the coast of southern Egypt, where tourists in increasing numbers converged daily to swim with the resting dolphins, creating a situation seemingly beyond control. Growing concern that the dolphins would abandon the reef as a result of the disturbance was brought to the attention of the Egyptian management authorities, and they responded by suspending all access to Samadai in December 2003.

A provisional management plan was prepared immediately, based on precaution and on the scant knowledge available at the time. In January 2004 the reef was again opened to visits, but only under tight control and within the conditions set down in the management plan. The plan envisaged (1) subdivision of the reef into zones, including a large no-entry zone encompassing the dolphins' preferred resting area, (2) limitation of daily visits to a maximum of 100 snorkelers and 100 divers who could visit the reef aboard 10 large boats, (3) time limits for visits (between 10:00 a.m. and 2:00 p.m.), (4) a restricted zone adjacent to what was considered critical dolphin habitat, where swimming visitors were admitted only under the guidance of certified guides, (5) a code of conduct, (6) payment of a 15 Euro entrance fee for each visitor, and (7) daily collection of data on dolphins and visitors to support adaptive management.

Today, the use of Samadai by spinner dolphins as a resting place is stable and regular, as documented by ongoing monitoring. Enforcement of the management regulations is constantly assured. At the same time, tens of thousands of tourists every year are able to enjoy the extraordinary opportunity of watching these animals in their natural habitat. Just as importantly, revenues from the Samadai entrance fees are, in large part, reinvested locally. This has allowed the Red Sea Protectorates to hire more than 50 technical and administrative personnel who ensure the protection of a much wider area, all thanks to the Samadai dolphins that rest inside a reef no wider than a couple of football fields

