

Minke Whales

June 1999

The little known dwarf minke whale was only discovered in Great Barrier Reef (GBR) waters during the 1980s, and research into its biology and ecology has only recently begun. During the 1990s increasing numbers of divers have been reporting interactions with dwarf minke whales along the Ribbon Reefs of the GBR. Such sightings were documented by Dr Peter Arnold from the Museum of Tropical Queensland between 1991 and 1995 (Arnold, 1998). In 1996, Alastair Birtles and Peter Arnold began detailed studies on the biology and ecology of dwarf minke whales and on the dynamics of the interactions between the whales and divers and on how best they could be managed (Arnold & Birtles, 1999).

A pilot study on the experiences of tourists participating in live-aboard scuba diving tours in this region in this region was begun in May 1996. Conducted by Dr Alastair Birtles and Peter Valentine, it was initially funded by the CRC for Ecologically Sustainable Development of the Great Barrier Reef, Task 2.2.2 Towards Ecotourism on the Great Barrier Reef. The survey continued to be distributed through 1997 and 1998. During 1998, the motivations, attitudes and perceptions of Japanese visitors participating in these dive tours were also investigated by two students, Matt Curnock and Yoshie Matsukura, supervised by Alastair Birtles.

Encounters with minke whales clearly provided strong experiences for divers and they therefore figured strongly in the diver survey results. The sightings and encounters with the dwarf minke whales were shown to be outstanding for their effects on respondents' experiences. Seeing and swimming with the whales was the most frequently mentioned element among the divers' best experiences.

These various strands of research have now been drawn together in a new project entitled "Developing Ecologically Sustainable Dwarf Minke Whale Tourism" funded by the Marine Species Protection Program of the Commonwealth Department of the Environment (Environment Australia) and managed by CRC Reef (Task 2.2.4). The consortium conducting the research includes the Museum of Tropical Queensland, James Cook University (CRC Reef Research Centre Ltd), *Undersea Explorer* and Digital Dimensions. The main researchers involved are: Peter Arnold, Alastair Birtles and Peter Valentine.

Under current national guidelines, it is vital that the initiation and maintenance of dwarf minke whale-human interactions are under the control of the whales at all times. It therefore follows that management should be directed towards managing the people rather than the whales. The scuba diver survey results from 1996 to 1998, and the work of O'Neill, Curnock and Matsukura have highlighted the importance of understanding people's experiences as an important precursor to best practice management of minke

whale encounters. They have also highlighted the importance of people being well informed about minke whales and adequately prepared for their encounter.

The Minke Whale Information Package 1999 (MWIP99) has been developed as a resource document for the use of the industry and its passengers to assist in the process of informing them about minke whale biology and best practice management of human-minke whale interactions. It is a draft document which will be evaluated during the minke whale season (June - July, 1999) by means of a passenger questionnaire (Minke Whale Questionnaire 1999 - MWQ99) and interviews with boat crews and managers.

A detailed Code of Practice is attached as Appendix One to the CRC Technical Report No. 27 *Towards Sustainable Management of the Developing Dwarf Minke Whale Tourism Industry in Northern Queensland* (Arnold & Birtles, 1999). This includes a number of recommendations for boat crew, passengers and managers for managing in-water interactions with dwarf minke whales. These were developed following our field work in 1996 and 1997 aboard Undersea Explorer and the background to our recommendations is included in the body of the Report.

Our suggestions now need to be tested more broadly by the industry and its clients. We are therefore seeking feedback about the implementation of the Code of Practice from the live-aboard dive boat operators, their skippers and their crews and a series of interviews will be conducted at the end of the 1999 minke season. We are also seeking feedback from passengers by means of the Minke Whale Questionnaire (MWQ99).

Finally, we are also hoping to trial a reporting system about minke whale sightings among vessels in the area, and a Minke Whale Sighting Sheet (MWSS99) is included. This project seeks to ensure that visitors have high quality experiences while minimising the impact on the whales and ensuring the long-term ecological sustainability of these interactions.

This research is only possible with the involvement and cooperation of the dive industry. Their support is greatly appreciated and we hope that the information collected will be of use to them in their operation and lead to the long-term sustainability of the industry.

