# MINKE WHALE PROJECT



#### RESEARCH UPDATE, 14 DECEMBER 2001 (INFORMATION SHEET # 5).

#### 2001 field season success!

After completing our sixth consecutive season of fieldwork studying dwarf minke whales and whale watchers, researchers from the Minke Whale Project are now attempting to tackle the mountain of data collected over the Once again, around 200 whales were 2001 season. encountered during the six-week sampling period on board Undersea Explorer over June and July. Several animals were re-sighted within the season, and for the first time ever, a whale was re-sighted from two years earlier ('Wiggly Nape Streak'). Further analyses of the thousands of images collected by researchers and several industry members over the season may reveal more re-sightings. We are very appreciative of the growing number of photos, video and sighting sheets submitted by members of the industry, which contribute greatly to our catalogue of identified whales and are helping to broaden our picture of their distribution and abundance in these waters.

#### **Researchers on other boats**

This season for the first time, we were able to collect firsthand data on each of the four live-aboard dive vessels involved in the research project. In addition to *Undersea Explorer's* long-standing support and involvement in the Project, in-kind berths were also provided by *Nimrod Explorer* and *Taka Dive*, and a much reduced fare was provided by *Mike Ball Dive Expeditions*. This increase in research platforms enabled us to gather a wider perspective of dwarf minke whale activities in the area and resulted in

#### 2001 pre-season industry workshop

The pre-season minke industry workshop held in Cairns on the 14<sup>th</sup> of June this year was a great success with a total of 35 industry members, managers and researchers in attendance. Our latest findings on both the whales and whale watchers were presented by Alastair & Peter A., with confidential reports of 1999 and 2000 passenger questionnaire results issued to each participating operator. Also distributed in the workshop were latest updates for operators' MWIPs (Minke Whale Info Packages) and leaflets detailing our revised Code of Practice for Dwarf Minke Whale – Human Interactions. The workshop received a very positive response from the industry, and was followed by an outstanding level of support offered by the participating operators during the field season.



Alastair (on the left) collecting identification data this season, drifting on a rope behind *Undersea Explorer*.

greater data returns than previous seasons of overall whale sightings, images for identification and passenger questionnaires. Researchers aboard each of the vessels were also able to give multimedia presentations to crew and passengers on dwarf minke whale biology, latest research findings and the revised Code of Practice.

The success of this workshop in comparison with previous years was in no small part due to the very good attendance by boat crews. We feel it is particularly important that those actually involved in the practical management of minke whales encounters are able to attend these workshops, and we look forward to even greater involvement in our 2002 workshops (see Project Objectives for 2002 below).

We would like to express our thanks to Stan Kielbaska and *Mike Ball Dive Expeditions* for hosting the 2001 workshop, and to co-organisers Bryony Barnett and Louise Goggin from the CRC Reef Research Centre for their marvellous efforts.

## Minke Whale Project conference presentations

Shortly before our 2001 field season, Alastair and Matt both attended and gave oral presentations at the Southern Hemisphere Marine Mammal Conference held on Phillip Island (May 29-June 1). Over 200 delegates from more than a dozen countries attended the conference, the theme for which was "Marine Mammal-Human Interactions." The presentations on dwarf minke whales were: 'Incorporating visitor experiences into ecologically sustainable management of dwarf minke whale tourism on the Great Barrier Reef,' presented by Matt, and; 'Spatial and temporal patterns of dwarf minke whales involved in commercial swim programs on the Great Barrier Reef and their implications for ecologically sustainable management,' presented by Alastair.

Both oral presentations were very well received and much interest was shown in the Project's collaborative approach to achieving positive management outcomes. A further paper was submitted for a special edition of Australian Mammalogy, entitled 'Commercial swim programs with dwarf minke whales on the northern Great Barrier Reef, Australia: characterisation of the encounters and management implications' (Birtles, Arnold & Dunstan, under review). A poster by Liam Smith (Master of Tourism graduate in 2000) entitled "Using interpretation to manage human dwarf minke whale interactions on the GBR" also attracted a great deal of interest during the conference. During the poster sessions we hosted a multimedia display of the Project with a new video production ('Meet the Minke') by Digital Dimensions (part of the original NHT funded minke research team) playing and a demonstration of our extensive minke whale section of the new CRC Reef website. This was very well received with particular interest shown by people from government, conservation, research and management agencies in South Africa and New Zealand, who seemed especially impressed with our communication strategy for all stakeholders including the tourism industry, passengers, government management agencies and the public. It is likely that this will result in future cooperative work.

We also attended a major half-day workshop at the conference, entitled "Nature-based tourism on marine mammals: can we measure significant disturbance?" chaired by Canadian and New Zealand researchers. We were able to contribute substantially to this workshop and it really served to highlight some of the unique aspects of our work with the minke whales.

# Cyber-minkes

In May 2001 the CRC Reef Research Centre launched its attractive new website, featuring the Minke Whale Project as a large component. While the site is still relatively new, there's already heaps of information available on minke whales and the varied Reef CRC research projects.

Minke Whale Project information to be found on the new website includes: an extensive summary of dwarf minke whale biology, the complete revised Code of Practice for Dwarf Minke Whale-Human Interactions (consisting of Guidelines for Operators and Guidelines for Divers/Snorkellers), the Project's latest research developments and publications, a list of operators assisting

## Focus on Japanese passengers in 2002

An unexpected bonus to the Minke Whale Project in 2001/02 includes an expansion of our work with Japanese passengers, following on from the Honours and Masters theses of Curnock and Matsukura in 1998. A Master of Tourism student Mitsuhiro Komiya is conducting a study entitled "Interpretation for Japanese Ecotourists: a case study of swim-with minke whale tourism in the GBR." He is using our data from 150 scuba divers who completed our Japanese version of MWQ2000 or MWQ2001 to document their experiences, reactions to management of their encounters and about the interpretation they received. It involves producing culturally appropriate versions of our Code of Practice and Information Brochure for the 2002 season, and interviews with live-aboard dive operators and crews about the special needs of their Japanese clients.

the research, contact details for researchers and a collection of minke whale photographs. Our Whale Sighting Sheet can also be downloaded from the site.

The website was introduced to the industry at the minke workshop in June 2001, and was also demonstrated aboard some of the vessels during the season as part of the researchers' multimedia interpretative presentations to the crew and passengers. We will continue to add our latest research and Project developments to the site, so keep checking for updates. To find us on the web, visit www.reef.crc.org.au/aboutreef/wildlife/minkewhale.shtml.

Faith Foster (B.Admin (Tourism) (Hons) 2002) is planning a thesis provisionally entitled "Japanese scuba divers' experiences with minke whales in the GBR: evaluating their responses to interpretation and management of their encounters." This will include an evaluation of Japanese passenger responses to the new Japanese interpretive material developed by Mr. Komiya and the effects of minke whale swim experiences on this important sector of the market. This is likely to include longer-term effects from following up on previous passengers among the 150 outlined above. We are approaching the industry for support for these projects, especially for boat access and the cost of production of the interpretive material, which will enhance the experiences and improve the management of Japanese passengers in the 2002 minke whale season.

#### 1999 & 2000 passenger survey results complete

The 2001 season has yielded the greatest passenger questionnaire returns for the Project so far. A total of 428 questionnaires in both English and Japanese were collected by the four participating operators this season, bringing our three-year total sample size to 955. This considerable sample will help us in providing more accurate performance feedback to each operator.

Whilst analyses of the 2001 questionnaires are expected to continue for several more months, the final results of the 1999 and 2000 MWQs have recently been completed and submitted for review as a CRC Reef Research Centre Technical Report, entitled "Incorporating visitor experiences into ecologically sustainable dwarf minke whale tourism on the northern Great Barrier Reef'. We hope this will be available to industry members, managers and other researchers before the 2002 minke season. The Report is anticipated to become a useful resource for understanding many of the operational and experiential elements of managing minke whale-human interactions.

The Report presents data from a sample of 527 passenger questionnaires collected from five live-aboard dive vessels experiencing regular in-water interactions with dwarf minkes over 1999-2000. It describes the experiences, attitudes and perceptions of whale-swim participants in relation to the current management guidelines and interpretative resources. Data presented in the report reflect the industry as a whole, and do not distinguish between operations or individuals.

Results from this study have already been incorporated into the revised Code of Practice for Dwarf Minke Whale-Human Interactions (introduced in June 2001) and have contributed to the development and improvement of interpretation for operators, including updates to the Minke Whale Information Package (MWIP2001) and the development of a draft passenger information brochure.

Industry members should find much of the data in the report provides useful feedback to their own operation (complemented by their confidential individual operator reports), and may help in assessing their performance in managing minke whale encounters and generally as a liveaboard dive company.

We are very grateful to all industry members who assisted us in collecting these questionnaires over the past few years.

## **Funding uncertainties**

The Minke Whale Project's two years of NHT funding expired in June 2001, and hence we commenced the 2001 field season by funding the Project privately ourselves, with the help of in-kind support from the industry.

We had applied to CRC Reef for a new two-year project with the objectives of developing and evaluating Performance Indicators to assist the Great Barrier Reef Marine Park Authority move to a more industry-based approach to the management of this specialised form of commercial whale watching. This involved working with the industry and management agencies to develop the Performance Indicators, providing operators with up-to-date research findings and interpretive material, continuing our photo-identification studies to improve our understanding of the biology and behaviour of this minke population and the cumulative effects of minke swims on this unique population, as well as expansion of the sightings network. This application was based on developing the Performance Indicators through f/y 2001/02 and evaluating them in the 2002 season.

We are very pleased to announce that we have received funding from CRC Reef, but so far only for one year of the project. A total of \$48,042 was awarded for the period 1 July - 30 June 2002, and we are now well underway on CRC Reef Task B2.8 "Towards ecologically sustainable management of human-wildlife interactions: a case study of swim-with minke whales tourism". These funds amounted to 66% of our requested funding for 2001/2002, with no research assistance provided for January-June 2002, so progress through this period will be slower with the analysis of biological data, especially Photo-ID studies, being much reduced and/or postponed. We have recently re-applied to CRC Reef for the second year of funding for the proposed study, which will cover the evaluation of the Performance Indicators during the 2002 season and their subsequent refinement, as well as the continuation of our biological observations and analysis of our photo-identification material. We are very grateful to the industry associations CHARROA and AMPTO, as well as GBRMPA for recognising the importance of this research and voicing their support for the initial funding of the study and we eagerly await the outcome of the current funding process.

## Some Project objectives for 2002

We will be holding an Industry & Management Workshop in March 2002 to develop the suite of draft Performance Indicators. We will also work with the industry at a Preseason Workshop in May, to prepare them for the collection of data based on these Performance Indicators. If our current funding application is successful, these will then be evaluated during the 2002 minke season. CRC Reef has agreed to fund a substantial print run of a new Minke Whale Information Brochure for passengers which we are currently drafting. With additional funding we will be able to produce a Japanese version for 2002.

#### Farewell...



Matt at work during the 2001 field season

Our fearless and friendly Research Assistant, Matt Curnock, will be leaving us all to fend for ourselves in December this year. Matt began working with the team in 1998, as an Honours student of Alastair's, studying passengers' experiences with dwarf minke whales and in particular Japanese scuba divers' experiences. He began work fulltime on the Project when it was first funded in June 1999, and has since been involved extensively in an increasing number of roles including countless hours of questionnaire data entry and analyses, report writing, fieldwork and liaising closely with the industry. Matt will begin his new (and married) life in Cambridge, U.K. in January 2002 (although he has admitted he might be persuaded to return for a few weeks during the next minke season). We wish him all the best in his endeavours!

#### **Recent media coverage**

Over the past year the Minke Whale Project and minke whales in general have received a substantial amount of media attention. Along with almost regular features in dive magazines, such as Asian Diver (Feb/Mar 2000, featuring the first ever photograph of a minke 'gulping' and also covered in the Febuary 2000 Italian 'Playboy') and Sport Diving (Oct/Nov 2000), the research has since received attention from National Geographic (April 2001), the Marine and Coastal Community Network's (MCCN) 'Waves' newsletter (Autumn 2001) and James Cook University's 'Outlook' newspaper (Aug 2001). Work is progressing on a 50 minute documentary on our work being co-produced by the Natural History Unit of TVNZ and Digital Dimensions, which it is hoped will preview at the IWC meetings in Japan in 2002, followed by its international release. Alastair and Peter (A) are currently working on developing stories about our most outstanding re-identified minke whales from the 1999-2001 seasons, which will be included in the film.

## Thanks

Once again we would like to express our sincere gratitude to all participating Cairns section live-aboard dive operators, their crew and staff members, whose contributions to the Project have assisted its many successes and discoveries. We are especially grateful for the sightings information collected over the years by Ian Stapleton and Jack Nairn (*Nimrod Explorer*), Mark Bell (*Mike Ball Dive Expeditions*), and Jack Brosnan (*Taka Dive*). We hope that outcomes of the Project continue to be of use to the industry and contribute to the long-term sustainability of human-dwarf minke whale interactions.

Members of the research team for the 2001 season included: Dr Peter Arnold (Museum of Tropical Queensland); Dr Alastair Birtles (CRC Task Leader), Peter Valentine, Matt Curnock & Vimoksalehi Lukoschek, (all James Cook University), Bryony Barnett & Louise Goggin (CRC Reef Research Centre) and Andy Dunstan & Monique Matthews (*Undersea Explorer*).

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The Minke Whale Project is a combined initiative of James Cook University, the Museum of Tropical Queensland and *Undersea Explorer*. The Project is managed by the CRC Reef Research Centre and was partially funded by NHT under the Marine Species Protection Program (Environment Australia), from June 1999 to June 2001. The Project is currently partially funded by the CRC Reef Research Centre. It would not be possible without the support of *Undersea Explorer* and other members of the Cod Hole and Ribbon Reefs Operators Association.











www.reef.crc.org.au/aboutreef/wildlife/minkewhale.shtml