

Monkey Mia News

Issue 3 Summer/Autumn 2001

DEPARTMENT OF
Conservation
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SHIRE OF SHARK BAY

Welcome to the third issue of Monkey Mia News.

This newsletter is produced twice a year, giving an update on what's happening in this important region, the Shark Bay World Heritage Area. Monkey Mia News is a non profit publication to give visitors an understanding of the happenings at Monkey Mia, including the important research undertaken in Shark Bay. Why not become a Monkey Mia Dolphin 'Friend' and receive regular newsletters and other benefits? See back page for details!



Under construction—the new Visitor Centre at Monkey Mia nears completion.

A NEW VISITOR CENTRE FOR MONKEY MIA

The year 2000 saw an exciting development at Monkey Mia. Construction of the new Visitor Centre began in July, and the building phase of the project was finished in December 2000, with the entire project due for completion by April 2001. The new centre is located on the foreshore at Monkey Mia, adjacent to the Dolphin Interaction Area, and next to the current Visitor Centre, which will be converted into office facilities for Department of Conservation and Land Management (CALM) staff, and researchers.

This exciting project will see the development of a state-of-the art visitor centre containing up-to-date informative and interactive displays, a fish preparation facility for dolphin feeds, and an amphitheatre for conducting talks and slide shows for visitors.

In addition to the new Visitor Centre, CALM has developed a new face-to-face interpretation program, which is now implemented on the beach during interactions with the dolphins. The aim of the program is to enhance the visitor experience at Monkey

Mia, and to provide people with information about the dolphins of Shark Bay, and some of the research that has been conducted over the past 18 years. The new program also informs visitors about the Shark Bay World Heritage Area, and CALM's dolphin-management practices at Monkey Mia.

CALM's Monkey Mia staff wish to apologise for any inconvenience the construction of the new Visitor Centre may cause, and trust visitors will understand what an exciting time this is for the future of Monkey Mia.

For further information about any of the new developments at Monkey Mia, please contact CALM officers at the Visitor Centre on (08) 9948 1366.



*Above: First time mum Peglet with her new three-day-old calf
Photo: by Alice Mackay*

WHEN A BABY IS BORN...

Summer at Monkey Mia brings with it not only searing heat and gusting south-easterly winds, but also the arrival of many newborn calves, as the breeding season for the Shark Bay dolphins hits its peak.

Those who have visited the dolphin interaction area at Monkey Mia probably would have met the calves of the adult beach dolphins—Nomad, Kiya and Sparky.

Nomad is the two-year-old son of Nicky, Kiya the three-year-old daughter of Puck, and Sparky, also two years of age, is the son of Surprise.

The behaviour of the young calves at the beach varies from visit to visit, but more often than not, you will see them playing together, swimming belly up, as they chase small fish, or staying close by their mums in 'baby position', safe under their mother's tail.

Dolphin calves are born tail first after a twelve-month gestation period. At birth, they weigh approximately 10 kg and measure up to 60 cm in length. Mothers nurse their calves for, on average, three to five years, and usually wean them when pregnant. Newborn calves are quite uncoordinated for their first few weeks, and pop up to the surface like a cork to breathe.

Although they suckle from their mothers for quite some time, calves do start catching and eating small fish from about four months of age. When feeding from its mum, the calf places his or her rostrum (or beak) up to one of the two mammary slits under the mother's belly and forms a cone with its tongue,

which latches onto the teat. The mother then squirts the milk into the calf's mouth, which ensures that no milk is lost into the water.

The greatest predator of the dolphin in Shark Bay is the tiger shark. Sharks take approximately 30 per cent of the calves in Shark Bay in their first year, and this figure increases to about 50 per cent for the first three years.

One of the occasional visitors to the beach at Monkey Mia is Peglet, an 11-year-old female who gave birth to her first calf on about November 22, 2000, making her the youngest known dolphin in Shark Bay ever to have a calf. The usual age for a dolphin to begin breeding is 12 or 13 years. The gender of Peglet's calf is still unknown. This is because they are constantly on the move and their sex cannot be determined for at least six weeks when they may be able to swim belly up and it can be seen if they have mammary slits or not.

Dolphins with newborns often spend a lot of time with other mothers and calves, probably as an extra means of protection for the young, and Peglet has, on numerous occasions, been seen with the beach dolphins and their calves, even coming inshore a number of times to show off her baby.

THE FEEDING TRIALS OF PICCOLO

The many visitors to Monkey Mia come for various reasons, but mostly to see the friendly dolphins that visit the beach to interact with humans, and maybe to get a chance to feed one of the dolphins. When the Monkey Mia experience began in the 1960s, visitors could feed any amount of fish to whatever dolphin would accept it. Over the years, this proved to be detrimental to the survival rate of the calves of the dolphins that visited the beach. In 1994, in an effort to improve the survival rate of calves, and ensure that future generations of dolphins could continue to visit Monkey Mia, the Human-Dolphin Interaction Management Program began. The first phase of the program was to introduce a policy of not feeding calves at all, until after they had been weaned. So far, this has been successful, as all of the calves born to the inshore dolphins since 1994 have survived and thrived.

The management program is now moving into the second phase, which is to introduce a juvenile dolphin to the current feeding group of three adult females. The second phase will see management attempt to feed a female juvenile dolphin that has been weaned for well over 12 months and is now successfully hunting for itself and socialising with other dolphins in the Bay.



Above: CALM officer David Charles offers Piccolo a fish during the feeding trial.
Photo: by Janet Mann

Piccolo, an eight-year-old female dolphin born to the beach dolphin 'Puck', has been the subject of an ongoing study by Dr. Amy Samuels and Cindy Flaherty of the Brookfield Zoo, in Chicago, USA since 1997. Their observations of Piccolo have shown that she successfully hunts and socialises offshore, as well as continuing to visit the beach on a regular basis to interact with people. This makes her an ideal candidate for recruitment to the feeding program.

The first introduction trial was conducted in August 1999. Before beginning the recruitment process, a strict protocol was developed in conjunction with several marine mammal research advisers, experienced dolphin trainers and Monkey Mia staff. This included the following:

- ❖ Only one fish per day to be offered to Piccolo.
- ❖ Piccolo to be fed only by CALM officers.
- ❖ Piccolo's behaviour onshore and offshore was to be closely monitored, before, during and after the trial.
- ❖ At any time, depending on Piccolo's reactions, the process could be abandoned.

The trial resulted in Piccolo being offered fish for 22 days, during which she only played with the fish and seemed to be more interested in the special attention she was being paid by CALM staff. It was clear that Piccolo was not yet ready to take fish, and so the decision was made to abandon this attempt and try again at a later date.

Since this time, Piccolo has continued to come to the beach on a regular basis and still interacts with the visitors. Her offshore behaviour has not been affected by this attempt to feed her, and she is regularly seen offshore with other dolphins, socialising and foraging as normal.

A second attempt to feed Piccolo is planned for March 2001, however it is possible that she may never accept fish offered to

her, but instead may choose to continue to visit the beach purely for the interaction with visitors. If this is the case, Piccolo may change the future of Monkey Mia whereby dolphins come to interact with visitors without the enticement of fish.

Research Spotlight

By Lars Bejder

Two new research programs have recently begun at Monkey Mia with the aim of monitoring interactions between commercial tour vessels (and private vessels) and dolphins. While the dolphin-watching industry holds considerable economic and educational potential, the impacts of uncontrolled tourism are not presently understood, and may have serious consequences for these animals.

Although single encounters with boats seldom cause major complications for dolphins, repeated close encounters for prolonged periods of time can have potentially detrimental impacts on them. For example, if mothers and calves are repeatedly disturbed while foraging or resting, critical energy reserves may be disrupted.

Impacts of Boat Noise

Excessive noise from boats can be of concern because marine mammals make use of acoustics for communication and orientation, and for recognising and localising companions, competitors, mates, predators and prey. Additionally, human noise can overlap with frequencies used by dolphins, and lead to masking of their own vocalisations.

The aim of this program is to identify potential impacts of boating on the Shark Bay dolphins. This is being accomplished by measuring vocal and non-vocal behavioural reactions to boats, e.g. the dolphins' travelling direction and speed, group composition, breathing patterns, habitat use and communication. Existing baseline data on the Shark Bay dolphins allows us to evaluate possible responses according to dolphin age, sex, kinship and activity.

The Department of Conservation and Land Management (CALM) will use the research results for management purposes, i.e. to ensure the sustainability of the dolphin-watching industry, by minimising impacts on these animals.

Monitoring Impacts of Boat Traffic

Land-based observations, using special equipment that offers reliable position-fixing without disturbing the study animals, allow us to track dolphin behaviour in both the absence and presence of boats. This, together with simultaneous acoustic recordings and behavioural observations from both

commercial dolphin-watching vessels and an independent research vessel, allow us to study potential effects of boating on the Shark Bay bottlenose dolphins, and hence minimise any impacts.

Contributors

This research is funded by CALM and the Danish Research Academy. The Monkey Mia Resort is providing free accommodation to the researchers. To help ensure the well-being of the dolphins and the sustainability of the dolphin-watching industry in Shark Bay, the crews of Aristocat 2 and Shotover are providing support. Essential information on the Shark Bay dolphin population comes from long-term research supported by the Dolphins of Monkey Mia Research Foundation.

CARING FOR THE DOLPHINS

To help preserve the unique experience of wild dolphins coming ashore and interacting with humans at Monkey Mia, a few simple guidelines have been developed:

❖ No Touching

Experience has shown that adult dolphins can become aggressive when being touched, and they are known to be susceptible to viruses transmitted through human contact. So enjoy watching the dolphins in their natural environment, but please keep your hands to yourself!

❖ Feeding the Dolphins

Uncontrolled feeding of dolphins can be highly detrimental to their health and in extreme cases lead to their death. Dolphins receiving handouts of fish from boats, or from the beach, change their behaviour and will become accustomed to scavenging and lose their natural instinct to hunt. They also become unsociable with the other dolphins and, over time, exhibit signs of aggressive behaviour. Adult females with dependent calves have been known to ignore the needs of their young, which can result in the death of the infant.

To ensure that the dolphins at Monkey Mia don't suffer the fate brought about by inappropriate feeding, CALM officers carefully supervise and regulate their feeding in the designated dolphin interaction area. A penalty of up to \$4,000 can be imposed on any person who is found feeding dolphins without permission or outside of this area.

❖ Swimming with Dolphins

Dolphins and their calves can easily be separated when confronted by swimmers who are keen to actively pursue the interaction at close quarters. To ensure the protection of all dolphins, the Wildlife Conservation Act of WA prohibits swimming with them. If you are fortunate enough to come in to contact with dolphins when swimming, let them swim around you while you keep still. This will ensure that they won't feel threatened or intimidated, and when they wish to swim away, they must be able to do so without being chased or harassed in any way.

So please - love the dolphins, but don't love them to death.

The Monkey Mia Dolphin Friends Membership

Annual Subscription \$10. You will receive a copy of the Monkey Mia learning package and a discount voucher for entry to Monkey Mia (valid for one year)

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