

Monkey Mia News

Issue 7 Autumn 03



SHIRE OF SHARK BAY

Welcome to the seventh 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!

New additions

By Roger Syme

After much speculation, December and January were two significant months at Monkey Mia when each of the regular beach-visiting female dolphins - Nicky, Puck and Surprise - gave birth!

To everyone's delight, two calves were born within days of each other. Puck's calf was first, on 6 December, followed by Nicky's calf on 8 December and finally, Surprise delivered a new baby on 21 January. The three new calves mean there will now be 10 dolphins coming to shore on a regular basis.

While it was known for some time that the three beach feeding dolphins were pregnant, no-one was sure when the first calf would arrive. It was certainly a surprise when two new calves appeared one morning!

It started in summer 2001-2002 when more dolphins began to visit Monkey Mia's shores. This was the onset of the dolphin-breeding season, when groups of offshore males followed females into shore to compete for their affections. The result was that Nicky, Puck and Surprise were herded offshore for several days, and all fell pregnant. With a gestation period of around one year, it was thought that December or January would be the most likely months to see the new calves.

Although the sex of the calves is unknown (this may take some time) they were given Aboriginal names by the children at Denham Primary School. The names honour Shark Bay's rich cultural history and the region's original inhabitants, the Mulgana People.

Nicky's calf was named Yadgalah (Mulgana for friend), Puck's calf Wada (pearl) and Surprise's calf Burda (star).

While it is exciting to have new babies on the beach, it is also a tenuous time for a young calf. Newborn dolphins have a high mortality rate. Research in Shark Bay suggests about 30 per cent do not survive their first year, and as many as 50 per cent do not survive their second year. The causes of their death can include shark attacks, starvation, strandings, getting lost from their mothers, malnourishment, diseases and viruses.

Viruses are particularly important to consider when it comes to human interaction. Why? Like humans, dolphins are mammals, and viruses can be transferred between the two species. Young calves in their first few weeks of life, are especially vulnerable to catching human transmitted viruses. These viruses can sometimes lead to illness or even fatalities. With this in mind, the rangers have been keeping people in the

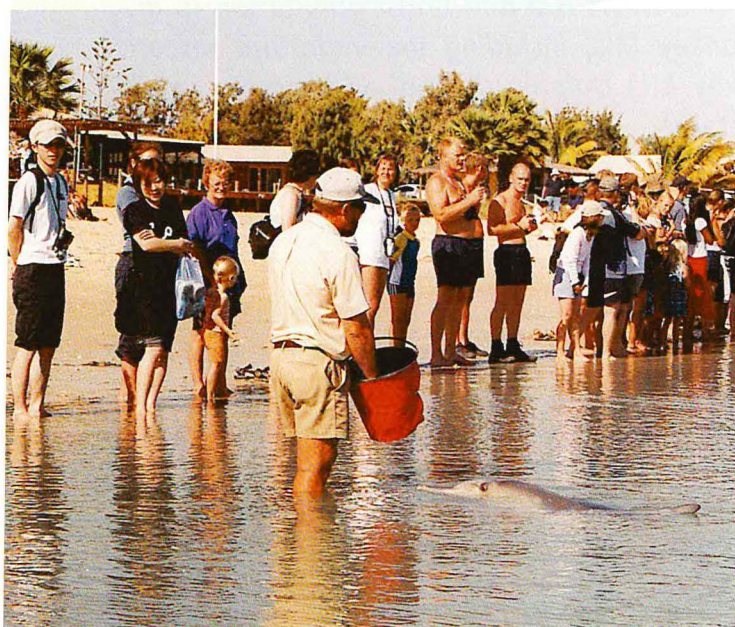


Puck with new calf Wada

shallows for this initial period and asked them to stay out of the water for the first six to eight weeks of the calves' lives.

Another reason for people to stay in the shallows is that while the mothers are keen to show off their beautiful babies, they can be very protective of their young, and will sometimes act aggressively if approached too closely.

Because of the new arrivals, staff have shortened the visitation times by conducting the feeds quickly. This is because while the mothers are inshore laying in the shallows, the calves cannot feed from them. To ensure the calves won't be neglected, the rangers feed the mothers within 15 minutes. This way, there is minimal human interference in the lives of these calves, which will hopefully be long and prosperous.



Operations Officer David Charles feeding Piccolo.

Introducing Piccolo!

By Amy Samuels, David Charles and Cindy Flaherty

Piccolo is the first of a new generation of dolphins to be recruited to the Department of Conservation and Land Management's feeding program at Monkey Mia.

When dolphin management at Monkey Mia was reviewed by Dr Barry Wilson in 1996, one of the conclusions was that the recommended strategy for maintaining a beach group of dolphins would be the recruitment of juvenile females born to provisioned adult females. This recommendation followed from general agreement among dolphin researchers, Department of Conservation and Land Management staff, and local community members that recruiting juvenile daughters of the provisioned dolphins is the preferred option for attracting new dolphins to the feeding program at Monkey Mia.

There are several reasons for this recommendation. Research in Shark Bay has shown that juvenile daughters (but not sons) typically maintain close associations with their mothers after weaning, therefore, recruiting daughters is not expected to change natural social relationships. In addition, natural feeding specialisations of offshore dolphins – like sponge carrying – appear to occur along female family lines, thus offering fish to daughters of provisioned dolphins might be perceived as carrying on the feeding traditions of Crooked Fin and her daughter Puck and Holeyfin and her daughter Nicky. Finally, recruitment of juveniles – who are fully independent with demonstrated skills in essential foraging and social behaviours – would help to ensure that new recruits do not become dependent upon feeding by humans.

Piccolo is the first of this new generation of dolphins to receive fish at the beach at Monkey Mia. In recent years, there have been seven regular beach visiting dolphins coming into shore, of which the three adult females are regularly fed. In October 2002, a fourth dolphin, Piccolo, was introduced into the feeding program.

Piccolo has been visiting the shores of Monkey Mia since she was born in 1992, as she is the daughter of Puck, a regular beach feeding dolphin. At 10 years of age, Piccolo is presently at a stage at which her survival skills are well developed, and it is now possible to bring her into the Monkey Mia feeding program without compromising her health and natural behaviour.

Introducing Piccolo to the feeding program is part of long range plans for managing the dolphin experience at Monkey Mia. Concerns of the past – such as poor calf survival, dolphin aggression to people, and dependency on fish handouts – appear to have been corrected by careful management from the Department. Management policies have encouraged the dolphins to spend considerable time offshore behaving as wild dolphins, for example, by limiting the amount of fish each dolphin receives from humans, limiting their time at the beach, and choosing for provisioning, those dolphins least likely to be disturbed or be harmed by the feeding situation. The gradual process of bringing Piccolo into the feeding program has involved careful planning and monitoring by Department staff which will continue over the next few years.

Most people assume that recruiting dolphins to hand-feeding is simply a matter of offering a fish but that is not the case. In fact, this is the second time that an effort has been made to give fish to Piccolo at Monkey Mia. In 1999, Department staff offered fish to Piccolo but she was not yet ready to be integrated into the feeding program. At that time, she chose not to eat the fish, and instead, she wanted to play with the fish offered by rangers. She even caught her own fish to give to people at the beach! As a result, the program was postponed until 2002.

In 2002, the program was initiated after the October school

holidays. At the first attempt to feed her, Piccolo was hesitant but finally took and ate the small fish that were offered. Since that day, Piccolo has visited the beach a number of times. Most days, she attends the feed and eats the fish offered by Department staff. On a few occasions, she has been a bit exuberant prior to the feed – including splashy leaps and breaches in the interaction area or getting pushy with Department staff – or, she has arrived at the wrong time of day or just missed returning for the feed. These “mistakes” show that she still has a few things to learn about the beach routine. She has also clearly indicated her preference for silver bream over yellow tail.

An important feature of the recruitment process is the monitoring of Piccolo’s behaviour by independent researchers throughout the process in order to safeguard Piccolo’s welfare and natural behaviour, and to ensure she does not become reliant on fish handouts from humans. The recruitment plan provides a unique research opportunity, that is, monitoring the behaviour of a young dolphin before and after initiation into a controlled provisioning program. Indeed, Piccolo’s behaviour has been documented by independent researchers since her birth! As a calf she was studied by Dr Janet Mann of Georgetown University, and since weaning, by Dr Amy Samuels and Cindy Flaherty of the Chicago Zoological Society. Piccolo has long been a central character in the Samuels and Flaherty study of the juvenile dolphins of Shark Bay. Thus, for several years before being introduced into the feeding program, Piccolo’s behaviour has been documented extensively both at the beach and offshore. Those research observations were used to indicate the age at which Piccolo was fully independent of her mother, self-reliant, and capable of foraging and socialising like offshore dolphins in Shark Bay.

The protocol for recruiting Piccolo to feeding at the beach includes the provision that special attention be paid to her behaviour during the first nine or so months of the program by the Samuels and Flaherty team including research assistant, Blair Hardman of Edith Cowan University. Such intensive monitoring is essential to ensure that Piccolo’s behaviour is not affected by provisioning. For example, it would be harmful for her to stay overly long at the beach or to learn to beg for fish from private vessels. These research observations will be compared with Piccolo’s own behaviour prior to provisioning and with the behaviour of her offshore companions, the wild-feeding juvenile females of Red Cliff Bay, in order to address such questions as “does Piccolo spend less time foraging or socialising than her peers?” or “does Piccolo stay closer to shore since she has been fed at the beach?”

At this early stage, the research shows that there has been little change in Piccolo’s behaviour since she began accepting fish. In addition, observations of Piccolo away from the beach let everyone know what she is up to on days that she does not

visit the beach. Offshore, it appears that she has been engaged in other learning processes typical for adolescent females of many species. During the breeding season, she has been seen on many occasions associating with male dolphins, and no doubt learning some valuable lessons about adult social behaviour. And now that the birthing season has come, she is interacting with calves, and probably gaining some important pointers about maternal care. In particular, Piccolo is often seen with her mother Puck and her new sibling Wada, who was born on 6 December, Piccolo’s tenth birthday. Piccolo is also a frequent “babysitter” for Nicky’s new calf Yadgalah, born two days after Wada.

Controlled provisioning, careful planning, and intensive monitoring are essential ingredients to ensure that the program to recruit Piccolo to feeding will succeed without adverse effects to her welfare and behaviour. If this program is successful, other daughters of provisioned females – Surprise’s daughter “Shock” and Piccolo’s little sister “Kiya” may be added to the beach-feeding dolphins in the future.

This is an exciting time at Monkey Mia when nearly every day, visitors can see close up the antics of young dolphins – especially Piccolo, the new calves, and the many offshore youngsters who visit the beach at this time of year.

To find out more about this and other research visit the website www.monkeymiadolphins.org

Unique features of the recruitment program for Piccolo

- Piccolo is offered less than one kilogram of fish per day (to ensure she does not become dependent on the feeding program). Normally she needs to catch about five to six kilograms per day.
- She is fed only when adult dolphins are present (to discourage her from spending long hours at the beach waiting for fish).
- Initially, she has only been fed by staff from the Department of Conservation and Land Management (to ensure that she learns the beach feeding routine).
- There will be a gradual phasing in to the normal feeding program (so that she becomes familiar with the feeding process followed by the other dolphins).
- There is intensive monitoring of Piccolo’s behaviour at the beach and offshore, both before and after the onset of provisioning (to ensure there are no adverse effects on her natural behaviour).
- There is an enhanced public awareness campaign including brochures, interpretive talks and extra staff on the beach (to enlist public cooperation and ensure Piccolo is not fed outside of the feeding program).

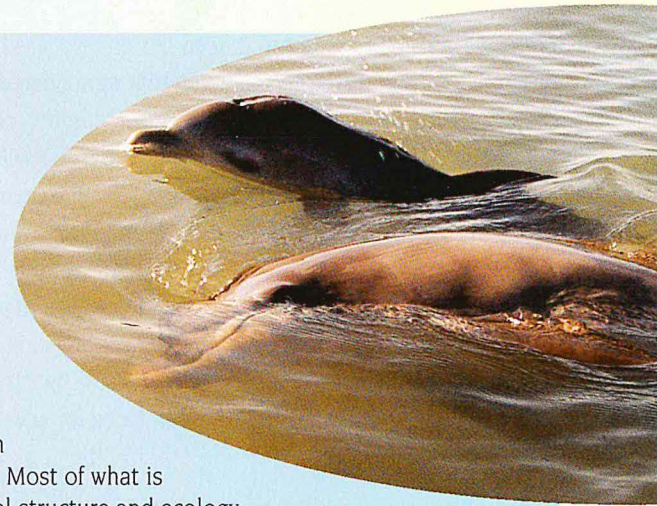
Dolphins of Monkey Mia Research

Foundation

The mission of the Dolphins of Monkey Mia Research Foundation is: **'To better understand and protect the dolphins and wildlife in Shark Bay through research.'**

Long-term research on the Shark Bay and Monkey Mia dolphins has been conducted by an international team of researchers since 1982. This is the second-longest running dolphin project worldwide. Researchers come from

Australia, Europe and North America. Most of what is known about dolphin behaviour, social structure and ecology, comes from the Shark Bay team. *The Dolphins of Monkey Mia Research Foundation* was established in 1998 to support the long-term research on the Monkey Mia and Shark Bay dolphins. Your donations will help protect and monitor more than 600 dolphins and will assist in this exciting scientific endeavour! Contributions to research can be forwarded to the address below.



For more information, please contact us by mail or through our website.

The Dolphins of Monkey Mia Research Foundation
PO Box 140, Claremont, WA 6010
www.monkeymiadolphins.org

The Monkey Mia Dolphin Friends Membership

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