

# HELPING STRANDS

**When a marine animal beaches itself or is injured in Townsville's waters, many helping hands launch into action to ensure it receives the best possible care. DANNY MORTISON reports**

**M**ARINE mammals stranded in the Great Barrier Reef region could not find a better place to land.

Not that they would know it but the services responding to such emergencies are the best in the land here in North Queensland.

Turtles, dugong, whales, dolphin or even crocodiles can be catered for by a variety of quality staff from the Great Barrier Reef Marine Park Authority, Queensland Parks and Wildlife Service, Department of Primary Industry, Reef Headquarters and the marine biology department of James Cook University.

Mark Read, senior conservation officer with Queensland Parks and Wildlife Service said the combined resources of all of the agencies ensured a stranded animal which was still alive would get the best care. For a dead animal the expertise was available to determine the reasons for that animal's death.

"Unfortunately the biggest number of strandings in the Townsville region are turtles which have injuries from boat strikes," Mark said.

"This unfortunately happens more in the winter months, we think, because the water is cooler and the turtles float closer to the surface in order to get warmth."

Mark has a passion for turtles having spent a third of his life working with the animals.

He has also travelled all over Queensland to do surveys on crocodiles for the Queensland National Parks and Wildlife Service.

"All of the people working within the Marine Animal Hotline are passionate about conserving animals in the wild. With hundreds of strandings reported each year we are all kept pretty busy collating in-



LEFT: Sarah Pierce of Reef HQ with "Schemp" the green turtle which was released this week. Other carers from QPWS, DPI, GBRMPA and Reef HQ look on. Photo: SCOTT RADFORD-CHISHOLM 5R064057

formation on what causes the strandings.

"Many animals we find are diseased, some even suffering from human diseases," he said.

This theory was backed up by Dr Rachel Bowater, veterinary pathologist with the Department of Primary Industry in Townsville.

Rachel, along with laboratory manager, Dr Steve Johnson, does the clinical assessment and treatment of live animals as well as post mortems and disease diagnosis.

"We have had a number of dolphins which stranded and were found later to have stingray barbs in their liver.

"However we are learning more and more as we go. Some animals we find riddled with parasites and one dolphin we did a post mortem on a few years ago had a parasitic disease usually only found in cats."

Rachel said the dolphin may have been the unlucky catcher of a fish which had fed around an outfall frequented by a cat carrying the disease. "The cat poo found its way into the waterway and was eaten by a fish feeding around an (sewage) outfall which was then eaten by the poor dolphin."

The Veterinary Lab at the DPI facility at Oonoonba is staffed with experts able to detect just about any disease or parasite and discover the reasons why an animal may have got sick or confused, causing its stranding.

"There are heaps of theories on why animals strand themselves," Rachel said. "It is important through the Marine Animal Hotline, that we get to the animals, dead or alive, as quickly as possible."

In the case of dead animals the DPI has the extended services of virologist Dr Nick Moody to isolate and identify viruses causing disease; Dr Annette Thomas, microbiologist for isolation and identification of bacteria, algae and fungi causing disease; Bill Doherty, entomologist and parasitologist for identification of parasites; senior histology technician, Liz Kulpa who prepares histological sections of tissue for pathologists to examine and Kim VanStelton, scientific assistant who assists the pathologists with post mortems. Add to this another eight support staff in the laboratory and it is not hard to see why the DPI knows how to get to the bottom of diseases, not only in

stranded animals, but in many commercial operations as well.

Rachel said the facility was used to analyse samples from meatworks as well as assisting the burgeoning aquaculture industry in the north in isolating disease problems such as the Noda Virus in barramundi.

This lab a few years ago did a post mortem on a baby humpback whale which had been hit by a Navy vessel.

"We discovered the baby humpback had a fractured mandible and was very emaciated when brought in. The Navy at the time thought the animal may have died from being struck by the ship, but we believe it had starved to death because of the broken mandible and was dead when the ship hit it," Rachel said.

Animals lucky enough to escape the post mortem room at the DPI, may find themselves at Reef HQ in Townsville where turtle expert and aquarist, Sarah Pierce is charged with nursing animals back to health. Sarah's expertise is with turtles and she is already boasting six successful rehabilitations so far this year.

The turtles are isolated in rehabilitation bins where they sit in fresh water for three days which re-

moves barnacles and kills parasites and worms.

"They then go into a deeper seawater holding bin where they are fed antibiotics which has proven successful to get the animals feeding again. The diet is high protein squid or greens like seagrass or algae or we stuff the squid with these."

Sarah said the most common problems for turtles was "floating syndrome" where the animals seemed to be suffering a kind of stress which made them float on a slant.

"When they get this syndrome they can't get under water to feed properly and when that happens it doesn't take long for them to get disoriented."

Sarah said the turtles were generally released in the area where they were found, but they needed to be extremely healthy before a return to the wild.

Her current "subject" is a green turtle she has nicknamed "Shemp" (after the missing stooge). Shemp came in about two months ago with "floating" syndrome.

"He could only go under water for 20-30 seconds at a time then; now he is back to normal diving and can go 20 to 30 minutes under water."

Shemp was released on Magnetic Island on Monday.

Many of the turtle, dugong and dolphin casualties in the Great Barrier Reef region can come from the animals getting stuck in nets where they eventually drown.

Dr Kirsten Dobbs, senior project officer for species conservation program at GBRMPA, doesn't mind getting into the thick of the action when the crew has to retrieve an animal, but her expertise is in the necropsy of the dugong.

"Every time we get an animal in here we can find out more about their biology and the diseases which affect the animals.

"There is so little known about the diseases in marine animals including some which affect humans.

"The Marine Animal Hotline has meant a remarkable increase in the awareness of people generally to the



plight of the animals which may be in distress.

"We are learning more and more with each animal which comes in, and samples are being used to assist universities both here in Townsville down to Brisbane."

One of the worst cases seen for many years, according to Kirsten, was an 8m Bryde's whale which stranded in Cairns this time last year.

Unfortunately the animal died, but when the autopsy was conducted, some 6 sq m of plastic was found inside the animal's stomach.

Dr Dobbs urged the public to use the Marine Animal Hotline by dialing and reporting any beached animals on 1300 360 898.



TOP: Kris, 9, and her father Ian Bell with Queensland Parks and Wildlife officer David Savage and the dead dugong found at Shelley Beach. Photo: LORI NEILSEN LN476048

LEFT: Senior QPQW conservation officer, Dr Mark Read with the display of plastics that were removed from the gut of a Bryde's whale, far left, that died near Cairns. Photo: NED KELLY NK385A14

BOTTOM LEFT: Conservation officer Neil Mattocks, and his son Eben, watch as "Flynn" the green turtle makes its way back to the sea

BELOW: A humpback female dolphin savaged by a shark, recuperating at Reef HQ



ABOVE: Craig Dunk, Dave Welch and Justin Smith prepare to release a flatback turtle into Cleveland Bay RIGHT: Stephen Johnson looks at a photo of a flatback turtle hatching. Photo: SCOTT RADFORD-CHISHOLM 5R064062



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