Ghostnets Australia[™]



In January 2009 Napranum rangers Peter Harper and Angela Christie prepared for another patrol of the 42km Pennefather Beach, west of Weipa. Working in monsoonal weather conditions, the rangers had already rescued a total of 63 turtles from ghost nets that month.

Most of the turtles were released back into the ocean straight away but unfortunately that day, two Olive Ridley turtles had to be put into the quad bike trailer and transported to the triage facility the rangers had

set up on the beach. One was in a particularly terrible condition; the

rangers named her Jewel. The other one they called Princess.
Jewel's right flipper had been worn down to the bone and her left flipper had two broken bones.
One of Princess' flippers was almost amputated.

Once at the triage station the turtles were cleaned and their wounds treated with antibiotic spray. Photos were taken and all measurements and observations noted. The turtles were then placed into a fresh water bath for 10 hours to kill all salt water bacteria.

Next the rangers placed the turtles in a clean salt water tank and tried to feed them with squid the rangers had caught. The turtles were checked to see how well they could swim and whether they could get to the bottom of the tank. (This test helps to determine the full nature of the turtle's injuries.)

The tanks were cleaned daily and the salt water was replaced. While the tanks were filling, rangers would clean the wounds on the turtles and treat them with antibiotic spray. When the spray had dried, the turtles were put back into clean tanks and the rangers would attempt to feed them again.

After a few days rangers could see that Jewel and Princess were not getting any better. If the turtles were going to survive, they would need professional help. The decision was made to send Jewel and Princess to the Cairns Turtle Rehabilitation Centre for further treatment.

After many months of intensive care both Jewel and Princess made full recoveries and were ready for release! They were flown back to Weipia and returned to the ocean at Pennefather Beach, each fitted with a short-term satellite tracking system to gauge the success of their recovery. These were the first turtles to pioneer this type of research. Princess swam over 1900km in 132 days, demonstrating just how successful her treatment had been, while Jewel swam a more sedate 1790km in 138 days.

GhostNets Australia continued to track Jewel and Princess around our northern oceans for a year, until the trackers fell off the turtles as planned. (The trackers were attached to the turtle's shells with a special glue, designed to wear away slowly.)

Let's hope these two special turtles can avoid entangling ghost nets for the next 50 years!



For coastal Australian indigenous communities, turtles and dugongs are a traditional source of food and an integral

Caring for country

part of their

and culture.

belief systems

Australia's Indigenous people have a special relationship to land and sea that incorporates both a cultural and spiritual tie. These relationships are fundamental to the social and economic wellbeing of indigenous communities. Indigenous people believe it is their responsibility to caretake the land for future generations. This concept is often called 'caring for country'.



Removing nets is important

The removal of ghost nets is important as it prevents them from returning to the ocean and continuing their destructive cycle. It is not easy work. Many of the nets are found buried in sand, are very heavy and are in remote and inaccessible locations. Some nets are so large they do not get washed ashore but scrape the bottom of the ocean kilometres off the coast. These nets require huge assets such as navy vessels to remove them, which is a very costly and time consuming activity.

Indigenous rangers

Rangers in Northern Australia are responsible for the day-to-day management of their country, including reducing threats from feral pigs and weeds, maintaining sacred sites, fire management and monitoring endangered and threatened species such as turtles.

Ghost Nets Australia (GNA) has provided training and resources to 32 ranger groups. They have supplied vehicles that were able to tow nets out of the sand, winches, measuring equipment and tools for digital data collection. Rangers collect data, clean up nets and rescue entangled wildlife.



For discussion:

- 1. If we know that Peter and Angela rescued 63 turtles in January 2009, is it possible to predict how many turtles they might rescue in a year? What would be your prediction? What things might influence the number of turtles trapped in ghost nets each month?
- 2. What is a triage station? What does the word triage mean and what other words might it be related to? Can you think of other places that might have or need a triage station?
- 3. Once Jewel and Princess were released, how many kilometres a day did each one swim? Would the difference in their distances be significant enough to say one turtle is doing better than the other? What might have contributed to the differences in the distances?
- **4**. Why do you think GNA used a short-term tracking device on Princess and Jewel?

Further activities:

- Make a chart diagramming the process used at the turtle triage station. Indicate the reason for each different stage.
- Research why it is important for a turtle to be able to go to the bottom of the water tank.

Websites to check out:

www.ghostnets.com.au/ranger-activites www.capeyorknrm.com.au/