



THE INDO-PACIFIC SEA TURTLE CONSERVATION GROUP

March 2007 Newsletter

Local turtle nesting



IPSTCG volunteers measure a flatback turtle after she nested at AIMS beach this summer

Photo: Bryan Windmiller

IPSTCG monitoring at AIMS beach

During our two week intensive survey we recorded successful nesting by one green turtle and one flatback. Another flatback twice attempted to lay but was hampered by a missing hind flipper and did not succeed. We tried to help her but she wasn't anywhere near firm sand so our digging was as unsuccessful as hers.

There were probably an additional three turtles during the 2-week period, which we missed as they came up either during the afternoon or very late in the night after we had left the beach. A week later, Reef HQ volunteers were lucky enough to see the previously recorded flatback on her return for another nesting, bringing the total number of marked nests to three.

Temperature data loggers were buried in the beach sand once again and after the new data is downloaded it will be interesting to compare temperatures this season with previous seasons. Last summer the nests all reached lethal temperatures and no turtles hatched. Interestingly this year the green turtle nested underneath a tree where her nest was well shaded and the flatback dug two very deep nests which may have afforded the eggs greater protection from the heat.

We checked hatching success in late February and found one flatback nest had been attacked by predators, probably feral dogs. The other flatback nest had a good success rate (46 eggs successfully hatched from a clutch of 55) as did the green turtle nest with 120 hatched from a clutch of 132).

Sara Bell

Family enthralled by a nesting flatback turtle

For some days, I had excitedly looked forward to the day that I had arranged to come out with my family and help Sara Bell and her crew of volunteers search for nesting sea turtles at AIMS beach. A professional herpetologist, I have watched a fair number of freshwater turtles nesting in my native Massachusetts, USA, but I'd only seen sea turtles well, at sea. I knew, from talking with Sara, that the odds of actually seeing one nest on any given night were low, but how could you go wrong walking around a deserted tropical beach at night?

My wife Alison, a wildlife veterinarian, and I had some trouble coaxing our kids into the car; Alex (11) and Susannah (7) have grown a bit bored of Dad's enforced natural history tours. But when we arrived at the beach with Sara and the other volunteers, we were all immediately entranced by the beauty of the spot, besides, we soon spotted a dead juvenile green turtle and found a nautilus shell.

After walking the length of the beach and resting, and listening to Sara's great stories about sea turtle encounters, we started back with two of the group jogging ahead. Soon, we learned that Sara and the others had found a fresh turtle track. It looked quite like the trail left by a miniature bulldozer. Sara quietly led us in groups of 2 or 3 to see the turtle nesting in the dunes, a flatback! A species found only in tropical Australia. After she began laying, we all approached and waited.

When she was done, I got to help lift her away from the nest hole so Sara could count the eggs. It

was a great privilege, though I felt like I might need a chiropractor's assistance afterwards, good thing it wasn't a much larger green turtle female.

We all watched as Sara excavated 35 eggs (a fairly small clutch for a large female flatback) and then carefully replaced and covered the eggs. We were all enthralled and looking at my photos later of all of us reaching out and touching the turtle, it looked rather like a passionate religious rite.

We followed the female as she laboriously headed back to sea and disappeared into the surf. Our once bored kids were wide-eyed asking when we could go out and do this again. I'll see if I can harness a bit of that enthusiasm to get them out into the mozzie-ridden corn field where I do some freshwater turtle nest monitoring back home!

Bryan Windmiller

Managing nesting attempts on the Strand

During most summers a few turtles attempt to lay their eggs along the Strand at Townsville, despite this popular recreation area being far from ideal as a turtle nesting site.

Turtles seeking to nest here have sometimes been harassed by humans or by dogs. Even if a turtle manages to lay her eggs without interference, the chances of success are low due to the Strand's unsuitable beach conditions. Any hatchlings that eventually emerge are also likely to become disorientated by surrounding bright lights, and therefore they may unwittingly wander onto the road and be crushed by cars.

Nesting attempts attract the interest of passing locals and visitors alike, including people who may be enthusiastic about turtles but unaware of best practice guidelines for watching them – for example, people often want to approach too close to the turtle. (See www.gbrmpa.gov.au for best practice guidelines.)

In some instances discord has arisen when well-intentioned passers by have misinterpreted the role of conservation volunteers who were attempting to protect a laying turtle.

Turtle conservation experts at QPWS have developed strategies to alleviate these difficulties. If a nesting attempt is reported promptly, a QPWS officer will attend to evaluate the situation and determine whether relocating the clutch of eggs to a more favourable site is justified and feasible.

In the long term, successful relocations would be expected to enhance hatching success and increase the number of turtle hatchlings safely reaching the sea.

Julia Hazel

Indigenous management of marine turtles



The North Australian Indigenous Land and Sea Management Alliance (NAILSMA) works with Indigenous communities on the management of marine turtles in northern Australia through the Dugong and Marine Turtle Project (DMTP). The DMTP was initiated in response to Indigenous concerns about marine turtles and dugongs and an increasing recognition by the Australian government of the need to engage and empower Indigenous people in marine turtle and dugong management.



Boys in the Gulf of Carpentaria learning to record information on marine turtles
Photo: Dhimurru Land Management Aboriginal Corporation

Central to the project are Regional Activity Plans (RAPs) which were developed by NAILSMA and Project partners (Kimberley Land Council, Northern Land Council, Carpentaria Land Council Aboriginal Corporation, Balkanu Cape York Development Corporation and the Torres Strait Regional Authority), at the direction of participating communities and Traditional Owners.

The RAPS identify community concerns and aspirations for marine turtle management in their regions, as well as a range of project activities including habitat mapping and monitoring, recording Traditional Knowledge and customary law, developing research partnerships, managing tourists and their impacts, catch monitoring and management, ranger exchanges and professional training, school and community education and turtle tagging and beach surveys. NAILSMA project activities and outcomes will contribute to the development of community based management plans for marine turtle and dugong management.

For more information on the DMTP and its network please visit the NAILSMA website

(www.nailsma.org.au) or contact Rod Kennett, DMTP Coordinator for NAILSMA, rod.kennett@cdu.edu.au. A handbook on Dugong and Marine Turtle Knowledge is available to download from the website. Funding for the DMTP is provided by the Australian Government's Natural Heritage Trust.

Lorae McArthur, NAILSMA

New IPSTCG website under development – thanks to a very generous benefactor

IPSTCG recently received a fantastic boost to its funds, thanks to a magnificent donation of ten thousand dollars from an extremely generous benefactor, who prefers to remain anonymous.

The long-planned new web site for the group is currently being built by professional developers, and the new funding will allow IPSTCG to employ a person to maintain the website and prepare additional material for it.

By all reports the web site is already looking very good. As soon as it goes live, members will be notified directly.

Julia Hazel

Where do hatchlings go? Radio-tracking flatback hatchlings from Peak Island.

As reported in the November 2006 Newsletter, IPSTCG member Dr Andrea Phillott had plans to follow flatback turtle hatchlings from Peak Island in Keppel Bay, Central Queensland, to determine dispersal patterns from the beach and swimming behaviour.

Assisted by Tim Harvey (previous president of IPSTCG), Dan Ferguson (EPA) and Dr. John Parmenter (CQU), Andrea was able to track 25 hatchlings from the moment they left the beach for up to 3 hours.



Flatback turtle hatchling *Natator depressus*
Photo: Eridani Mulder

All hatchlings had a radio-transmitter inside a fishing float attached by a 1.5m line to the rear of their carapace. This allowed the hatchlings to be followed visually, with the radio-transmitter as a safety measure in case the hatchlings were lost.

The design, which has taken a year to obtain the correct permits and animal ethics approval, was extremely successful and hatchlings were easily followed.

Unfortunately the study was hindered by weather that included 20 knot winds and 3 foot swell. As Andrea and Tim were in sea kayaks accompanied by John and Dan in a support vessel, this made research conditions a little uncomfortable.

Some hatchlings were followed for 2-3 hours but most for only 20-30 minutes as the seas were too rough for safe paddling. The hatchling position and swimming direction were recorded every 10 minutes.



Dr. Andrea Phillott and Tim Harvey following hatchlings as they swim away from the natal beach.

Photo: Eridani Mulder

Preliminary analysis of the data indicates that local currents may play a large role in hatchling dispersal from the beach.

Andrea will continue the study next year, hopefully on a flat sea with less than 5 knots of wind.

Andrea Phillott

Writer/editor position

IPSTCG needs someone to take over from Julia Hazel, our newsletter editor for the past four years.

It's an opportunity to put your writing and editing skills to good use, enhance your resume material and develop your contacts with many interesting people working to protect our environment.

The role involves gathering verbal and written information from the IPSTCG committee and from local community sources, writing and editing short articles, and producing a 4-page newsletter for distribution approximately quarterly. You can see back issues of the newsletter at www.aims.gov.au/ipstcg/ipstcg-03.html.

For more information please feel free to speak to Julia directly (0407 431 382) or email the committee at IPSTCG@beyond.net.au

a place was a privilege and quite unique. To sit on the beach at night watching turtles come up all over the place was mind blowing.

Assisting with QPWS monitoring of foraging populations, especially around Bowen, was also remarkable. That Australia still has some of the biggest populations of sea turtles in the world is something that we should fight like hell to protect.

The talks we gave to so many audiences were always a joy. The chance to influence just one person in an audience was always something I felt was vital.

The beach and creek clean ups we did in Townsville were also high points. That IPSTCG was influential in helping Townsville win the Clean Beach award was always a big plus for me.

The reintroduction of a turtle rehab centre at Reef HQ was a great thing to happen. I like to think that the relationship IPSTCG had with Reef HQ and the enthusiasm we generated helped to get this initiative back on the scene.

Finally I would have to say that all the people I have worked with as volunteers and committee members have been delightful. Keen, hard working fanatics - the best sort of people. The group could not exist without the team putting in so many unpaid hours and I would just like to say a huge 'Thank You' to all.

Tim Harvey

Past president reviews IPSTCG highlights

With new directions for the group being discussed (see January newsletter) it's timely to consider IPSTCG's achievements to date.

Here Tim Harvey, immediate past-president of IPSTCG, recalls highlights of the past five years.

I would have to say that there have been so many great moments that I can't pick out any single one.

IPSTCG's work with school kids has been great and the Plastic Bag Challenge run by Willows School was a high point. Four kilometres of plastic bags tied together made an amazing sight.

The calendar that IPSTCG put out a couple of years ago was just excellent, very hard work but the result was well worth it.

Turtle nesting surveys in the Coral Sea will always stay in my memory. To be allowed to work in such



Monitoring foraging turtles in Edgumbe Bay near Bowen, Ian Bell (L) and Tim Harvey (R) secure a green turtle for tagging and measurement.

Photo: Julia Hazel