



DARWIN ANEGADA



The Newsletter of the Darwin Initiative Assessment of the Coastal Biodiversity of Anegada, BVI.

<http://www.seaturtle.org/mtrg/projects/anegada/>

Issue 4, 2005



Fisherman We Need Your Help!

As many of you may be aware, we have been attaching depth recording devices and sonic locators (see photo opposite) to some of the hawksbill turtles living on the south side of Anegada over the summer.

Each unit has been attached to the right side of the shell around the middle to back sections (see photo opposite). These units effectively record and store the depth and duration of individual dives of the turtle and the sonic pingers allow us to relocate the animal. We have successfully recovered 11 of these devices so far but there are still 9 turtles that we are having trouble re-locating as we think the sonic locators are not working as well as they should and turtles are ranging over a wide area.

We would greatly appreciate your help in trying to relocate these turtles and recover the depth recording units. If you happen to see a turtle with one of the devices attached to it when you are at sea could you please attempt to catch the turtle and make a note of your location and then contact either Jim White or Damon Wheatley who will come and remove the unit. Even the location of a sighting would be a great help. We really do need your help and greatly appreciate your efforts in advance.

This issue is sponsored by:



Photo: Close up of the sonic locator and depth recording unit.



Photo: Hawksbill turtle with depth recording unit attached.

BVI team attend International Sea Turtle Symposium

In January 2005, Darwin Initiative Project Officer Andy McGowan, Arlington "Zeke" Pickering (BVI Conservation and Fisheries) and Jim White (Anegada Turtle Researcher) attended the International Symposium on the Conservation and Biology of Sea Turtles, held in Savannah, Georgia, USA. In addition, UK project partners Brendan Godley and Annette Broderick (Marine Turtle Research Group, University of Exeter in Cornwall), and USA partner Michael Coyne (SEATURTLE.ORG) attended the conference.

This provided a great opportunity to present a poster on the ongoing research on Anegada (see photo opposite), highlighting its regional importance for foraging green and hawksbill turtles. Attending this conference also enabled the team to meet and discuss issues with colleagues from around the world, in particular from other UK Overseas Territories, including Bermuda, Cayman Islands and Montserrat.

In addition to attending the main conference Jim and Zeke also represented BVI at the annual WIDECAST (Wider Caribbean Sea Turtle Network) meeting, discussing issues with colleagues from the region.

Support and funding to enable Andy, Jim and Zeke to attend the symposium was from a matrix of sources including the Darwin Initiative, the International Sea Turtle Society, WIDECAST and the BVI Government.

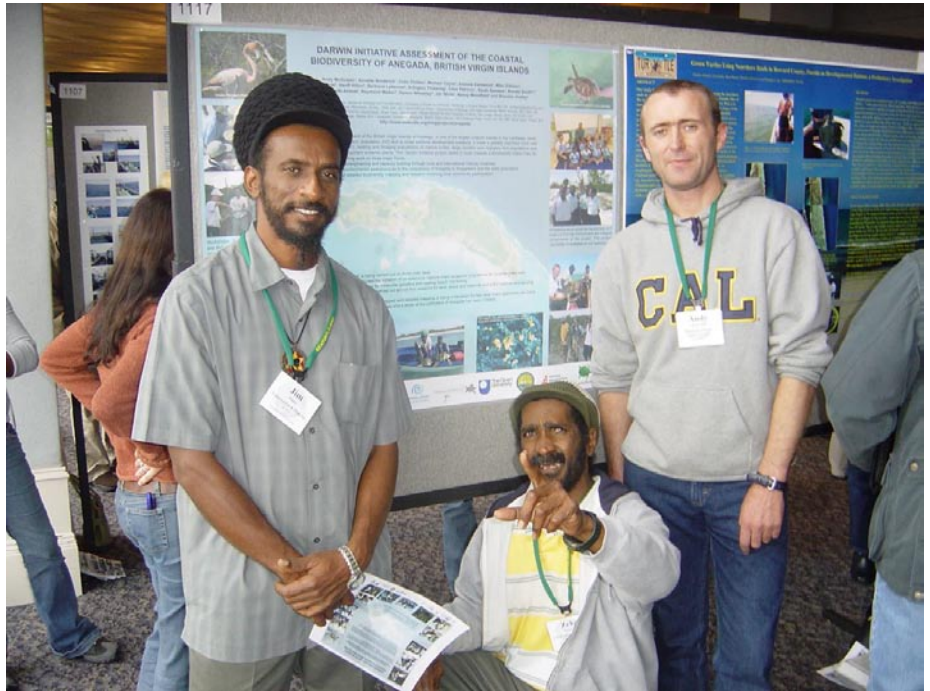


Photo: Andy McGowan, Arlington "Zeke" Pickering and Jim White presented a poster on the Darwin Initiative project in Anegada.

Project Partners attend Bird Conference

Darwin Initiative Project Officer Andy McGowan and Esther Georges from BVI National Parks Trust represented the BVI at the 15th Regional Meeting of the Society for the Conservation and Study of Caribbean Birds in Guadeloupe (1-5th August, 2005).

The week long meeting saw many presentations given on the exciting bird life of the Caribbean and the work being done to protect the many threatened species that live in the region. Andy gave a presentation on the opening morning of the conference on the status of the birds of Anegada, highlighting the resident bird species as well as those that breed on the island. He went on to describe in detail the systematic monitoring protocols that

have been undertaken in order to thoroughly gain some idea of the numbers of each bird species living on Anegada, highlighting the importance of the eastern saltponds and Anegada as a whole. Andy also illustrated the regional and global significance of some of the BVI seabird colonies, in particular those of the Magnificent

frigatebird (*Fregata magnificens*) and Roseate Tern (*Sterna dougallii*) in addition to the two species that breed on Anegada (Laughing gull, *Larus atricilla* and Least tern, *Sterna antillarum*) and emphasised the need for more systematic monitoring of these colonies.

Esther gave an excellent talk on how the bird work of the Darwin project was assisting BVI National Parks Trust in identifying Important Bird Areas (IBA's) throughout the Territory. The IBA's scheme is part of the directive of Birdlife International in trying to gain some understanding of the areas that are important for birds in each country and trying to establish some form of protection for these areas. As well as the many presentations on offer there were also many workshops available ranging from species specific working groups to how birds and art can promote conservation. The meeting was attended by over a hundred people, the vast majority from the Caribbean Islands in addition to bird conservationists and researchers from many parts of the world.

Support for attendance at the meeting was provided by the Darwin Initiative, Government of the British Virgin Islands and the Royal Society for the Protection of Birds.



Photo: Raising awareness with local school children.

SEA TURTLE UPDATE

We thought it was about time that we fully updated you all on the sea turtle work that we have been carrying out. There really has been a massive effort from everyone involved and we would like to say a very big thank you to everyone who has helped us to catch turtles, provided refreshment when it was needed most and generally welcomed us to Anegada and made our visits to the island most enjoyable! Your efforts in making this aspect of our project such a success are greatly appreciated.

Nesting

As in 2004, in 2005 we carried out a detailed survey of the entire coastline of Anegada from Neptune's Treasure to the East End, to record the nesting activity of both hawksbill and green sea turtles. This year there have been many more turtles nesting, with 71 different nesting activities recorded by the end of August compared with just 44 in 2004. Of the 71 activities (many emergences do not result in egg laying and are only crawls or digging attempts), recorded in 2005, 22 were nests of the green turtle, 15 of the hawksbill turtle and just one leatherback turtle nest was recorded. In 2004, just 7 green and 6 hawksbill turtle nests were recorded in total. However, logistics meant that no monitoring was possible in August last year which may account for a portion of the observed differences. Nevertheless, this still makes Anegada the most important island for nesting green and hawksbill turtles in the BVI archipelago.

In water captures

The inshore turtle capture aspect of the project has been a great success and a lot of the credit for this is due to Jim White and Damon Wheatley, whose turtling skills have been invaluable and company on the water excellent. We have managed to catch, tag, sample and measure a total of 123 green and 230 hawksbill turtles giving an impressive total of 353 individual turtles to date. In both turtle species the vast majority of the animals we are catching are less than 50cm long as can be seen from the graph opposite, although the green

turtles that we are catching tend to be slightly larger than the hawksbill turtles. This does not mean that there are not larger turtles out there. Most of our sampling is restricted to within the reef system where most of the turtles are small and the water very shallow. We suspect that the larger hawksbills are living on the edge of the horseshoe reef with quick access to much deeper water and are rarely venturing into the shallow water around the southern portion of the island.

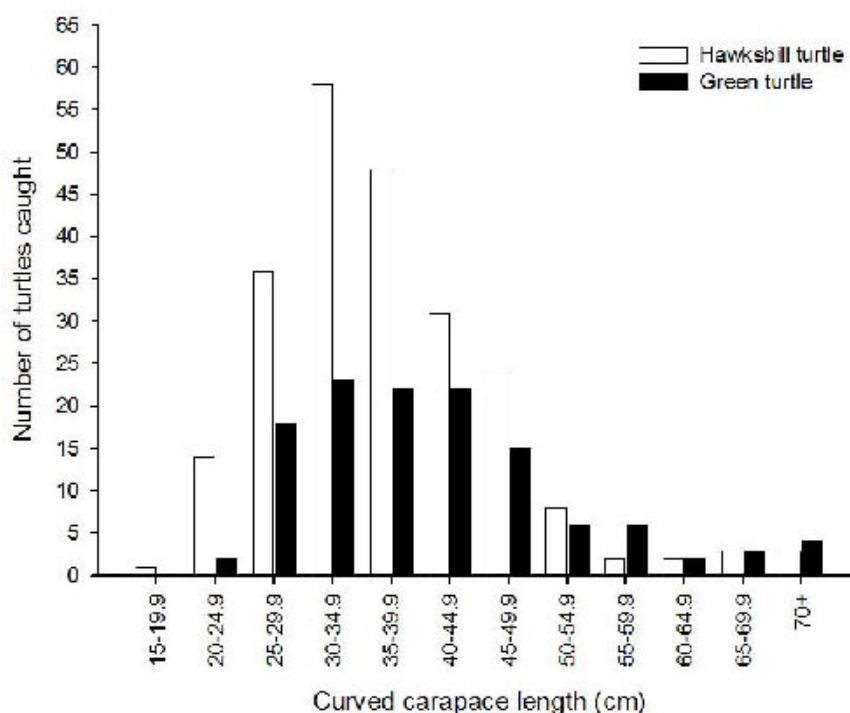
In addition to the 353 turtles we have caught ourselves, we have also managed to obtain samples from a further 12 turtles; 10 green and 2 hawksbill, thanks to the fisherman who kindly let us sample these turtles. Initial results from the genetic work have revealed that the hawksbill turtles in the waters around Anegada have links with nesting populations from Anguilla, Antigua, Barbados, Brazil, Cuba, Montserrat, Puerto Rico, and the Turks and Caicos Islands. Green turtles have links with nesting populations from as far away as Ascension Island, as well as closer to home with rookeries in Costa Rica, Mexico, USA and Venezuela.

In water recaptures

Over the past 2 years we have also managed to recapture 91 (65 hawksbill and 26 green turtles) of the 353 turtles that we had tagged on a previous occasion and this is giving us a unique insight into the speed at which these animals are growing. Initial results suggest that Anegada may be the home of some of the quickest growing hawksbill turtles ever recorded! A result no doubt in their excellent choice of habitat

Over time this recapture data will help us to estimate the length of time that these turtles stay at Anegada. Perhaps they are only passing through, or only come to forage there for certain months of the year.

Our work so far has revealed that Anegada is a significant foraging site for both the endangered green turtle and the critically endangered hawksbill turtle. Although the Darwin Initiative project is due to end in March 2006 we are trying to raise funds that will enable us to continue to monitor this important population in the future.



Graph: The number of hawksbill and green sea turtles that have been caught and tagged in each of the different size classes.

Using GIS for Conservation & Research

The BVI National Parks Trust and the Conservation and Fisheries Department have been using Geographical Information Systems (GIS) to conserve and manage the BVI's environment since the late 1990s. With the vast sources of information available today, GIS is a key tool in determining what it all means by analysing data and presenting it in map format.

This GIS technology has been used throughout the Anegada Darwin Initiative project to monitor the turtles, birds and vegetation. The project has several GIS mapping goals: (1) to create a vegetation map of Anegada that will also show the distribution of threatened and endemic species; (2) to map bird count locations for recurrent monitoring, and (3) to map the foraging location of turtles in the water and their nesting sites on land. These maps will create an overall

picture of where the critical terrestrial and marine locations are and can then be used for conservation planning.

The project team has collected the data required for the production of maps for the last two years and the 600 ground-truthed points will ensure the accuracy of vegetation maps that have been generated by the National Parks Trust and the Royal Botanic Gardens Kew. The vegetation mapping exercise combined with aerial photography acquired from the BVI Survey Department assists in the interpretation of the Anegada landscape. The many days spent in Anegada's thickets, scrub and woodlands have been well spent and we hope that the final map will be a useful reference for conservationists and environmental educators for many years to come.

Nancy Woodfield, BVI National Parks Trust



Photo: Nancy Woodfield (BVINPT) and Susanna Henighan (freelance journalist) record and map some of the threatened plants on Anegada.

ACKNOWLEDGEMENTS:

We thank: Ms Lucia Frances and the people of Anegada for their continued support for the project; Ms Diane Levante of Ocean Range Hotel; the businesses of Anegada and the UK Overseas Territories Conservation Forum for their support in disseminating this newsletter; the UK's Marine Conservation Society for providing turtle educational materials for children; Jim Stoll and Lifeworks, Joan Miles and George Brown for their generous support.

Can You Help?

As part of the project, local Anegadians are employed and assist in monitoring and research. Already the willingness to be involved has outstripped available resources and we are appealing for more support. There is unlimited work to be done and your help is most appreciated.

For more information or to become a supporter of the project please visit our web site or see contact details below. All donations will be acknowledged on our web site and in future issues of the newsletter. Through our partnership with US Based 501c(3) registered non-profit conservation organisation SEATURTLE.ORG we are able to accept donations online. 100% of all monies donated will be spent directly on the biodiversity of Anegada.

Contact details:

In the UK:

Dr Andy McGowan
Darwin Research Fellow
Marine Turtle Research Group
Centre for Ecology & Conservation
University of Exeter
Tremough Campus,
Penryn, TR10 9EZ, UK
Email: anegada@seaturtle.org

In the BVI:

BVI Conservation and
Fisheries Department,
PO Box 3323
Roadtown, Tortola, BVI
Tel: (284) 494 5681

BVI National Parks Trust
PO Box 860
Roadtown, Tortola, BVI
Tel: (284) 494 3904

PDF of this newsletter available at:

<http://www.seaturtle.org/mtrg/projects/anegada/>