

Sea Turtle Conservation in Grenada

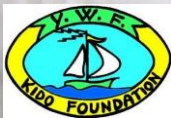
Report prepared for
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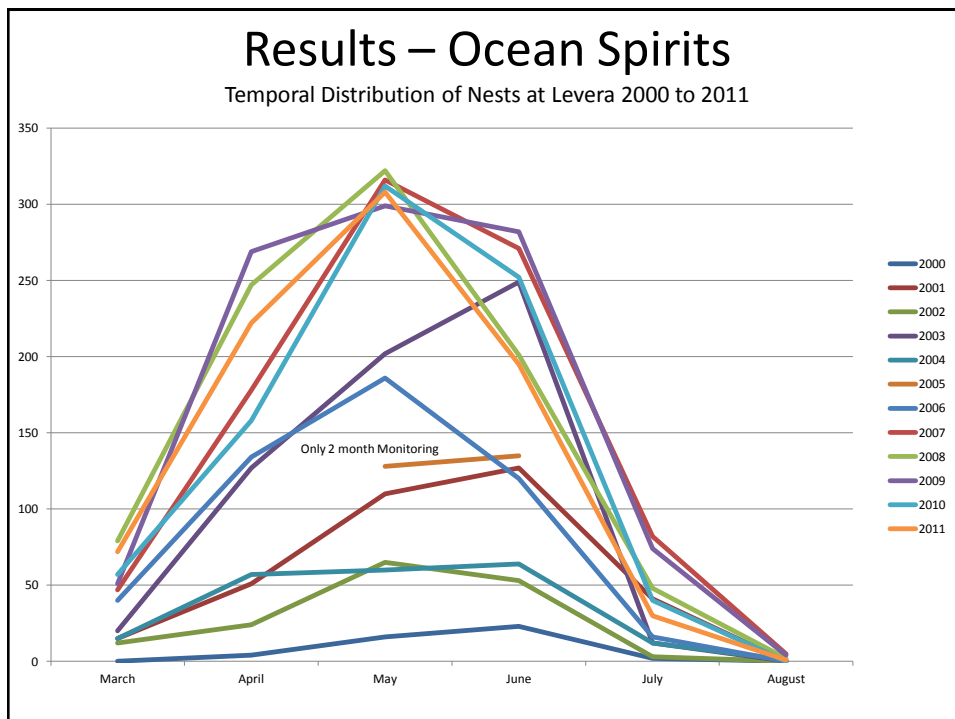
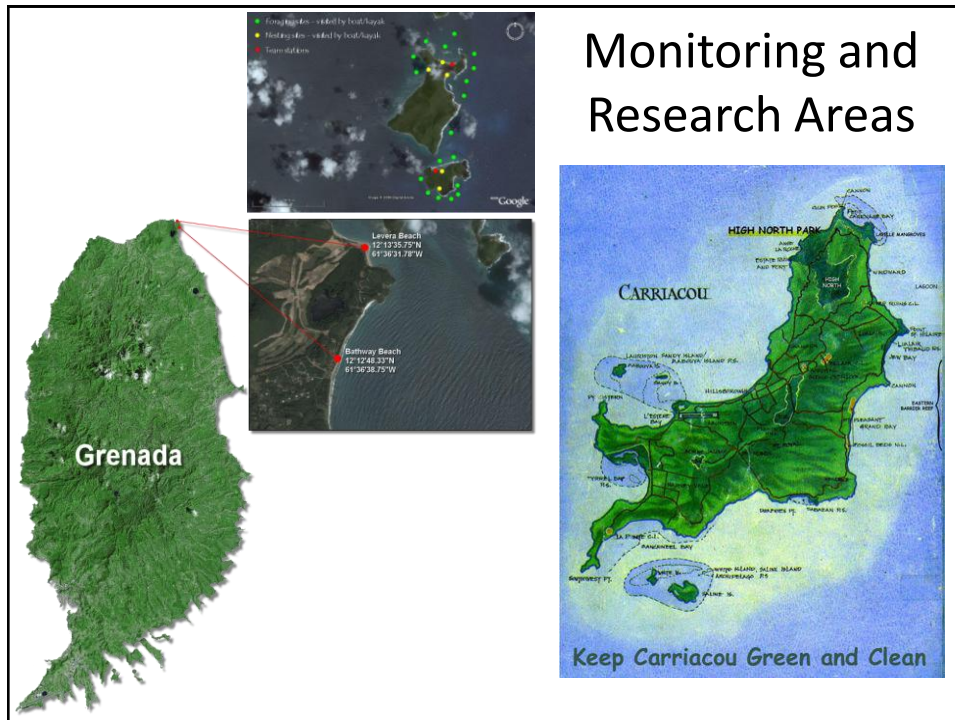
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Research & Monitoring

Research and monitoring efforts are carried out by two organizations:

- **Ocean Spirits, Inc.**, operating on beaches in the North of Grenada – Levera, Bathway and offshore islands
- **YWF-Kido Foundation Inc.**, which operates on beaches on the smaller sister island of Carriacou – Petit Carenage, Anse La Roche & Sparrow Bay

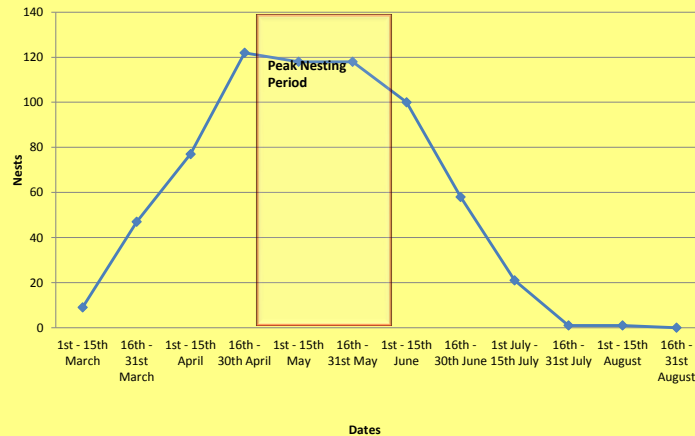




Results – Ocean Spirits

- Total nests for the 2011 season: 672 nests

Figure 5: Nests laid at Levera over the 2011 Season



Results – Ocean Spirits Cont'd

Leatherback Monitoring

Saturation tagging
7pm to 6am

Nests

2000	45
2001	344
2002	156
2003	605
2004	209
2005	235
2006	491
2007	864
2008	802
2009	867
2010	646
2011	672

2011 Results

Nests	672
Possible Nests	156
Attempted Nests	92
False Crawls	86
Unknown	4

Total 1010

135 Nest relocated for:

- Clay sedimentation
- Exposure of old nests
- Water inundation/proximity
- Root inundation

Hawksbill In-water

Off-shore Islands
In-water and beach
teams

50+ nesting females
tagged

150+ turtles
caught/tagged
(adult/juvenile) in-
water

Unique Grenada
specific haplotypes
identified in hawksbill
population

Kido Foundation - Nesting Sea Turtle Activities



	Leatherback	Hawksbill	Total
2009	126	111	237
2010	70	216	186
2011	40	233	273

Results – Kido Foundation Cont'd

- Nests – 146 (Leatherback 28 – Hawksbill 118)
- Possible Nests – 37 (Hawksbills)
- Total Attempted Nest – 53 (Leatherback 10 – Hawksbill 43)
- False Crawl – 37 (Leatherback 2 – Hawksbill 35)

37 nests were relocated, for the following reasons: risk of water inundation, root inundation, being too close to the sea, shallow depth, risk of poaching and sand mining

In addition, through the Rescue and Release programme, 23 animals were released in 2011, as follows: 19 hawksbills, 3 greens and 1 Olive Ridley. Altogether, 311 turtles have been released since this programme began.

Education and Public Awareness

- Both organizations continue to carry out extensive education and public awareness building activities. In 2011 these included:
 - School and community presentations
 - Media discussions
 - Guide Training
 - Summer activities
 - Beach clean up campaigns
- Ocean Spirits was instrumental in setting up Grenada's first Sea Turtle Education Center within the Levera National park Office, opened in September.



In photos



Photos continued.....



Threats

The major threats faced by sea turtles in Grenada include

- *Deliberate fishing for consumption (open season)
- Illegal harvest
- Egg poaching
- Sand mining
- Coastal Development
- Incidental catch
- Unregulated Tourism (Turtle Watch and Beach festivities)

NB – * There is a growing trend whereby local fishermen are drying turtle meat to sell to locals living abroad, esp. in the UK and North America, which fetches a higher price. Due to this practice, fishermen are now reluctant to sell the live animals for release.

Photo: Petit Carenage sand mining

Deliberate fishing for consumption in Carriacou



Rescue & Release in Carriacou



Illegal harvesting in Grenada



Legislation

The Law in Grenada

No person shall fish for, take, sell, purchase, have in his possession or disturb the nest of any sea turtle of any size at any time.

No person shall fish for, take, sell, purchase or have in his possession any leatherback sea turtle of any size at any time.

No person shall fish for, take, sell, purchase, have in his possession or disturb any species of sea turtle during the designated closed season (1st May – 31st August).

No person shall fish for, take, sell, purchase, have in his possession or disturb any sea turtle under 25lbs at any time.

Anyone found violating this regulation will be prosecuted.

Tourism and Turtle Watching

As public awareness relating to sea turtle conservation and broader environmental issues has developed in Grenada, so too has the interest and appeal of turtle watching. With the exception of the disruption caused by hurricane Ivan in 2005, turtle watching as a tourist and local activity has continued to grow in popularity. Although this interest plays a key role in developing alternative livelihoods in local communities, there exists significant risk that without the appropriate enforceable structure, turtle watching may begin to adversely impact the nesting turtles. Presently, guidelines and recommendations concerning beach capacity, the provision of local guides and behaviour around a nesting turtle are voluntarily adhered to by turtle watching tour operators.

However, there is a growing number of visitors to the beach who visit Levera outside of these tours and thereby are free to choose whether to abide by these same 'Best practices' guidelines. If turtle watching is to develop as both a reliable alternative livelihood for local communities and as a national product within the country's tourism portfolio, steps will need to be taken to better protect the beach during the nesting season and exercise some parameters in relation to the carrying capacity of the beach in terms of human traffic.



Conclusions

Carriacou results: significant decrease of leatherback & increase of hawksbill nesting activities since 2009

Current monitoring work acts as an effective tool for deterring wide-spread poaching at Levera. The same was true for the offshore islands. However, the conservation model of deploying teams to remote (relatively) off-shore islands is both expensive & unsustainable. However, critical nesting populations are unlikely to sustain the current exploitation at nesting sites previously included in the monitoring programme. Solution?

The Leatherback is a 'protected' species in Grenada. The hard-shelled species, in particular the Hawksbill, is still a commercially exploited species and receives limited protection. In light of steps taken throughout the region to protect this species, the apparent rarity of a Grenada specific nesting and foraging haplotype and the unimpeded exploitation of nesting females, what steps can be taken to safeguard the species' continued presence in Grenada?

'Open' and 'Closed' seasons appear limited in their ability to control illegal harvesting of nesting turtles on offshore islands. What effective options exist other than deploying patrol teams over nesting season?