

March 2016



▶ Newsletter 1/2016

# STENAPA

## Turtle papers published with data collected from St Eustatius.

### Inside this Publication...

2015 highlights	1
Marine Park news	2
Botanical Garden	3
Quill/Boven National Park	4
Education and outreach	5

### Don't forget...

**Guided Hikes:** Call to arrange!

**Botanical Garden:** Check out the view from the Lookout Garden. Open from sunrise to sunset. Great for picnics and BBQs!

### Find us on Facebook:

Keep up to date with all the latest happenings - Like our 'Stenapa St. Eustatius' and 'Stenapa Youth Nature' pages!

### Volunteer At STENAPA

We are always on the lookout for new volunteers and interns, especially with our turtle season just around the corner. If you would like to help out at the parks please contact us or if you know anyone who would like to volunteer or complete an internship here please pass on the contact details to them.

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Over the last year St Eustatius National Parks has contributed to three published papers concerning sea turtles.

A study called 'Green and hawksbill turtles in the lesser Antilles demonstrate behavioural plasticity in inter-nesting behaviour and post-nesting migration' by Esteban et al was published in 'Marine Biology'.

This study used satellite tracking information on three green turtles and two hawksbill turtles to gather information about inter-nesting, migratory and foraging habits in the region. Although the sample size was very small the data was interesting as it showed both migratory behaviour and year-round residents within the group.



The team also used tagging data to look at nest-site fidelity and the results were similar showing some turtles return to the same beaches over and over again and others move from one site to others.

Another study published this year in the Journal of Experimental Marine Biology and Ecology' looked at the sand temperatures for nesting sea turtles in the Caribbean and the implications of this in relation to global climate change.

Like many other reptilian species, the temperature of the eggs in the nest is what determines the sex of the hatchlings. The higher the temperature of the nest the more likely the hatchlings will be females. With climate change and temperatures potentially on the rise this can affect the populations of already critically endangered species by skewing the male/female ratios.

Sand temperatures were taken and historical weather data dating back 200 years was looked at to determine the percentage of males and females produced from Statian beaches since the mid 19th century.

The paper concludes that strategies should be put in place for the future to prevent localized extinction of these species. Measures that can be used would be things like shading nests or relocating them to deeper depths to ensure the temperature of the nest can be controlled.

A third study looked into the international movements of female leatherback turtles using tag recovery data.

3151 Leatherbacks were tagged throughout the Caribbean with WC-series tags supplied by Wider Caribbean Sea Turtle Network (WIDECAST). When a leatherback is seen on a monitored beach data is collected including tag numbers if it already has a tag.

This data is then shared throughout the region and the results were used for this paper.

The Study found that although many of the leatherbacks returned to beaches within the same country they did not always return to the exact same beach and in areas such as Statia where there are other viable nesting beaches on other islands not in the same political jurisdiction they will often travel between different countries.



These studies are showing that the old adage that sea turtles always return to the exact same beach from which they emerged as a hatchling is not always true and this has important implications for protection legislation for the future.

# Marine Park News

## More sharks tagged in January

During January, park staff were happy to welcome Dr Erwin Winter and his research assistant Melanie Meijer zu Slochteren to Statia once more in an attempt to tag more sharks in our waters.

A total of 4 sharks were tagged during 2 days of fishing bringing the total for Statia to 6 individuals now.



This project is important to learn more about the movements of sharks around the island. If we know where they are, we can better protect them and their habitat.

## Lionfish fry - Another good turnout.

Easter has always been a great time to be on St Eustatius. The bay comes alive with stalls, bands and people spending time with family and friends and enjoying the long weekend.

So, back by popular demand on Good Friday this year was the lionfish fry. We had an excellent turnout once again. There were cleaning and dissection demos, presentations and of course lots of fish to sample.

It's a tasty fish that has a mild flavour, not dissimilar to grouper and is suited to a lot of different recipes. They are invasive and a threat to other fish populations and so by eating them, not only are you enjoying a tasty meal, you are helping with environmental protection!

## 2016 sea turtle symposium

Jessica Berkel went to Lima, Peru in March for the 2016 world sea turtle symposium.

This event is held every year in a different location and is a great chance to take part in training, network with other turtle conservationists and keep up with the latest technologies, studies and best practice from other protection organizations.



Jessica usually participates as a volunteer. This means long days arriving before any other delegates and leaving late in the evening after preparing for the following day. Luckily, this year she got funding from WWF to attend without having to volunteer, meaning she was able to get to her bed before midnight most nights!

## Shark week 2016 - I think we're gonna need a bigger week!

National Park staff are now gearing up for shark week 2016. The week will happen this year in June.

STENAPA have a wide variety of interesting events and exhibitions planned for the week as well as fun competitions designed to engage the whole island in the sharky fun.



The family fun day will kick off the week with more games and educational displays for the children.



There will be exhibitions in town, presentations and talks as well as the return of the popular film nights from last year.

This year there will be more information about rays. Sharks and rays form the elasmobranch family of animals and are very closely related. Jillian Morris described rays to the school children last year as basically



'squished' sharks. When we talk about sharks and their importance in the environment we really are talking about all the whole elasmobranch family.

Southern stingrays are a common sight in the Statia Marine park but we also see the beautiful spotted eagle



ray and on rarer occasions the majestic manta ray.

Seeing these animals in the marine park is as much of a thrill as seeing one



of the several different shark species we have. Southern sting rays are often seen coming into the city pier when the fishermen are cleaning fish, looking for an easy meal to a chorus of excited on-lookers.

Sharks and rays are enigmatic and can capture the imagination like no other species. Even people who are still scared of sharks are also drawn to them and fascinated by them and their behaviour. Shark week 2016 is gearing up to be bigger and better than last year so look out for more information over the coming months.

# Miriam C Schmidt Botanical Garden

## Fixing the road

The first family Friday of March the STENAPA team turned road crew and they worked on a particularly treacherous section of road where the main paved road leads to the dirt road section.



The step from the concrete onto the dirt

road had become gradually deeper and steeper over time and in one section it was a drop of 7 and half inches.

This was bad enough for the STENAPA pickup trucks (especially with a group of volunteers in the back) but for members of the public with an 'normal' car or taxi drivers it had become a serious hazard and meant many were not able to drive all the way to the garden.

The idea of the morning was to even out the drop and ensure the end of the road cannot simply break off again by using reinforcing wire to extend the end of the road into a gentle slope.

The foundation hired a cement mixer for the morning and used 2 yards of mix and 8 bags of cement to complete the over 6 ft extra section of road.

The road is now a lot more passable in this section although the road as a whole is still in desperate need of more serious repairs.

## Statia Doet and the children's garden

This year saw the second annual Statia Doet event on the island. The idea of the project is to encourage people from all over Statia and from every walk of life and profession to volunteer some time to help out a non-governmental organization operating on the island.

This year for our project we opted to rebuild the children's playground at the Botanical Garden. This is a project we have been hoping to get finished

for a some time after having to dismantle the old playground in early 2014. The wooden frames of the previous play sets had deteriorated in the extremes of the Caribbean weather and were no longer safe for the children to use.



The playground area before work started



The area was cleared ahead of Statia Doet

As with everything at STENAPA, all the salvageable parts were saved for future use and so we still had the plastic slide, rock-wall hand holds and other hardware.

The frames were constructed at the Gwendoline Van Putten school workshop by the teachers and students and installed on Friday 11th as part of Statia Doet.



Work continued on the second day of the project on the 12th and the base for the large slide was cemented in place to ensure it is safe and secure for the children to play on.

We were very lucky to have assistance from Broadreach students the following week and much of the painting was completed by them a few days after Statia Doet.

Work continues on the children's garden restoration and we will be planting up the



weeded flower beds and installing new and interesting installations to educate and entertain the younger visitors to the garden.

## Planting and propagation

Many areas of the garden have been cleared of Corallita and weeds and are now in need of some plants.

STENAPA is starting work to propagate and plant out a number of different species both native and ornamental.

Native species are fundamental for the Botanical garden and was one of the main reasons the garden was created in the first place. Planting native species not only preserves them in a safe environment but also encourages wildlife and showcases the plants to visitors and locals alike.

Ornamental plants also serve a purpose. They can bring colour and vibrancy to the garden, creating a beautiful space people want to spend time in. Many are also great for attracting local wildlife and even though they are not native they can still provide habitat and food to many insect, bird and reptile species.

# Quill/Boven National Park

## Slave trail progress update

Work is progressing on the new slave trail. The idea of the trail is to offer an alternative route down from the crater onto the main quill trail and to highlight some of the historical ruins in the National Park.

The slave trail follows an old ghaut which was terraced by slaves to catch water and stop the soil run-off.

The trail traverses down the rock wall terraces showing off the workmanship of the walls and their durability even today.

## Green Iguana caught on Statia.

Last month the National Parks office received a call from a local police officer that an unusual looking iguana was sitting near his wall.



It turned out to be a Green Iguana. This is an invasive species found on other islands in the region like St Maarten and can be a serious threat to the native Lesser Antillean Iguana.

The Lesser Antillean Iguana, although sometimes green in colour is a separate and less dominant species. Therefore when the larger Green Iguanas are present on the same island, they will compete for food, mates and good nest sites, all of which is a threat to the population.

Lesser Antillean Iguanas are protected on Statia by law and with good reason. Statia is one of the last islands in the region these lizards call home and the last Dutch island to have a population. They are also critically endangered.

STENAPA staff responded and removed the iguana from the area. It was later humanely euthanized. Rangers have checked the area for more individuals but none have so far been found. None were seen during any of the iguana surveying done earlier this year and last year therefore this would suggest this was an isolated incident.



*Malvern Lopes from GIS keeping her distance from the iguana during her interview with Park Ranger Ambrosius about the differences between the species.*

The most distinctive difference between the species is the obvious black bands along the tail of the green iguana. It also has longer spines along its back and a large single scale located just below the ear.



*The dark bands on the tail and the large, single scale shown here in the circles.*

Tim Van Wagensveld will be returning to the island this month to carry out a short extension to the survey he carried out last year in order to verify for certain if there are any more present on the island.

We are encouraging the general public to contact us if they think they may have spotted one of the green iguana species on the island. Please call the office and inform us immediately so it can be investigated and removed if necessary.

## Trail tags selling fast - only in March and already 350 tags sold!

By the end of the March we had already sold more than 350 trail tags.

Trail tags are generally sold to visitors as non-residents are required by law to pay a user fee before entering any of the National Park areas. However, it is a great way for residents of Statia to help the parks. Paying a user fee for the National Parks helps to contribute to all the work we do, the maintenance of the trail network, the monitoring and of course the development of new trails.

This year we have increased the fee slightly from \$6 per annum to \$10. This reflects the increased cost of materials on the island and is still a fair price for a whole year of hiking in the National parks.

# Education and Outreach

## Hazel field trips with schools

All of the primary schools on the island visited Hazel's vegetable project on Zeelandia road last month as part of the STENAPA school lesson program.



Each month every primary school child has a nature lesson from the park's education officer and learns about different aspects of the protected areas, nature and the environment.

The children were able to visit the farm and learn about growing vegetables, agriculture on the island and where their food comes from.



Most of the fresh produce on Statia is shipped from other islands or even as far as the USA. These items spend many days and weeks on board container ships before they even reach local stores and so describing it as being 'fresh' can be misleading.



The children saw a wide variety of different products on the farm including, okra, peppers, cucumber, watermelon and tomatoes (which they got to sample raw, straight off the plant).



They also saw things like sorrel, egg plant, pumpkin, papaya and got to look over the different pieces of farm machinery. Mr. Hazel gave the children the tour and encouraged them to sample the produce and imagine themselves one day involved with agriculture explaining the many different careers available in the sector.

It was so encouraging to see the children interested in the information and also to



see them squabbling over who would get to try the vegetables on offer when many parents struggle to get them to eat vegetables at every meal.

We would like to thank Mr. Hazel and his team of workers at the vegetable project

for their hospitality and being able to engage the children so well on the subject.

## Job training at STENAPA

STENAPA has always had groups of volunteers and interns assisting with work whilst also learning and gaining valuable work experience employers are looking for.

Recently we have been having more and more young people come to work with STENAPA from the local schools and training foundations.

Shanelle Heynes has been carrying out job training in the office for a few weeks at a time since September of last year.

This forms part of the MBO training scheme at the Gwendoline Van Putten school. Violet Busby and Claire Blair completed 'craftsman teacher' training back in 2011 in order to be able to properly supervise and train these students in all aspects of on-the-job training.

Yiraldi Abreu Gomez is also back working with STENAPA once more. He spent time working at the Botanical garden back in 2013 as part of his PRO course at the GVP school. This time he is here with New Challenges Foundation doing more on-the-job training. It is great to have him back and see the progression he has made over the years. He has gone from a teenager to a self-assured, smart, young man..

Aymerik Maduro is also helping out each day at STENAPA. He has been working with us through the Statia Foundation since last year, mostly at the Botanical garden, removing invasive tan tan trees and also helping out with trail maintenance and development.

While these young people gain experience and training working in the parks, we also get a few extra pairs of hands helping out with the workload. Staff also benefit from working with young people and get great satisfaction passing on their knowledge and passions to the next generation.

**St Eustatius National Parks**



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STENAPA is an environmental not-for-profit foundation on St Eustatius established in 1988. The purpose of the Foundation is the acquisition, preservation, protection and administration of parcels of land/water on Sint Eustatius, worthy of preservation, due to; a. its scenic beauty and/or presence of flora and fauna important in scientific and cultural respect or valuable from a geological or historical point of view; b. its purpose to serve for the well being, the education, and the recreation of the Sint Eustatius population as well as that of visitors, all this with due observance of the primary requirement of preservation.

STENAPA is legally mandated by the Island Council to manage the St Eustatius National Marine Park, The Quill/Boven National Park and the Miriam Schmidt Botanical Gardens .

- President: Irving Brown
- Vice President: Teresa Leslie
- Treasurer: Gene Herbert



**Don't forget:** The whales are back! Watch out for migrating humpback whales until April/May. A great place to spot them is the lookout at the botanical garden!



## Staff Matters

**Goodbye to Hannah Madden.**

After working for the parks for over 9 years Hannah Madden is leaving



STENAPA for pastures new. She first moved to St Eustatius in 2005 and started to volunteer with the National Parks running the junior rangers and snorkel clubs. She started to work for STENAPA full time in 2006 as a National Park Ranger working in the Quill/Boven National parks, maintaining and developing new trails as well as installing information signage for visitors.

She worked with Nicole Esteban to complete the hikers guide to the Quill/Boven National parks informing the public about the rich biodiversity of the island.

She completed her BSC in 2012 and quickly put her new knowledge into practice conducting many surveys and contributing to many areas of research assisting visiting scientists with various publications while working at the parks. She even had a tarantula species named after her.

She was promoted to Terrestrial Areas Manager in 2014 and is currently working on her masters degree with the University of the west indies.

Although she contributed in many ways to St Eustatius' National Parks possibly the most profound and long lasting contribution was the promotion of the terrestrial nature and working to ensure that St Eustatius is not only known for it's marine life. Our island boasts incredible terrestrial biodiversity and this is now much more widely recognised.

We wish her all the best in her endeavours and much success for the future.

**Jack of all trades ....**

When you work at the parks you have to develop many skills. We have a small staff and this often involves mucking in and getting on with whatever needs to be done, even if that is not something you usually do. Here are some examples of staff stepping out of their daily routines over the last month.



*Na-dio*

*felling a tree, Claire fixing nuts and bolts and yes, that's Tutti pulling corallita!*