

Sint Eustatius National Parks

Foundation

STENAPA



2015 Annual Report

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I. INTRODUCTION

1. Sint Eustatius: an island of the Dutch Caribbean

The Kingdom of the Netherlands comprises the constituent countries of Aruba, Curacao, Sint Maarten, and the Dutch special municipalities of Bonaire, Sint Eustatius and Saba. Together they make up the Dutch Netherlands, located more precisely in the Lesser Antilles with around 800km² and 300 000 inhabitants. Their natural heritage is rich and diverse, making them a ‘hot spot’ for biodiversity. The Dutch Caribbean boasts a range of unique, threatened and endangered habitats and species ranging from primary rain forest to magnificent coral reefs. The islands of Aruba, Bonaire and Curaçao alone are home to over two hundred endemic species and subspecies. The Dutch Caribbean islands form two distinct groups which are separated by more than 900 km of open water, but are also linguistically, culturally, geologically and ecologically divided.

The Windward Islands includes Saba and St Eustatius. These are of volcanic origin with lush vegetation ranging from dry coastal regions with cacti, seagrapes and aloe to tropical climates around the mountains where ferns and mountain mahogany trees grow. There are coral reefs, pinnacles, patch reefs and fringing reefs around the islands due to old lava flow covering the sea bottom. On St Maarten salinas (salt ponds) and mangrove stands cover some of the coastline.

By contrast the vegetation of the Leeward Islands of Aruba, Bonaire and Curaçao consists almost exclusively of cacti, acacia and other dry loving trees and plants. Bonaire and Curaçao are unique in being islands formed from the ocean crust, as they are separated from the South American continent by a deep-water trench. Bonaire’s reefs are considered some of the very best and healthiest in the Caribbean. Aruba, on the other hand, lies on the continental shelf of South America. All three islands have fringing coral reefs, seagrass and mangrove stands as well as extensive bays and salinas.

St. Eustatius, also known widely as ‘Statia’, lies at the Northern end of a continuous submarine bank, called the St. Kitts Bank, which also encompasses the islands of St. Kitts and Nevis. It is a relatively shallow bank reaching at maximum depths of 180m.

II. STENAPA

2.1. Mandate

Sint Eustatius National Parks STENAPA is a non governmental organization charged with the management of the St. Eustatius Marine Park, the Quill and Boven National Parks and Miriam Schmidt Botanical Garden. STENAPA was founded in 1985 and officially registered on St. Eustatius in 1995. The foundation is governed by a volunteer Board of local representatives. The day-to-day management of the Foundation is carried out by staff along with various part time consultants, interns and volunteers. The St Eustatius Marine Environment Ordinance of 1996 appointed STENAPA as the marine park manager, giving it the responsibility of placing and maintaining mooring buoys and allowing it to collect tanker fees.

The National Park Visitor Centre and head offices of STENAPA are located at Gallows Bay on the West coast close to the harbour. It is a good location, close to the harbor and main hotels, facilitating access of information to the tourists.

2.2 Board

The Foundation has a permanent Board, which oversees activities (Marine Park, National Park, Botanical Garden, and others) and directs overall annual strategies. Elected board members have additional responsibilities in accordance with respective positions. Monthly meetings take place.

Table 1. STENAPA board members in 2015

Name	Position
Irving Brown	President
Teresa Leslie	Vice President
Gene Herbert	Treasurer
Elsbeth Feenstra	Secretary
Kay Boyd	
Mike Harterink	

2.3 Staff

STENAPA had eight full time staff members working in 2015. Staff meetings were held weekly throughout 2015. The three managers were member of the Management Team and were jointly responsible for the day to day management. There was no director in 2015.

Table 2. STENAPA staff and their position in 2015

Staff	Position
Jessica Berkel	Marine Park manager
Violet Busby	Office Manager and Financial manager
Hannah Madden	Terrestrial Parks manager
Nadio Spanner	Marine Park ranger
Matt Davies	Marine Park ranger
Claire Blair	Education and Outreach manager
Ambrosius van Zanten	Terrestrial Parks ranger
Chuckuma Lijfrock	Botanical Garden ranger

2.4 Interns and Volunteers

Intern Programme

Internships are possible for the Marine and Terrestrial parks and for the Botanical garden. Terrestrial interns help the park ranger to maintain the hiking trails and signs. Together with the marine interns, the marine rangers have to clean the mooring lines regularly, do lion fish control and make sure the no fishing rule is respected in the reserves. Finally, the Botanical garden interns are responsible for the maintenance of the garden. The seventeen international interns that assisted STENAPA in 2015 carried out a total of 154 weeks of work. Some of them finished a bachelors or masters thesis with the supervision and/or help of STENAPA.

Statia Conservation Project Volunteer Programme

STENAPA continues to have volunteers come and help in the parks and garden. It is not necessary that volunteers have relevant qualifications or experience in these fields. They assist particularly in the National Park with trail maintenance, sign building, species monitoring and in the Botanical Garden by planting, maintenance, and garden development. In the Marine Park, volunteers help out in sea turtle monitoring and sometimes in mooring cleanings.

Working Abroad, a UK based volunteer organisation has supported the St. Eustatius Conservation Project since 2003. Groups of up to eight volunteers visit for a period of two months to work in the parks and the garden.

2.5 STENAPA financial statement

The foundation's 2015 financial statement can be found in the yearly financial report. It is provided by the Ernst & Young – Dutch Caribbean Auditing firm. Financial reporting included the production of a budget for 2016, an annual overview of profit and loss and an annual payroll report.

Number of divers gone up

Year	Total number of divers	Annual dive passes	Single passes
2005	1782	824	958
2006	2130	1410	720
2007	2130	1202	928
2008	2250	1315	935
2009	1604	851	753
2010	1096	656	440
2011	984	484	500
2012	962	422	540
2013	675	380	295
2014	911	567	344
2015	969	577	392

Number of trail tags sold also gone up

Year	Total number of trail tags
2005	841
2006	1029
2007	1031
2008	915
2009	713
2010	840
2011	740
2012	548
2013	433
2014	701
2015	1119

Total Yachts calling to Statia in gone up

Year	Total number of yachts
2014	246
2015	253

III. CONSERVATION AND PRESERVATION

The first terrestrial protected area was established in 9th May 1969 on Bonaire and was followed in 1978 with the Christoffel Park on Curaçao and in 1979 by the creation of the very first marine protected area in the Dutch Caribbean, the now famous Bonaire National Marine Park. Other islands quickly followed and have tried to create at least one terrestrial and one marine protected area (PA) on each island with the goal of protecting and preserving the island's natural heritage whilst allowing the sustainable use of these resources, particularly by tourism. Common constraints for the PA's include limited and at times unreliable government support, lack of funding and lack of effective spatial planning on the islands. The main threats include development pressure, particularly in the coastal zone, invasive species such as lion fish and free roaming goats, sheep, cattle and donkeys. There are entrenched local issues over land tenure and persistent over harvesting of marine resources such as grouper, lobster and conch.

3. Protected area Management Organisations (PMOs)

Each of the protected areas of the Dutch Caribbean is managed by a not for profit non gouvernemental organization or foundation which has a co-management arrangement with local stakeholders. The following map gives an overview of the established PAs on Statia.

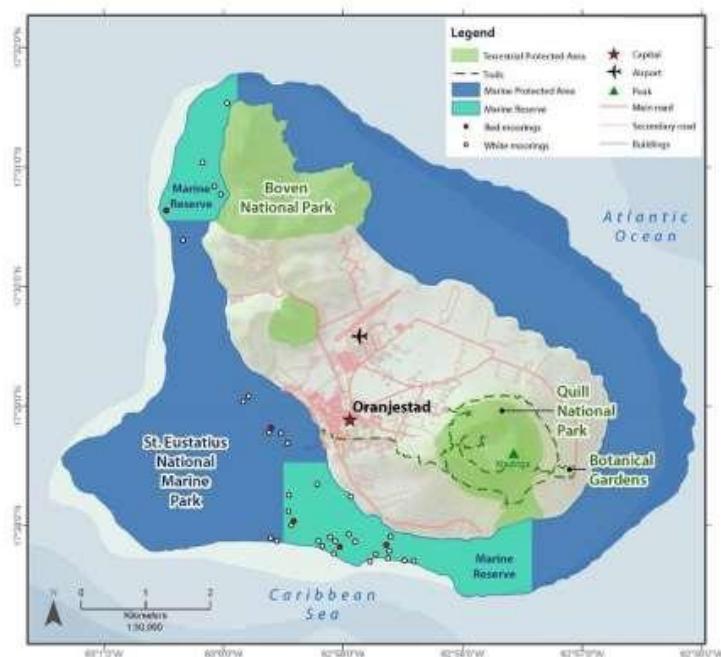


Figure 2. St Eustatius and its protected areas over which STENAPA is responsible.

3.2. STENAPA's parks

3.2.1 Terrestrial park

The Quill and Boven National Parks were established in 1997. They are spatially separated: the Northern park area is known locally as Boven and the Southern park area is known as The Quill. Adjacent to the Quill is the botanical garden, which is also managed by STENAPA.

Being located at opposite sides of the island, both parks have different climates and corresponding biomes. Dominating the landscape on Statia is the Quill, the obvious remains of a volcano and crater. It is located on the Southeast of the island and is separated from the mountainous North-Western pit by the 'Kultuurvlakte' – a central low lying plain where the majority of the population lives. The Quill is surrounded by a dry tropical forest, while its crater is considered an evergreen forest, wetter than at the edge of the volcano. With the adjacent White Wall and Sugar Loaf limestone formations, the surface area is 220ha.

On the Northern side of the island is the Boven park, there is an oil transshipment facility to the Northwest, which is located amidst the protected area, which includes Boven, the highest of the older Northern volcanoes, Signal Hill to its South, in addition to Bergje, Venus and Gilboa Hills. Its total surface area is approximately of 320ha. The Boven park has

a drier biome, with shrubs and cacti as only vegetation.

Table 3. List of the trails maintained by STENAPA in 2015

Quill park :	Boven park :
Quill trail	Bergje trail
Around the Mountain trail North and South	Signal Hill trail
Bird trail and botanical garden trail	Venus – Jenkins bay trail
Couchar Mountain trail	Venus bay coastal trail
Crater trail	Gilboa butterfly trail
Panorama point trail	Gilboa 1, 2, 3 trails
Mazinga	Boven trail

The Miriam C. Schmidt Botanical Garden is located to the Southeast of the island in the shadow of Mazinga Peak, the highest point of the island at 600m. It extends for 5.3ha across the Southern slopes of the Quill. This land was granted as a lease from the Island Government to STENAPA in 1999 and is subject to regulations controlling development and access.

Field operations

Trail maintenance is scheduled three mornings per week, from 7am – midday. The terrestrial Park Ranger is responsible for leading groups to carry out regular maintenance. STENAPA interns and volunteers assist with maintenance. When the NP Ranger is not available to lead groups due to other commitments, the NP intern steps in.

Regular maintenance was carried out on all hiking trails throughout the year, with the exception of Boven and Signal Hill. The Boven trail is flagged but not regularly maintained, and because Signal Hill is owned by NuStar NV there are limitations relating to its access. Priority is therefore given to maintaining the other hiking trails, which receive higher numbers of visitors.

Thanks to funding from Prins Bernhard Cultuurfonds Caribisch Gebied, a number of new tools and equipment were purchased to assist with trail maintenance. Work commenced on a new trail that leads from just below the rim down a rocky ghut to the entrance of the park. The aim of the trail is to highlight the role of slaves in the Quill.

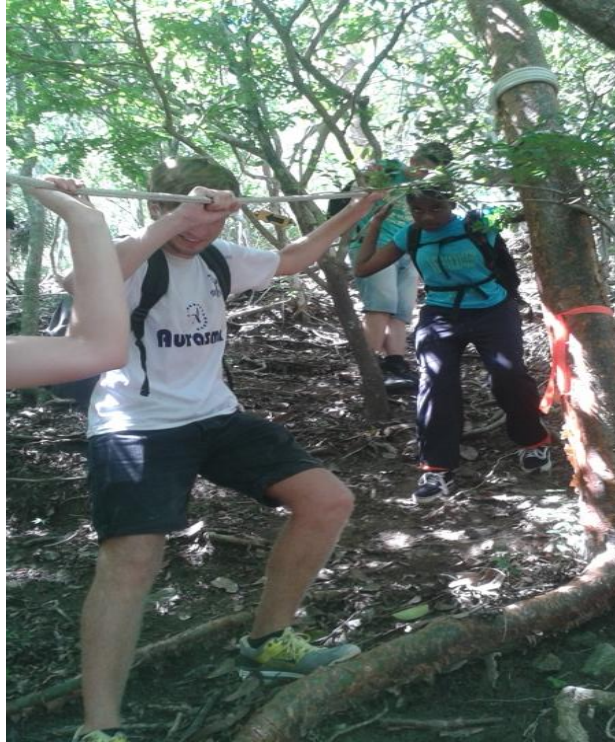
An additional new trail leading from the main trail just below the 250m park boundary takes hikers to an historical homestead complex consisting of various stone-mortar structures, including a domed cistern with yellow brick trim. This cistern is attached to a rectangular house structure. Approximately 10 meters to the north of these is a larger (storage) structure with about 3 meters maximum height wall ruins and no apparent windows, only half of this structure is present. There is a rectangular terraced platform surrounded by stone piles to the immediate east of the house/cistern.

Based on this exciting discovery, STENAPA decided to highlight this historical site by creating a new hiking trail from the main Quill trail that leads to the ruins. The trail begins just below the bench at the 250 meter boundary of the national park and descends approximately 180 meters to the site. At the time of writing the trail was flagged and partly finished. This new trail will form an interesting historical contribution to the otherwise largely nature-based information in the Quill.



Above: Historical homestead complex in the Quill

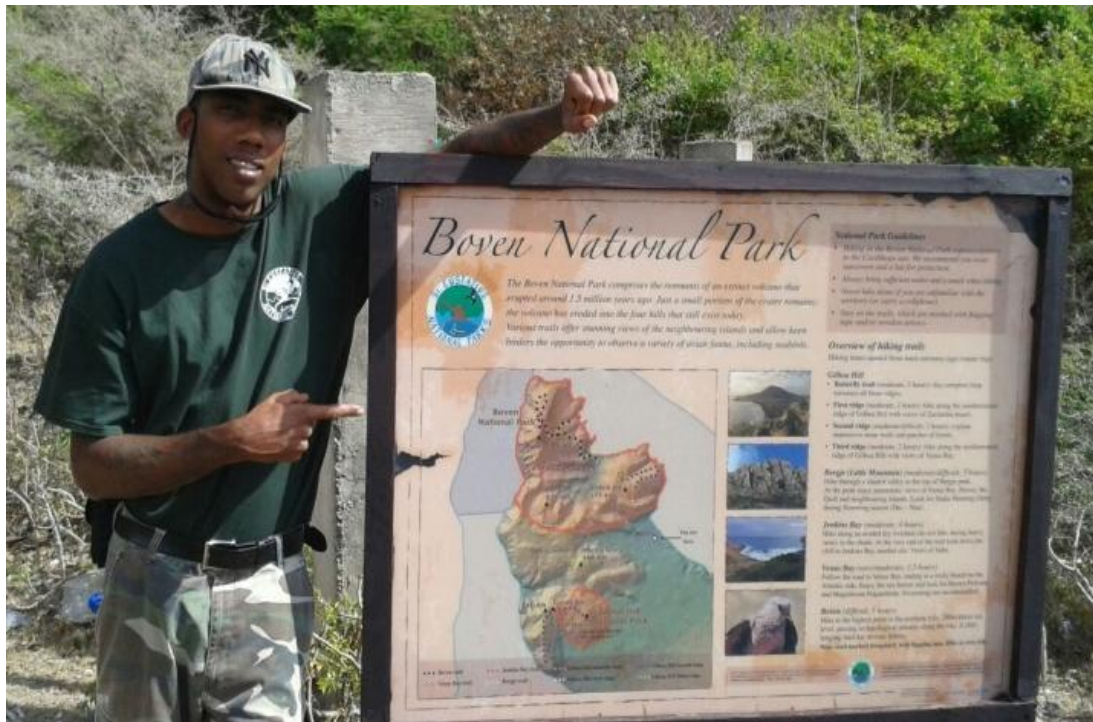
The Bergje trail was extended to offer hikers the opportunity to walk around the base of the mountain instead of returning down the original trail. This trail follows the gulley and adds at least one hour to the original hiking time. The end point is close to Venus Bay.



Above: Maintaining and extending the Bergje trail

In addition to trail maintenance, guided hikes to the Quill/Boven National Parks were given to residents, tourists and school groups, and field assistance was provided to researchers throughout the year.

Five information boards and an entrance sign to Boven National Park were installed in town and at the end of Zeelandia Road. Text and photos were supplied by Hannah Madden; the signs were designed by Robert Jan van Oosten. Funding for this project was provided by Prins Bernhard Cultuurfonds Caribisch Gebied.



Above: New entrance sign at Boven National Park and informative sign in town

Maintenance and development of the garden is carried out daily by a dedicated Botanical Garden Ranger. The Ranger is responsible for leading groups to carry out regular maintenance in Phase 1, the Fruit Garden and the Children's Garden. STENAPA interns and volunteers assist. When the BG Ranger is not available to lead groups due to other commitments, the BG intern is expected to step in.

3.2.2 Miriam C. Schmidt Botanical Garden

In addition to maintenance, garden tours are offered to visitors and residents, and it may be used for camping, weddings, educational or other activities. The number of visitors to the garden remains low, in part due to the poor condition of the main access road.

Large areas of invasive species were removed from the fruit garden and children's garden, however the majority of work in 2015 concentrated on the beautification of Phase 1. Thanks to funding from the Prins Bernhard Cultuurfonds Caribisch Gebied, a number of new tools, materials and equipment were purchased for the garden: a chipper for recycling plant clippings; new cloth for the shadehouse; an irrigation system for Phase 1 and the fruit garden;

a new pump; shadecloth and materials for the creation of a second shadehouse. Much of this work was completed in 2015.

Terrestrial Research and Monitoring

Pollination project

In May, Dr. Stephen Bush, professor of Biology from Coastal Carolina University, returned to St. Eustatius to follow up his 2012 study on the pollination systems and pollinators of the island's native flora.

Outcome:

The project is ongoing. Two papers have already been published documenting the native bee species and emending the description of Statia Morning Glory, with the main statistical analysis and text still being written. Dr. Bush conducted a comparative study on St. John (US Virgin Islands), and he plans to return to Statia.

Red-billed tropicbird reproductive ecology

Monitoring work continued for a third year on red-billed tropicbirds, focusing on the main nesting site Pilot Hill. Unfortunately, camera traps documented numerous predation events of eggs by invasive black rats. This impacted hatching success, which was around 57%, and is a real conservation concern for this long-lived seabird species. Tropicbirds lay just one egg per clutch, but may make a second attempt following nest failure if early in the season.



Camera trap image showing an unhatched tropicbird chick being predated by a black rat

Outcome:

A report containing the results of the study revealed that the Statia population suffers egg loss, but predation of chicks is apparently low. An island-wide or localized rodent control project needs to be implemented.

Goat excluders

Nine goat excluders in the Quill were visited in April and data collected. The excluders will continue to be monitored once a year for at least ten years in order to collect sufficient data. Preliminary results indicate that while overall plant abundance has decreased due to extremely dry weather in the first half of 2015, species diversity remains higher inside the excluders compared with the controls.

Outcome:

A report detailing year two results was sent to relevant stakeholders, in particular the local government and LVV department, in order to encourage the reduction of roaming herbivores in the park (and across the island). Additional excluders should be installed in Boven National Park and the cultuurvlakte.

Naturalis/Statia Bioblitz

In October, researchers from Naturalis, the Mammal Society, RAVON and Anemoon spent two weeks on Statia to perform a 'bioblitz'. Random plots were sampled across the island and flora/fauna specimens collected. Terrestrial parks Rangers Ambrosius van Zanten, Chuck Lyfrock and Terrestrial Manager Hannah Madden assisted. Approximately 80 'new' species were discovered. The researchers were extremely happy with the expedition and are looking to strengthen collaborations with STENAPA by submitting funding proposals for training with bats (mammal society) and possibly birds (Naturalis).

Outcome:

Papers on the various new/unpublished species will be published in due course.

Bridled Quail-dove population assessment

A population assessment on the Bridled Quail-dove (*Geotrygon mystacea*) was conducted from February to April. This was a follow-up to surveys conducted in September-October 2013, which yielded very few birds. The aim of the survey is to gain a reliable population assessment of this endangered species in order to determine the conservation measures necessary to preserve the population. Rats may also have a negative impact on this species.

Outcome:

Analysis of the data using DISTANCE software revealed that the dataset is too small for an accurate assessment. Therefore it will be necessary to repeat the surveys in 2016.

Terrestrial bird monitoring

Terrestrial bird surveys were conducted in January and June after a one-year hiatus. Given that we collected five years' of baseline data from 2009-2013, the decision was taken to continue monitoring but reduce effort to every two years.

Outcome:

Analysis of the data using R software revealed that town and the Quill have the highest species richness. A report was drafted at the end of 2015 and will be sent out in 2016.

Iguana population assessment

Following a successful small grant application to the Mohammed Bin Zayed Species Conservation Fund, STENAPA collaborated with Dr. Mark Welch from Mississippi State University and MSc student Thijs van den Burg to conduct a DNA population assessment on the Lesser Antillean Iguana (*Iguana delicatissima*).

Extensive DNA sampling of around 300 *Iguana delicatissima* was conducted on Statia. The initial lab results appear to show that there is very little genetic variation within the population.

Visits

Dr. Jo-Anne Sewlal and Dr. Christopher Starr (retired) from the University of the West Indies in Trinidad visited Statia for one week to document arachnids and wasps. Following their visit they published articles in the *Living World*, an annual research journal.

Dr. Steven Latta of the National Aviary, Dr. Robert Ricklefs and PhD student Leticia Soares from the University of Missouri-St. Louis visited Statia for one week to conduct research on avian malaria. This is part of a 25-year research project across the Caribbean to document the biogeography and species distributions of the region's birds. The team spent a week in the field where they collected blood samples from across the island to look for the presence of vector-borne malaria. Staff, interns and volunteers that participated in the fieldwork.

Dr. Tinde van Andel, Dr. Jeremy Miller, and Dr. Michael Stech visited Statia to conduct preliminary fieldwork and set up plots for the baseline assessment that was conducted by the terrestrial team in October. Among some of the new species discovered in October were a silver-body fly and a glow-worm. The specimens were taken back to the Netherlands for DNA barcoding.

Dr. Joseph Wagman visited the island to assist with developing an early-warning system to predict outbreaks of dengue fever and Chikungunya. STENAPA was invited to collaborate along with the Public Health and Public Works departments, and the Caribbean Netherlands Science Institute. Wagman and Madden set up mosquito traps in the Quill in an effort to document the mosquito species present.

Dr. Maarten Eppinga, professor of biology from the University of Utrecht, visited in July with two groups of PhD and MSc students to conduct fieldwork on invasive plants and herpetofauna.

Naturalist Mark Yokoyama visited Statia to continue work on a joint project with Hannah Madden. 'The Incomplete Guide to the Wildlife of Statia' will be published in 2016 and funding to support this project has been provided by NuStar Terminals NV.

Mr. Steve Shunk of Nature Travel Network and Executive Director of BirdsCaribbean, Lisa Sorenson, spent three days on Statia to familiarize themselves with the island. Feedback from both was extremely positive and they see tremendous possibilities for nature-based tourism on Statia. They also discussed hosting bird trainings and workshops for the SSS islands at CNSI, which offers reasonably priced accommodation and meeting room facilities. Statia will be promoted on the Caribbean Birding Trail website and staff will be trained to become certified bird guides. The first group of visitors from Nature Travel Network will come in 2017.

3.2.3. Marine Park

St. Eustatius National Marine Park was established in 1996. It encompasses the entire coastline of St. Eustatius from the high-water mark to the 30m depth contour, covering an area of 27,500ha. The distance of the Marine Park boundary from shore varies between one and three kilometres depending on the slope of the sea bottom. Within the Marine Park are two well defined and actively managed reserves in which no fishing or anchoring are permitted. The reserves were established to conserve marine biodiversity, restore fish stocks and promote sustainable tourism.

Table 4. List of the dive sites maintained by STENAPA in 2015

Southern Reserve :	Blair's reef
Drop-off East	Crooks castle
Drop- off West	Caribbean Sea side :
Grand Canyon	Aquarium
The Cliffs/Down South	STENAPA reef
Coral Gardens	Chien Tong
Mushroom gardens	Triple Wreck
The Humps	Double Wreck
Valley of Sponges	Stingray city
Five fingers N	Blue Bead Hole
Five fingers S	The Charles L. Brown (North and South)
The Ledges	Northern Reserve :
Anchor Reef	Doobie's Crack
The Blocks	Outer Jenkins Bay
Hangover	Twin sisters
Anchor point N	Gibraltar
Anchor point W	Atlantic side :
Anchor point S	North Man
Twin peaks/ castle rock	Five Canyons
Barracuda reef	The Cave
Nursing station	English quarter

Field operations

The Marine team continued with the lion fish control program, which is the recording, culling and dissection of an invasive species in the coral reef ecosystem, that can disrupt the food chain by predating on smaller fish species and being hard to predate on. The success of the program over the last 5 years was assessed and a report is available on request.

The team also performed a one time reef check survey which compared the health of the reef and fish diversity at certain dive locations in 2015 to the health of the reef in previous years. A report is available on request. Beach cleaning and mappings were done every semester on Zeelandia utilizing the stakes at the beach and their GPS location to make a map of the sand movement and erosion.

In the Spring 2015, two big expeditions directed by the Naturalis Museum, Leiden took place. The Marine and terrestrial expeditions were aimed to map most of the species and their environment, taking some samples for analysis.



View on the Gallows Bay: sunset

In 2015, the Global Coral Reef Monitoring Survey (GCRMN) continued with the assistance of Marine Park staff. This consisted of twenty dives at various areas in the Marine Park. A report written by the data monitoring officer who is in charge of the project is available on request.

The marine team usually has a turtle intern, that is trained by the turtle programme coordinator and marine park manager Jessica Berkel. The turtle intern, together with volunteers patrols the beach for sea turtle tracks or nest, especially in the nesting season (May-November, when night patrols are also conducted to tag nesting turtles. Because the sex of sea turtles is determined by the nest temperature, it is important to control the beach temperatures, especially on Zeelandia, the longest sandy beach on Statia.

Workshops for 2015

Lionfish program training – St Eustatius, February 19 2015, (1/2 day including practical dive)

Sponsor: Statia National Marine Park

Attendees: Scubaqua management and staff members

Subject matter: Equipment safety, safety in the water, handling the fish

Enforcement workshop – St Eustatius, November 02 – 06, 2015

Sponsors: MPA Enforcement International, NFWF and WWF

Attendees: All Marine Park staff and select other staff members

Subject matter: Safety and situational awareness, Interpretive Enforcement, Verbal situation diffusion, Successful prosecution, Report writing, Surveillance Techniques, Vessel boarding, Interview techniques, Apprehension techniques, Teamwork and Court procedures.

2015 highlights

January – 2 days of filming took place on the island for the shark film “Sharks demystified”. The MP manager was responsible for liaising with the film crew and the fishermen. This was a big part of the fishermen shark outreach and awareness component of the special project funded by INNO and initiated by the Saba Conservation Foundation in collaboration with STENAPA and Nature Foundation St Maarten.

February – Meeting with the prosecutor concerning harbor ordinance
Rescued drifting sailboat “Zucchini”

March – Assisted with the Broadreach program with lectures and supervision of beach cleans.
Meeting with prosecutor concerning reserves and the harbor ordinance
Marine Mammal Sanctuary Meeting – St Maarten, March 28, 2015 which entailed discussion of sister sanctuaries in the Caribbean.

April – Lion Fish Fry – Good Friday April 3rd, 2015
Harbor Masters Meeting – Golden Era April 17th 2015
(Includes Coast Guard, Fire chiefs, Police, Harbor, Nature Parks, Customs, Shipping Inspectorate, also from Saba and St Maarten, Commissioner Tatum)
Blue Runner serviced by the mechanic from St Kitts. April 16 2015

June - Meeting with Ron Minnaar (RWS) issues dealing with the MP
Current buster training for all staff (Oil spill mitigation)
2 Marine Park staff did Nitrox training via Scubaqua
Naturalis Marine expedition from June 6 to June 20 2015. MP staff assisted.

July - Disaster committee workshop, Great Bay, St Maarten July 01,02 2015
(Held by RWS, Includes all policy makers and field personnell to be used during an oil spill/crisis)
Meeting Roy Hooker concerning Harbor Ordinance and MP matters July 08, 2015
Assisted with Broadreach Marine Program - 6 vessels for the week of June 20 -25 2015.

August - Blue Runner emergency repairs (steering etc) done by mechanic from St Kitts.
2 Tropical storms prompted the relocation of sea turtle nests on Zeelandia Beach

September - Shark week activities held from August 31 to September 05 2015
International Coastal clean up September 18 2015
Statia Sustainable Conference attended Sept 24 and 25.

October - Shark experts Jillian and Duncan Brake visit the schools first week of October
Shark expert Erwin Winter on island for shark tagging October 23 – 28

November - Enforcement Training for all MP staff November 02 – 06 2015 (see above for content)

Disaster simulation November 27th 2015 including Saba and Netherlands

December - Oilspill training for all MP staff December 18, 2015

Total Dives 2015 Statia Marine Park: 8493



View on the Caribbean Sea

Lobbying issues

- Controversial reduction of the Marine park

In March 2015, the local government implemented an ordinance expanding the harbor area over the Marine park in order to be able to collect tanker fees without hinderance. This ordinance, called Verordening Havengelden Sint Eustatius 2015 amends parts of the Marine Environment Ordinance of 1996 by reducing the Marine park (see figure 1). STENAPA

replied in April complaining about the lack of consultation, and reminding about the international treaties that have been signed to protect the marine park. Indeed, the park is protected by the Specially Protected Areas and Wildlife (SPAW) protocol that was ratified by the Netherlands in 2014 and many other Caribbean countries. STENAPA aligned with other conservation NGO's to support STENAPA in its goal to keep the marine park within its present boundaries. The Marine Park manager, on behalf of the organization, put in an official protest on May 30 2015.

NuStar is the oil company that has an oil terminal for storage and transhipment of mineral oil products on St Eustatius and thus anchors its tankers close to the island. In October 2015 the company won the injunction filed against the government and the Court ruled in favor of NuStar because the government had failed to publicly announce the ordinance and involve stakeholders in it. STENAPA believes the marine park needs to remain protected, as it is an important source of income for the island both from fisheries and tourism due to its unique marine environment.

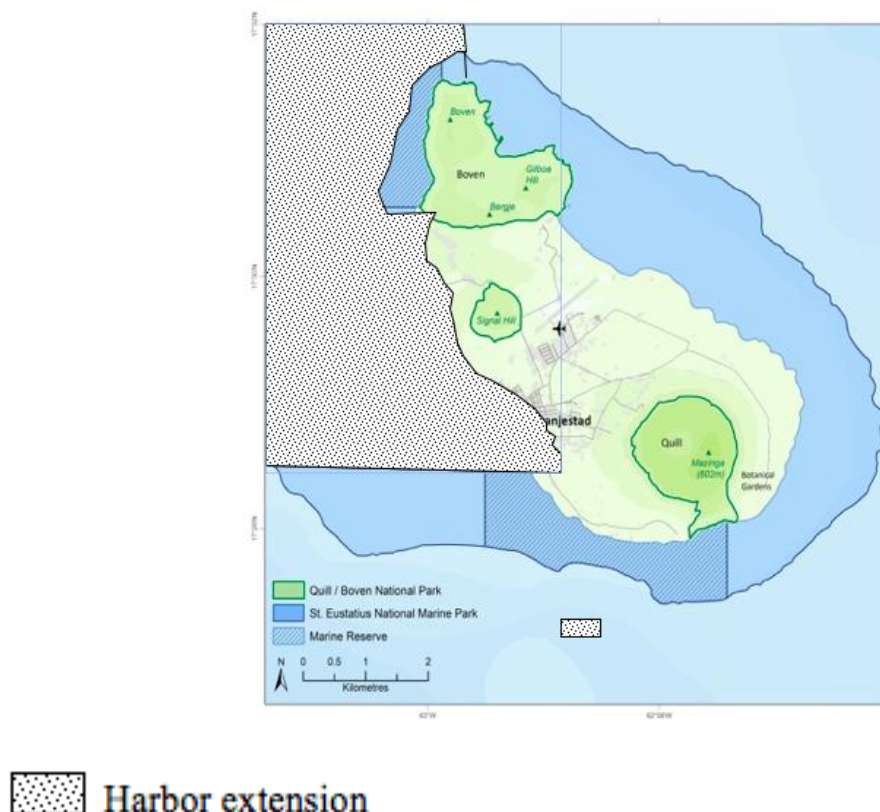


Figure 1. Map of Sint Eustatius, the harbor extension would represent a major loss of marine park and reserve.

IV EDUCATION AND OUTREACH

4.1 Education

STENAPA ran in 2015 the Junior rangers club with weekly meetings for kids at the offices. Now and then the kids were given the opportunity to do an outing, for example to the beach, to the Quill or to the department of LVV. During summer holidays schoolkids enjoyed summer club at STENAPA, two weeks full of activities on land and in the water.

In 2015 every first week of the month STENAPA's education and outreach officer went to the primary schools to give a class about nature and the conservation work of STENAPA. This program engages 370 pupils every month.

4.2 Outreach

All year round, STENAPA organizes guided hikes, presentations, and tours for tourists but also for the Broadreach programs. Broadreach is a summerprogramma for teenagers. They sail on of teenagers that stop on Statia for a couple of days. In addition to that, regular beach cleanups are done with schools or youth nature clubs to sensitize younger generations to pollution.

In 2015, STENAPA held its first Shark week in cooperation with DCNA. The aim is to raise awareness on the importance of sharks and rays in the marine ecosystems. The week generated a lot of free publicity. Another new event organized by STENAPA was a lionfish fry. This fish is invasive to ecosystems around Statia, and our marine team tries to control the population by sparefishing it.

The Caribbean Netherlands Science Institute (CNSI) hosts every month a Science Café. STENAPA employee's and inters gave presentations in 2015.

- Joey de Hamer & Steffan Walton (January): climate change risks / brown trembler
- Hannah Madden (February): native bees
- Ricklefs (March): avian malaria
- Josh Robertson (April): red-billed tropicbirds

- Hannah Madden & Janne (May): *Iguana delicatissima*
- Willem van Wijk (June): climate change adaptation/mitigation
- Tim van Wagensveld (November): *Iguana delicatissima*

STENAPA's Facebook account showed a slow progression in amounts of 'likes', from 820 in January to 1041 December 2015.

In 2015, STENAPA has released 60 press articles related to the research undertaken with the Naturalis scientists, but also relating to the events held during the year and the protests against the harbor ordinance. Most of the articles appeared in the local newspaper, the Daily Herald of Sint Maarten, an article was published in the Dutch nationale newspaper Volkskrant.

An invasive species booklet and poster was produced for St. Eustatius with the primary aim of educating port authority staff about the risks non-native and (potentially) invasive species pose to the island's ecosystem and native species. A workshop will be held in 2016.

4.3 Working with stakeholders

STENAPA works with more than 30 stakeholders and partners on issues relating to the marine environment and 22 stakeholders on issues relating to the Terrestrial Environment. These stakeholders include the Coastguard, Tourism Department, other NGO's, local government, businesses, schools, as well as international organisations such as WWF, IUCN and the Working Abroad volunteer organisation. By working with partners and developing applications for fundraising, STENAPA builds a network of helping the organization for current and future projects.

For research purpose and knowledge sharing, STENAPA has worked with other organizations based in the Caribbean or in European Netherlands over the years. This cooperation is always welcome and brought new perspective in STENAPA's everyday work.

The Dutch Caribbean Nature Organisation is the umbrella organization for STENAPA and the other park organisations.

4.4 Visitors

Our marine and terrestrial parks were busy year round, with a the slowest touristic season being between September and November due to hurricane season. Total dive tags sold : 969. Total hiking tags : 1119.



July tree