St Eustatius National Parks Foundation





2016 Year 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 800 km² 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 Curação 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 include St Eustatius and Saba as well as St Maarten. 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 saliñas (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 saliñas.

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 180 m.

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 and the Quill and Boven National Parks. Besides these STENAPA maintains the 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 alongside 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 mandate for the management of the terrestrial park was granted in 1998.

The National Park Visitor Centre and head offices of STENAPA are located at Gallows Bay on the West coast 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. To facilitate these duties monthly meetings take place.

The board elected a new president in 2016, after Irving Brown stepped down having led the board for many years, Teresa Leslie took over the role. The treasurer Gene Herbert also stepped down. He was replaced by Mike Harterink as new treasurer, who was already a standing board member. The board started discussions in 2016 to renew the Statutes and make them more up to date with a clear division between the tasks of the board and the tasks of the staff.

STENAPA continued addressing the need for closing a Service Level Agreement (SLA) with government of Sint Eustatius. This agreement is a condition, requested by the Dutch ministry of Economic Affairs, to transfer the funds for the project 'Strengthening Management of Nature'. STENAPA has been waiting for these funds since 2014. However, no agreement has been reached about the wording of the text.

2.3 Staff

STENAPA had eight full time staff members working in 2016. There were many changes in the office this year, five of the eight persons continued their career somewhere else and were replaced by new colleagues. A new director started in April 2016, followed later that year by two new marine rangers, a new terrestrial ranger and a new outreach officer. Marine ranger Nadio Spanner was transferred to the botanical garden. Staff meetings and team meetings (staff including interns and volunteers) were held monthly and weekly respectively throughout 2016.

Table 1. STENAPA board members in 2016

Name	Position
Teresa Leslie	President
Kay Boyd	Secretary
Mike Harterink	Treasurer
Gilberto Maduro (since November 2016)	Board member
Vacancy	Board member
Vacancy	Board member

Table 2. STENAPA staff and their position in 2016

Staff	Position
Clarisse Buma	Director
Jessica Berkel	Marine Park manager
Violet Busby	Office and Financial manager
Erik Houtepen	Marine Park ranger
Mervina Redan	Marine Park ranger
Hannah Fairley	Education and Outreach manager
Rupnor Redan	Terrestrial Parks ranger
Nadio Spanner	Botanical Garden ranger

2.4 INTERNS AND VOLUNTEERS

Intern and Volunteer Program

Internships and volunteer ships are possible for the marine and terrestrial parks as well as the Botanical Garden. The interns work full time, the volunteers usually from 7 to 12. Terrestrial interns help the park ranger to maintain the hiking trails and signs. They are additionally involved in iguana patrols. Together with the marine rangers, the marine interns clean the mooring lines, perform coral reef monitoring and coral restoration, lion fish control and ensure the no fishing rule is respected in the reserves. Finally, the botanical garden interns are responsible for the maintenance and beautification of the garden. All interns and volunteers are involved in sea turtle patrols and beach clean ups.

More than ten international interns and volunteers assisted STENAPA in 2016 on land and around nine in the marine park. Some of them finished a bachelors or master's thesis with the supervision and/or help of STENAPA.

It is not necessary that volunteers have relevant qualifications or experience in these fields. It is the ambition and drive that counts. Working Abroad, a UK based volunteer organization, has supported Sint Eustatius since 2003 with connecting new volunteers with STENAPA.

2.5 STENAPA financial statement

The foundation's 2016 financial statement can be found in the yearly financial report 2016, which is a separate document. It is provided by the Ernst & Young – Dutch Caribbean Auditing firm. Financial reporting included the budget for 2016, the balance sheet and an annual overview of the profit and loss statement. The financial report 2016 was the last one produced by Ernst & Young and paid for by STENAPA's network organization the Dutch Caribbean Nature Organization (DCNA).

In general one can conclude that the yearly subsidy from Sint Eustatius is not enough to cover the costs. It is not even enough to cover the salary costs, let alone the costs for

equipment, vehicles and patrol boat. STENAPA is therefore heavily dependent on external funding from institutional and private donors. The lack of funds puts a significant pressure on board and staff and STENAPA again made, a considerable financial loss in 2016.

Table 3, 4 and 5. Sales fees

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
2016	1058	586	472

Number of divers has returned to 2010 figures with a significant 9% increase

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
2016	693

Number of trail tags has seen a significant decrease after a rise of similar proportions last year

Slight fall in the total number of yachts

Year	Total number of yachts
2014	246
2015	253
2016	225

Our marine and terrestrial parks were busy year round, with the slowest touristic season being between September and November due to hurricane season. Total dive tags sold: 1058. Total trail tags: 693. We don't know why the amount of trail tags sold

in 2016 dropped considerably. STENAPA receives occasional reports that tourists walk the Quill without purchasing a trail tag. Discussions within the organization have started to strengthen the marketing of the tags through cooperation with the hotels.

III. CONSERVATION AND PRESERVATION

The first terrestrial protected area was established in 1969 on Bonaire, 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 Bonaire 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 in the Dutch Caribbean include sometimes limited 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 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.

3.1 Protected Area Management Organizations

Each of the protected areas of the Dutch Caribbean is managed by a not for profit nongovernmental organization or foundation which has in certain cases a comanagement arrangement with local stakeholders. The following map gives an overview of the established PA's on Statia.



Figure 2. St Eustatius and its protected areas (PA's) 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, a dormant volcano. It is located on the Southeast of the island and is separated from the mountainous North-Western pit by the 'Cultuurvlakte' – 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 220 ha.

On the Northern side of the island is the Boven Park. There is an oil transshipment

facility to the Northwest (NuStar NV), 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 320 ha. The Boven Park has a drier biome, with shrubs and cacti as only vegetation.

Table 6. List of the trails maintained by STENAPA in 2016

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

Field operations

Trail maintenance is scheduled on average three mornings per week, from 7am – midday. The terrestrial Park Ranger is responsible for leading groups to carry out regular maintenance with the assistance of interns and volunteers. Regular maintenance was carried out on all hiking trails throughout the year, with the exception of Signal Hill, 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, especially the main Quill trail and crater trail. Special attention was required for the safe removal of multiple beehives located alongside the trails. STENAPA worked with a local beekeeper to remove the beehives in a safe and professional way.

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.

Terrestrial Research and Monitoring

In 2016 Ton de Winter from Naturalis Biodiversity Center returned to the island to continue his study on land snails. It was a follow up of the two expeditions in 2015 for exploring both the marine and non-marine biodiversity, among others Molluscs.

Outcome

In 2016 De Winter e.a. published a scientific paper in Basteria, journal of the Dutch Malacological Society, about the discovery of a new land snail species discovered on Sint Eustatius and named after Quill. STENAPA communicated the news in a press release that was picked up by several news outlets. A land snail, recorded as empty shells in the 1980's, was rediscovered alive. Study of the soft parts morphology and DNA allowed Ton de Winter (Naturalis), Sylvia van Leeuwen (ANEMOON foundation) and researcher Ad Hovestadt to establish the systematic position of this approx. 5 mm-sized snail as member of the family of Glass snails (Oxychilidae). The soft parts characteristics and shell morphology could not be matched with that of any validly named species, and the species was described as a new species, Glyphyalus quillensis. The name quillensis is derived from the Quill volcano, where this snail is restricted to the forested upper slopes and crater bottom, the least disturbed habitat on Statia. The species is so far only known from Statia, but it may also occur on the Caribbean islands St Kitts, Saba and Puerto Rico.

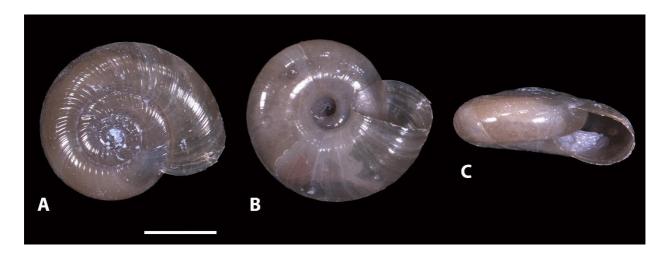


Photo: Newly discovered land snail

Red-billed tropicbird reproductive ecology

Former Terrestrial park manager Hannah Madden continued, after leaving STENAPA, her monitoring work of the red-billed tropic birds. The outcome and results will be published in a paper.

Terrestrial bird monitoring

Due to the many changes in staff, the lack of skilled people at that time and the focus on the iguana work, STENAPA skipped the bird monitoring in 2016.

Iguana population assessment

In February 2016 the wellbeing of the Lesser Antillean Iguana population came heavily under pressure due to the catch of a Green iguana, an adult female. It was thanks to the eye of former ranger Ambrosius van Zanten who spotted the animal. Green iguanas are well known on the ABC-islands, but invasive to Statia. They can outcompete the native species, because they lay more eggs. This happened on Sint Maarten.

In 2016 regular iguana patrols were held to look for more Green Iguanas or hybrids, because both species can interbreed with each other. In 2016 a few hybrids were caught which shows that the future or the local iguana is very critical.

The already running monitoring program of the Lesser Antillean Iguana continued in 2016 with the help of Tim van Wagensveld from RAVON, MsC student Thijs van den Burg and former terrestrial Parks Manager Hannah Madden. Iguanas are caught, measured, get a bead code and are released again.

In November a European Union grant was given to STENAPA to take part in a project with the Anguilla National Trust and St Barths Territorial Environmental Agency (ATE) to develop a subregional recovery plan. One of the topics is to start also PIT-tagging the animals with a Passive Integrated Transponder. The first animals were PIT-tagged in 2016, but the project started per 1 January 2017. Tim van Wagensveld and Thijs van den Burg gave the new ranger Rupnor Redan the required training to continue the work.

In 2016 plans were developed with Tim van Wagensveld en Blijdorp Zoo in Rotterdam to send off two males and two females to Blijdorp to take part in a captive breeding program. To be able to keep the four animals temporarily in a cage before flying out, STENAPA built a holding facility.

3.2.2 Miriam C. Schmidt Botanical Garden

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

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. STENAPA interns and volunteers assist. Thanks to funding from Prins Bernhard Cultuurfonds Caribisch Gebied a great part of the 2016 salary of the Botanical garden ranger was covered. Given the size of the garden plot, the limited capacity and the continuous access of roaming animals destroying the work done, there is a growing need to focus on Phase 1, the lower part of the garden, before taking on new projects.

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 to three kilometers 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.

Field operations

The marine team cleaned numerous mooring lines, performed lion fish control and ensured the no fishing rule is respected in the reserves.

Table 7. List of the dive sites maintained by STENAPA in 2016

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)
701 T 1	N. d. D.
The Ledges	Northern Reserve:
Anchor Reef	Doobie's Crack
Anchor Reef	Doobie's Crack
Anchor Reef The Blocks	Doobie's Crack Outer Jenkins Bay
Anchor Reef The Blocks Hangover	Doobie's Crack Outer Jenkins Bay Twin sisters
Anchor Reef The Blocks Hangover Anchor point N	Doobie's Crack Outer Jenkins Bay Twin sisters Gibraltar
Anchor Reef The Blocks Hangover Anchor point N Anchor point W	Doobie's Crack Outer Jenkins Bay Twin sisters Gibraltar Atlantic side:
Anchor Reef The Blocks Hangover Anchor point N Anchor point W Anchor point S	Doobie's Crack Outer Jenkins Bay Twin sisters Gibraltar Atlantic side: North Man

In 2016 there were three major incidents in the Marine Park. On March 21st of 2016, the last section of the Nustar jetty broke off. After a while, operations relocated it a bit further from where it fell. In doing so they dragged it along the seabed causing damage to vital sea grass beds in Oranjebaai.

On July 14th, it was ascertained that the NuStar barge "Navigator" while anchored near Doobie's Crack caused damage to the dive site due to the proximity of the chain. Witnesses to the event were Marine Park staff and interns. STENAPA made a formal complaint to the police and the case is now on the desk of the public prosecutor, who has to decide if he wants to bring the case to court or not.

On 11th August 2016 in the evening the MV Sirena with seven Persons on board ran aground on the North point of St. Eustatius. All people on board were rescued and it was reported that the captain was possibly intoxicated. STENAPA was involved in the discussions about the follow up. In September a refloat attempt was made but was unsuccessful. All salvage attempts were abandoned and the ship was still in the water at the end of 2016.



Photo: Stranded MV Sirena near northern tip of the island

Marine Research and Monitoring

Project: coral reef restoration (RESCQ)

In July 2016 STENAPA started with the coral reef restoration project. This is a European Union funded project, a part of the BEST initiative to support conservation work in the Caribbean overseas territories. This project is carried out on Saba, Sint Maarten, Sint Eustatius and on Turks and Caicos. The aim is to restore Elkhorn and Staghorn corals which can grow 12 cm a year.

The work consists of growing coral fragments on trees/ladders in a nursery, cleaning and measuring the fragments and checking them for diseases regularly and later planting them out on suitable areas around the islands. The project is run by IMARES under an agreement with IUCN. St Eustatius has more trees completed than the other partners which means additional work and maintenance. IMARES supplies students who assist with the project and also help out with other duties in the Marine Park. Since the start of the project, in an effort to keep the community informed, ranger Erik Houtepen has done several public talks on the progress of the work.

Global Coral Reef Monitoring Network (GCRMN)

The goal of the Global Coral Reef Monitoring Network (GCRMN), an operational network of ICRI, the International Coral Reef Initiative, is to improve data collection, information sharing and regional cooperation. As in 2015 STENAPA took an active part in the 2016 monitoring. The survey location for our local GCRMN surveys was the Sint Eustatius National Marine Park (SNMP) where 20 sites were monitored. The GCRMN method looks at eight elements of the coral reef ecosystem. Abundance and biomass of reef fish, relative cover of reef-building organisms (corals) and their dominant competitors, health assessment of reef-building corals, recruitment of reef-building corals, abundance of key macro-invertebrate species (sea urchins and sea cucumbers), water quality (i.e. water transparency), macro-algae height and mugosity.

Outcome:

The density of reef fish in the surveyed areas appeared to be reasonable when compared to similar areas in the Caribbean. There is a low frequency of large snappers and groupers even

though the overall snapper/grouper biomass is reasonable.

The recorded percent cover of reef building corals is low at 4.99% in 2015 and 5.198% in 2016. When comparing all sites in 2016 there is an increase in the cover of an invasive seagrass, Halophila stipulacea (1.026% in 2015, 1.389% in 2016).

Although coral cover is low, so is the prevalence of diseased coral colonies. The density of coral recruits remains encouraging although there was a slight drop from the previous year. The low density of sea urchins reflects the Caribbean wide decline. No Sea cucumbers were observed in the 2016 survey. The algal composition of the Southern Reserve is dominated by Dictyota spp and Lobophora spp. Rugosity was low since nearly all reefs on St. Eustatius are not true coral reefs, i.e. structures built by hard corals, but are more encrusted boulders and low relief rock ledges.

Sea Turtle Conservation program

The nesting season was below average in 2016 with only a few recorded leatherback activities and a low total of 77 activities for all three nesting species combined: Leatherback, Green Turtle, Hawksbill. The start of the 2016 nesting season came in April with the report of a leatherback track by a citizen. The bulk of green turtle activities were recorded in August and October. In May a family walking the beach came across a leatherback nesting in the early morning. Unfortunately besides a taking a few pictures, they did not check whether she was tagged or not. Most of the hawksbill activities were on the Caribbean side of the island with at least 8 nests on the beach at Oranjebaai. The last activity was a green turtle on the night of October 26th.

In August, Marine Park staff and visiting researchers tagged 36 sea turtles for a project funded by NWO, the Dutch Organization for Scientific Research. The work is part of a four year study led by Marjolijn Christianen from Groningen University with the aim to get a better picture of the population and (feeding) habits of the nesting and foraging turtles in Dutch Caribbean waters. Work was also done on the land as three female nesting green turtles are included in that figure. The species that have been tagged are the endangered green sea turtles and the critically endangered hawksbills.

The heaviest hawksbill tagged during this survey in the marine park weighed just over 55

kilos; the heaviest green weighed just over 150 kilos. One of the turtles that was deployed with a transmitter travelled 250 km's in five days to Guadeloupe.



Photo: Tagging a seaturtle on Zeelandia beach, from left to right: Marine Park manager Jessica Berkel, researcher Marjolijn Christianen and intern Fionne Kiggen

The project was overall very successful. It lead though to a discussion with dive shops about the need for this type of scientific research including catching and tagging. It was experienced by divers that sea turtles living in Statian waters were more shy after the research had ended, as though they were afraid of being caught again.

Lion Fish Control Program

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.

Beach Mapping

Beach mappings were done every semester on Zeelandia Beach utilizing the stakes at the beach and their GPS location to make a map of the sand movement and erosion. It is important to collect this data, because this beach is the main sea turtle nesting location. Apart from that regular beach clean ups were done, one of which in November lasted many days, because of the amount of debris after heavy rainfall.



Photo: Debris on Zeelandia beach in November 2016 after heavy rainfall

Lobbying issues

• Reduction of the Marine Park

During 2016 STENAPA continued lobbying for the withdrawal of the reduction of the Marine Park. The Island Council had decided to reduce the park in 2015 in favor of extension of the harbor area. The reduction resulted in a number of protest letters from national and international NGO's including letters from the Dutch government saying that the public entity cannot single handedly reduce the park. To reach a compromise STENAPA proposed to the local government a plan to designate separate shipping lanes in the Marine Park as an alternative to the extension of the harbor. Besides that STENAPA discussed with politicians and civil servants the possibility of organizing an international Round Table. The idea was to bring all stakeholders and all knowledge together and form common ground to go forward. Unfortunately the Island Government was not interested in a Round Table. Politicians in the Second Chamber in The Hague asked questions about guarantees for safeguarding the corals.

• Roaming animals

On several occasions STENAPA addressed the situation of the roaming animals with the government. Cows, goats, sheep and pigs roam freely over the island. This doesn't not only

have a negative effect on nature, there is also a safety issue. The cliff in the back of the STENAPA office is disintegrating due to erosion partly caused by overgrazing of goats. Besides that, pigs and goats have destroyed plants and flowerbeds on numerous occasions in the Botanical Garden.

IV EDUCATION AND OUTREACH

4.1 Education

STENAPA started a close corporation with two youth clubs on the island - Mega D and Daughters of the King (DOTK) – regarding the STENAPA Junior rangers club. The last couple of years the number of kids joining the Junior Rangers Club had dropped to only a few kids per week. Now, the STENAPA education and outreach officer goes to the youth clubs, instead of the kids coming all the way to the STENAPA office after school.

The new approach has led to a visit to both clubs once per month. On the program are outings, talks, crafts and more. Working with these partners gives STENAPA the advantage that we can make use of their communication channels. Whereas they have the guarantee of a continuous and attractive nature program, it therefore is seen as a mutually beneficial program by all sides. With the new approach STENAPA can reach out to more kids and at the same time make better use of the time of the education and outreach officer.

During summer holidays schoolkids enjoyed summer club at STENAPA, a varied week full of activities on land and in the water, including a festive closing with a barbeque on the beach.

In 2016 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

In the fourth quarter of 2016 STENAPA became involved in a Nature Awareness Project in corporation with the ministry of Economic Affairs and the Caribbean Netherlands Science

Institute (CNSI).

All year round, STENAPA organized guided hikes, presentations, and tours for tourists, but also for the Broadreach programs. Broadreach is a summer program for teenagers. They provide sailing trips 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 2016, STENAPA held its second Shark week in cooperation with DCNA and funded by the National Postcode Lottery. 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. Especially the visit of Shark Week ambassador Jörgen Rayman, a Dutch-Surinam comedian, who received a positive response. He moderated a well-attended Quiz night at the Golden Era hotel. 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 spearfishing it.

The Caribbean Netherlands Science Institute (CNSI) hosts every month a Science Café. STENAPA employee's and interns gave several presentations in 2016 to highlight our work. Topics on the program were: coral restoration, the iguanas and more.

STENAPA's Facebook-account received a boost in the last quarter of the year with a plan of approach about what to communicate and how often. With this structured approach the stories are more varied and there is more interaction with the followers. The Facebook-feed was also embedded in the website as a new-feed. The number of followers was slowly rising to 1400 end of the year, compared to 1041 in December 2015.

STENAPA opened at the same time a Twitter account, to stay in touch with schools, NGO's, politicians, reporters and opinion leaders. End of the year we had 125 followers who started sharing our messages regularly. Due to technical problems STENAPA did not send out the online newsletter. First plans to develop a new website were discussed internally in 2016. A new, more easy to use newsletter module will be implemented with the new website.

In 2016 STENAPA was featured at least 70 times by the newspaper, mostly the Daily Herald of Sint Maarten, but also papers from the ABC-islands, and papers in the Netherlands, such as

Dagblad Trouw. Thanks to the development of a new reliable press list, STENAPA has a good overview of the main press contacts that are important to us.

An informative booklet was developed with the International Reptile Conservation Foundation (IRCF) about "How to tell the difference between Statia's iguana and the invasive Green iguana". The publication was made possible thanks to a generous gift and pro bono help of the IRCF. In December a bumper sticker was released "Give Iguanas a brake", also with the help of the IRCF.



Photo: Hannah Fairley hands over the first Iguana bumper sticker to Lt. Gov. Julian Woodley

4.3 Thank you partners

STENAPA wishes to express its gratitude for the many funders and donors who have supported our organization through the years financially, governmental and institutional donors as well as private funders, NGO's, scientific institutes and more. Without our partners it would not be possible to do all the important work that STENAPA carries out. These types of cooperation bring a new perspective and inspiration to STENAPA's everyday work and we are very grateful for that.