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▶ Newsletter 1/2006

STENAPA Update



Annual Report Highlights

STENAPA's Annual Report was published this month and contains information about operational, legislative and institutional arrangements of St Eustatius National Parks Foundation during 2005. Points of interest include the following:

The Board of STENAPA was comprised of seven permanent members and one dive centre representative during the majority of 2005. The Board held 13 meetings during the year. Additional representatives from government and fishermen were again invited to join the Board.

Each year, the Board of St Eustatius National Parks compiles a set of management objectives. A total of 26 of the 27 objectives were partly or fully achieved.

The new volunteer programme that started at the beginning of 2003 continues to be organised through *Working Abroad*. A total of 25 volunteers came from around the world to assist on trail maintenance, botanical garden development, marine park maintenance, and turtle conservation.

In the Marine Park, the number of registered divers increased in 2005 by 23%. The majority of divers came from the USA, followed by Holland, Britain, France and Switzerland. The majority of divers purchased annual dive passes. The number of visiting yachts was recorded as 411 – a

decrease of 11% from 2004 to 2005. The majority of yacht captains were from the USA, followed by UK, Netherlands, France and Germany.

The activities of the Sea Turtle Conservation Programme were extended due to assistance from volunteers and a full time turtle programme coordinator.

The number of registered visitors to the Quill National Park in 2005 decreased by about 21%. Trail improvements focused on the Crater Trail and Round the Mountain Trail. The number of goats



continues to cause a negative impact through grazing.

Development in the Botanical Gardens continued so that all the Gardens of Phase 1 have now been completed, including a Sensory Garden, Palm Garden and Lookout Garden. Many improvements were made to infrastructure, such as re-painting of pavilion and house, and replacement of the power supply.

Research and monitoring in the Parks included a conch and lobster population study, Corallita phenological study and geological study. Research reports are available for those interested.

Highlights of the education programme included monthly school presentations at all schools, including a turtle outreach programme, two sessions of Snorkel Club with 10 children participating, and commencement of the second group of Junior Rangers.

Considerable time and energy were placed on public education and information about nature conservation and park activities.

Collaboration amongst protected areas of the Netherlands Antilles increased dramatically with the development of a new umbrella organisation, the Dutch Caribbean Nature Alliance (DCNA). Opportunities have already been created for shared projects and resources. The DCNA played a major role in lobbying for the substantial financial support through grants from Stichting Doen, Netherlands Postcode Lottery via IUCN and Ministry of BZK.

The Annual Report can be downloaded as a pdf file via www.statiapark.org. Or come to review it at the National Park office.



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Special points of interests

Turtles: Contact the office if you want to see a turtle nesting!

Quill Guide d Hikes with Rangers: Available for groups

Botanical Garden: Open from sunrise to sunset. Great for family picnics and BBOs



Statia Sea Turtle Conservation Programme 2005

In 2005, the St Eustatius Sea Turtle Conservation Programme completed its fourth successful year of monitoring, research and education activities; there follows a summary of the Programme's principal findings for the year.

The nesting season ran from 29 March – 1 October; leatherbacks nesting from March – June, hawksbills from May – September and green turtles from July – October. A total of 28 nests were recorded for the season; 11 leatherback, 15 green turtle and 2 hawksbill. Zeelandia Beach remained the primary nesting beach for all three species of turtle, with minimal nesting reported from Turtle Beach and Kay Bay.

Nightly patrols were conducted on Zeelandia Beach from 18 April – 20 October; 165 patrols were completed, totalling over 1,000 hours of monitoring. All turtles observed were tagged with external flipper tags, and for leatherbacks, internal PIT tags were also applied. Eight turtles were encountered during patrols; three leatherbacks and five green turtles. One green turtle was encountered with an old tag that had originally been applied in August 2002; this was the project's first record of a returning (remigrant) turtle.

All nest locations were marked for inclusion in a study of survivorship and hatching success; these were checked daily for signs of disturbance, predation or hatching emergence. Two of the 28 marked nests were lost during incubation; one leatherback nest was washed away in extremely high tides, and one green turtle nest was buried under a cliff fall. Leatherback nests had very low hatching success compared to hawksbill and green turtles; 3.5%, compared to 41.4% and 76.8%, respectively. One reason for this difference was possibly the fact that leatherback eggs were laid much deeper than either green or hawksbill turtles and were more likely to be inundated by water, which killed the developing embryos. Also, all but one leatherback nest was laid close to the public access area on Zeelandia Beach, which was the site of continued illegal sand mining in 2005. The removal of sand adds to the natural erosion of the beach, creating problems for any nests laid in that area. Only one nest was relocated; during a night patrol, eggs from a green turtle nest were observed in a bank being washed away by

high tides. The nest was relocated to another section of the beach away from the erosion zone; the relocation process did not appear to adversely affect the eggs for hatching success was calculated as 76.4%.

One of the major achievements of 2005 was the successful implementation of the Sea Turtle Satellite Tracking Project, funded by the Dutch Caribbean Nature Alliance. This research was an inter-island collaboration of STENAPA and the Nature Foundation St Maarten. Dr Robert van Dam was the lead biologist, providing expertise and training in satellite telemetry methodology. The research aimed to identify migration pathways and foraging grounds of hawksbill and green turtles nesting on Statia and St Maarten. In addition, it was hoped to use the project as a means of engaging the public in marine conservation issues.

Although only two transmitters were deployed on nesting females, one on a green turtle from Statia in September, the second on a hawksbill from St Maarten in October, the project produced some interesting results. The hawksbill showed



fairly typical migratory behaviour, travelling 330km to St John, US Virgin Islands, a straight-line distance of 175km from her release site on St Maarten. In contrast, the green turtle displayed very unusual behaviour; she did not undergo any significant migration, remaining in the near-shore waters less than 5km from the release site on Zeelandia Beach throughout the two-month tracking period. This is possibly the first record of such behaviour for an adult green turtle female, and will be studied further during additional tracking studies in 2006. The project results were presented at the 26th International Sea Turtle Symposium held on Crete in April 2006.

The education component of the project focused primarily on the island schools. Students were given presentations about satellite telemetry and invited to participate in two competitions. For the "Name the Turtle" competition students were asked to draw a picture of a turtle, write a story about their migration or make a model turtle out of recyclable materials. 106 entries were received; three winners were selected and they won various prizes, including the opportunity to choose the name for one of the transmitter turtles. A similar competition was held on St Maarten, and received over 200 entries. The green turtle was given the name "Miss Shellie" and the hawksbill was called "Archy". All the competition entries were displayed as part of an exhibit at the public library, featuring a map that was regularly updated with the location of each turtle. The "Where's the Turtle?" competition asked people to guess where they thought the turtles would migrate to and how far they would swim. Over 250 students participated, and four winners were announced; one guessing the exact distance that "Archy" travelled from St Maarten to the Virgin Islands.

Several different community activities were conducted as part of the Programme in 2005. A puppet show was organised for local schools, to teach students about threats to turtles, how they could be avoided and what they could do to help. Presentations were also given at the Auxiliary Home and the Methodist church.

Beach erosion continues to be a significant problem on Zeelandia Beach; this is compounded by illegal sand mining activities that occur at the northern end of the beach. Five large cliff falls were reported during the nesting season, highlighting the need for an extensive erosion study to monitor the problem. Another area of concern is the quantity of garbage on the nesting beach, most of which is coming from the Smith's Gut landfill site. Regular clean-ups conducted on Zeelandia Beach gathered more than 12 truck loads of rubbish bags, in addition to a fridge, large rope, fishing net and car batteries.

Following the success of the Programme in 2005, research and monitoring activities will continue to develop in 2006, when it has been financed by USONA.

STENAPA's Facelift

STENAPA's new expanded office at Gal-lows Bay is nearing completion. A lease was signed between STENAPA and the Island Government, allowing the original property to be extended in order to enable expansion of the National Park facilities.

The garden area on the south side of the current facility is being changed to incorporate a public area with picnic tables and facilities for small gatherings and activities, such as the Snorkel Club and Junior Ranger Club.

A new building has been constructed to house bathroom facilities, including two toilets and two showers for public use. There will be a small charge to cover water usage. A new visitor's entrance giving direct access to these facilities is also under construction.

A new building to the north side of the property will provide facilities for a workshop and equipment storage. A covered area will provide shade for maintenance of the Marine Park patrol boat and other vehicles.



STENAPA will continue to maintain the Tompi Hill Head Trail to Upper Town.

The final part of the construction has been to enlarge the current wooden building under the existing roof for an improved visitor's centre, including souvenir sales and a meeting area. There will also be two administrative offices.

Construction and improvements were funded by a three-year grant from Stichting Doen.

Other Changes

Not only has the office undergone a facelift, STENAPA staff have also been fitted with a smart **new uniform**. The uniform consists of dark blue shorts or trousers and a shirt embroidered with STENAPA's logo.

We are pleased to announce **Carlton van Putten** has joined STENAPA as part-time **Assistant Ranger** in the Botanical Garden. This post is funded by the Prins Bernhard Culture Fund until end 2006. Welcome Carlton!

Corallita Research Project Update by Pieter Ketner and Joris Ernst, Researchers

The earliest recording of Corallita on Statia is from 1907 by the botanist Bodinigh in his 'Flora of the West Indies', where he mentioned the species was found in a garden in Oranjestad. This immediately poses the question: "Why has it taken so long before the plant became a pest?" This is very difficult for ecologists to answer. During our stay in November 2005 we asked several people if they could remember when Corallita started growing profusely and became a pest. Several answered 'some 15—20 years ago'. Historically this seems to coincide with a thorough change of land use, as many agricultural practices were abandoned. This might have induced the rapid growth of Corallita.

Another intriguing question is the way the plant propagates. Is it mainly by seeds or vegetative by stem cuttings, root cuttings or tubers? We looked for seed-

lings during our stay but only found one on a heap of soil in town. We never found a seedling under a parent plant, where it is dark and humid. The seeds lying there decompose rapidly or get infested by fungi or eaten by insects. However, the tubers form a menace. In a heavily Corallita-infested area we dug 1m² up to 35cm deep and collected 280 tubers of various sizes, more than 1kg. Stem and root cuttings also seem a way of dispersal. Branches root at the knots as soon as they touch the surface and can form thick mats of biomass. It is often mentioned in literature that animals disperse the plant from one site to another, but there is no proof so far. If they do eat seeds, it is possible that the (winged nut) seed is not digested and is disposed with the faeces in a not-yet-infested area. Cows and goats have been observed eating Corallita leaves but in low quan-



tity. Cow dung is collected and checked for the presence of viable seeds. The dry season is interesting for observation. We want to know how long the plants will continue to grow and flower. Soon we will know more about the growing cycle and will keep you informed.

Pieter and Joris will be in Statia from 25 May to 5 June. If you are interested in attending a public talk, please contact the STENAPA office.

St Eustatius: National and Marine Parks and Botanical Gardens



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STENAPA is an environmental not-for-profit foundation on St Eustatius and was established in 1988. The objectives of STENAPA are to upkeep the natural environment, to preserve and protect endangered or endemic species (flora and fauna) and to educate the community about the importance of the protection of the natural environment.

Areas of responsibility include management of the marine park, the national parks and the Miriam C Schmidt Botanical Gardens. STENAPA is legally delegated by the Island Council to manage these protected areas.

President: Irving Brown
Vice President: Ronnie Courtar
Treasurer: Jana Mason
Secretary: Jessica Berkel

Next edition of STENAPA Update available soon with articles on:

- New education programme 'the Waste Watchers',
- Artificial reef sunk for fishermen thanks to Statia Terminal
- Corallita is so famous that a song has been made!

Nicole Esteban in the Netherlands

Some of our most endangered wildlife and habitats are one step closer to safety following the announcement by Minister Pechtold of the Dutch Ministry of Kingdom Affairs (BZK) of a Euro 11 million grant for nature conservation in the Dutch Caribbean. The money from the Dutch government will go to the Dutch Caribbean Nature Alliance, an umbrella organisation formed last year to give a united voice to conservationists on the six islands of Aruba, Bonaire, Curacao, Saba, St Eustatius and St Maarten.

'Our coral reefs, mangroves and tropical forests contain the richest biodiversity in the Kingdom of the Netherlands,' says Kalli De Meyer, the DCNA's executive

director. 'In the past, our efforts to safeguard these amazing habitats have been severely hampered by a lack of dependable funding. We are overjoyed that the Dutch Government has decided to step in with financial support which we desperately need. This demonstrates the spirit of unity and support which lies at the heart of the DCNA and which we hope to foster between the islands in the coming years.'

The funds, which will be released over a ten-year period, will be used to create a Conservation Trust Fund that will eventually generate enough interest to cover the operational running costs of all the parks. It is anticipated that revenues from the Trust Fund will start supporting operational costs of STENAPA from 2017. The new grant is another boost for DCNA that was set up in February 2005. The organisation has now turned its attentions to fundraising, securing long-term financing and building management capacity in all the parks. Letitia Buth, director of the Central Government Department of Nature and the Environment (MINA): 'We are pleased that Minister Pechtold realises the urgent need for long term investment in nature conservation in our islands.'



Eco-bags Update



STENAPA's plastic bag campaign is coming to an end and most activities are now complete. Around 3,000 eco-bags were received in January, some pre-printed, others having a pocket sewn on by islanders in response to radio requests for help. A new eco-bag radio jingle has been aired since February. Violet (Tutti) Busby distributed bags to most areas of town, assisted by our new volunteer Hannah Madden. In addition to the two bags received by each household, every schoolchild has received one extra bag. Extra bags are available on sale at the National Park office.

Photo: Seventh Day Adventist school