

# TrustNotes

Issue 9 No.3 | July 2013

The Newsletter  
of the  
Bahamas  
National  
Trust



Native Iguanas and Shearwaters Saved from Invasive Rodents



Touring Andros West Side National Park



Student Iguana Experience



Birding on San Salvador



P.O. Box N-4105  
Nassau, Bahamas  
Tel: 242-393-1317  
bnt@bnt.bs www.bnt.bs

## Grouper Conservation Meeting

The Nassau grouper is listed as endangered by the International Union of Conservation of Nature, and the population has declined by about 60 per cent over the last 30 years.

This falling population, combined with the rapid loss of spawning aggregations, recently led the BNT to convene a meeting of scientists to discuss ways of rescuing this iconic species. The meeting was funded by the Moore Bahamas Foundation (an affiliate of Louis Bacon's Moore Charitable Foundation).

The overall objective of the participants (including the Guy Harvey Ocean Foundation, Ocean Crest, The Nature Conservancy and BREEF) was to discuss the structure of a potential project that would cover research and monitoring, education, outreach and advocacy for a permanently closed season for the Nassau grouper.

Since the 1980's, there have been documented declines in Nassau grouper populations in Bahamian waters threatening the continued existence of the species. One major cause is overexploitation, particularly during seasonal aggregations, when the fish are most vulnerable.

Research has shown that the resulting overfishing from this practice has decimated grouper populations regionally by as much as 90 per cent relative to grouper populations of two decades ago. The Bahamas' re-



Pictured from left: Neil Mckinney, Shenique Smith, Krista Sherman, Ramould Ferrera, Joe Ierna, Lindy Knowles, Dr. Guy Harvey, Dr. Craig Dahlgren, Eric Carey, Casuarina Lambert, Vanessa Benjamin, Fred Smith and Joseph Darville

sponse so far has been to impose a seasonal closure for grouper fishing. But experts say more is required to save the fishery.

The BNT advocates a multi-agency approach to develop a comprehensive National Conservation Strategy as the first practical step towards conserving this cultural icon. Such a strategy is of paramount importance to address management inadequacies, identify priority research

needs specific to The Bahamas, and promote public awareness of the conservation issues.

The current winter closed seasons are not a permanent feature of fishery regulations, and the length and timing of the closed seasons varies annually at the whim of the Minister of Agriculture and Fisheries. Regulatory changes are critical to address the many threats facing the Nassau grouper.

### Mystery of the Grouper Moon

Acclaimed marine artist and conservationist, Dr. Guy Harvey, at right, was present at the Old Fort Bay Club recently for the showing of his 2011 documentary on the Nassau grouper spawning aggregation on Little Cayman (Mystery of the Grouper Moon). Dr. Harvey and videographer, George Schellenger, spent a week in the field with other scientists to film this amazing event. Over 120 people attended the BNT event where the film was screened. It was introduced by Dr. Harvey, who was in Nassau for the BNT's Nassau grouper conservation strategy meeting. A Jamaican with a PhD in fisheries science, Dr Harvey is an acclaimed wildlife artist and filmmaker. He founded the Guy Harvey Research Institute at Nova University and the Guy Harvey Ocean Foundation. His business ventures include artwork, a line of branded outdoor clothing and restaurants. He has also produced an award-winning 45-minute film on shark conservation, much of which was shot in the Bahamas.



# Native Iguanas and Shearwaters Saved from Invasive Rodents



Four years ago, the BNT—along with Island Conservation; Dr. John Iverson of Earlham College; and Dr. Will Mackin—began a programme to remove invasive house mice from Allen Cay in the Exumas.

Support was provided by the United States National Fish and Wildlife Foundation, charter boat operator Powerboat Adventures, and the John G. Shedd Aquarium.

Allen Cay supports the third largest breeding population of Audubon's Shearwaters (*Puffinus lherminieri lherminieri*) in the Bahamas, as well as The Bahamas-endemic Allen Cay Rock Iguana (*Cyclura cyclura inornata*) listed as Endangered by the International Union for Conservation of Nature.

The inadvertent introduction of non-native house mice, a primary food source for Barn Owls, led to an artificially higher number of the transient owls, which then ate large numbers of Shearwaters.

As a result, the mortality rate for Audubon's Shearwaters was twice as high on Allen Cay compared to nearby cays without invasive rodents.

The decline of Audubon's Shearwaters and the lack of breeding iguanas were strong indicators that the cay's threatened natural ecosystem required action.

Following extensive planning, field trials, on-site monitoring and public outreach, the project was authorised by the Ministry of the Environment in April 2012 and implemented the following month.

This past May scientists returned to the cay and confirmed the absence of rodents. They also reintroduced resident iguanas that had been translocated to a nearby cay to avoid disturbance during the removal project.

The team saw clear signs of a recovering island ecosystem, and preliminary findings

suggest a significant drop in bird mortality since the removal of the mice.

The mouse-removal was a significant part of a larger effort to restore the natural environment of Allen Cay. Subsequent work to enhance breeding habitat will increase the chance of recruitment and recovery of the iguana population.

Following the removal of invasive mice, natural cavities were filled with sand to provide ideal nesting sites for female Allen Cay Rock Iguanas. Such efforts will continue into the future.

According to Deputy Executive Director Lynn Gape, "It is essential for recreational boaters and local fishermen to understand the impacts that introduced rodents can have on our island ecosystems so they can take steps to help prevent reintroduction. The BNT will work with recreational boaters and fishers to reduce the risk of future invasions."

Allen Cay is in the northern Exuma islands, about 60 km southeast of Nassau. The cay is about 1 km long, 5 m in elevation, and 100 m wide.



# Students and Teachers Visit Andros West Side National Park



Claudine Green of the BNT and Sharon Henfield of Nature's Hope, an Andros conservation group, joined students and teachers from the Deep Creek, Eleuthera and High Rock, Grand Bahama primary schools on

a tour of the Andros West Side National Park in June. The visit was funded by the non-profit Kerzner Marine Foundation, which has been dedicated to the preservation and enhancement of marine ecosystems

through research, education and public outreach. The foundation was created by the Kerzner International group of companies, which operates the Atlantis Resort on Paradise Island.

## Improvements for Andros West Side National Park

Wardens Wavell Hanna and Tavares Thompson recently installed boundary buoys for the Andros West Side National Park, as well as a park Information kiosk at the Mangrove Cay Airport. The buoys and kiosk were funded by the Kerzner Marine Foundation in partnership with The Nature Conservancy, Nature's Hope, the Andros Conservancy and local government.



# Sea Turtle Research Continues at Union Creek

Drs. Alan Bolten and Karen Bjorndal were at the Union Creek Reserve on Inagua during May to conduct annual turtle tagging and associated research. The research is supported by the Archie Carr Center for Sea Turtle Research, which has been studying turtles at Union Creek for more than 35 years. This season 100 Green turtles and one Hawksbill turtle were caught, measured, weighed and tagged before being returned to the sea. Of those that were caught, 38 had been tagged previously, and all were healthy. From left (standing): BNT Warden Henry Nixon, Dr. Bjorndal, Casper Burrows. From left (kneeling): Marquis Rolle and Dean Munnings, volunteers.



# Abaco Identifies Heritage Tourism Sites

The BNT recently took part in a multi-agency planning session that identified more than 50 potential heritage tourism sites on the island of Abaco.

Representatives of the Antiquities Monuments and Museums Corporation (AMMC), the Abaco Chamber of Commerce, Friends of the Environment, the Ministry of Tourism, and the Department of Local Government agreed to undertake further research on half of those sites.

Their goal is to incorporate key natural areas, historic sites and places of scenic beauty into an overall heritage tourism plan for the island.

According to Abaconian Nancy Albury of the AMMC, “there are a large number of sites that showcase Bahamian biodiversity and Abaco’s unique ecosystems.”

Criteria for site selection included the expense and effort needed to make a site useful, its relevance to Abaco’s history or heritage, its potential economic or recreational impact, the practical benefits offered as a tourism site, and the feasibility of forming a partnership with local government.

The meetings in June were led by Marvin and Lee Cook of Caribbean Heritage Concepts. They reviewed the importance of developing a concept plan for each site with

an implementation budget.

The idea for an island-wide heritage plan was originally proposed by Friends of the Environment. “It is great for all of us to come together to promote our unique environment and heritage,” said Friends Executive Director Kristin Williams.

The BNT has been working on development plans for the Abaco National Park that will provide opportunities for tour guides and other business services. Deputy Executive Director Lynn Gape said the BNT was enthusiastic about “working with our partners and members of the Abaco community on this broader proposal.”



## BNT and Shedd Aquarium Team Up for Student Iguana Experience

Nineteen students from the Black Point and Staniel Cay All-Age Schools recently joined Dr. Chuck Knapp (of Chicago's renowned Shedd Aquarium) on Gaulin Cay in the Exumas to learn about iguanas.



West Indian rock iguanas are large plant-eating lizards that live on islands in the Caribbean and the Bahamas. They are threatened with extinction from habitat loss, predation, competition from non-native mammals and overhunting.

For more than 15 years, Shedd has conducted field research on endangered

iguana populations in the Exumas and on Andros. Researchers and volunteers living aboard the research vessel, R/V Coral Reef, survey and investigate the health of iguana populations and erect signs on beaches to educate tourists.

Many of the students who took part in this year's research are members of the BNT's Discovery Club, which has a thriving chapter at Black Point.

Dr. Knapp has been studying the Exuma Rock Iguana for 20 years and has been visiting the schools at Black Point and Staniel Cay for the last three years. He brings iguanas into the classroom to discuss their ecology, and the students expressed interest in joining him in the field.

Thanks to transportation provided by Bell Island, the students and their teachers met Dr Knapp on the beach at Gaulin Cay (where more than 200 iguanas live) to learn first-hand about these large reptiles.

The students were able to observe and participate in weighing, measuring, tagging, and releasing the iguanas.

Exuma iguanas are uniquely suited to their island ecosystem but vulnerable to human pressures—most notably feeding by humans. The population exists on small cays in the central and southern Exuma chain, and is estimated

at only 1300 individuals. The Exuma iguana has declined some 20 per cent over the last 50 years.

Dr Knapp's research focuses on understanding the effects of anthropogenic disturbance on endangered species and designing conservation strategies to prevent further population declines and habitat degradation.

He is a member of the International Iguana Foundation, which aims to ensure the survival of iguanas through conservation, awareness and scientific programmes.

According to Juanita Munroe, the BNT education officer at Black Point, "This joint field trip between the two schools was a first and the opportunity appeared to have a positive and hopefully long-lasting impact on the students."





## BNT Summer Safari Camp



A group of 25 youngsters had the opportunity to explore the Bahamian environment, learn about our cultural heritage and discuss sustainable living during the BNT's Summer Safari Camp in June.

They visited the pine forest and were taught how to plait silver thatch palm by Eloise Smith. They visited Bonefish Pond National Park and snorkelled in the mangrove creeks. At the Retreat on Village Road they learned about land crabs and how to catch them.

A visit to the water tower near Fort Fincastle included a discussion about water

resources and water conservation as part of RBC Royal Bank's Blue Water Project. The week-long safari camp ended with the painting of ecosystem murals and a Junkanoo rush out.



Launched in 2007, the **RBC Blue Water Project** is a 10-year global charitable commitment of \$50 million to help provide access to drinkable, swimmable, fishable water, now and for future generations. The BNT received a grant to fund a collaborative project with The Nature Conservancy to reduce threats to sensitive natural areas and increase community stewardship of watersheds and water resources in the Bahamas, including a water conservation programme for schools.

# BNT Workshop Teaches the Importance of Biodiversity



Efforts to protect key biodiversity areas on San Salvador recently received support from the Critical Ecosystem Partnership Fund - a joint programme of European, Japanese and American groups and the World Bank.

The target areas are Graham's Harbour and the Great Lakes. The project aims to protect these areas as national parks by engaging government officials, raising public awareness, building capacity to monitor species of conservation value, and strengthening partnerships with local groups.

As part of this project, BNT Science officer Predensa Moore held a Seabird Monitor-

ing Workshop at the Gerace Research Centre on San Salvador in June. The goal was to teach participants about the seabirds nesting in and around Graham's Harbour, which has already been designated as an Important Bird Area by the BNT in conjunction with BirdLife International.

The area is home to Brown Boobys, Red Footed Boobys, Magnificent Frigate Birds, Bridled Terns, Sooty Terns, Brown Noddys, Roseate Terns, Royal Terns, Laughing Gulls and Ruddy Turnstones. The monitoring capacity built by this workshop will help to move the national park designation process forward.





**LIONFISH WINNERS** Pictured from left: front row: Alexander Maillis, Glenn Pritchard, Rachel Lightbourne and Felicity Burrows. Back row from left: Pericles Maillis, Jeff Mitchell, Gregory Graham, Theo Hutcheson, Demetri Darville, George Maillis, and Peter Maillis. Missing are Jordan Lampkin and Peter Maury.

# Lionfish Roundup

Two hundred and seventy three lionfish were landed during the recent Lionfish Roundup sponsored by the BNT and The Nature Conservancy.

Event partners included the Green Parrot Restaurant, Sands Beer, Lightbourne Marine, Bay Street Marina, and the Department of Marine Resources.

Winning the roundup with 137 lionfish was the Maillis Family (and friends).

The Bahamas Marine Exporters Association was on hand to buy the fish, which are increasingly popular at local restaurants.

Jordan Lampkin placed second and Demetri Darville was third. The largest fish was caught by Gregory Graham and the smallest by Jordan Lampkin.

Lionfish are an invasive species with no natural predators in this part of the world, so their population is exploding.

The first confirmation that lionfish were

becoming established in the Atlantic occurred off North Carolina in 2000. Since then, they have spread like locusts, eating their way throughout the Caribbean and along every coastline from North Carolina to Venezuela.

When lionfish arrive on a reef, they reduce native fish populations by nearly 70 per cent.

Scientists believe they were released into the wild, either accidentally or on purpose, which set an ecological cascade in motion.

Researchers are trying to learn as much as they can to understand the extent of the damage lionfish will inflict on local ecosystems, and determining the best ways to respond.

Lionfish can have a severe impact on commercial fisheries because they eat whatever they can get their mouths

around, which means that young fish and crustaceans of any species are potential targets - including popular food fish like grouper.



## BNT Building Community Relationships in Black Point, Exuma

Three staff members visited Black Point, Exuma to join the BNT education officer who is stationed there (Juanita Munroe) for a special event in June.

Tavares Thompson, Andros park warden; Scott Johnson, education officer; and Vanessa Turnquest, Discovery Club coordinator, took part in a unique social occasion designed to build relationships with the community while promoting the importance of national parks.

The evening events were well attended with 45 ladies gathering at Dashamon's Restaurant while the men gathered at Scopios. After formal presentations, participants enjoyed a variety of games, including a very competitive domino tournament. The initiative was part of the BNT's effort to improve communications with local communities.



# BNT Sea Turtle Tagging Internship

Several young people took part in BNT-coordinated scientific expeditions this year to track, catch and tag sea turtles.

The work was undertaken in partnership with the Archie Carr Center for Sea Turtle Research at the University of Florida.

The Center's research programmes help to obtain the necessary information to counteract threats to the survival of sea turtles.

The interns tracked and caught turtles in shallow mangrove creeks and bays around Barraterre, Exuma, Acklins and in the Exuma Cays Land & Sea Park.

After weighing and measuring, the turtles were tagged and released. The data are submitted to the Center, which has been researching in The Bahamas for over 35 years.

BNT Education Director Portia Sweeting coordinated the programme together with volunteers Stephen Connett and Barbara Crouchley.

The first expedition visited Inagua, Crooked Island and Long Island before returning to New Providence. The interns interacted with students from the Crooked Island School and met with the island administrator, Samuel Miller.

Over 40 turtles (Green and Hawksbill) were tagged during the week-long expedition.



Pictured above: Kenaj Sweeting and Francesca Bethel. At right Marquis Rolle and Christina Roberts. This year's participants in the BNT's annual Sea Turtle Tagging Expedition which began in 2008.

The second expedition visited Long Island, Exuma, Farmer's Cay and the Exuma Cays Land and Sea Park. Over 30 turtles were tagged.

The Archie Carr Center was established in 1986 in recognition of the pioneering research of the late Archie Carr, a zoologist whose entire career was spent at the University of Florida. His ability to translate science into literature brought the first international attention to the plight of sea turtles.

During the 1950s Dr Carr's research included the creeks of Inagua and the BNT was able to establish the Union Creek Reserve in 1963.

Dr. Carr was mentor to Drs Karen Bjorndal and Alan Bolton, who are BNT scientific advisors. They have been studying sea turtles at Union Creek since 1974.

The young people who participated in the turtle expeditions were graduates of the BNT's 2012 Eco Camp and the Bahamas Environmental Stewardship Programme.



# BirdLife International World Congress

Conservationists, politicians and business people from more than 120 countries met in Ottawa, Canada during June for the BirdLife International World Congress.

BirdLife is the world's largest civil society partnership for nature. There are 121 BirdLife Partners worldwide with over 2.5 million members and 4000 staff.

The congress marked the 90th anniversary of the organisation from which BirdLife evolved (making it the world's oldest international conservation organisation), and the 20th anniversary of the BirdLife Partnership.

The BNT became a full Birdlife Partner in 2012 and BNT Executive Director, Eric Carey attended the Ottawa event. He shared the activities of the BNT at the Birdlife Partnership Fair.

Our partnership with Birdlife International is a critical aspect of BNT conservation efforts. Together, the BirdLife

Partnership forms the leading authority on the status of birds, their habitats and the issues and problems affecting bird life.

In The Bahamas the BNT has identified and is working to protect 39 Important Bird Areas (IBAs). Worldwide, the BirdLife Partnership has identified 12,000 IBAs. They are recognised as the most comprehensive network of essential sites for biodiversity conservation using birds as indicators.

Declines in birds across the globe are providing evidence of a rapid deterioration in the global environment that is affecting all life on earth – including people. However, birds also tell us

that saving the planet comes at a relatively small price – an investment in conservation that's vital to secure our own future.



Picture from left: Eric Carey, David Yarnold, CEO National Audubon and Matt Jeffery, National Audubon International Alliances programme.



## BNT Public Meetings focus on Marine Resources

Public Meetings in May and June focused on marine resources. In May **Dr. Peter Mumby**, from the University of Queensland in Australia spoke on the importance of Bahamian coral reefs. His informative talk covered the importance of the Exuma Cays Land and Sea Park and the role it has played in showing how Marine Protected Areas can benefit commercial fisheries.

In June **Dr. Alan Stoner** served up decades of conch research in one evening. Dr. Stoner's presentation was also heard on Reality Check with Chrissy Love on Guaridan Talk Radio where he appeared with Casuarina McKinney of BREEF and Jared Dillet, BNT's Conchervation Coordinator.



## FAO Logging Workshop

BNT wardens recently took part in a technical training workshop presented by the United Nations Food and Agriculture Organisation. The FAO is undertaking a forest management pilot training programme on Abaco in conjunction with the BNT and the Forestry Department of the Ministry of the Environment. The workshop focused on equipment safety, chainsaw maintenance, and tree felling techniques. The Forestry Act 2010 created a new framework for the

sustainable use of Bahamian forests - including pinelands, coppice and mangroves. The Director of Forestry works in concert with the BNT to implement the law's provisions. BNT wardens currently act as forestry officers on the islands of Andros, Abaco Grand Bahama and New Providence. Pictured from left at the workshop: Cameron Saunders, David Cleare, Marvin Russell, Wavell Hanna and Arien Sikken, FAO forestry specialist.

## High School Teachers at Leon Levy Preserve

Twenty-two teachers from Central Eleuthera High School visited the Leon Levy Native Plant Preserve in Governor's Harbour recently. The teachers received a special welcome and tour from Camilla Adair, deputy preserve manager, and Hermene Examente, preserve attendant. The 25-acre preserve features 171 species of indigenous plants and 2,000 native trees, and attracts an array of wildlife. The Preserve is operated by the Bahamas National Trust and funded by the Leon Levy Foundation. It was developed by Shelby White, trustee of the Foundation, in honour of her late husband, Leon Levy.



### Bahamas National Trust

P O Box N-4105  
Nassau, The Bahamas  
Tel: 242-393-1317

www.bnt.bs | bnt@bnt.bs