

# Protection and Restoration of Piping Plover Habitat in the Bahamas Archipelago

Joulter  
Cays  
National  
Park

Grand  
Bahama  
Island

North  
Atlantic  
Abaco  
Cays

Abaco  
Sound

The  
Berry  
Islands

Great  
Abaco

THE BAHAMAS

New  
Providence

Andros

The  
Exumas

Tongue  
of the  
Ocean



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## Protection and Restoration of Piping Plover Habitat in the Bahamas Archipelago



Piping Plover (N. E. Atlantic)

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Submitted to

Bahamas Environment, Science & Technology, and Bahamas National Trust



## PROJECT SUMMARY

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In 2016, Conservian and its partners began the first program in the Bahamas to implement on-the-ground protective and restorative measures to limit human-caused disturbance, and control invasive Australian pine (*Casuarina equisetifolia*), at key Piping Plover (*Charadrius melodus*), shorebird, and seabird sites. In 2017, 2018, and 2019 we continued to expand our project work throughout the northern and central Bahamas. Other focal species include the Wilson's Plover (*Charadrius wilsonia*), American Oystercatcher (*Haematopus palliatus*), Roseate Tern (*Sterna dougallii*), Least Tern (*Sternula antillarum*), Bridled Tern (*Onychoprion anaethetus*), Sooty Tern, (*Onychoprion fuscatus*) Brown Noddy (*Anous stolidus*), White-tailed Tropicbird (*Phaethon lepturus*), and Audubon's Shearwater (*Puffinus lherminieri lherminieri*). Long term project goals include increasing local capacity to implement coastal stewardship with hands-on conservation actions.

Conservian's mission is to conserve coastal birds and their habitats throughout the western hemisphere. The Bahamas archipelago is comprised of more than 700 islands and cays, and thousands of miles of sandy shorelines, sand flats, mud flats, and mangroves, possessing prime habitat for migratory and breeding shorebirds, much of it yet unexplored for these species. Even now, as human-created pressures increase globally, very little information exists for many species of shorebirds in the Bahamas. Conservian's project goals are consistent with recommendations from the *Piping Plover Five Year Review*, *Wilson's Plover Species Conservation Plan*, *Important Bird Areas of the Caribbean*, the *Atlantic Flyway Shorebird Conservation Business Strategy* and the *Australian Pine Management Plan of Florida*. These sources list the need for evaluation of human-created disturbance impacting shorebirds, and the need for habitat management and implementation of protective and restorative measures.

## BACKGROUND

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The concept for Conservian's shorebird habitat conservation work in the Bahamas took root in 2011 during discussions with Bahamas National Trust and other partners at the BirdsCaribbean

International Conference on Grand Bahama Island. In 2014 Conservian received the support of LightHawk to conduct extensive aerial surveys of the Bahamas by seaplane, a crucial first step that provided essential habitat data necessary to begin on-the-ground work. In the fall of 2015 the International Conservation Fund of Canada, with financial support from the Nature Conservancy of Canada, provided support to begin in our fieldwork in 2016. The discussions and planning with partners that occurred in 2015 at the BirdsCaribbean Conference in Jamaica also contributed to the approval of a Neotropical Migratory Bird Conservation Act grant award which provides additional partial funding for the project through 2019.

## PROJECT OBJECTIVES

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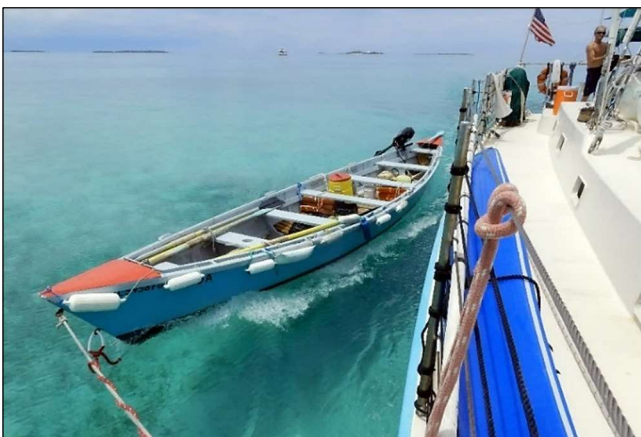
- 1) Reduce human impacts and enhance/restore shorebird and seabird habitat with on-the-ground management.
- 2) Train residents to monitor/steward shorebird and seabird sites and implement protective measures.
- 3) Conduct multispecies population assessments at Important Bird Areas (IBAs) and throughout the Bahamas to fill knowledge gaps in shorebird and seabird abundance and distribution.
- 4) Conduct habitat assessments at selected IBAs and key shorebird and seabird sites.
- 5) Engage and inform landowners/stakeholders on invasive Australian pine to secure support to target sites for eradication and removal.
- 6) Train Bahamian national park personnel, government staff, and local volunteers to control Australian pine.
- 7) Increase local awareness of the value of shorebirds and seabirds through outreach and education to preserve natural resources for the Bahamas' economic future.
- 8) Provide best management practices recommendations on coastal stabilization and restoration to Bahamas National Trust, the Bahamas Government, and commercial and private landowners.



## RESULTS: Summary of Progress & Outcomes 2019

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Conservian's cooperative Bahamas restoration work marks the first continuing effort to engage local Bahamians in on-the-ground protective and restorative measures for shorebirds, seabirds, and habitat through posting and signing of key migratory and breeding sites and invasive plant eradication. Conservian's northern Bahamas 2016, 2017, and 2018 project areas included Grand Bahama Island, Great Abaco, the Atlantic Abaco Cays, the Berry Islands, the Joulter Cays, North Andros, and the northern Exumas. In 2019 our project area expanded to include Central Andros, the southern Exumas, and Great Exuma. The research schooner served as our base of operations, providing housing, food, and transportation for field crew and materials.



**Expedition research schooners and deployment boats.** ©Conservian

## 2019 Project Accomplishments

### **Fall 2018 to Spring 2019**

- Provided 2018 progress reports to the Ministry of Public Works documenting the work of the summer *Casuarina* control internship
- Worked with professors from the University of the Bahamas and Bahamas Agriculture and Marine Science Institute to recruit students for the 2019 May schooner expedition and summer *Casuarina* control internship.
- Worked with the Bahamas Ministry of Public Works to secure stipends for university students for the 2019 *Casuarina* control summer internship (funded by the Bahamian Government)
- Secured permission from The Bahamas Public Parks and Beaches Authority to release employee to supervise the summer internship students in the field.
- Worked cooperatively with Grand Bahama Port Authority and Bahamas National Trust to continue removal of eradicated *Casuarina* from Lucayan National Park
- Secured project research and material import permits from Bahamas Environment and Science Technology Commission and Bahamas National Trust

### **Schooner-Based Field Program (May)**

- Sponsored and trained seven Bahamian university students on the 2019 May schooner expedition in *Casuarina* control and beach-nesting bird conservation
- Conducted Australian pine training and eradication at Joulter Cays National Park
- Posted new and replaced lost signage in Piping Plover winter areas and shorebird nesting areas at Joulter Cays National Park
- Conducted ground assessments for beach-nesting birds and seabirds throughout the Joulter Cays, Central Andros, the Exumas and Great Exuma
- Collected new data on habitat, human-caused disturbance, and breeding abundance and distribution, assessing more than 200 miles of coastal habitat.



- Worked with field partners BirdsCaribbean to assess declining breeding populations of Audubon Shearwaters in the Exumas

### **Summer *Casuarina* Field Program (June-August)**

- Supervised the (second year) of the *Casuarina* control summer internship program for Bahamian university students on the public beaches of New Providence
- Trained nine Bahamian students in total in *Casuarina* Control methods
- Met with project advisors in Nassau to discuss and plan 2020 summer student internship program
- Initiated plans with Bahamas Agriculture and Marine Science Institute to begin a second *Casuarina* control summer internship for students in 2020 on North Andros.
- Met with Bahamas National Trust to plan 2020 project objectives and discuss long-term cooperative shorebird and seabird habitat restoration.

In 2019, we conducted field work with the schooner in the Bahamas from May 5 through May 26. We worked in different island locations each week, conducting shorebird, seabird, and habitat assessments, working with local partners to post signs to protect known Piping Plover, shorebird, and seabird sites, and eradicate Australian pine at key locations within the Bahamas National Park system. Below are highlights from our 2019 accomplishments.

In 2019 we conducted Australian pine training and eradication at Joulter Cays National Park and on the public beaches of New Providence. Conservian and the Bahamas government continued the new *Casuarina* Control summer internship project (begun in 2018) in New Providence for Bahamian university students. In 2019 the Bahamas government again agreed to provide a weekly stipend for the participating students. The Public Parks and Beaches Authority again approved one of its' employees (trained by Conservian) to devote his work hours to supervise the summer internship students in the field.

The Grand Bahama Port Authority continued systematic removal of eradicated *Casuarina* from Lucayan National Park as a direct result of Conservian's project work. On the schooner expedition in May, Conservian sponsored seven students (five) from the University of the Bahamas (UB) and (two) from Bahamas Agriculture and Marine Science Institute (BAMSI) who participated in training and beach-nesting bird ground surveys, assisted with posting and signing of important Piping Plover/shorebird areas, and *Casuarina* control training and eradication. The same trained students continued *Casuarina* eradication on New Providence's beaches as part of the 2019 *Casuarina* control summer internship project. We also conducted ground surveys for beach-nesting birds and seabirds, collecting new data on habitat, human-caused disturbance, and breeding abundance and distribution.



**Wilson's Plover hatchling in nest**

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## Cumulative Project Accomplishments 2017-2019

### **Reduction of Human-caused Disturbance**

- Posted 26 imperiled shorebird/seabird sites that support 600+ wintering Piping Plovers
- Posted sites support more than 40% of the Bahamas winter Piping Plover population, and 7% of the world pop (8,100), as well as breeding beach-nesting birds
- Trained 10 local Bahamians to monitor shorebirds/seabirds at 12 sites

### **Australian Pine Control**

- Conducted Australian pine control at five National Park sites improving the winter habitat of 550+ migratory Piping Plovers ~ 40% of Bahamas winter population and 7% of the world population (8,100).
- Eradicated 15 linear miles of invasive *Casuarina* on coastal bird habitat with a total area of more than 350 acres.
- Conservian co-authored a national *Casuarina* eradication and management conceptual plan for the Bahamas government
- Engaged Grand Bahama Port Authority cooperatively with Bahamas National Trust to remove eradicated *Casuarina* from Lucayan National Park
- Initiated and continued (cooperatively with the Bahamas government) the *Casuarina* control summer internship project in New Providence for Bahamian university students

### **Education and Outreach**

- Engaged 50+ Bahamian volunteers in posting shorebird/seabird sites
- Trained 8 Bahamian government and national park staff in Australian pine control methods
- Trained two Grand Bahama Port Authority staff in Australian pine control methods
- Trained 13 Bahamian university students in Australian pine control methods
- Sponsored 11 Bahamian students from two universities to participate in the May schooner expeditions

- Trained one Turks & Caicos National Trust staff in invasive pine control, and shorebird protection and monitoring
- Reached 100+ Bahamians through presentations, training, and personal interaction in the field
- Secured a suspension of beach raking during nesting season at one site through Conservian and local volunteer intervention
- Gained permission to install two artificial, predator resistant nest boxes for White-Tailed Tropicbird on private property sites

### **Site Assessment**

- Assessed 850+ linear miles of coastline for beach-nesting bird habitat in the northern and central Bahamas
- Conducted ground assessments and identified and mapped beach-nesting birds and seabirds on over 165 islands and cays.
- Collected new population, distribution, and habitat data for breeding shorebirds and seabirds
- Identified new important breeding areas and habitat for Wilson's Plover
- Identified potential new habitat areas for future winter Piping Plover surveys





## DISCUSSION

### Important Piping Plover Sites Posted

In 2019 we again replaced lost signs and posted new areas in Joulter Cays National Park. In total, Conservian and local volunteers have posted 26 breeding shorebird and seabird sites that are known to support more than 600 wintering Piping Plovers. Three of the areas are sites within national parks (Peterson Cay NP, Pelican Cays NP, Joulter Cays NP) and one site, Ambergris Cay, has been proposed as a national park. The posted sites combined support more than 40% of the Bahamas winter Piping Plover population, and approximately seven percent of the world population of 8,100 breeding adults, as well as several other species of breeding, beach-nesting birds.



### New Solitary Beach-Nesting Bird Population Data

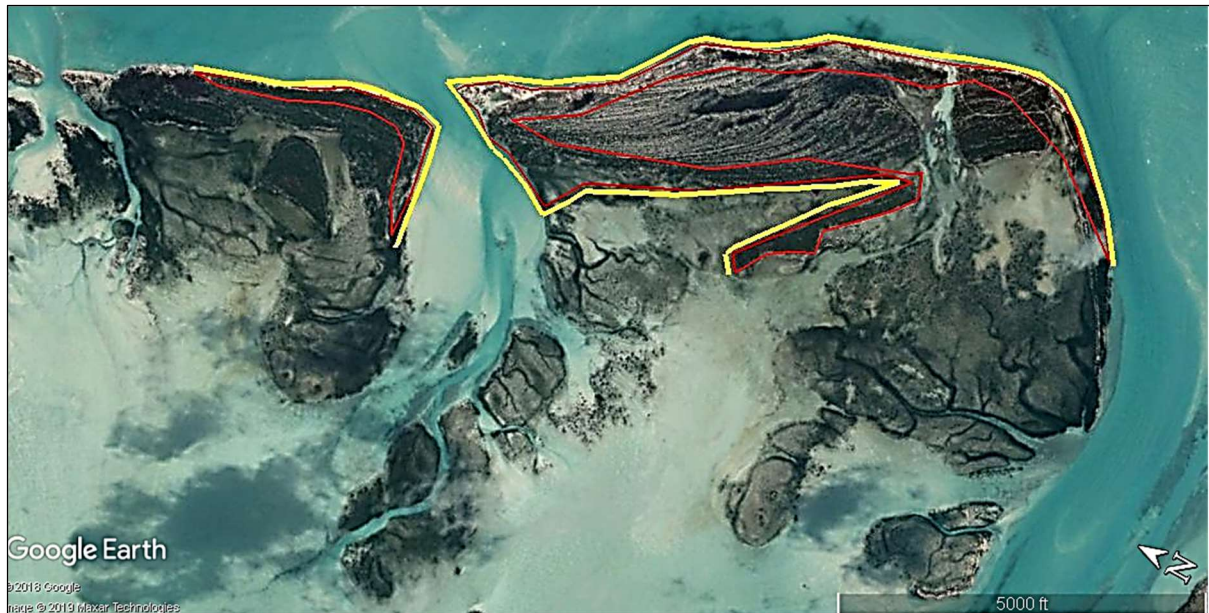
Throughout our 2016-2019 expeditions, we have documented new abundance and distribution for solitary nesting Wilson's Plovers and American Oystercatchers. As of 2019 we have assessed approximately one half of the Bahamas coastline for breeding, beach-nesting birds. A total of 332 pairs of Wilson's Plovers and 28 pairs of American Oystercatchers have thus far been recorded in the northern and central Bahamas during the surveys. We found as expected that the majority of known Piping Plover winter roosting sites also support breeding, beach-nesting birds. New data collected by Conservian and our local shorebird stewards indicates that Wilson's Plover populations on Grand Bahama Island and Great Abaco are not "residential", but follow a migration cycle like that of Wilson's Plovers in south Florida and the Florida Keys in the U.S. (*Wilson's Plover Species Conservation Plan*). Very little data existed for these solitary beach-nesting bird species prior to our surveys, thus we are building the first baseline

information on population, distribution, habitat, and human-caused threats regarding these species in the Bahamas. Please see shorebird population and habitat assessment data tables and maps at end of report (pgs. 20-52).

### *Casuarina* Control

In 2019, we continued to focus *Casuarina* control work on shorebird and seabird sites managed by the Bahamas National Trust with the full consent and permitting to conduct the work from the Bahamas Government and Bahamas National Trust. Since the inception of Conservian's Bahamas conservation program more than 350 acres of *Casuarina* have been eradicated, primarily in Bahamas National Parks. In 2019 we continued training sessions in the field, and *Casuarina* eradication at Joulter Cays National Park and on the beaches of New Providence. We employed both girdling (hack and squirt) and basal spray application of herbicide as recommended by the *Australian Pine Management Plan for Florida* (Pernas et al 2013). The Joulter Cays are a remote chain of barrier islands located north of Andros that have recently been designated as a national park. The Joulter Cays are known to support significant numbers of wintering Piping Plovers. In May of 2019 seven university students from UB and BAMSI participated onboard the schooner expedition assisting in *Casuarina* eradication. In the Joulter Cays we have treated the majority of the *Casuarina* impacting known Piping Plover roosting habitat. These same areas also supported breeding Wilson's Plovers and American Oystercatchers. Since 2017 Conservian has destroyed more than 100 acres of *Casuarina* in the Joulter Cays. Approximately 20-25% of the invasive is still present in the Park and will require further eradication. New *Casuarina* seedling growth has occurred, attributed to the recent hurricanes (Matthew 2016 and Irma 2017) passing through the area in the past three years. Hurricane Dorian will have certainly caused increased spreading of *Casuarina*. We plan to destroy all remaining *Casuarina* and halt any new growth in the Joulter Cays during the 2020 expedition.





Joulter Cays National Park showing areas treated for invasive *Casuarina*. Google Earth Image

Joulter Cays National Park showing areas of invasive *Casuarina* (before eradication) treated in 2019

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## Engaging Partners, Landowners and Stakeholders

Significant strides have been made over the past year in the Bahamas with Conservian-initiated *Casuarina* control projects. The Port Authority is one of the largest landowners on Grand Bahama Island and they lease land to Lucayan National Park and own lands adjacent to the Park. In 2019 under the supervision of the Park's manager, Ellsworth Weir, and in cooperation with Bahamas National Trust, the Grand Bahama Port Authority with Grand Bahama Sanitation Services made further progress removing the dead *Casuarina* trees from the beach at Lucayan National Park. Since 2016, Lucayan National Park and Conservian have eradicated more than 30 coastal acres of invasive *Casuarina* in the Park. Conservian will continue to monitor, advise, provide training, and herbicide and *Casuarina* control materials for the long term, large-scale, ongoing project on Grand Bahama Island.



**Sections of beach after *Casuarina* eradication and removal at Lucayan National Park.** ©E. Weir/BNT 2019





After *Casuarina* eradication new native beach vegetation shown growing at edge of primary dune in Lucayan National Park © E. Weir/BNT



2019 *Casuarina* control summer internship university students in New Providence. ©P. Ferguson/Bahamas Beaches & Parks



In May 2019 Conservian met with Bahamas National Trust at their headquarters in Nassau to review project accomplishments, plan 2020 conservation objectives and discuss long-term goals for cooperative shorebird and seabird habitat restoration in the Bahamas. The Trust has pledged continued partnering and support to Conservian. In 2018, we completed co-authoring a national *Casuarina* eradication and management plan for the Bahamas, Government, Minister of Public Works, with Providence Energy Partners Holdings. One of Plan's objectives was initiated as a pilot project in spring of 2018. Conservian and the Bahamas government began a new *Casuarina* control summer internship project in New Providence with University of Bahamas Students. The project continued in 2019 and was again facilitated by Conservian and Providence Energy Partners Holdings and supported by the Minister of Public Works, and Beaches and Parks in Nassau. The two summer internship sessions (2018 & 2019) have destroyed more than 30 acres of *Casuarina*. Conservian provided training, tools, and materials, as well as project design, documentation, supervision and required project reports.

**Below: *Casuarina* impacted wetland in New Providence showing trees turning brown a few weeks after treatment.** ©P. Ferguson/Bahamas Beaches & Parks



The Bahamas government and Conservian plan to continue and increase the new *Casuarina* control summer internship project in 2019. One of Conservian's objectives include expansion of the *Casuarina* control summer internship to the beaches and tidal wetlands of North Andros, as these areas support significant numbers of winter Piping Plovers. We have begun working with BAMSI (located on North Andros) to initiate a second *Casuarina* summer internship project in 2020.

### Local Volunteer Assistance

Local volunteer assistance is essential to the success of our conservation goals in the Bahamas, particularly in the absence of strong laws to protect shorebirds, seabirds, and their habitats. Our local volunteer coordinators and volunteers on Grand Bahama Island, Great Abaco, and New Providence proved invaluable to our 2019 project objectives and were active in assisting with field surveys, monitoring, posting and signing, as well as *Casuarina* eradication. Our Nassau volunteer coordinators worked with us to expand our volunteer network in New Providence, and Andros Island in preparation for our 2019 Bahamas Expedition. Through local volunteer coordinator connections and continued support from the Ministry of Public Works, Conservian plans to begin a second *Casuarina* control summer internship on North Andros that will run simultaneous to the first *Casuarina* control summer internship on New Providence.

### Field Partners and Additional Outcomes

In May of 2019, Dr. Will Mackin and members of the BirdsCaribbean Seabird Working Group joined us again during the 2<sup>nd</sup> week of the expedition. Colonial seabird surveys were conducted simultaneously with our primary project objectives. BirdsCaribbean and Conservian worked together to survey beach-nesting birds and seabirds as part of our common conservation goals. Since the early 1990s, scientists have been studying White-tailed Tropicbirds, Audubon's Shearwaters, and other seabirds in the Northern Exumas Cays and the Land and Sea National Park.





BirdsCaribbean's seabird objectives for 2019 included conducting repeat surveys and monitoring at two of the world's second and third most important breeding sites for Audubon's Shearwater. During our breeding surveys of 2018 the shearwater populations on Long Rock Cay and Allan's Cay were not found in the anticipated numbers, as approximately only 1/10 of the breeding birds were present at the two sites (W.Mackin unpubl. data). Shearwater's have been documented to skip nesting years due to windy and rainy weather as we experienced in May 2018, thus we conducted repeat surveys in 2019 and found higher numbers of breeding Audubon's Shearwater present. Early data analysis from our surveys show that breeding shearwaters on Long Rock Cay may have decreased by 29% in the past few decades (W.Mackin unpubl. data). Further assessment and annual surveys will be necessary to determine the causes of the decline however, we documented significant predation by barn owl on both islands (W.Mackin unpubl. data). Overall, preliminary results for our 2016-2019 surveys show that colonial seabird species in the Bahamas are in great decline. Field observations indicate that sites formerly colonized by seabirds are experiencing higher levels of human intrusion and

human-introduced invasive predators reinforcing the importance of regular population and habitat assessments for colonial seabirds.

## CHALLENGES

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Conservian's conservation projects are always challenging, that is why most of what we do, and propose to do, has never been done before. Because we are persistently committed to achieving our conservation goals, and because we have supportive partners both in and out of the field, no obstacles encountered in 2019 were insurmountable.



Male Wilson's Plover with nest in plastic trash bag

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## SUCCESS OWED to PARTNERSHIP

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Conservian's Bahamas cooperative shorebird habitat conservation work is a new program with long term objectives to conserve and protect the natural coastal resources of the Bahamas

through directed assistance and local capacity building. Our present and future successes are owed to our growing family of supporting partners.

### Supporting Partner Organizations

BirdsCaribbean, Bahamas National Trust, International Conservation Fund of Canada, The Nature Conservancy of Canada, Neotropical Migratory Bird Conservation Act grant/USFWS, Bahamas Ministry of Public Works, Bahamas Public Parks & Beaches Authority, Grand Bahama Nature Tours, Grand Bahama Port Authority, Bahamas Agriculture & Marine Science Institute, University of the Bahamas Bahamas Environment and Science Technology Commission, Providence Partners Energy Holdings, The Nuttall Ornithological Club, Dream Catcher Coastal Sailing Adventures, Lost Island Adventures, LightHawk, Dow AgroSciences, Royal Bahamas Police Force/Marine Support, Keys Wildlife Center.

### Supporting Partners (Individuals)

Hon. Pericles Maillis, Dr. Lisa Sorenson, Erika Gates, Hon. Earl Deveau, Hon. Minister Bannister, Peter Deveau-Isaacs, Shamie Rolle, Linda Barry-Cooper, Dr. Elwood Bracey, Ellsworth Weir, Captain John O. Duke, Captain Ray Temeyer, Keith Kemp, James Madison Roswell, William Gravitter, Robert Gravitter, Edward Guerry, David Cummins, David L'Hereux, Thomas Wilmers, Pete Johnston, Greg Johnston, Matthew Lowe, Joel Hederhause.

**Conservian supporting volunteer field leaders:** Erika Gates, Maureen Lilla, Scott Hecker, Will Mackin, Prince Ferguson, Lisa Ferguson, Tyler Kovacs.

**Supporting volunteer crews 2016-2019:** Alexandra Newton, Shona Lawson, Dawn Rassmusin, Jennifer Wheeler, Carolyn Wardle, Janet Vertin, Robyn Darley, Robin Bjork, Ben Bowman, Pete Monte, Louis Wray, Corina McBride, Coralina Meyer, Michala Reedy, Charla Lower, Susan Silvia, Elaine Mason, Correy Forbes, Meredith Morehouse, Keith Morehouse, Mike Hungeling, Lillian Russel, Soledad Pagluica, Joseph McIntire, Sandra Dunn, Samantha Plencer, Tristan Dewick, Isabella Rooney, Dianne Anderson, Thomas Red, Clint McNeal, Steven Temeyer, Sheila MaGee, Jan Monahan, Melissa Encinas, Rachael Manion, Natasha Atkins, Suzanne Heck, Amanada Devico, Josh Cantor. **Bahamas Educational Institutions:** CARDI: Michelle Singh, University of Bahamas: Kristen Unwala, Stacy Moultrie, Rhianna Neeley, BAMSI: Raveenia Roberts-Hanna, Katherine Huyler. **University of Bahamas Interns 2018:** Opal Obrien, Tika Penn, Jesse Sweeting,



Herbert Pinder, and Gabrielle Neilly. **University of Bahamas and BAMSI interns 2019:** Danielle Brown, Johntae Dorsett, Hubert Fernander, Shontes Hall, Ricardo McPhee, Lynden Mitchell, Kerwin Mullins, Ken- Reesha Price, Krista Saunders.

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## Bahamas 2016-2019 Beach-Nesting Bird Pair Population and Habitat Data

Site Name and (Designation)	Survey Year	Owner-ship	Site Length (mi/km)	Macrohabitat	WIPL Pairs	AMOY Pairs	LETE Pairs	ROST Pairs	BRTE Pairs	Migratory PIPL Recorded*
<b>Grand Bahama Island</b>										
West End, Bahama Bay	2016	Private	1.0/1.6	Mangrove Wetland	1	0	0	0	0	No
Ginn Estates Wetland	2016	Private	2.5/4.0	Mangrove Wetland	2	0	0	0	0	Yes
Ginn Sur Mer Beach	2016	Private	3.0/4.8	Mainland Beach	2	0	0	0	0	Yes
Holmes Rock Wetlands	2017	Private	6.1/9.8	Mainland Beach	0	0	0	0	0	Yes
Deadman's Reef/ Paradise Cove	2017	Private	12.4/ 20.0	Mainland Beach	0	0	0	0	0	No
Xanadu Beach	2017	Private	2.1/3.4	Mainland Beach	2	0	0	0	0	Yes
Freeport Aggregates Quarry	2016	Private	1.5/2.4	Artificially Created	0	0	0	0	0	Yes
North Shore Cays	2016	GBPA	12.0/ 19.3	Mangrove Islands	13	0	0	0	0	Unknown
Dover Sound	2016	GBPA	3.0/4.8	Mainland Beach	15	0	0	0	0	Unknown
Taino Beach/Bell Channel to Grand Lucayan WW	2016	Private/ Municipal	3.8/6.1	Mainland Beach	0	0	0	0	0	No
Discovery Beach	2017	GBPA	2.5/4.3	Mainland Beach	5	0	7	0	0	Yes
Barbary Beach	2016	GBPA	9.0/14.5	Mainland Beach	10	1	0	0	0	Yes
Peterson Cay National Park (IBA)	2017	BNT/GBPA	0.5/0.8	Barrier Island/Cay	0	0	2	0	75	Unknown
Gold Rock Beach, Lucaya National Park (IBA)	2016	GBPA/ BNT	2.2/3.5	Mainland Beach	4	0	0	0	0	Yes
Pirates of the Caribbean Disney Film Site	2017	Crown	3.1/5.1	Mainland Beach	3	0	0	0	0	Yes

## Bahamas 2016-2019 Beach-Nesting Bird Pair Population and Habitat Data

Site Name and (Designation)	Survey Year	Owner-ship	Site Length (mi/km)	Macrohabitat	WIPL Pairs	AMOY Pairs	LETE Pairs	ROST Pairs	BRTE Pairs	Migratory PIPL Recorded*
Gold Rock Creek to High Rock (IBA/NP)	2016	GBPA	5.2/8.4	Mainland Beach	0	0	0	0	0	Yes
Pelican Point	2016	GBPA/ Municipal	2.0/3.2	Mainland Beach	4	0	0	0	0	Yes
Rocky Point Flats	2016	Crown	1.5/2.4	Mainland Beach	0	0	0	0	0	Yes
Blackwood Point to Mclean's Town	2017	Crown	4.4/7.1	Mainland Beach	0	0	0	0	0	No
McLean's Town	2017	Municipal	0.4/0.6	Mainland Beach	1	0	0	0	0	No
Great Abaco (East)										
Allan's/Pensacola Cay (Abaco Cays IBA)	2016	Private	3.5/5.6	Barrier Island/Cay	2	1	0	0	0	Unknown
Murray (Money) Cays	2016	Crown	1.0/1.5	Barrier Island/Cay	0	0	0	0	0	Unknown
Big Hog Cay (Abaco Cays IBA)	2016	Private	1.0/1.6	Barrier Island/Cay	1	0	0	0	0	Unknown
Alec Cays	2016	Crown	0.4/0.7	Barrier Island/Cay	0	0	0	0	0	Unknown
Spanish Cay (Abaco Cays IBA)	2016	Municipal	3.0/4.8	Barrier Island/Cay	1	1	0	0	0	Unknown
Powell Cay (Abaco Cays IBA)	2016	Private	3.8/6.1	Barrier Island/Cay	2	0	0	0	0	Unknown
Soldier Cay	2016	Crown	0.1/0.2	Barrier Island/Cay	0	0	0	0	0	Unknown
High Cay (Abaco) (Abaco Cays IBA)	2016	Private	0.5/0.8	Barrier Island/Cay	0	0	0	0	0	Unknown
Bonefish Cay	2016	Crown	0.5/0.8	Barrier Island/Cay	0	0	0	0	0	Unknown



## Bahamas 2016-2019 Beach-Nesting Bird Pair Population and Habitat Data

Site Name and (Designation)	Survey Year	Owner-ship	Site Length (mi/km)	Macrohabitat	WIPL Pairs	AMOY Pairs	LETE Pairs	ROST Pairs	BRTE Pairs	Migratory PIPL Recorded*
<b>Ambergris Cays (Abaco)</b>	2016	Crown	1.3/2.1	Barrier Island/Cay	0	0	0	0	0	Unknown
<b>Manjack Cay (Abaco Cays IBA)</b>	2016	BNT	4.0/6.4	Barrier Island/Cay	7	0	0	0	0	No
<b>Crab and Fiddle Cays</b>	2016	Crown	2.3/3.7	Barrier Island/Cay	0	0	0	0	0	Unknown
<b>Green Turtle Cay (Abaco Cays IBA)</b>	2016	Municipal	6.0/9.7	Barrier Island/Cay	9	0	0	25	0	Yes
<b>No Name Cay</b>	2016-17	Crown	1.6/2.6	Barrier Island/Cay	0	0	4	0	0	Unknown
<b>Whale Cay</b>	2017	Crown	2.9/4.7	Barrier Island/Cay	2	2	6	100	4	No
<b>Spoil Cay</b>	2017	Crown	0.9/1.4	Artificially Created	3	0	4	0	0	Unknown
<b>Don't Rock</b>	2017	Crown	0.02/0.03	Barrier Island/Cay	0	0	0	0	0	Unknown
<b>Great Guana Cay (Abaco Cays IBA)</b>	2016	Private/Municipal	7.0/11.3	Barrier Island/Cay	5	0	15	0	0	Yes
<b>Foot's Cay</b>	2017	Crown	0.2/0.4	Barrier Island/Cay	0	0	0	0	0	Unknown
<b>Fish Cays (Abaco)</b>	2017	Crown	1.2/2.0	Barrier Island/Cay	0	0	0	0	0	Unknown
<b>Scotland Cay (Abaco Cays IBA)</b>	2016	Private	1.5/2.4	Barrier Island/Cay	0	0	0	0	0	Unknown
<b>Fowl/Fish Hawk Cay</b>	2017	Crown	1.8/2.9	Barrier Island/Cay	0	1	0	0	1	Unknown
<b>Man-O-War Cay</b>	2016	Municipal	2.9/4.8	Barrier Island/Cay	3	0	0	0	0	Yes

## Bahamas 2016-2019 Beach-Nesting Bird Pair Population and Habitat Data

Site Name and (Designation)	Survey Year	Owner-ship	Site Length (mi/km)	Macrohabitat	WIPL Pairs	AMOY Pairs	LETE Pairs	ROST Pairs	BRTE Pairs	Migratory PIPL Recorded*
Marsh Harbour	2016-17	Crown	0.5/0.8	Mainland Beach	0	0	0	0	0	No
Elbow Cay	2016	Municipal	4.6/7.4	Barrier Island/ Cay	5	0	0	0	0	Yes
Witch Point	2017	Crown	1.2/2.0	Mainland Beach	0	0	4	0	0	Unknown
Tilloo Cay (National Park)	2016	BNT/ Private	4.8/7.7	Barrier Island/ Cay	2	0	0	0	0	No
Lynyrd Cay	2016-17	Crown	2.6/4.3	Barrier Island/ Cay	0	0	0	0	0	Unknown
Goole Cay	2016-17	Crown	0.2/0.2	Barrier Island/ Cay	0	0	0	0	0	Unknown
Pelican Cays NP	2017	BNT	1.9/3.1	Barrier Island/ Cay	2	1	0	0	10	Unknown
Tom Curry's Point	2017	Crown	0.4/0.6	Mainland Beach	0	0	0	0	4	Unknown
Little Harbor, Bookies Beach	2016	Municipal	1.5/2.4	Mainland Beach	3	0	0	0	0	Yes
Winding Bay Beach	2016	Private	2.3/3.7	Mainland Beach	3	0	0	0	0	Yes
Cherokee Point	2016	Private	2.7/4.4	Mainland Beach	1	0	5	30	0	Yes
Cherokee Sound to Eight Mile Bay	2017	Private	3.3/5.3	Mainland Beach	2	1	0	0	0	No
Bahama Palms/ Nettie's Point	2017	Private	3.7/6.0	Mainland Beach	7	0	0	0	0	Yes
Rolling Harbour/ Delphi Club	2017	Private	2.6/4.2	Mainland Beach	2	0	0	0	0	Yes
Guineaman Bay	2017	Private	2.5/4.0	Mainland Beach	7	0	0	0	0	Unknown
Schooner Bay	2017	Private	1.2/1.9	Mainland Beach	3	0	0	0	0	Yes
Crossing Rocks Bay to Gilpin Point	2017	Private	3.5/5.7	Mainland Beach	5	0	0	0	0	Yes

## Bahamas 2016-2019 Beach-Nesting Bird Pair Population and Habitat Data

Site Name and (Designation)	Survey Year	Owner-ship	Site Length (mi/km)	Macrohabitat	WIPL Pairs	AMOY Pairs	LETE Pairs	ROST Pairs	BRTE Pairs	Migratory PIPL Recorded*
<b>Great Abaco, Abaco Sound</b>										
Norman's Castle	2017	Crown	5.5/8.8	Mainland Beach	0	0	0	0	0	Unknown
Joe Downer Cays	2017	Crown	10.2/16.5	Mangrove Island	4	1	0	0	0	Unknown
Big Lake/Goliath Cays	2017	Crown	6.9/11.0	Mangrove Island	0	0	0	0	0	Unknown
Woolen Dean Cays	2017	Crown	2.5/4.1	Mangrove Island	5	0	0	0	0	Unknown
The Marls (North)/Dead Man's Sound	2017	Crown	8.4/13.5	Mangrove Island	12	0	0	0	0	Unknown
The Marls (South)/Tony Cay Sound	2017	Crown	6.1/9.7	Mangrove Island	7	0	0	0	0	Unknown
Wood Cay Sound	2017	Crown	2.9/4.7	Mangrove Island	7	0	0	0	0	Unknown
Big Mangrove Cay/Long Mangrove Cay	2017	Crown	5.6/9.0	Mangrove Island	8	0	0	0	0	Unknown
Sand Ridge Sound	2017	Crown	6.3/10.2	Mangrove Island	21	0	0	0	0	Unknown
California Sound	2017	Crown	6.5/10.4	Mangrove Island	4	0	0	0	0	Unknown
Cedar Cays/Cornwall Point	2017	Crown	4.8/7.7	Mangrove Island	2	0	0	0	0	Unknown
Chalk Sound	2017	Crown	5.9/9.5	Mangrove Island	0	0	0	0	0	Unknown
<b>Berry Islands</b>										
Great Harbour Cay	2016	Municipal	8.0/12.9	Barrier Island/Cay	5	0	0	0	0	No
Petit Cay	2017	Crown	1.3/2.1	Barrier Island/Cay	1	1	4	0	10	Unknown
Haines Cay	2017	Crown	3.4/5.5	Barrier Island/Cay	2	0	0	0	0	No
Caesar Cay	2017	Crown	0.6/0.9	Barrier Island/Cay	0	0	0	0	0	Yes



### Bahamas 2016-2019 Beach-Nesting Bird Pair Population and Habitat Data

Site Name and (Designation)	Survey Year	Owner-ship	Site Length (mi/km)	Macrohabitat	WIPL Pairs	AMOY Pairs	LETE Pairs	ROST Pairs	BRTE Pairs	Migratory PIPL Recorded*
<b>Fanny Cay</b>	2017	Crown	1.1/1.7	Barrier Island/Cay	0	0	0	0	0	Yes
<b>Ambergris Cay (Berry)</b>	2017	Crown	1.7/2.7	Barrier Island/Cay	3	1	0	0	0	Yes
<b>Abner Cay</b>	2017	Crown	0.3/0.4	Barrier Island/Cay	0	1	0	0	50	Unknown
<b>Market Fish Cay</b>	2017	Crown	0.6/1.0	Barrier Island/Cay	0	0	0	0	4	Unknown
<b>Soldier Cay (Berry)</b>	2017	Crown	0.9/1.4	Barrier Island/Cay	2	2	1	5	10	Unknown
<b>Channel Cay/Rock</b>	2017	Crown	0.3/0.4	Barrier Island/Cay	0	1	0	0	8	Unknown
<b>Hoffman's Cay</b>	2016	Crown	2.7/4.4	Barrier Island/Cay	0	2	0	0	0	Unknown
<b>Little Harbor Cay/ Cabbage Cay</b>	2016	Private	2.6/4.2	Barrier Island/Cay	0	1	0	0	0	Unknown
<b>High Cay (Southern)/ Frozen Cay</b>	2017	Private	0.9/1.4	Barrier Island/Cay	0	0	0	0	40	Unknown
<b>Bonds Cay</b>	2016	Private	2.8/4.5	Barrier Island/Cay	3	0	0	0	0	Unknown
<b>Sandy Cay/Bush Cay</b>	2017	Crown	1.2/2.0	Barrier Island/Cay	0	1	0	0	20	Yes
<b>Fish Cays (Berry)</b>	2017	Crown	2.2/3.5	Barrier Island/Cay	0	1	0	0	0	Yes
<b>Rum Cay</b>	2017	Crown	0.3/0.5	Barrier Island/Cay	0	0	0	0	0	No
<b>Cockroach Cay</b>	2017	Crown	1.3/2.0	Barrier Island/Cay	1	0	0	0	0	No

## Bahamas 2016-2019 Beach-Nesting Bird Pair Population and Habitat Data

Site Name and (Designation)	Survey Year	Owner-ship	Site Length (mi/km)	Macrohabitat	WIPL Pairs	AMOY Pairs	LETE Pairs	ROST Pairs	BRTE Pairs	Migratory PIPL Recorded*
Mamma Rhoda Rocks	2017	Crown	0.3/0.5	Barrier Island/Cay	0	0	0	0	35	Unknown
Andros Island (North)										
Joulter Cays NP	2017-19	BNT	4.6/7.4	Barrier Island/Cay	4	1	0	0	0	Yes
Golding Cays	2017	Crown	0.3/0.6	Barrier Island/Cay	0	1	0	0	0	No
Morgan's Bluff	2018	Municipal	2.2/3.5	Mainland Beach	0	0	0	0	0	Unknown
Nicholls Town	2018	Municipal	2.3/3.7	Mainland Beach	0	0	0	0	0	Unknown
Conch Sound	2018	Municipal	0.9/1.5	Mainland Beach	0	0	0	0	0	Unknown
Mastic Point	2018	Municipal	2.7/4.3	Mainland Beach	0	0	0	0	0	Unknown
Stafford Creek	2018	Municipal	3.5/5.6	Mangrove Wetland	0	0	0	0	0	Unknown
Kamelame Cay/ Blanket Sound	2018	Private	2.8/4.5	Barrier Island/Cay	3	0	0	0	0	Yes
Staniard Creek	2018	Private/ Municipal	5.4/8.7	Mainland Beach	11	0	0	0	0	Yes
Coakley Town	2018	Crown	5.4/8.7	Mainland Beach	5	0	0	0	0	Unknown
Young Sound	2018	Private	4.5/7.2	Barrier Island/Cay	13	0	0	0	0	Yes
Bowe's Sound	2018	Crown	6.0/9.6	Mainland Beach	0	0	0	0	0	Unknown
Andros Island (South)										
Big Wood Cay/North Bight	2019	Crown	7.89/ 12.7	Barrier Island/Cay	3	1	0	0	0	Yes
Mangrove Cay/Middle Bight	2019	Crown	6.35/ 10.22	Barrier Island/Cay	0	0	0	0	0	Unknown
Little Sandy Cay/South Bight	2019	BNT	10/16.1	Barrier Island/Cay	0	2	0	0	0	Unknown

## Bahamas 2016-2019 Beach-Nesting Bird Pair Population and Habitat Data

Site Name and (Designation)	Survey Year	Owner-ship	Site Length (mi/km)	Macrohabitat	WIPL Pairs	AMOY Pairs	LETE Pairs	ROST Pairs	BRTE Pairs	Migratory PIPL Recorded*
<b>New Providence Island</b>										
Maillis Beach	2019	Private	0.1/0.2	Mainland Beach	1	0	0	0	0	Unknown
Adelaide Village Beach	2017	Public	2.0/3.2	Mainland Beach	1	0	0	0	0	Yes
Coral Harbour Beach	2017	Public	1.5/2.4	Mainland Beach	1	0	0	0	0	Yes
Bonefish Pond	2019	BNT	1.6/2.6	Mainland Beach	1	0	0	0	0	Unknown
South Beach	2017	Private	0.7/1.1	Mainland Beach	0	0	0	0	0	Yes
Fox Hill	2016	Private	2.0/3.2	Mainland Beach	2	0	0	0	0	Unknown
<b>Exumas</b>										
Highborne Cay	2018	Private	3.5/5.7	Barrier Island/ Cay	8	0	0	0	0	Unknown
Lobster Cay	2018	Private	0.01/ 0.02	Barrier Island/ Cay	0	0	0	0	0	Unknown
Little Norman's Cay	2018	Private	0.1/0.2	Barrier Island/ Cay	2	0	0	0	0	Unknown
Norman's Cay	2018	Private	2.0/3.3	Barrier Island/ Cay	1	1	0	0	0	Unknown
Shroud Cay	2018	BNT	4.6/7.4	Barrier Island/ Cay	6	0	0	0	0	Yes
Hawksbill Cay	2018	BNT	3.4/5.4	Barrier Island/ Cay	6	0	0	0	0	Yes
Warderick Wells Cay	2018	BNT	5.6/9.0	Barrier Island/ Cay	6	0	0	0	0	No
Hog Cay	2018	BNT	0.2/0.3	Barrier Island/ Cay	0	0	0	0	0	Unknown
Hall's Pond Cay	2018	Private	6.5/10.5	Barrier Island/ Cay	9	0	0	0	0	Unknown
Little Hall's Pond	2019	Private	1.2/1.93	Barrier Island/ Cay	0	0	0	0	0	Unknown



### Bahamas 2016-2019 Beach-Nesting Bird Pair Population and Habitat Data

Site Name and (Designation)	Survey Year	Owner-ship	Site Length (mi/km)	Macrohabitat	WIPL Pairs	AMOY Pairs	LETE Pairs	ROST Pairs	BRTE Pairs	Migratory PIPL Recorded*
Compass Cay	2019	Crown	3.04/4.89	Barrier Island/ Cay	0	0	0	0	0	Unknown
Pipe Cay	2019	Crown	0.6/0.96	Barrier Island/ Cay	0	0	0	0	0	Unknown
Thomas Cay	2019	Crown	0.8/1.28	Barrier Island/ Cay	0	0	0	0	0	Unknown
Sampson Cay	2019	Crown	1.0/1.61	Barrier Island/ Cay	0	0	0	0	0	Unknown
Little Major's Cay	2019	Crown	0.6/0.96	Barrier Island/ Cay	0	0	0	0	0	Unknown
Staniel Cay	2019	Crown	0.3/0.48	Barrier Island/ Cay	0	0	0	0	0	Unknown
Bitter Guana Cay	2019	Crown	1.6/2.57	Barrier Island/ Cay	0	0	0	0	0	Unknown
Gaulin Cay	2019	Crown	0.5/0.8	Barrier Island/ Cay	0	0	0	0	0	Unknown
Great Guana Cay	2019	Crown	0.3/0.48	Barrier Island/ Cay	0	0	0	0	0	Unknown
Big Farmers Cay	2019	Crown	1.8/2.89	Barrier Island/ Cay	0	0	0	0	0	Unknown
Cave Cay	2019	Private	4.56/7.34	Barrier Island/ Cay	0	0	0	0	0	Unknown
Musha Cay	2019	Private	1.0/1.61	Barrier Island/ Cay	2	0	0	0	0	Unknown
Rudder Cut Cay	2019	Private	0.5/0.8	Barrier Island/ Cay	0	1	0	0	0	Unknown
Little Darby Cay	2019	Private	3.38/5.44	Barrier Island/ Cay	0	0	0	0	0	Unknown

### Bahamas 2016-2019 Beach-Nesting Bird Pair Population and Habitat Data

Site Name and (Designation)	Survey Year	Owner-ship	Site Length (mi/km)	Macrohabitat	WIPL Pairs	AMOY Pairs	LETE Pairs	ROST Pairs	BRTE Pairs	Migratory PIPL Recorded*
Prime Cay	2019	Private	4.44/7.14	Barrier Island/ Cay	1	1	0	0	0	Unknown
Bock Cay	2019	Private	0.3/0.48	Barrier Island/ Cay	0	1	0	0	0	Unknown
Norman's Pond Cay	2019	Crown	0.4/0.64	Barrier Island/ Cay	0	0	0	0	0	Yes
Lee Stocking Island	2019	Private	2.39/3.84	Barrier Island/ Cay	3	0	0	0	0	Unknown
Children's Bay Cay	2019	Crown	1.25/2.01	Barrier Island/ Cay	0	0	0	0	0	Unknown
Rat Cay	2019	Crown	1.81/2.91	Barrier Island/ Cay	0	0	0	0	0	Unknown
Glass Cay	2019	Crown	0.95/1.52	Barrier Island/ Cay	0	0	0	0	0	Unknown
Pimlico Cays/Tea Table Rock	2019	Crown	0.4/0.64	Barrier Island/ Cay	1	1	0	0	0	Unknown
<b>Great Exuma</b>										
Exuma Point to Ann's Creek	2019	Private	3.2/5.15	Mainland Beach	4	0	0	0	0	Yes
Ann's Creek to Roker's Point	2019	Private	3.4/5.47	Mainland Beach	0	0	0	0	0	Unknown
Farmer's Hill Beach to Breakwater Dr.	2019	Private	1.19/1.91	Mainland Beach	0	0	0	0	0	Yes
Breakwater Dr. Beach	2019	Private	3.2/5.15	Mainland Beach	2	0	0	0	0	Unknown
Grog Pond	2019	Private	1.17/1.88	Inland Salt Pond	0	0	0	0	0	Unknown
Tar Bay Beach	2019	Private	4.5/7.24	Mainland Beach	0	0	0	0	0	Unknown
Hooper's Bay Beach	2019	Private	4.5/7.24	Mainland Beach	0	0	0	0	0	Unknown

## Bahamas 2016-2019 Beach-Nesting Bird Pair Population and Habitat Data

Site Name and (Designation)	Survey Year	Owner-ship	Site Length (mi/km)	Macrohabitat	WIPL Pairs	AMOY Pairs	LETE Pairs	ROST Pairs	BRTE Pairs	Migratory PIPL Recorded*
Georgetown	2019	Private	5.26/8.46	Mainland Beach	0	0	0	0	0	Unknown
Tropic of Cancer	2019	Private	15.11/24.32	Mainland Beach	1	0	0	0	0	Unknown
Stocking Island	2019	Private	3.6/5.79	Barrier Island/Cay	2	0	0	0	0	Yes
Elizabeth Island	2019	Private	0.4/0.64	Barrier Island/Cay	0	0	0	0	0	Unknown
Guana Cay	2019	Private	1.1/1.77	Barrier Island/Cay	1	1	0	0	0	Unknown
Man of Way Cay	2019	Private	1.3/2.09	Barrier Island/Cay	7	0	0	0	0	Yes
Moriah Harbour Cay National Park	2019	BNT	2.6/4.18	Barrier Island/Cay	3	1	3	0	0	Yes
<b>TOTAL PAIRS</b>					<b>WIPL 332</b>	<b>AMOY 28</b>	<b>LETE 55</b>	<b>ROST 160</b>	<b>BRTE 271</b>	

### Key to Abbreviations

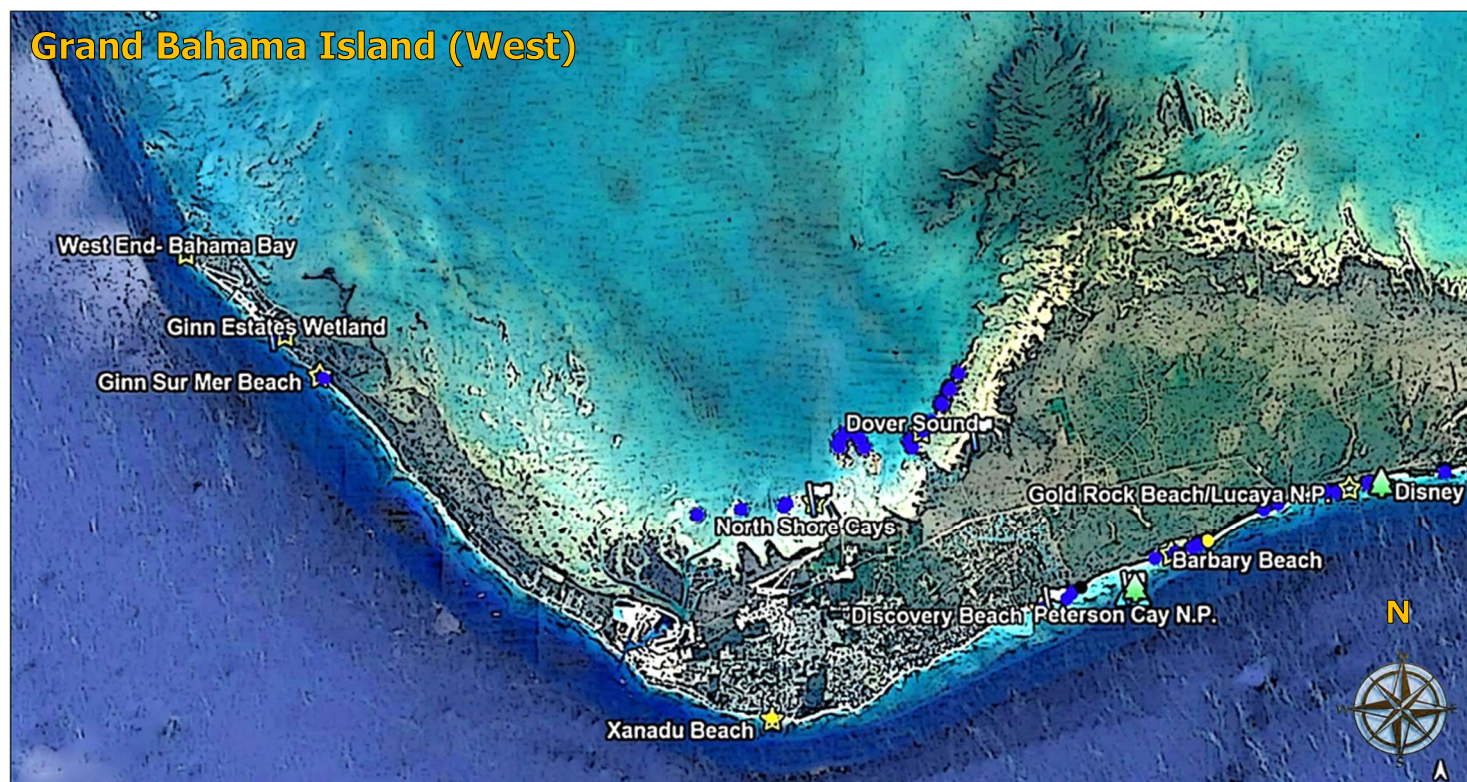
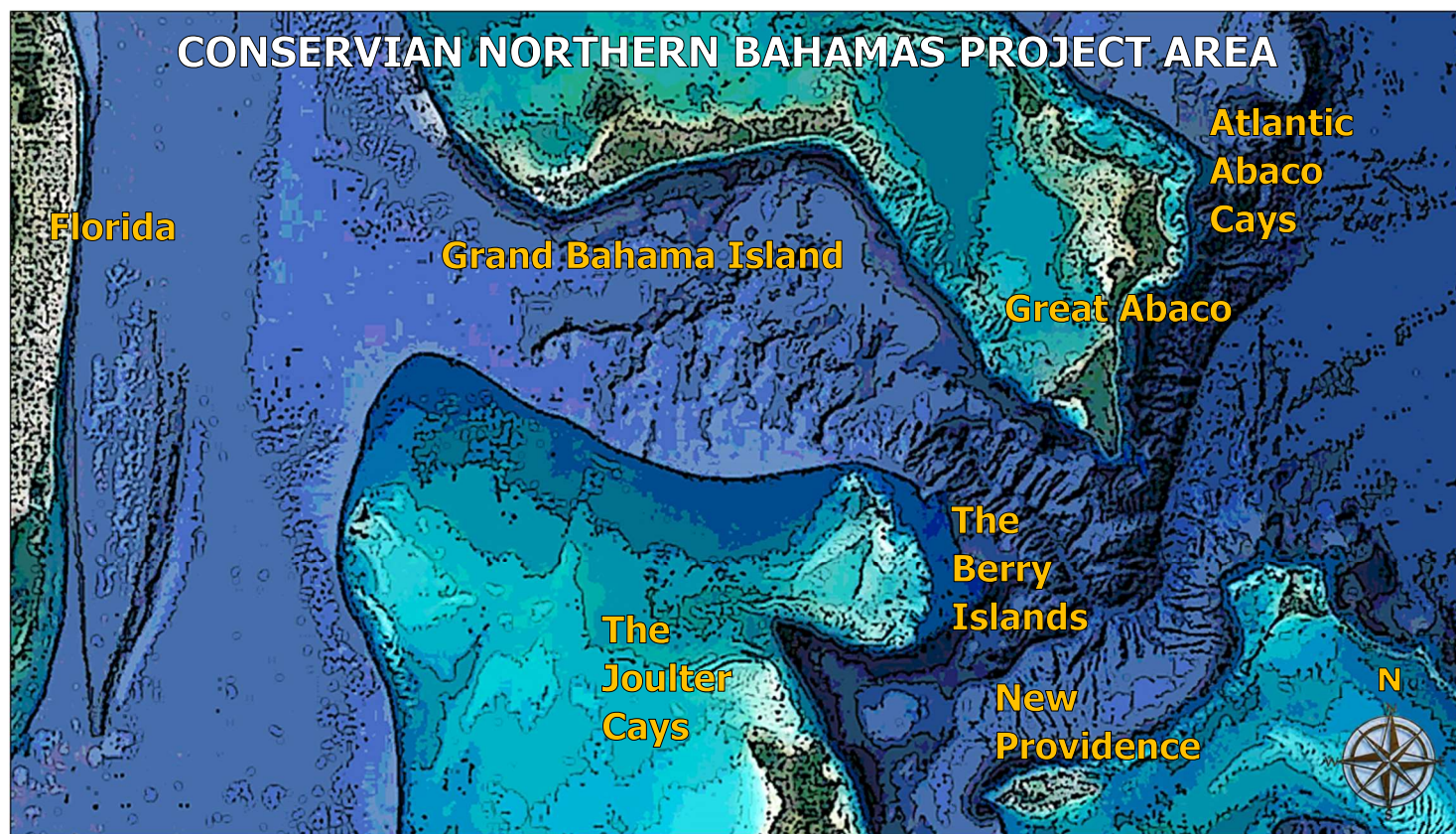
IBA = Important Bird Area GBPA = Grand Bahama Port Authority BNT = Bahamas National Trust NP= National Park

\*PIPL survey data from 2011 USGS Winter Survey supplemented by Ebird data and Conservian/CBC survey data.

Additional colonial pairs not included in table. See maps for locations. SOTE=1012, BRNO=126, WTTB=190, LAGU=828

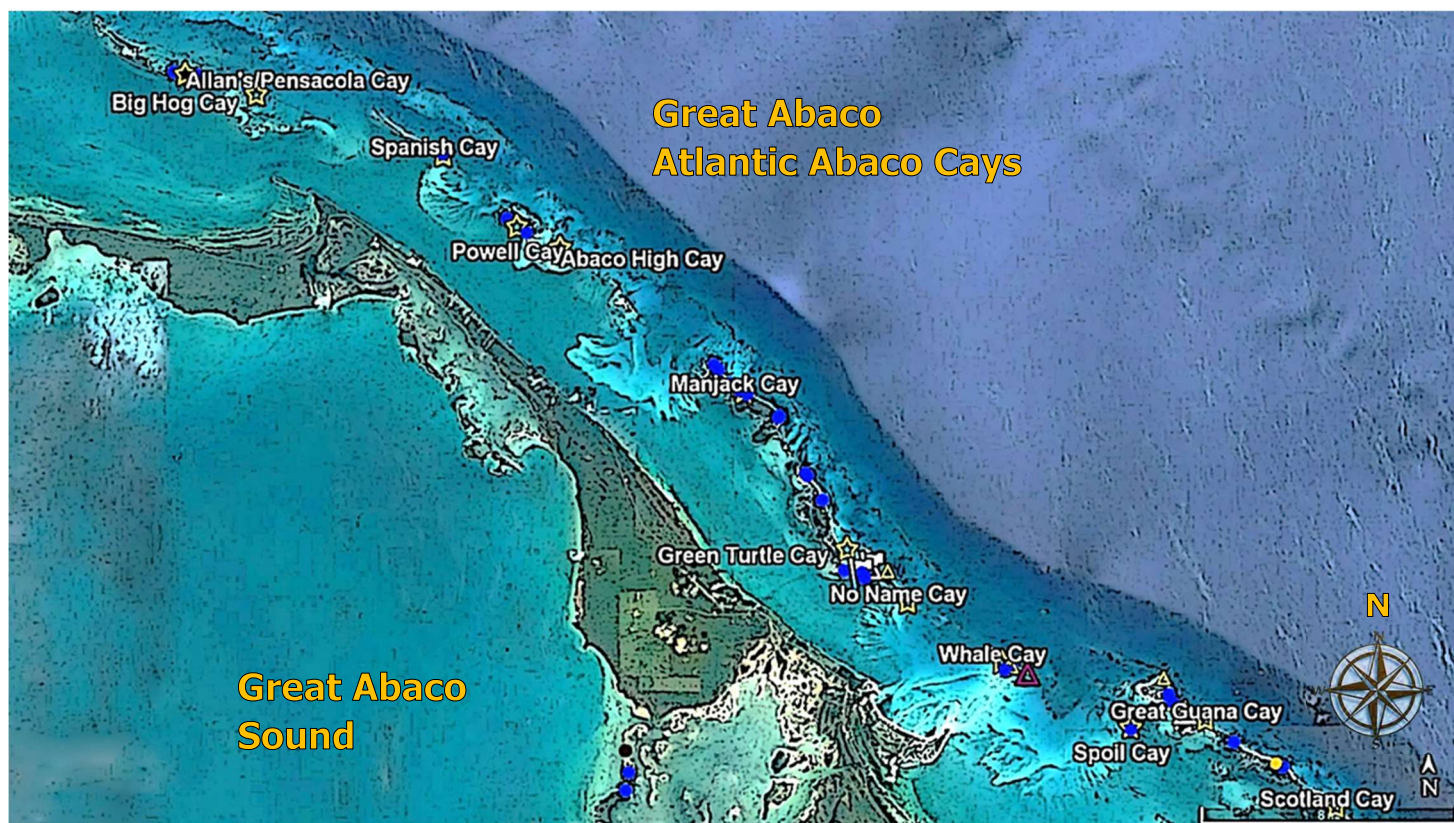


## Northern Bahamas Project Area Maps



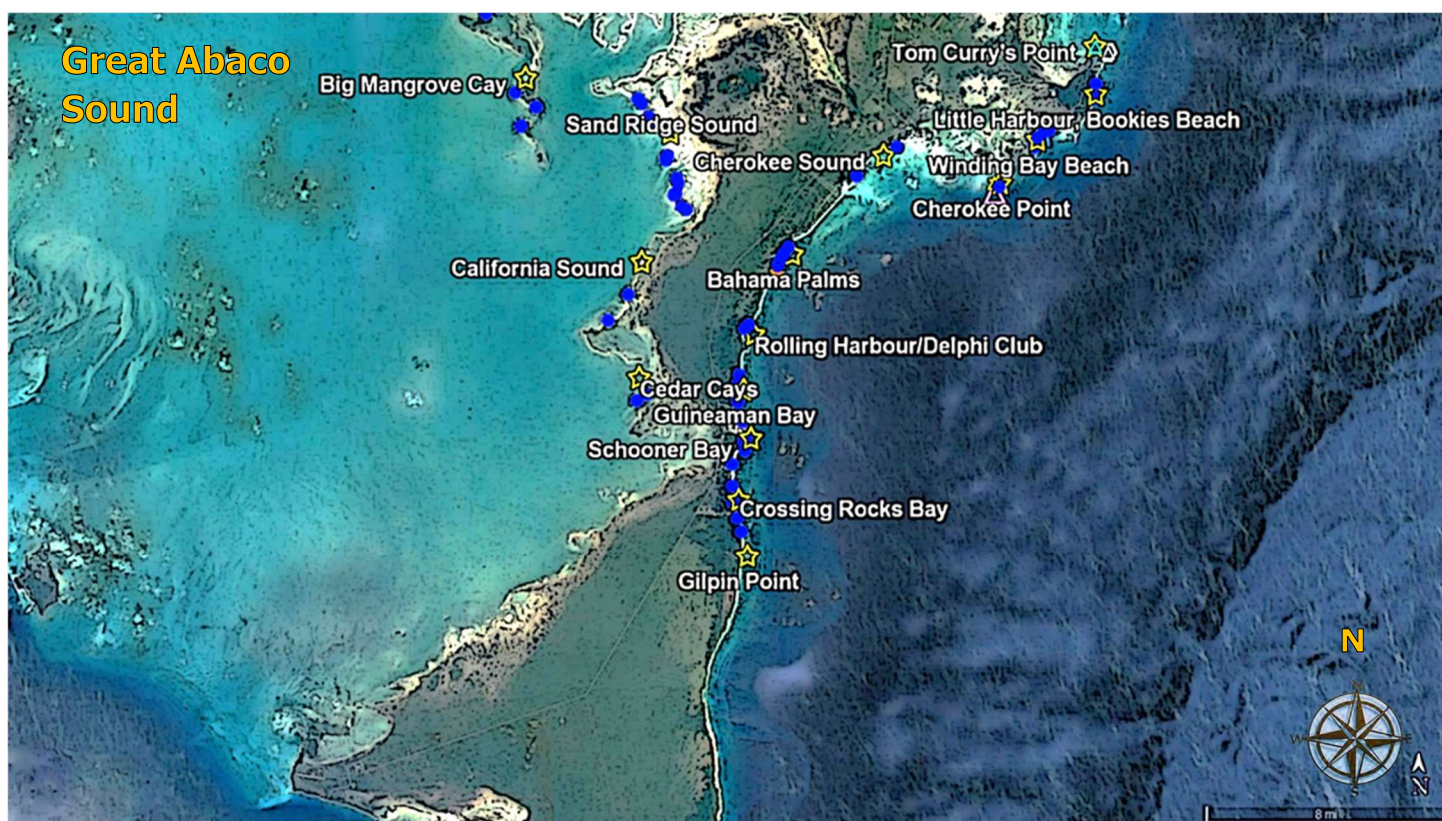
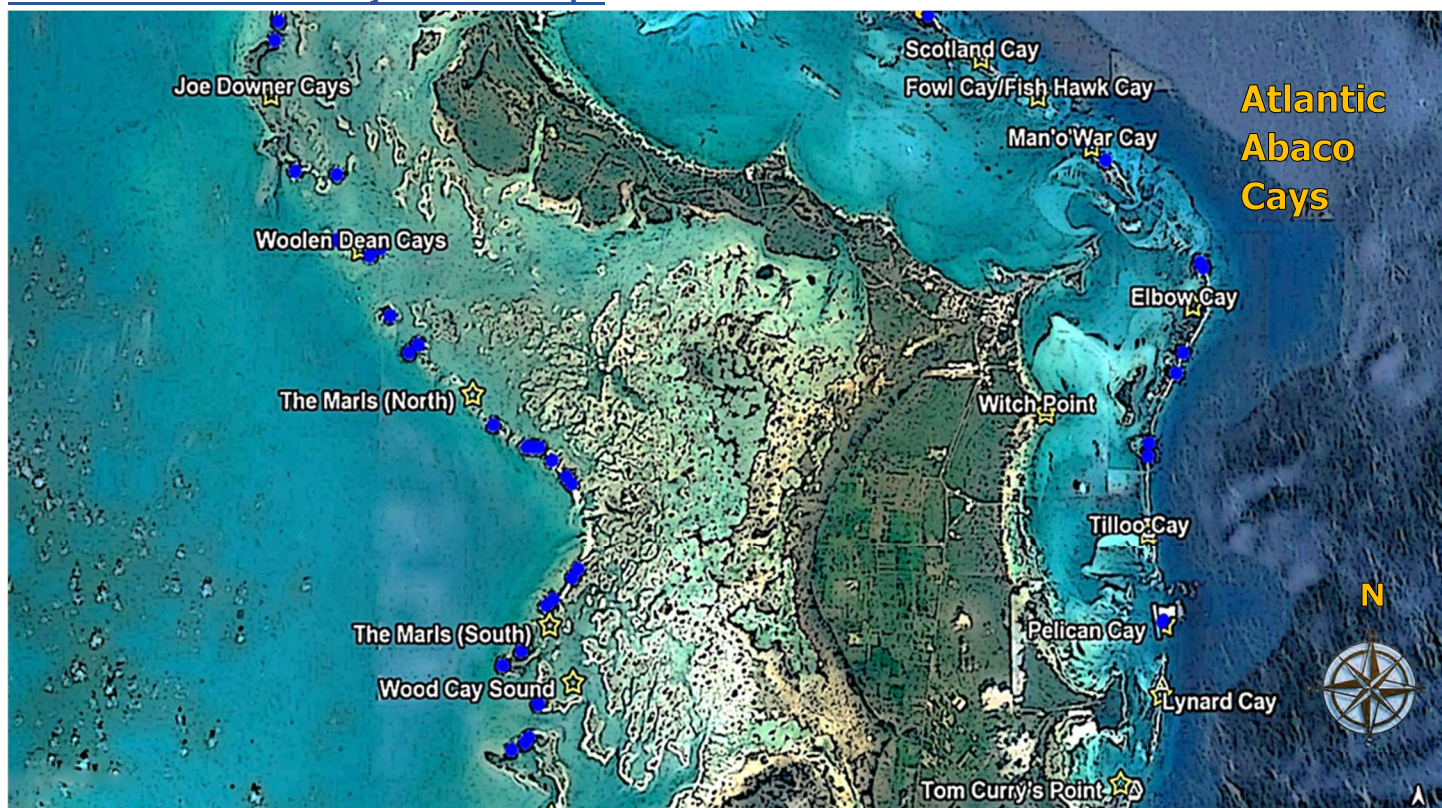


## Northern Bahamas Project Area Maps



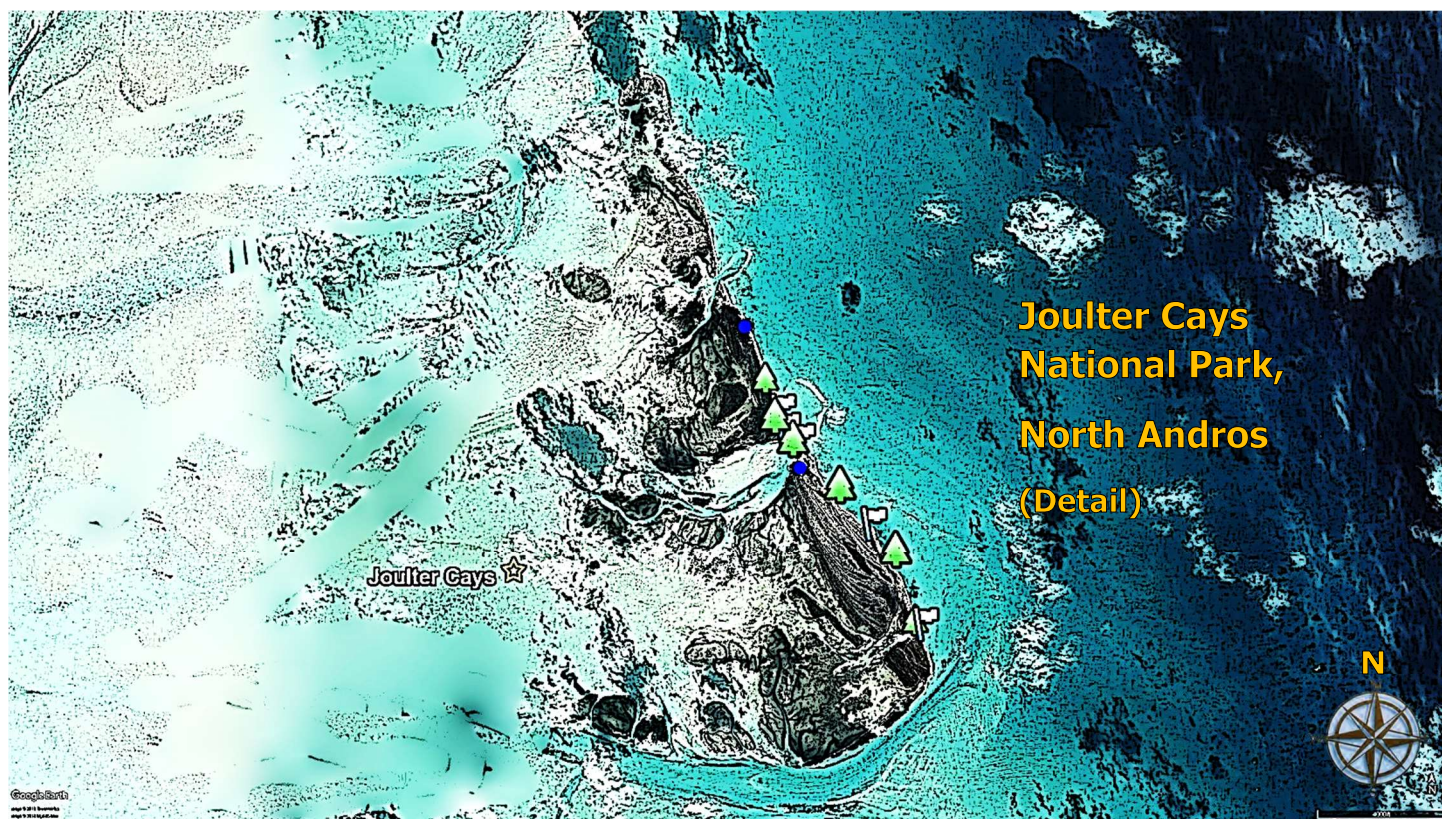
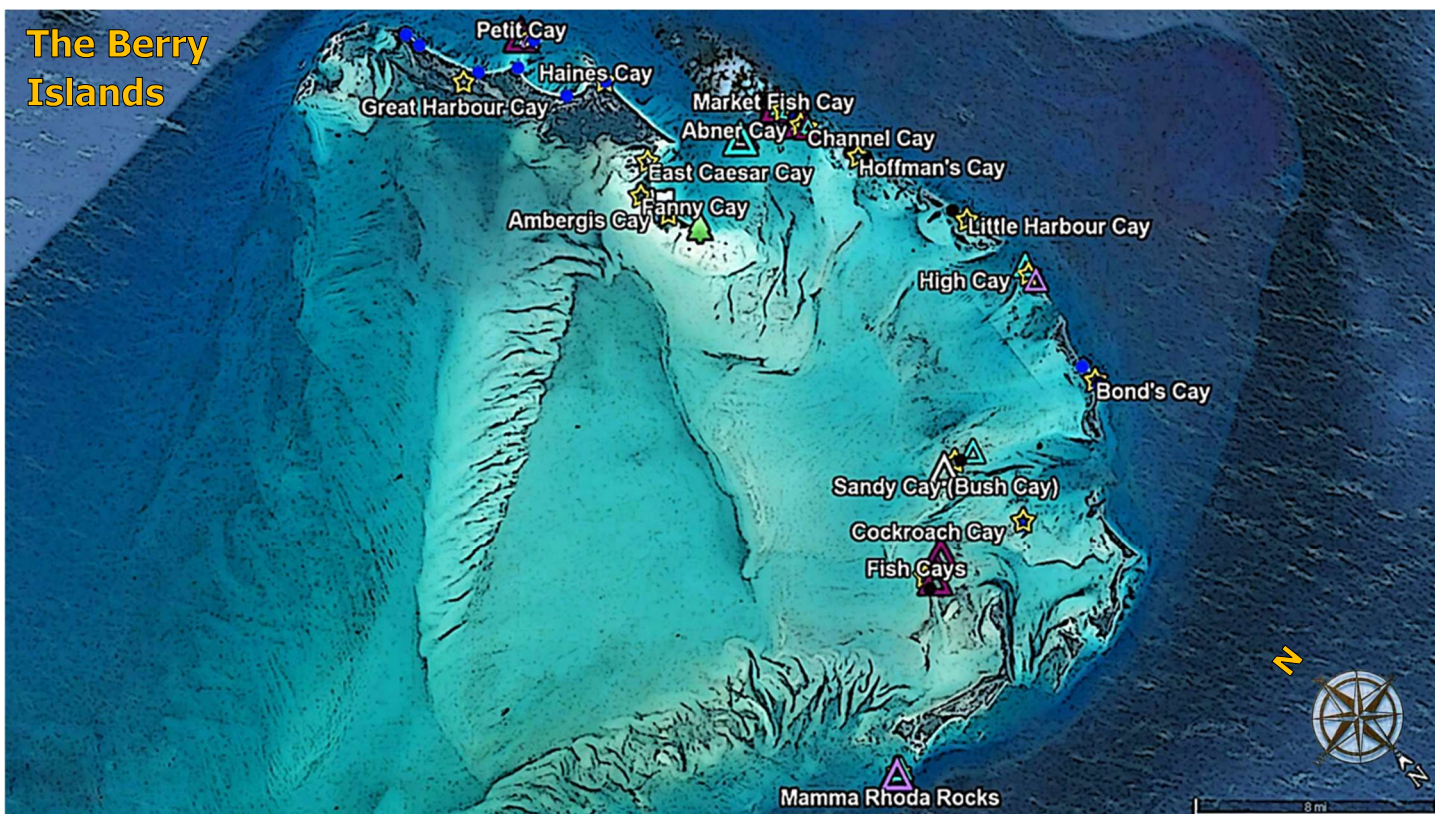


## Northern Bahamas Project Area Maps





## Northern Bahamas Project Area Maps

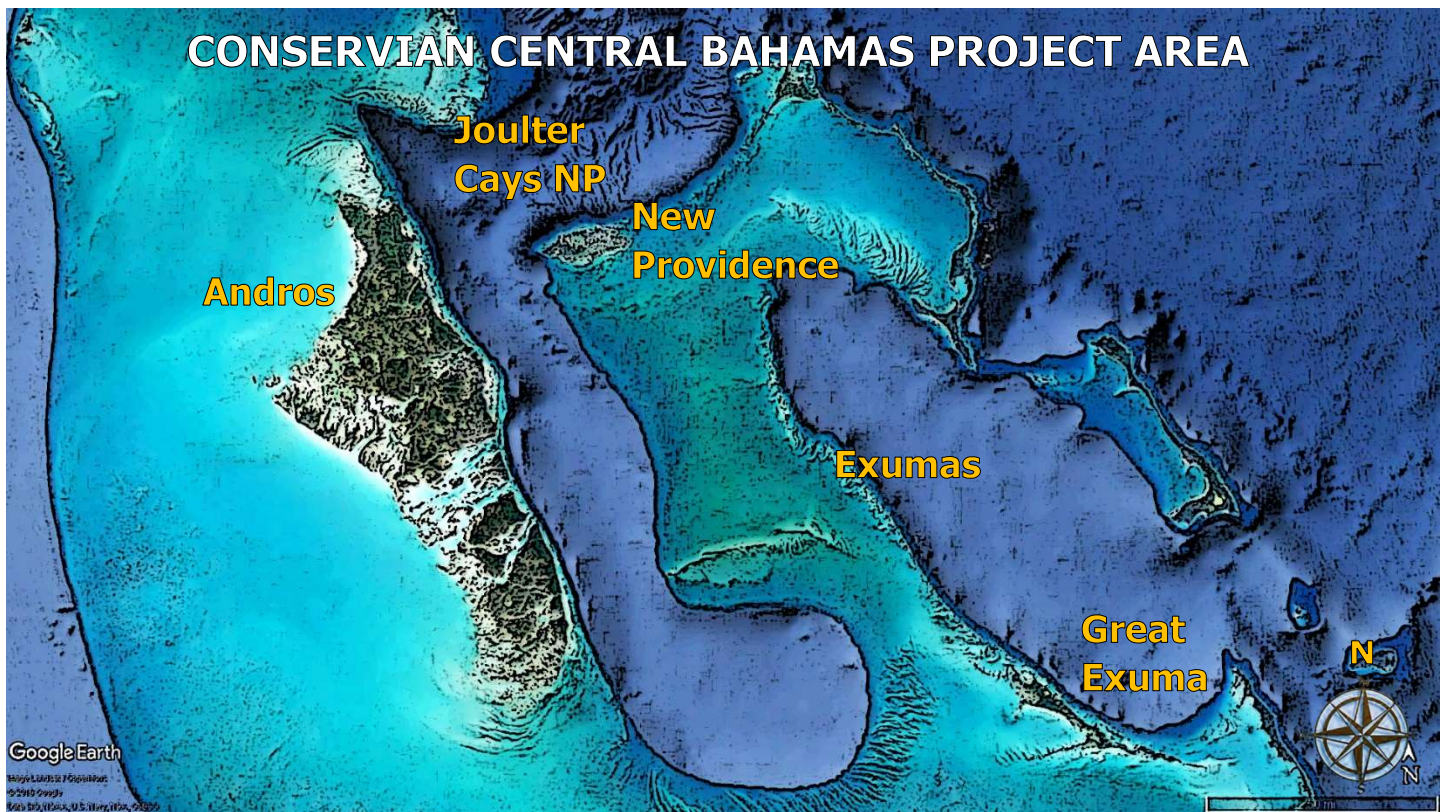




## Key to Map Symbols

Solitary Nesters (Dots)		
Blue	Wilson's Plover	o Single pair
Black	American Oystercatcher	o Single pair
Colonial Nesters (Triangles)		
Pink	Roseate Tern	Δ 1-10 pairs
Yellow	Least Tern	
Aqua	Bridled Tern	
Gray	Sooty Tern	Δ 11-50 pairs
White	White-tailed Tropic Bird	Δ 51+ pairs
Neon Green	Audubon Shearwater	
Light Purple	Brown Noddy	
Dark Purple	Laughing Gull	
Migratory Birds		
Orange	Piping Plover	o Single bird or group
Conservation Action Symbols		
☆	Site Assessed/Ground surveys	
🚧	Site with Protective Posting	
🌲	Site Treated for Australian Pine	
🏠	White-Tailed Tropicbird artificial nest box	

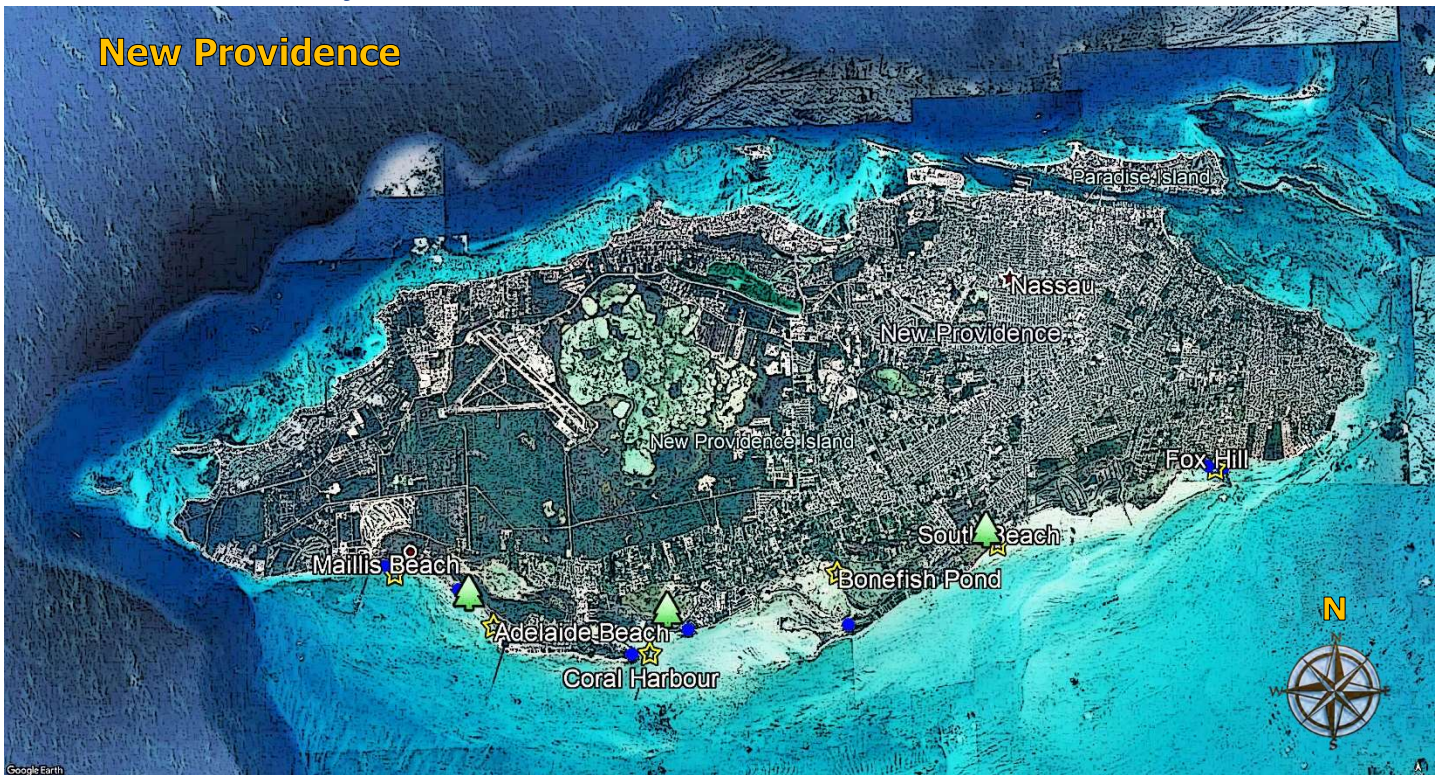
## Central Bahamas Project Area



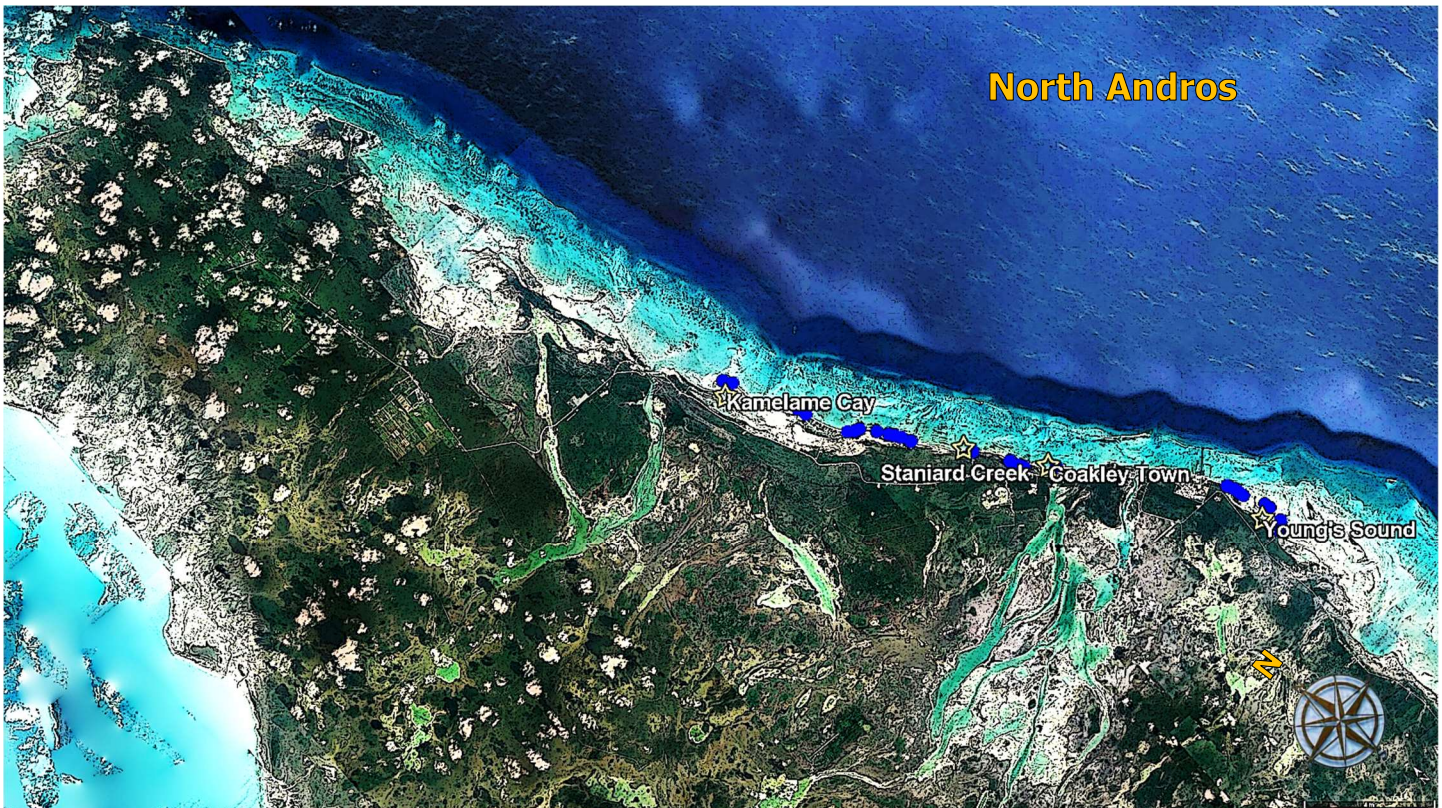


## Central Bahamas Project Area

### New Providence

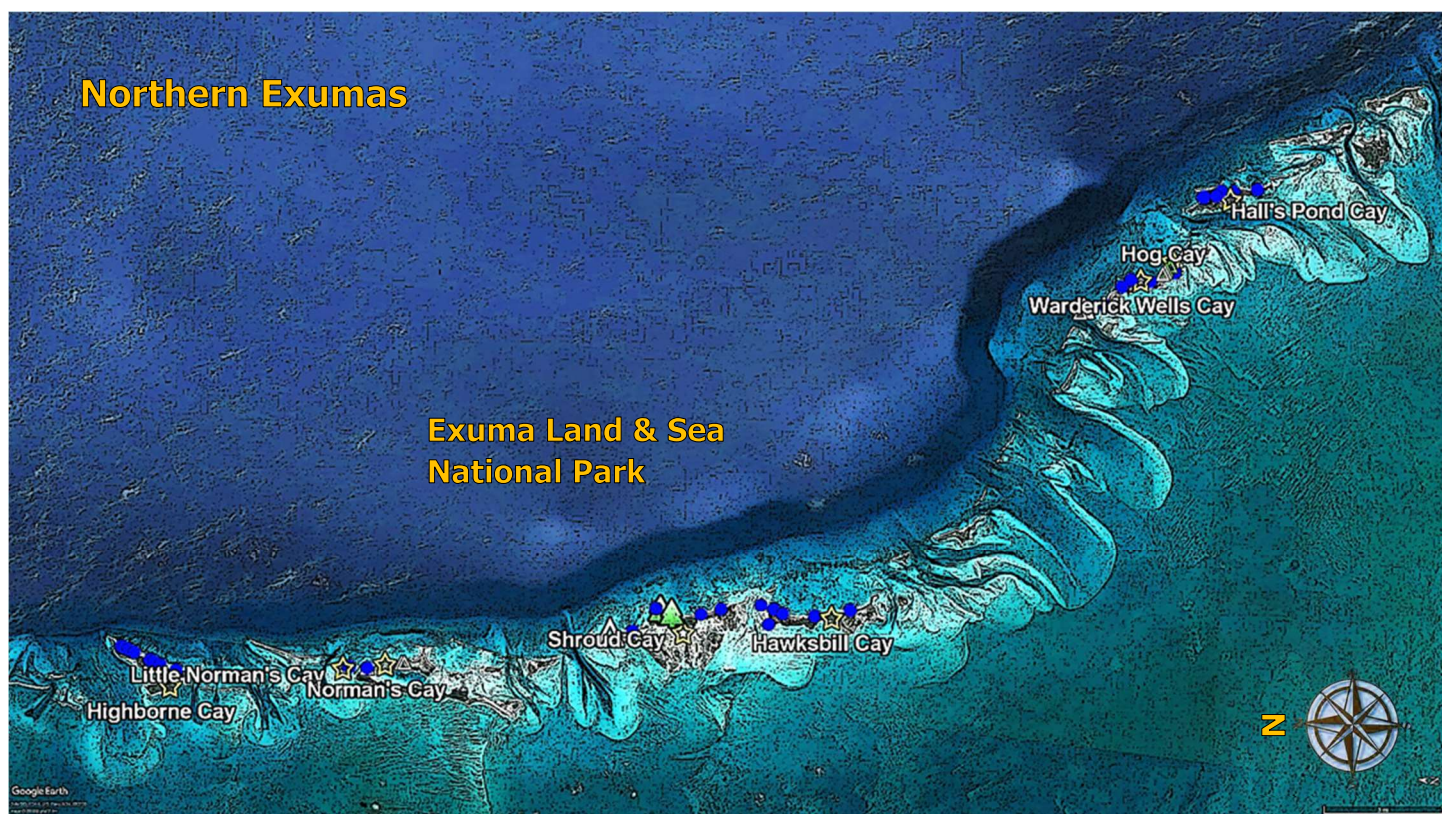
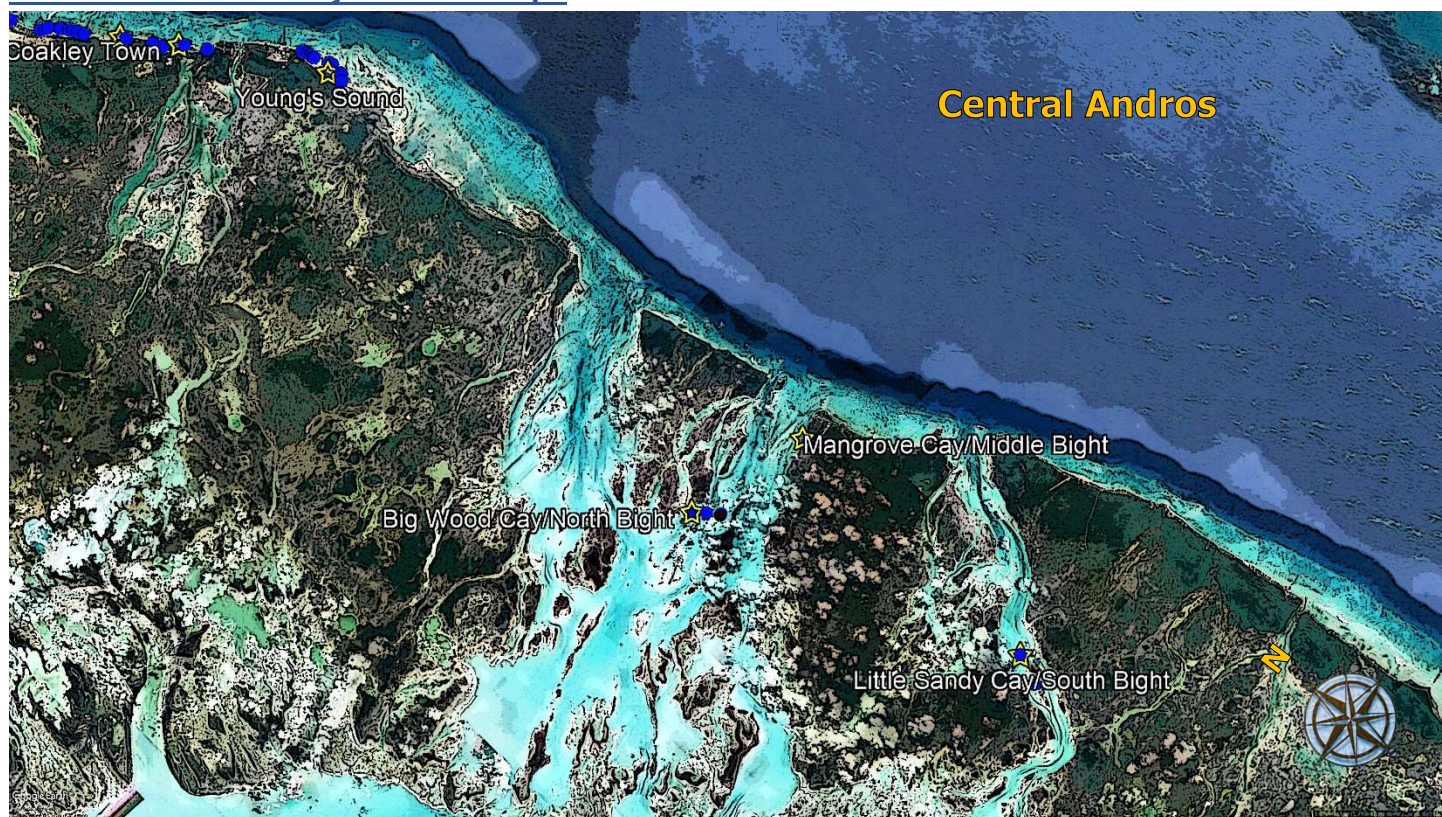


### North Andros



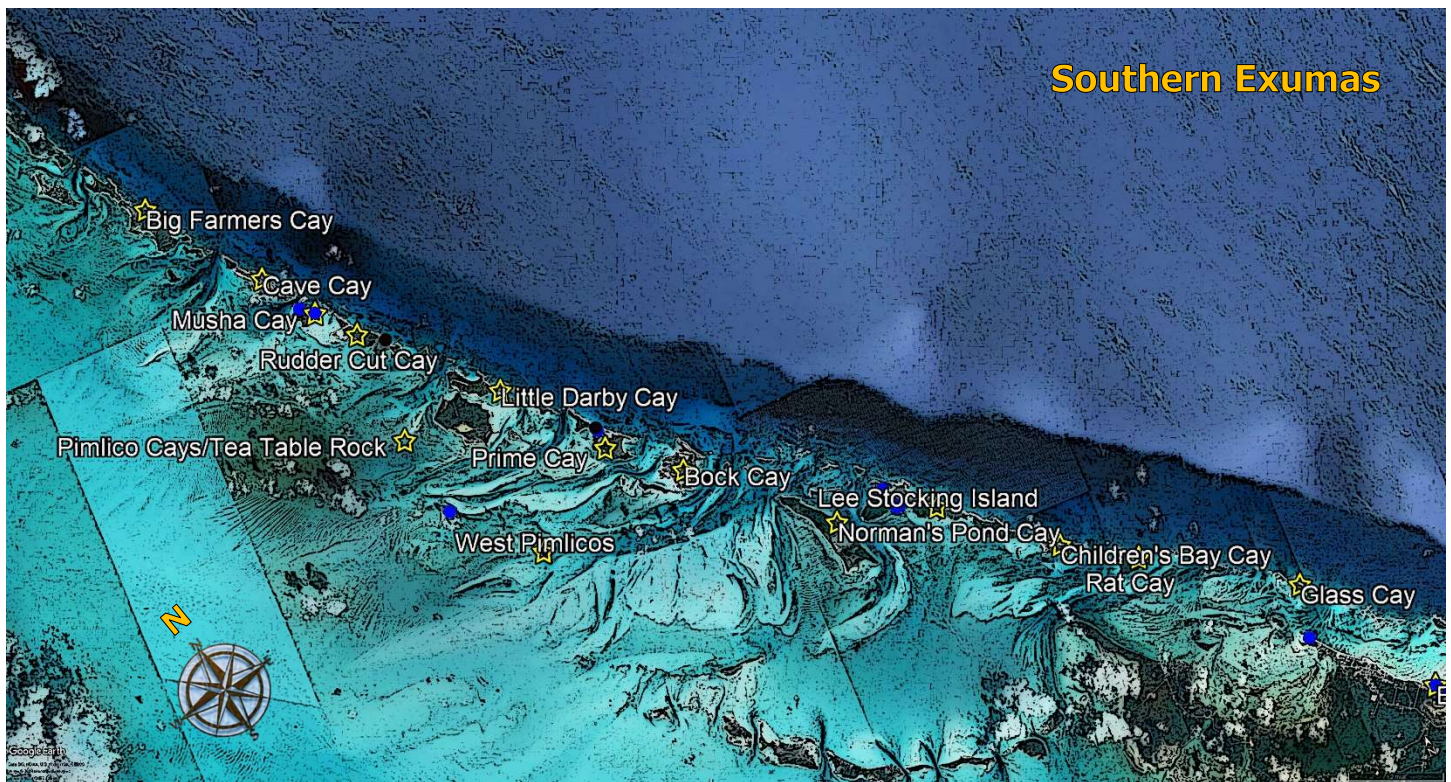
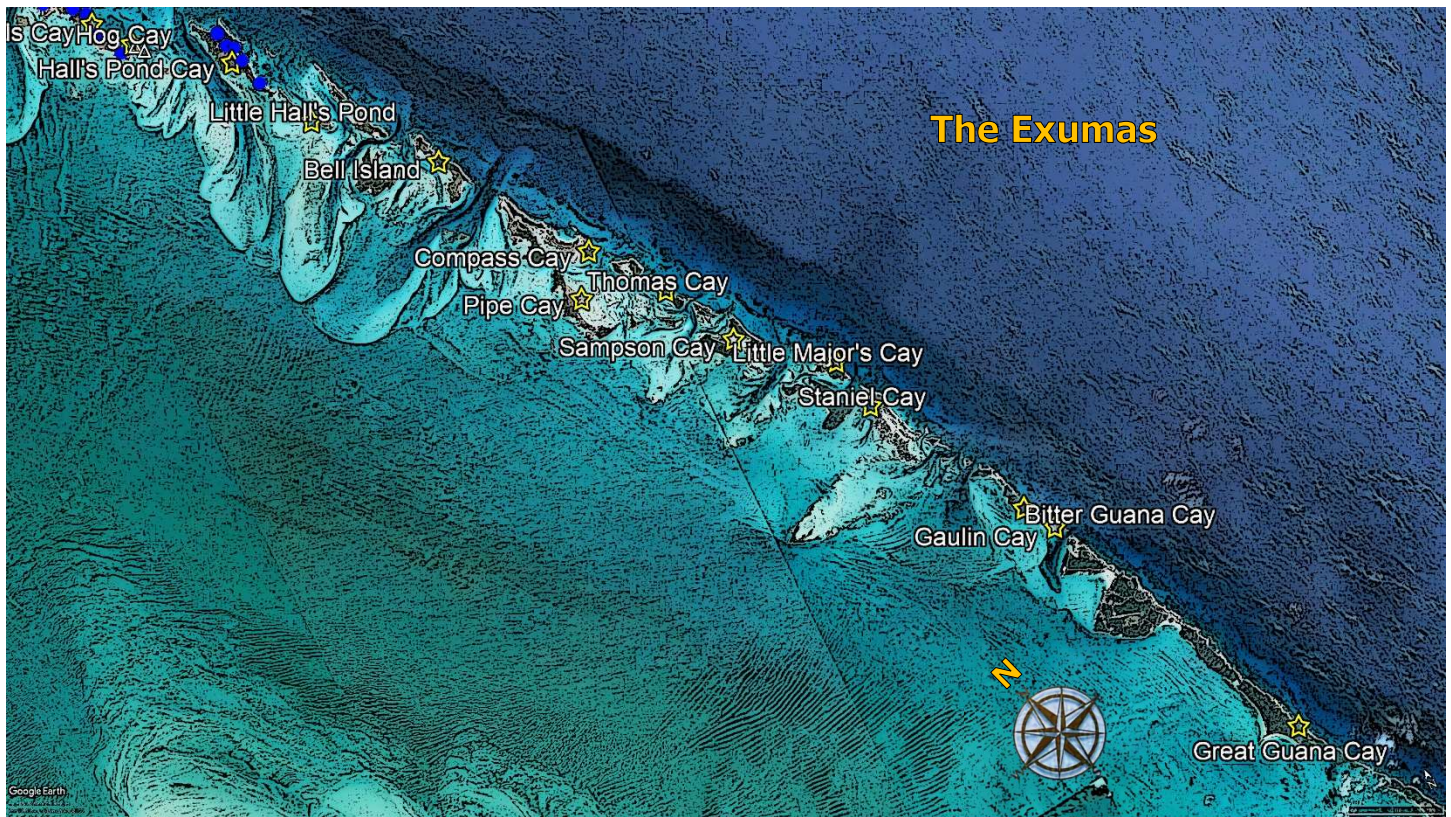


## Central Bahamas Project Area Maps



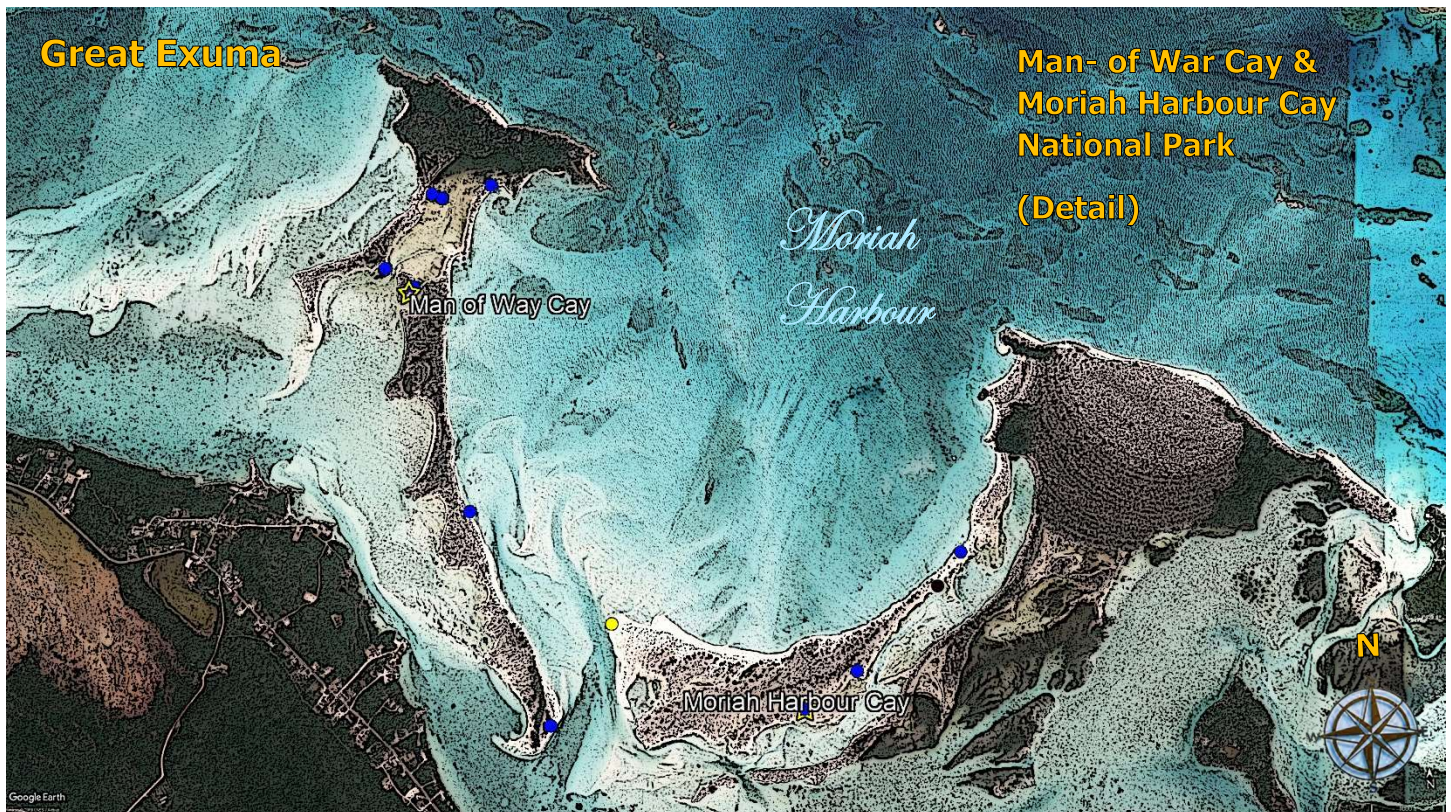
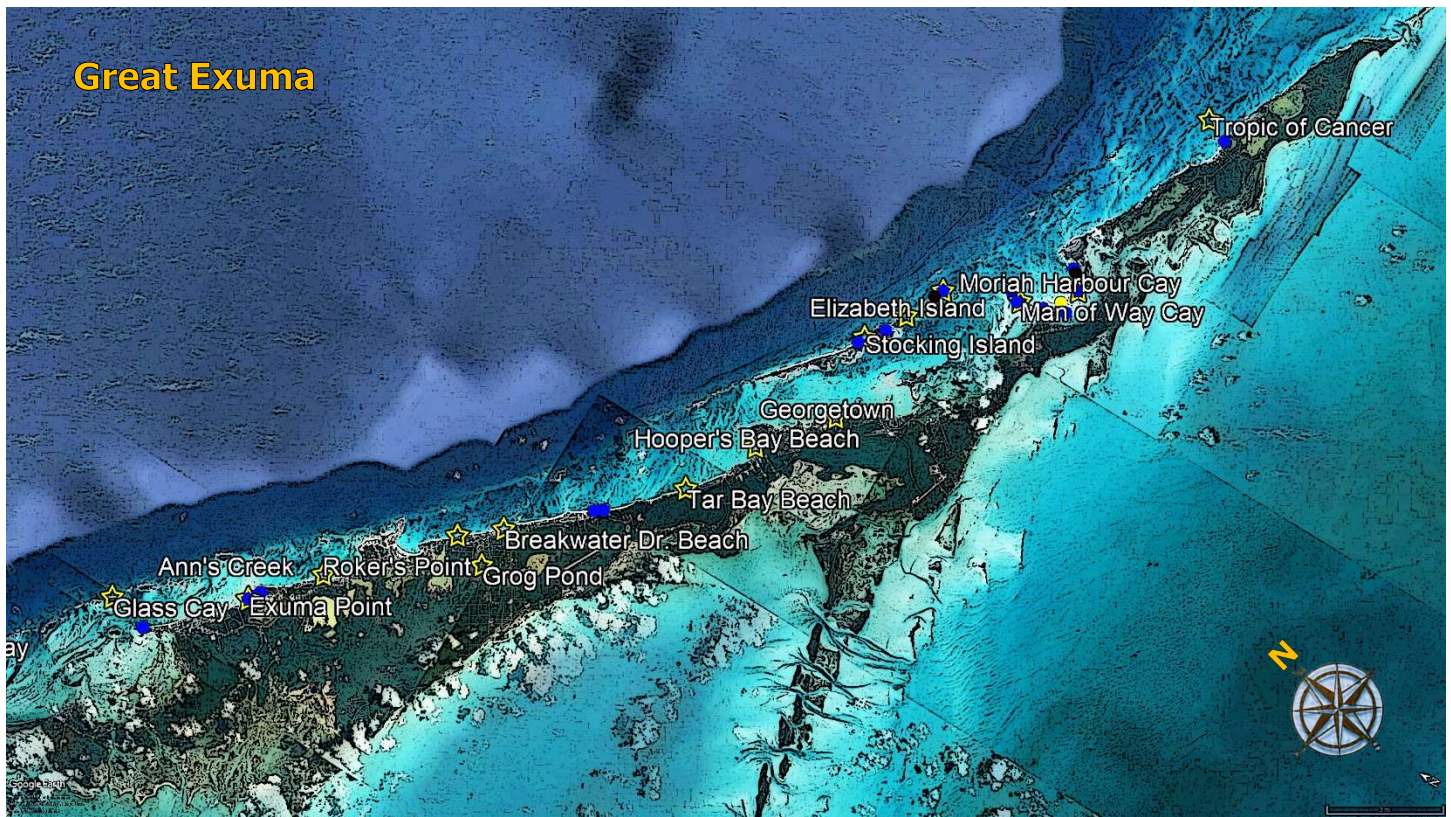


## Central Bahamas Project Area Maps





## Central Bahamas Project Area Maps





## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts	Conservation Actions Implemented
<b>Grand Bahama Island</b>					
<b>West End, Bahama Bay</b>	Private	WIPL/1	No	Pedestrians, pets, development, Australian Pine	Threats assessed/species mapped/steward monitored
<b>Ginn Estates Wetland</b>	Private	WIPL/2	Yes	Pedestrians, pets, Australian Pine	Nesting areas posted/roosting areas posted/monitored
<b>Ginn Sur Mer Beach</b>	Private	WIPL/2	Yes	Pedestrians, pets, ORV use development, Australian Pine	Threats assessed/species mapped/steward monitored
<b>Holmes Rock Wetlands</b>	Private	0	Yes	Pedestrians, pets, watercraft, development, Australian Pine	Threats assessed/species mapped
<b>Deadmans Reef/Paradise Cove</b>	Private	0	No	Pedestrians, pets, development, Australian Pine	Threats assessed/species mapped
<b>Xanadu Beach</b>	Private	WIPL/2	Yes	Pedestrians, pets, development, Australian Pine	Threats assessed/species mapped
<b>Freeport Aggregates Quarry</b>	GBPA	0	Yes	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped/steward monitored
<b>North Shore Cays</b>	GBPA	WIPL/13	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Nesting areas posted/roosting areas posted
<b>Dover Sound</b>	GBPA	WIPL/15	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Nesting areas posted/roosting areas posted
<b>Taino Beach/Bell Channel to Grand Lucayan WW</b>	Private/Municipal	0	No	Pedestrians, pets, development, Australian Pine	Threats assessed/species mapped
<b>Discovery Beach (East &amp; West)</b>	GBPA	WIPL/5 LETE/7	Yes	Pedestrians, pets, watercraft use, development, Australian Pine	Piping Plover roosting/BNB nesting areas posted/ Threats assessed/species mapped/steward monitored
<b>Barbary Beach</b>	GBPA	WIPL/1 AMOY/1	Yes	Pedestrians, pets, development, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Peterson Cay National Park</b>	BNT/GBPA	LETE/2 BRTE/75	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Nesting area signed, posted, roped/Threats assessed/species



## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts	Conservation Actions Implemented
					mapped/steward monitored; All <i>Casuarina</i> eradicated
Gold Rock Beach, Lucaya National Park (IBA)	GBPA/BNT	WIPL/4	Yes	Pedestrians, pets, watercraft use, Australian Pine	<i>Casuarina</i> Control
Pirates of the Caribbean Disney Movie Site	Crown	WIPL/3	Yes	Pedestrians, pets, ORV use, watercraft use, Australian Pine	Threats assessed/species mapped
Gold Rock Creek to High Rock	GBPA	0	Yes	Pedestrians, pets, development, watercraft use, Australian Pine	Threats assessed/species mapped
Pelican Point	GBPA/Municipal	WIPL/4	Yes	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Rocky Point Flats	Crown	0	Yes	Pedestrians, pets, development, Australian Pine	Threats assessed/species mapped
Blackwood Point to Mcleans Town	Crown	0	No	Pedestrians, pets, Australian Pine	Threats assessed/species mapped
Mcleans Town	Municipal	WIPL/1	No	Pedestrians, pets, development, Australian Pine	Threats assessed/species mapped
<b>Great Abaco (East)</b>					
Allan's/Pensacola Cay (Abaco Cays IBA)	Private	WIPL/1 AMOY/1	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Murray (Money) Cays	Crown	0	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Big Hog Cay (Abaco Cays IBA)	Private	WIPL/1	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Alec Cays	Crown	0	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Spanish Cay (Abaco Cays IBA)	Municipal	WIPL/1 AMOY/1	Unknown	Pedestrians, pets, watercraft use, airstrip, development, Australian Pine	Threats assessed/species mapped
Powell Cay (Abaco Cays IBA)	Private	WIPL/2	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped

## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts	Conservation Actions Implemented
<b>Soldier Cay (Abaco)</b>	Crown	0	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>High Cay (Abaco) (Abaco Cays IBA)</b>	Private	0	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Bonefish Cay</b>	Crown	0	Unknown	Pedestrians, pets, watercraft use, Australian Pine -	Threats assessed/species mapped
<b>Ambergris Cay (Abaco)</b>	Crown	WIPL/1	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Manjack Cay (Abaco Cays IBA)</b>	Municipal	WIPL/7	No	Pedestrians, pets, watercraft use, ORV use, Australian Pine	Threats assessed/species mapped
<b>Crab and Fiddle Cays</b>	Crown	0	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Green Turtle Cay (Abaco Cays IBA)</b>	Crown/ Municipal	WIPL/9 ROST/25	Yes	Pedestrians, pets, development, watercraft use, ORV use, Australian Pine	Piping Plover roosting/BNB nesting areas posted/ Threats assessed/species mapped/steward monitored
<b>No Name Cay</b>	Crown	LETE/4	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Whale Cay</b>	Crown	WIPL/2 AMOY/2 LETE/6 ROST/10 0 BRTE/4	No	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Spoil Cay</b>	Crown	WIPL/3 LETE/4	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Don't Rock</b>	Crown	0	Unknown	Watercraft use	Threats assessed/species mapped
<b>Great Guana Cay (Abaco Cays IBA)</b>	Private/ Municipal	WIPL/5 LETE/15	Yes	Pedestrians, pets, development, ORV use, beach-raking, Australian Pine	Threats assessed/species mapped
<b>Foot's Cay</b>	Crown	0	Unknown	Watercraft use	Threats assessed/species mapped

## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts	Conservation Actions Implemented
<b>Fish Cays</b>	Crown	0	Unknown	Watercraft use	Threats assessed/species mapped
<b>Scotland Cay (Abaco Cays IBA)</b>	Private	0	Unknown	Pedestrians, pets, development, ORV use, beach-planting	Threats assessed/species mapped
<b>Fowl/Fish Hawk Cay</b>	Crown	AMOY/1 BRTE/1	Unknown	Pedestrians, pets, watercraft use	Threats assessed/species mapped
<b>Man-O-War Cay</b>	Municipal	WIPL/3	Yes	Pedestrians, pets, development, beach raking, Australian Pine	Threats assessed/species mapped
<b>Marsh Harbour</b>	Crown	0	No	Pedestrians, pets, development, Australian Pine	Threats assessed/species mapped
<b>Elbow Cay</b>	Municipal	WIPL/5	Yes	Pedestrians, pets, development, Australian Pine	Threats assessed/species mapped
<b>Witch Point</b>	Crown	LETE/4	Unknown	Watercraft use	Threats assessed/species mapped
<b>Tilloo Cay (National Park)</b>	BNT	WIPL/2	No	Pedestrians, pets, development, Australian Pine	Threats assessed/species mapped
<b>Lynyrd Cay</b>	Crown	0	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Goole Cay</b>	Crown	0	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Pelican Cays NP</b>	BNT	WIPL/2 AMOY/1 BRTE/10	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Piping Plover roosting/BNB nesting areas posted
<b>Tom Curry's Point</b>	Crown	BRTE/4	Unknown	Pedestrians, pets, watercraft	Threats assessed/species mapped
<b>Little Harbor, Bookies Beach</b>	Municipal	WIPL/3	Yes	Pedestrians, pets, development, camping, Australian Pine	Threats assessed/species mapped
<b>Winding Bay Beach</b>	Private	WIPL/3	Yes	Pedestrians, pets, development, ORV use, beach raking, Australian Pine	Piping Plover roosting/BNB nesting areas posted/ Threats assessed/species mapped/steward monitored/Beach raking halted during nesting

## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts	Conservation Actions Implemented
Cherokee Point	Private	WIPL/1 LETE/5 ROST/30 AMOY/1	Yes	Pedestrians, pets	Threats assessed/species mapped/steward monitored
Cherokee Sound to Eight Mile Bay	Private	WIPL/2 AMOY/1	No	Pedestrians, pets, development, ORV use, Australian Pine	Threats assessed/species mapped
Bahama Palms/ Nettie's Point	Private	WIPL/7	Yes	Pedestrians, pets, development, ORV use, watercraft use, Australian Pine	Threats assessed/species mapped
Rolling Harbour/ Delphi Club	Private	WIPL/2	Yes	Pedestrians, pets, development, ORV use, Australian Pine	Threats assessed/species mapped
Guineaman Bay	Private	WIPL/7	Unknown	Pedestrians, pets, development, ORV use, Australian Pine	Threats assessed/species mapped
Big Bay Bridge/ Schooner Bay Point	Private	WIPL/3	Yes	Pedestrians, pets, development, ORV use, Australian Pine	Threats assessed/species mapped
Crossing Rocks Bay to Gilpin Point	Private	WIPL/5	Yes	Pedestrians, pets, development, ORV use, Australian Pine	Threats assessed/species mapped
<b>Great Abaco, Abaco Sound</b>					
Norman's Castle	Crown	0	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped
Joe Downer Cays	Crown	WIPL/4 AMOY/1	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped
Big Lake/Goliath Cays	Crown	0	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped
Woolen Dean Cays	Crown	WIPL/5	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped
The Marls (North)/ Dead Man's Sound	Crown	WIPL/12	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped
The Marls (South)/ Tony Cay Sound	Crown	WIPL/7	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped
Wood Cay Sound	Crown	WIPL/7	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped
Big Mangrove Cay/ Long Mangrove Cay	Crown	WIPL/8	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped



## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts	Conservation Actions Implemented
<b>Sand Ridge Sound</b>	Crown	WIPL/21	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped
<b>California Sound</b>	Crown	WIPL/4	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped
<b>Cedar Cays/Cornwall Point</b>	Crown	WIPL/2	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped
<b>Chalk Sound</b>	Crown	0	Unknown	Watercraft use, Australian Pine	Threats assessed/species mapped
<b>Berry Islands</b>					
<b>Great Harbour Cay</b>	Municipal	WIPL/5	No	Pedestrians, pets, development, ORV use, litter, Australian Pine	Threats assessed/species mapped
<b>Petit Cay</b>	Crown	WIPL/1 AMOY/1 LETE/4 BRTE/10	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Haines Cay</b>	Crown	WIPL/2	No	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Caesar Cay</b>	Crown	0	Yes	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Fanny Cay</b>	Crown	0	Yes	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Ambergris Cay (Berry)</b>	Crown	WIPL/3 AMOY/1	Yes	Pedestrians, pets, watercraft use, Australian Pine	Piping Plover roosting/BNB nesting areas posted/ <i>Casuarina</i> control
<b>Abner Cay</b>	Crown	AMOY/1 BRTE/50	Unknown	Pedestrians, pets, watercraft use, - Australian Pine	Threats assessed/species mapped
<b>Market Fish Cay</b>	Crown	BRTE/4	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Soldier Cay (Berry)</b>	Crown	WIPL/2 AMOY/2 LETE/1 ROST/5 BRTE/10	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped

## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts	Conservation Actions Implemented
Channel Cay/Rock	Crown	AMOY/1 BRTE/8	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Hoffman's Cay	Private	AMOY/2	Unknown	Pedestrians, pets, camping, litter, Australian Pine	Threats assessed/species mapped
Little Harbor Cay/ Cabbage Cay	Private	AMOY/1	Unknown	Pedestrians, pets, Australian Pine	Threats assessed/species mapped
High Cay (Southern/Frozen)	Private	BRTE/40	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Bonds Cay	Private	WIPL/3	Unknown	Pedestrians, pets, Australian Pine	Threats assessed/species mapped
Sandy Cay/Bush Cay	Crown	AMOY/1 BRTE/20	Yes	Pedestrians, pets, watercraft use	Threats assessed/species mapped
Fish Cays (Berry)	Crown	AMOY/1	Yes	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Rum Cay	Crown	0	No	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Cockroach Cay	Crown	WIPL/1	No	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Mamma Rhoda Rocks	Crown	BRTE/35	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Andros Island (North)</b>					
Joulter Cays NP	BNT	WIPL/4	Yes	Pedestrians, pets, watercraft use, Australian Pine	Piping Plover roosting/BNB nesting areas posted/ <i>Casuarina</i> control
Golding Cays	Crown	AMOY/1	No	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Morgan's Bluff	Municipal	0	Unknown	Pedestrians, pets, watercraft use, ORVs, development, Australian Pine	Threats assessed/species mapped
Nicholls Town	Municipal	0	Unknown	Pedestrians, pets, watercraft use, ORVs, development, Australian Pine	Threats assessed/species mapped

## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts	Conservation Actions Implemented
Conch Sound	Municipal	0	Unknown	Pedestrians, watercraft use, development, Australian Pine	Threats assessed/species mapped
Mastic Point	Municipal	0	Unknown	Pedestrians, watercraft use, development, Australian Pine	Threats assessed/species mapped
Stafford Creek	Municipal	0	Unknown	Pedestrians, watercraft use, development, Australian Pine	Threats assessed/species mapped
Kamelame Cay/ Blanket Sound	Private	WIPL/3	Yes	Pedestrians, pets, watercraft use, ORVs, beach raking, development, Australian Pine	Threats assessed/species mapped
Staniard Creek	Private/ Municipal	WIPL/11	Yes	Pedestrians, pets, watercraft use, ORVs, development, Australian Pine	Threats assessed/species mapped
Coakley Town	Crown	WIPL/5	Unknown	Pedestrians, pets, watercraft use, ORVs, development, Australian Pine	Threats assessed/species mapped
Young Sound	Private	WIPL/13	Yes	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Bowe's Sound	Crown	0	Unknown	Pedestrians, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Andros Island (South)</b>					
Big Wood Cay/North Bight		WIPL/3 AMOY/1	Yes	Watercraft use, Australian Pine	Threats assessed/species mapped
Mangrove Cay/Middle Bight		0	Unknown	Watercraft use	Threats assessed/species mapped
Little Sandy Cay/South Bight	BNT	AMOY/2	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>New Providence Island</b>					
Maillis Beach	Private	WIPL/1	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	<i>Casuarina</i> Control and trees removed/monitored
Adelaide Village Beach	Public	WIPL/1	Yes	Pedestrians, pets, watercraft use, development, Australian Pine	<i>Casuarina</i> Control/monitored

## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts	Conservation Actions Implemented
<b>Coral Harbour Beach</b>	Public	WIPL/1	Yes	Pedestrians, pets, development, ORV use, Australian Pine	<i>Casuarina</i> Control /monitored
<b>Bonefish Pond</b>	BNT	0	No	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>South Beach</b>	Private	0	Yes	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped/steward monitored
<b>Fox Hill</b>	Private	WIPL/2	No	Pedestrians, pets, development, Australian Pine	Threats assessed/species mapped/steward monitored
<b>Exumas</b>					
<b>Highborne Cay</b>	Private	WIPL/8	Unknown	Pedestrians, watercraft use, ORVs, development, Australian Pine	Threats assessed/species mapped
<b>Lobster Cay</b>	Private	0	Unknown	Pedestrians, pets, Australian Pine	Threats assessed/species mapped
<b>Little Norman's Cay</b>	Private	WIPL/2	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
<b>Norman's Cay</b>	Private	WIPL/1 AMOY/1	Unknown	Pedestrians, pets, watercraft use, ORVs, development, Australian Pine	Threats assessed/species mapped
<b>Shroud Cay</b>	BNT	WIPL/6	Yes	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
<b>Hawksbill Cay</b>	BNT	WIPL/6	Yes	Pedestrians, pets, watercraft use, ORVs, development, Australian Pine	Threats assessed/species mapped
<b>Warderick Wells Cay</b>	BNT	WIPL/6	No	Pedestrians, watercraft use, development, Australian Pine	Threats assessed/species mapped
<b>Hog Cay</b>	BNT	0	Unknown	Watercraft use	Threats assessed/species mapped
<b>Hall's Pond Cay</b>	Private	WIPL/9	Unknown	Pedestrians, watercraft use, development, Australian Pine	Threats assessed/species mapped
<b>Little Hall's Pond</b>	Private	0	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
<b>Compass Cay</b>	Crown	0	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped



## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts	Conservation Actions Implemented
Pipe Cay	Crown	0	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Thomas Cay	Crown	0	Unknown	Watercraft use	Threats assessed/species mapped
Sampson Cay	Crown	0	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Little Major's Cay	Crown	0	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Staniel Cay	Private	0	Unknown	Pedestrians, watercraft use, development, Australian Pine	Threats assessed/species mapped
Bitter Guana Cay	Crown	0	Unknown	Pedestrians, pets, watercraft use	Threats assessed/species mapped
Gaulin Cay	Crown	0	Unknown	Pedestrians, pets, watercraft use	Threats assessed/species mapped
Great Guana Cay	Crown	0	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Big Farmers Cay	Crown	0	Unknown	Pedestrians, watercraft use, Australian Pine, livestock (goats)	Threats assessed/species mapped
Cave Cay	Private	0	Unknown	Pedestrians, watercraft use, ORVs, development, Australian Pine	Threats assessed/species mapped
Musha Cay	Private	WIPL/2	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Rudder Cut Cay	Private	AMOY/1	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Little Darby Cay	Private	0	Unknown	Pedestrians, watercraft use, development, Australian Pine	Threats assessed/species mapped
Prime Cay	Private	WIPL/1 AMOY/1	Unknown	Pedestrians, pets, watercraft use, Australian Pine	Threats assessed/species mapped
Bock Cay	Private	AMOY/1	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Norman's Pond Cay	Crown	0	Yes	Pedestrians, pets, watercraft use, Australian Pine, native iguanas	Threats assessed/species mapped

## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts	Conservation Actions Implemented
Lee Stocking Island	Private	WIPL/3	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Children's Bay Cay	Crown	0	Unknown	Australian Pine, watercraft use	Threats assessed/species mapped
Rat Cay	Crown	0	Unknown	Australian Pine, watercraft use	Threats assessed/species mapped
Glass Cay	Crown	0	Unknown	Australian Pine, watercraft use	Threats assessed/species mapped
Pimlico Cays/Tea Table Rock	Crown	WIPL/1 AMOY/1	Unknown	Australian Pine, watercraft use	Threats assessed/species mapped
<b>Great Exuma</b>					
Exuma Point to Ann's Creek	Private	WIPL/4	Yes	Pedestrians, pets, watercraft use, ORVs, development, Australian Pine	Threats assessed/species mapped
Ann's Creek to Roker's Point	Private	0	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Farmer's Hill Beach to Breakwater Dr.	Private	0	Yes	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Breakwater Dr. Beach	Private	WIPL/2	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Grog Pond	Private	0	Unknown	Pedestrians, pets, Australian Pine	Threats assessed/species mapped
Tar Bay Beach	Private	0	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Hooper's Bay Beach	Private	0	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Georgetown	Private	0	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Tropic of Cancer	Private	WIPL/1	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Stocking Island	Private	WIPL/2	Yes	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped
Elizabeth Island	Private	0	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine	Threats assessed/species mapped

## Human-Caused Impacts and Conservation Actions Implemented 2016-2019

Site Name and (Designation)	Owner-ship	Species Pairs	Migratory PIPL	Human-Caused Disturbance & Habitat Impacts		Conservation Actions Implemented
<b>Guana Cay</b>	Private	WIPL/1 AMOY/1	Unknown	Pedestrians, pets, watercraft use, development, Australian Pine		Threats assessed/species mapped
<b>Man of Way Cay</b>	Private	WIPL/7	Yes	Pedestrians, pets, watercraft use, Australian Pine		Threats assessed/species mapped
<b>Moriah Harbour Cay National Park</b>	BNT	WIPL/3 AMOY/1 LETE/3	Yes	Pedestrians, pets, watercraft use, Australian Pine		Threats assessed/species mapped
<b>TOTAL PAIRS</b>		<b>WIPL/332 AMOY/28 LETE/55 ROST/160 BRTE/271</b>				

### Key to Abbreviations

IBA = Important Bird Area GBPA = Grand Bahama Port Authority BNT = Bahamas National Trust NP= National Park ORV= Off Road Vehicles

\*PIPL survey data from 2011 USGS Winter Survey supplemented by Ebird data and Conservian/CBC survey data



## CONSERVIAN Contact Information

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**Wilson's Plover nest in wrackline**

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