



THE ANDROS JOULTER CAYS NATIONAL PARK PROPOSAL



**Submitted to the Office of The Prime Minister
By The Bahamas National Trust
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Cover photo by Walker Golder

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I. EXECUTIVE SUMMARY

The Joulter Cays, located just north of Andros Island, are well known by research biologists and fishermen. The area is prominent for its unique geological features, abundant fisheries, diverse and abundant birdlife, expansive flats and tidal creeks, mangrove wetlands, and rich coral reefs. Key features for which the area is known include:

- Impressive bonefish populations that contribute to a sustainable vibrant recreational fly-fishing industry in Andros;
- Extensive banks of unique oolitic sand, one of the few places in the world where this type of sand exists;
- Sand flats that provide habitat for thousands of shorebirds, including the largest congregation of the endangered Piping Plover outside the United States;
- Mangroves and tidal creeks that provide nursery areas for sharks and commercially important reef fish species;
- Seagrass meadows that sustain nursery habitats for lobsters, conch and sea cucumbers, and feeding grounds for marine turtles;
- Areas of coppice that support significant breeding populations of White-crowned Pigeon;
- Intact healthy coral reefs that provide shoreline protection and enhance fisheries productivity.

The proposed Andros Joulter Cays National Park would cover an area of 92,000 acres located approximately two (2) miles north of the main island of Andros [Map 3]. The National Park would extend seven (7) miles to the east and west of the three (3) main islands and smaller associated cays. Moving east to west, the park encompasses deeper waters important for pelagic species, a portion of the Andros Barrier Reef, offshore reefs, then to the Cays and tidal creeks that support seagrass beds, mangroves, and coppice forest, and stretching west to encompass the vast oolitic sand banks. All of the land within the proposed National Park boundary is recommended for protection, with the exception of a 5-acre plot of private land.

Currently, the primary users of the Joulter Cays are sports fishermen who target bonefish and permit on the flats and in the creeks; commercial fishermen that harvest demersal fish (grouper, snappers, grunts etc.), lobster and stone crabs on the reef; and commercial harvesters of sponge and conch on the banks. However, these same primary users express concern for their long-term occupational livelihoods due to increased fishing pressures observed on the flats and the declining state of coral reefs. Other threats to the Joulter Cays area include poor handling of bonefish, vessel groundings that destroy reef, discarded fishing gear, and other marine debris.

Importantly, the development of this park proposal was a participatory process involving resource users and the local people. This process was facilitated through a series of outreach activities including Focus Group Meetings with fishermen and fishing guides, public meetings, and survey assessments to reach over 150 people of North and Central Andros.

Based on the results of scientific investigations and community outreach initiatives, the Joulter Cays are highly prioritized for legal protection. This proposal is supported by avian

surveys to identify areas of conservation importance for birds, and a Rapid Ecological Assessment (REA) for the marine environment. Although classified as a Wild Bird Reserve and an Important Bird Area (IBA), these designations do not afford the Joulter Cays protection against current and future threats. The National Park designation will protect the Joulter Cays from unregulated development and destructive practices such as sand mining to help ensure a sustainable and viable economy for the Androsian community.

Inherent to the proposal is a focus on long-term economic stability to enable opportunities for Bahamians provided by the designation of a National Park. As a National Park, the Joulter Cays will be protected in perpetuity, preserving essential habitats and ecosystem functions while also safeguarding traditional recreational and commercial uses by local communities.

The Bahamas National Trust has received support from many agencies in the preparation of this proposal to declare the Joulter Cays as a National Park. These include the National Audubon Society, The Nature Conservancy, the Andros Conservancy and Trust, The Bahamas Environment Science & Technology (BEST) Commission, The Department of Marine Resources and the communities of Northern and Central Andros.



Minster of the Environment and Housing, The Hon. Kenred Dorsett, and North Andros Local Government Officials meet Bahamas National Trust and National Audubon Society Representatives for a trip to the Joulter Cays.

II. INTRODUCTION

The expansion of the Bahamas National Protected Area System is an undertaking supported by the National Implementation Support Programme (NISP) partners, to advance the Government's commitments under international obligations for the development of a comprehensive and representative system of Protected Areas throughout the archipelago by 2020 (Caribbean Challenge Initiative). This commitment has spurred The Bahamas National Trust to incorporate national priority sites of biological, ecological and cultural significance to be added to the National Parks System through a systematic approach that involves the participation of local people.

The Bahamas National Trust with support from conservation partner organizations has long recommended and promoted areas of important marine and terrestrial habitats in Andros for protection. Currently, five (5) of the twenty-seven (27) National Parks are located on the island of Andros (Map 1): Andros North and South Marine Parks, Blue Holes National Park, Crab Replenishment National Reserve, and the largest in the system, the Andros West Side National Park, collectively covering more than 1.5 million acres.

The Joulter Cays are located on the margin of the Great Bahama Bank, north of Andros Island (25° 16.00 North 78° 7.00 West). The area is a large intertidal to shallow subtidal area of stabilized sand flats. The sand flats, interspersed with tidal channels and seagrass beds, are primarily made of the globally rare Ooid or Oolite sand, a unique spherical grain type of sand that resembles fish-roe. To the east of the sand flats, there exists a ridge of vegetated islands up to 6 meters above mean sea level. The primary vegetation on the Joulter Cays is Red and Black mangrove with small areas of coppice. The marine environment offers a diversity of shallow and deep coral reef patches dominated by *Montastraea/Orbicella*, *Acropora palmate* (both important reef building corals in the Caribbean), and multiple patches of the endangered staghorn coral, *Acropora cervicornis*.

The Joulter Cays were established as a Wild Bird Reserve in 1968, to protect this important area for breeding White-crowned Pigeons. More recently, shorebird surveys have helped to designate the area as a globally Important Bird Area (BirdLife International 2012) for the endangered Piping Plover (4% of the global population) and Short-billed Dowitcher (2% of the global population); and to document the importance of the area to many shorebird, seabird, and wading bird species. Additionally, the Joulter Cays are globally recognized as a hotspot for bonefish and contribute to the \$141 million industry across The Bahamas.

Due to the ecological significance of the site, the conservation community and local inhabitants believe that the Joulter Cays warrant greater protection by the Bahamian Government. As a National Park, the Joulter Cays will enable a sustainable future for commercially viable and biologically important species thus maintaining and offering opportunities to expand local economies while restricting threats could destabilize the area.

Through scientific investigation and community stakeholder engagement, The Bahamas National Trust recommends the following areas within the Joulter Cays to be protected:

- North, central and south Joulter Cays, Long Cay and small Cays and sand flats south to

protect exceptional, pristine habitats for endangered Piping Plovers, Red Knots, other shorebirds, Reddish Egret (*Egretta rufescens*) and other wading birds including West Indian Flamingo (*Phoenicopterus ruber*), and breeding grounds for White-crowned Pigeons (*Patagioenas leucocephala*);

- Shallow tidal creeks and channels which are important juvenile bonefish habitats, as well as other fish species;
- Healthy mangrove stands essential for shoreline protection, and juvenile stages of commercially important fish, crawfish and conch;
- Seagrass beds that provide habitats for conch, feeding habitats for sea turtles and nurseries for fisheries;
- A portion of the Andros Barrier Reef (offshore from main cays) to incorporate healthy examples of coral reef systems to help augment fisheries productivity;
- Areas to the west of the cays to protect globally unique concentrations of Ooid sands;
- Deep ocean waters to protect pelagic species, adult life cycle for bonefish, and habitats for marine mammals.

During the stakeholder engagement process to support the development of this proposal, the communities of North and Central Andros stood firm in their vision of the Joulter Cays as a multi-use area. They expressed support for allowing traditional non-destructive fishing practices to continue, while limiting threats that can cause irreversible damage to the natural resources.

The Bahamas National Trust is committed to working alongside the Andros communities to develop appropriate management prescriptions for the Andros Joulter Cays National Park to ensure sustainable use to support economic activities and livelihoods of local people.



Map 1: Andros National Parks System

III. ENVIRONMENTAL, CULTURAL AND SOCIOECONOMIC IMPORTANCE OF THE JOULTER CAYS

Environmental Importance

At present, the Joulter Cays and the immediate surrounding area form an intact functioning ecosystem that supports a variety of important flora, fauna, and unique natural processes.

Flora

The uninhabited Joulter Cays consist of three (3) main vegetated cays, interspersed with many mangrove-lined creeks and channels, the majority of which are in shallow or intertidal zones. A total of seventeen (17) plant species were identified on the main Joulter Cays, the predominant plant species being Red and Black mangroves, and Buttonwood. Of the identified plant species, two (2) invasive plants, Australian Pine (*Casurina equisetifolia*) and White inkberry (*Scaevola taccada*), are becoming established on the shoreline of the islands.

Fauna

The tidal flats, beaches, coppice (Figure 1), mangroves, and shallow waters of the Joulter Cays are very important to many species of birds, especially shorebirds, during spring migration, fall migration, and winter months. There have been forty-two (42) bird species recorded to date at the Joulter Cays. Several key species have been documented in large numbers such as the endangered Piping Plover and Short-billed Dowitcher. Of note, the threatened Rufa Red Knot has been documented for wintering in The Bahamas for the first time. Further study is needed, but initial assessments indicate that the Joulter Cays are critically important habitat for several important avian species.



Figure 1: Shorebird roosting area during high tide. - Photo credit, W. Golder.

Shorebirds and Wading Birds

The Joulter Cays were designated in 1968 as a Wild Bird Reserve and have been designated by BirdLife International as a globally significant Important Bird Area (IBA). The IBA designation is based on the fact that the area supports migratory Piping Plovers and Short-billed Dowitchers, with 4% and 2% of the global population respectively, spending part of their nonbreeding season at the Joulter Cays, along with thirteen (13) other species of shorebirds.

Shorebirds depend on the Joulter Cays to rest and refuel during their long migrations from breeding areas as far away as the Arctic to wintering areas in the Caribbean or South America. Some species spend the entire winter in The Bahamas and require the Joulter Cays to survive the winter. The productive sand flats of the Joulter Cays are essential to the survival of the shorebirds that winter there.

Piping Plovers are listed under the Endangered Species Act in the United States, with a global population estimated at 8,092 of mature individuals (Haig et al. 2005, Elliott-Smith et al. 2009). The species is “Highly Imperiled” by the U.S. Shorebird Conservation Plan, and Near Threatened under the IUCN Red List. “All piping plover populations are inherently vulnerable to even small declines in survival of adults and fledged juveniles. Progress towards recovery would be quickly slowed or reversed by even small sustained decreases in survival rates during migration and wintering.” (Source: USFWS. 2009. Piping Plover 5-Year Status Review)



Figure 2: rufa Red Knots in Joulter Cays (bird at far left with a band was banded in Delaware Bay) – Photo credit, W. Golder

Rufa Red Knots are currently proposed for “threatened” status under the Endangered Species Act, having one of the most impressive migrations in the world. These species travel over 9,000 miles twice a year along the Atlantic Flyway, including The Bahamas from the Arctic, to Argentina and back. The population is currently crashing having fallen by 75% since the 1980’s, with the steepest declines in the past decade (Figure 2).

Wading birds recorded in the Joulter Cays include Reddish Egret (*Egretta rufescens*), the West Indian Flamingo (*Phoenicopterus ruber*), Green Heron (*Butorides virescens*), Great Egret (*Ardea alba*), Yellow-crowned Night Heron (*Nyctanassa violacea*), and Tricolored Heron (*Egretta tricolor*).

Other Birds of interest:

The Joulter Cays were designated as a Wild Bird Reserve by the Bahamian Government in 1968 to protect a key breeding site for the White-crowned Pigeon, an economically important game bird species in The Bahamas. It is important to note that the designation as a Wild Bird Reserve does not offer any protection to the habitat, the designation simply means that the Joulter Cays area is off limits to hunting. Recent surveys of the island during breeding season (June to September) indicate that the area is of critical importance for breeding pigeons that in-turn support the hunting industry across Andros.



Figure 3: Western and Least Sandpipers roosting at high tide in the Joulter Cays

The habitats on the Joulter Cays offer a unique conservation opportunity for piping plovers, other shorebirds, native breeding egrets, seabirds, rails, wading birds, native songbirds, and breeding White-crowned pigeons, while providing economic opportunities for ecotourism

development for North Andros communities. Degradation of the sand flats and mangroves in the Joulter Cays could have a dramatic impact on shorebird and wading bird species.

Fish communities



Figure 4: Bonefish in shallow flats area – Photo – W. Golder

Fly fishing guides have reported that bonefish (figure 4) populations are relatively abundant at the Joulter Cays. Importantly, the Joulter Cays provide the necessary habitats including deepwater areas, sandy embayments, mangroves, deep channels and surrounding flats, needed to support all life history stages for bonefish (T. Fedler, 2008). Therefore, to protect the fishery an ecosystem-based approach should be taken to ensure that important bonefish habitats are protected from degradation. Healthy habitats translate to a healthy fishery and the

protection of a \$141 million dollar fishery for The Bahamas. This unique matrix of habitats and intertidal flow also support abundant populations of Lemon sharks, Nurse sharks, rays and sea turtles.

Geological Features

The Joulter Cays feature a unique fine sand known as Ooid. Oolitic sands are present in three (3) areas of the Joulter Cays: 1) at the inner edge of the coral reefs, 2) on the tidal sand bars, and 3) on the shallow sand shoal (P. M. Harris, 1976). The ooid shoal on the margin of the Great Bahama Bank is a sand flat that has accumulated over the past 5,000 years commensurate with sea level rise. Ooid sand is a very unique spherical grain sand that resembles fish-roe (figure 1) with a diameter that reaches up to 2 mm.

Ooids are accretionary — meaning that the sand grows in size – as opposed to typical sand grains which decrease in size by natural processes like weathering. Ooids grow in shallow wave agitated water. Waves move fine sediment particles (quartz grains or biogenic fragments) which act as a crystallization nuclei upon which mineralized matter starts to grow. Most ooids are classified as calcitic or aragonitic. They have a characteristic concentric layering which resembles the growth rings of trees. Oolitic sand is well sought after for the aquarium industry and is being considered by the plastics industry for a raw material.

Additionally, ooid sands on the Joulter Cays have been studied extensively over the past 100 years and the area is a prized place of study for geology students from several international universities. Hence, the area is also an important component for education and research tourism on Andros Island.

Cultural and Socioeconomic Importance

The Joulter Cays are of significant economic importance to the communities of North and Central Andros. Fishing (commercial, artisanal and sports) in the Joulter Cays and the

surrounding area is currently the primary source of income for many. Fly-fishing guides from Central Andros (Staniard Creek) and North Andros settlements bring anglers to fish the flats and channels for bonefish and permit. Commercial fishermen utilize the banks and deeper reefs for conch, crawfish, stone crabs, groupers, snappers, grunts and sponges. The entire Joulter Cays system is utilized on a daily basis even during inclement weather when fishing occurs on the reef system in closest proximity to North Andros settlements. In addition to local artisanal fishing, commercial fishermen from other islands of The Bahamas also fish the Joulter Cays in larger vessels.

The Bahamas National Trust organized a series of consultations with local stakeholders to initiate conversations on proposing the Joulter Cays as a National Park. Focus Group Meetings were held in five (5) communities in North and Central Andros (Lowe Sound, Behring Point, Nicholl's Town, Red Bays and Fresh Creek); and involved more than seventy (70) fishermen and fly fishing guides. Public meetings to discuss the future protection of the Joulter Cays involved some one-hundred (100) stakeholders from the wider communities of Central and Northern Andros. Further efforts to raise awareness were undertaken through questionnaires led by youth groups on the island, which connected with an additional one-hundred eighty (180) individuals.

Feedback from stakeholders noted the unsustainable harvesting of sea cucumbers in the area for export to Asian markets. This concern was echoed through the Andros communities, noting that they have seen the dramatic reduction in sea cucumber abundance. To prevent similar problems in the future, local communities recognize the need for sustainable, regulated, and enforced harvest practices that will help maintain a viable economy over the long term.

The overwhelming message from the community was to support greater protections for the Joulter Cays. The message was also loud and clear that community participation is essential in the development of management plans, uses of the park, and community engagement in economic opportunities such as ecotourism generated by a protected area designation.

The community vision for the Joulter Cays National Park includes:

1. Developing recreation and eco-tourism based activities that support local economies,
2. Use of the site for greater environmental education and awareness for the general public,
3. Training ground to develop new guides for the fly-fishing industry,
4. Sustaining the fly fishing guides, their families, and the infrastructure that supports fly fishing tourism and,
5. Stronger enforcement of existing laws and implementation of new policies (i.e. penalties) for the site.

IV. ENVIRONMENTAL ISSUES AND POTENTIAL CONFLICTS

Environmental Issues

The Joulter Cays and surrounding environments are of significant importance to local economies, local culture and threatened biological assemblages such as bonefish, staghorn coral, birds and the unique geological feature of ooid sands. Any interruption to the ecological processes could irreversibly change the ecology of the Joulter Cays, subsequently negatively impacting the local people and likely resulting in species extinction.

Increased protection for the Joulter Cays will help safeguard the natural resources for future generations of Bahamians by minimizing threats which could interrupt economic development. The scientific findings from the marine Rapid Ecological Assessment (REA) show significant stress to the marine environment from natural disasters and human induced threats including overfishing, illegal fishing practices, and ship groundings. Greater protection would help reduce such stresses and a management plan will assist in the recovery of lost biodiversity.

Threats to the Joulter Cays include:

Overfishing

Poorly regulated commercial fishing was a concern expressed by the Androsian communities. Foreign fishing vessels and fishers from other islands are fishing intensively on the reef systems of the Joulter Cays. These fishing activities, coupled with other stressors, are adding to the degradation of coral reef health, displacing commercial and ecologically important species. Removal of juvenile conch was another major concern that needs to be managed to ensure long term viable populations. Evidence of intense fishing pressure was identified at several reefs south of the main cays with broken traps and fishing lines abundant and few observations of large commercial fish species.

Overfishing for bonefish through poor catch-and-release handling techniques were also concerns vocalized by the Androsian fly-fishermen. Bonefish abundance could be impacted without regulation and oversight, especially as shark predation is so high following the release of bonefish.

Illegal Fishing Practices

Fishing for species during the closed season (e.g. Nassau grouper), and the use of compressors outside of legal limits are also prevalent in the Joulter Cays. These illegal practices were an additional concern throughout fishing communities.

Vessel Groundings

During the marine REA, shallow reef sites showed evidence of ship groundings with large sections of fiberglass, pipes, cables and pieces of machinery (e.g. engine parts) strewn across a large section of reef flat that had once been living elkhorn coral (*Acropora palmata*), but now reduced to rubble. These impacts not only kill corals on the reef, but also destroy habitat for many fish species and disrupt the marine ecosystem.

Climate Change

Increased intensity of storms, sea level rise, elevated sea surface temperatures and ocean acidification will impact the Joulter Cays.

Incompatible Development

Development on the Joulter Cays could have irreversible consequences to the ecosystems and important species found there. Runoff from impervious surfaces and leaky septic systems could upset the fragile balance of the surrounding shallow water habitat and threaten the marine environment. Development would likely eliminate nesting and foraging habitat for White-crowned Pigeons and shorebirds. The disturbance associated with development would be a threat to shorebirds and other birds that use the beaches and tidal flats.

Sand Mining

An existing threat to the site is mining for Oolid sand. Oolid sand is popular in the Aquarium industry with the Bahamas currently exporting the sand from other areas. Oolid is also being explored and tested by the plastics industry as a potential future raw material. In addition, the United States is increasingly looking toward the Caribbean for sand to replenish its beaches. While this is not a direct threat to the Joulter Cays (that we know of) today, placing the area into protection would reduce future mining industries from disrupting the carefully balanced ecosystem and threatening habitat for bonefish, birds, and other wildlife.

Pollution

Due to the sea currents that flow towards the Joulter Cays, they are extremely vulnerable to pollution. Whether such pollution stems from a shipping incident or oil spill, the Joulter Cays are threatened by commercial activity occurring in and around the region.

Invasive and Alien Species

Invasive and alien species successfully compete in new ecosystems by displacing native species and disrupting important ecosystem processes. Two (2) aggressive plant invasive species have been documented in the Joulter Cays (Appendix 3), Australian Pine and White Inkberry, that can result in shoreline erosion and loss of habitats important for shorebirds. In the marine environment, lionfish (*Pterois volitans*) were found present on the reef systems of the Joulter Cays competing with native fish for food and space. Management measures such as active removals and monitoring systems, to control impacts from both terrestrial and marine invasive species can be implemented once the area is protected.

Natural disasters

Evidence of coral disease and past mass mortality of endangered coral species (elkhorn and staghorn corals) were observed at several sites indicating that these reefs are under stress. Those reefs that have remained relatively healthy may have characteristics that promote their resilience or limit the extent of natural or human impacts. Safeguarding these reefs against potential future impacts from which they may not be as resilient, should be a priority for conservation in the area.

V. SITE SELECTION

Proposed boundaries

The proposed boundaries for the Joulter Cays National Park covers an area of 92,000 acres, situated approximately 2 miles from the closet point of land. All three (3) of the main islands, and associated cays and sand flats (IBA) are included in the boundaries, extending 7 miles west and 7 miles east to deeper waters (map 3). All the land within the proposed boundaries is proposed for protection, with the exception of the 5-acre plot of private land.

The Joulter Cays have been scientifically proven to be important for both terrestrial and marine habitats and species. The Joulter Cays are a prime location for scientific research to explore some of the most critical environments in The Bahamas and the world.

Avian Assessments

The scientific census in 2011 for the Piping Plover, Wilsons Plover and Snowy Plover, involved more than 31 biologists from 10 different organizations and agencies surveyed 176 sites across 14 islands. The results indicate that the Joulter Cays support the largest wintering population of Piping Plovers in The Bahamas, and one of the largest wintering populations in the world. The majority of the birds found in The Bahamas are from the Atlantic coastal breeding population (North Carolina to Nova Scotia), although an individual bird was observed with bands from North Dakota.

As a result of the 2011 and 2012 findings, two areas were identified as sites of global importance for Piping Plovers in The Bahamas; the Joulter Cays, and flats in the Northern Berry Islands. Subsequently, the data recovered was presented to BirdLife International and both sites were declared Important Bird Areas (IBAs).

Species	High Counts <i>Conservative numbers</i>	Percentage of Global Population
Piping Plover <i>Charadrius melodus</i>	326	4%
Black-bellied plover <i>Pluvialis squatarola</i>	1260	0.8%
Short-billed Dowitcher <i>Limnodromus griseus</i>	2403	2%
Red Knot <i>Calidris canutus rufa</i>	124	
Reddish Egret <i>Egretta rufescens</i>	9	
Wilson's Plover <i>Charadrius wilsonia</i>	85	
Western Sandpiper <i>Calidris mauri</i>	1077	
Least Sandpiper <i>Calidris minutilla</i>	396	

Table 1: Shorebird species observed on the Joulter Cays

Key species recorded in significant numbers in the Joulter Cays: the globally threatened and endangered Piping Plover (*Charadrius melodus*) (Figure 5), Wilson's plover (*Charadrius wilsonia*), large numbers of Black-bellied Plover (*Pluvialis squatarola*), globally-significant population of Short-billed Dowitcher (*Limnodromus griseus*), the rapidly-declining Red Knot (*Calidris canutus rufa*), Least Sandpiper (*Calidris minutilla*), Western Sandpiper (*Calidris mauri*), American Oystercatcher (*Haematopus palliatus*), Willet (*Tringa semipalmata*), and Sanderling (*Calidris alba*) (Table 1).

Additional research in 2012 identified the Joulter Cays as being important for breeding Reddish Egrets (Near Threatened, IUCN 2013), wintering and migrating Rufa Red Knot (declined 75% since the 1980s and being considered for listing under the Endangered Species Act in the US), more than 2% of the global population of Short-billed Dowitcher, and significant numbers of other shorebird and wading bird species including the National bird of the Bahamas the West Indian Flamingo.



Figure 5: Endangered Piping plover - More than 4% of the global population, 9% of the Atlantic breeding population have been seen on the Joulter Cays – largest population outside the United States.

A survey in August 2013 by BNT Science Officers documented that large numbers of White-crowned pigeons use the mangroves throughout the area for reproduction and foraging in the nearby mixed broadleaf coppice. The birds nest in the mangroves and feed on the fruiting coppice in the Joulter Cays and the mainland. White-crowned pigeons were also observed flying to and from the mainland of North Andros where they forage in coppice for their feeding before returning to the Joulter Cays for roosting and breeding.

Additional species for which the Joulter Cays has been found to be important include: Least Tern (*Sternula antillarum*), observed in August resting on sand bars and assumed to be migrating from the US, Royal Tern (*Thalasseus maximus*); Sandwich Tern (*Thalasseus sandvicensis*), Common Tern (*Sterna hirundo*), Caribbean race of Osprey (*Pandion haliaetus*) nesting at many locations, Merlin (*Falco columbarius*) and Peregrine Falcon (*Falco peregrinus*) common during migration, Clapper Rail (*Rallus longirostris*) abundant, and many species of migrant and wintering songbirds.

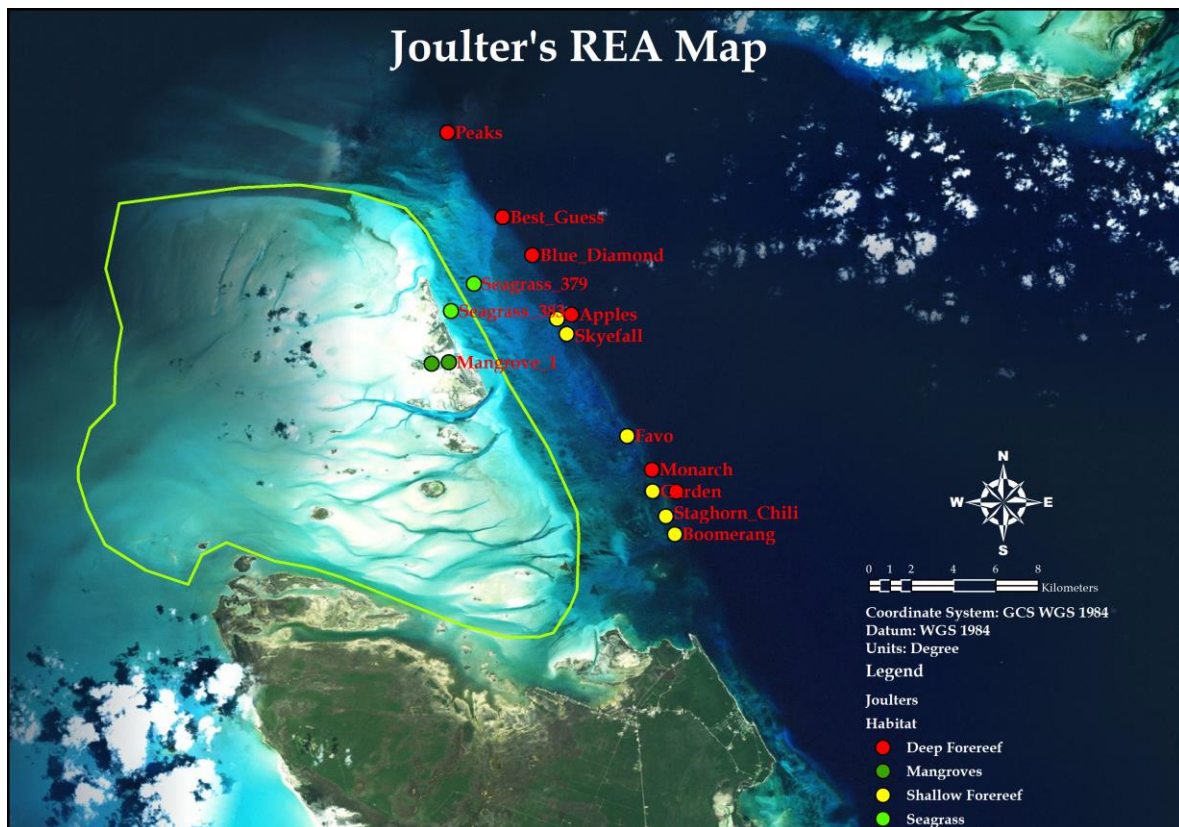
Marine Rapid Ecological Assessments (REA)

A Rapid Ecological Assessment of the marine environment for the Joulter Cays was conducted from September 8-11, 2013, in collaboration with The Nature Conservancy through the Blue Project funded by the Kerzner Marine Foundation. Representatives from The Perry Institute for Marine Science (PIMS), The Bahamas National Trust (BNT), The Nature Conservancy (TNC) and Atlantis (Figure 6) conducted surveys to assess the conditions of the marine habitats and resources, particularly deep and shallow reefs for coral populations and their health, benthic communities and key fish populations (Map 2). Several seagrass and mangrove sites were also surveyed and



Figure 6 – Joulters REA Team comprised of representatives from PIMS, BNT, TNC and Atlantis.

qualitative observations of habitat conditions and the status of marine resources were also made in a number of habitats.



Map 2 – Fourteen (14) sites surveyed during the Sept. 2013 REA, and boundaries (yellow) of the Joulter Cays Important Bird Area, 2012.

Coral reefs

The Joulter Cays lie within the western hemisphere's second largest barrier reef system. The REA identified several reefs off the main Joulter Cays that are of exceptional value based on the amount of live coral cover, presence of endangered species, overall coral diversity, as well as fish diversity and abundance. These sites, which are of highest conservation value and are a priority for protection, include Joulters Reef, Skyefall, Favo and Apples reefs (Map 2).

Of the sites surveyed, two (2) areas (Joulters Reef and Favo) were made up of the most complex and productive reef types, *Montastraea/Orbicella*, while Skyefall and Joulters Reef sites illustrated the highest amount of coral cover and types of coral (Figure 7), including multiple patches of the endangered Staghorn coral (*Acropora cervicornis*). While populations of Staghorn coral appeared to be greatly reduced, and there were signs of ongoing mortality in some of these colonies, populations on these reefs were among the largest observed in The Bahamas at present, and therefore warrant protection (C. Dalghren comm, 2013).

Fish Communities

Reef fish assemblages of the Joulter Cays observed during the REA were diverse with the highest diversity, abundance and size of fish species being observed off the main cays of the

Joulter Cays which was consistent with good reef health quality, quantified during coral reef assessments. Shallow sites off the cays (Joulter Reef, Skyefall and Favo) tended to have greater diversity and fish abundance than other sites however the average sizes of fish were somewhat larger at several of the deeper sites. The greatest concern was the low abundances of larger predators on the reefs (e.g. Nassau grouper), while other grouper species and some snappers species were in abundance.



Figure 7 – Snapshot of Skyefall Reef considered being one of the healthiest reefs at the Joulter Cays, possessing colonies of the endangered Staghorn coral.

The REA findings suggest that the boundaries of the proposed Andros Joulter Cays National Park should include coral reefs, and a portion of the Tongue of the Ocean east of the Important Bird Area (IBA). This area would contain important intact reefs that include Joulter Reef, Skyefall, Favo and Apples reefs, that are supported by the connectivity of the coastal mangrove systems and seagrass meadows that are essential for the life stages of commercially important marine species, spawning areas for fish, and feeding areas for turtles and marine mammals.

Mangroves and Seagrass Habitats

The Joulter Cays are interspersed with many mangrove lined creeks and channels with seagrass beds that provide nursery grounds for reef fish communities. The tidal creeks surveyed during the REA were fringed with red mangroves and shown to support an abundance of juvenile gray snapper (*Lutjanus griseus*), schoolmasters (*Lutjanus apodus*), Mojarras (known locally as shad), grunts, parrotfish and juvenile and adult damselfish.

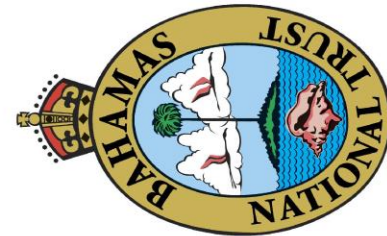
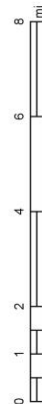
The seagrass sites were surveyed for Queen conch and sea cucumbers which found. No conch or sea cucumbers were found, reflecting similar findings to more extensive surveys of seagrass areas conducted in 2010 (C. Dalghren).

ANDROS JOULTER CAYS NATIONAL PARK

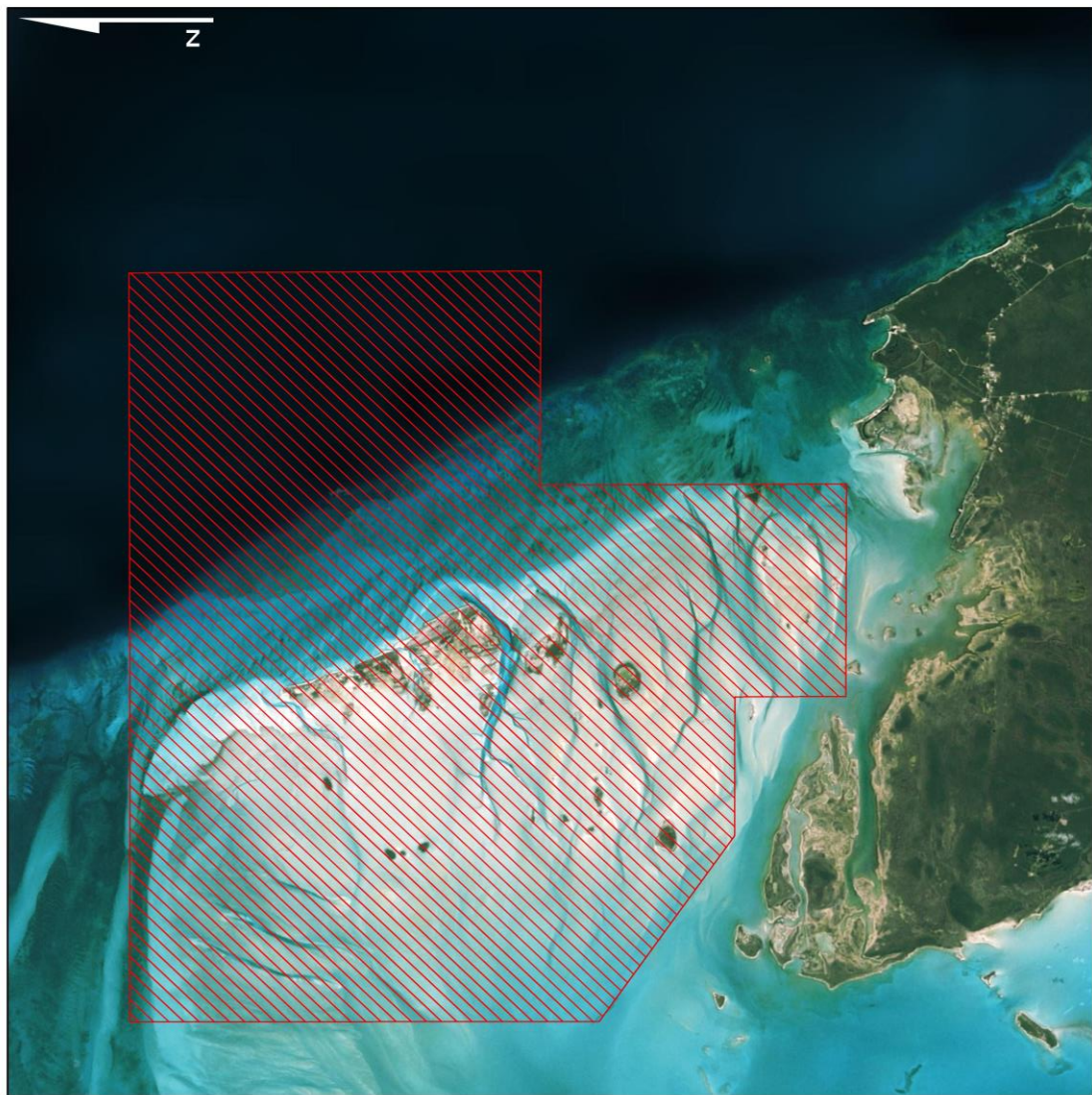


Size: 92,000 Acres

Distance from the islands to the East: 7 miles
Distance from the islands to the West: 7 miles
Distance from Lowe Sound: 2 miles



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Map 3. Proposed boundaries for the Andros Joulter Cays National Park.

VI. FEASIBILITY OF ESTABLISHING THE ANDROS JOULTER CAYS NATIONAL PARK

The Joulter Cays comprise an area at the most northern point of Andros and the area is accessible only by boat. The area is highly sought after for catch-and-release fly-fishing for bonefish and permit with many repeat anglers that engage local guides from North and Central Andros. Concerns have been expressed by local guides on the recent increase in boating traffic on the flats, and poor fishing practices and ethics that can negatively impact bonefish populations. There is support for implementing plans and policies for the protection of the Joulter Cays that can address these issues, while still allowing for sustainable use of resources.

Site Identification

Identifying areas of conservation importance is critical to the development of a National Park. Five (5) Focus Group Meetings (Figure 8) were held with some seventy (70) fishermen and



Figure 8 – Focus Group Meeting in Red Bays, North Andros, to discuss the importance of protecting the Joulter Cays.

fishing guides in Red Bays, Lowe Sound, Behring Point and Staniard Creek settlements. The objective of these forums was to gather insights from key individuals about the importance of the Joulter Cays to their cultural heritage and livelihoods. Information gleaned from these sessions identified the current uses of the Joulter Cays, existing and potential threats, and economic opportunities that stakeholders feel can be advanced to improve the livelihoods of Andros communities. The scientific investigations complimented the feedback from focus group meetings, supporting key areas in the Joulter Cays to be considered for protection, highlighting areas of high ecological, biological, geological and economic importance to The Bahamas and the Andros community at large.

Education & Outreach

While there is keen interest to expand knowledge on shorebird conservation in Andros, there is limited awareness and appreciation for the Joulter Cays and for the survival of these species, and the implications should shorebird habitats be disturbed. In support of the development of this proposal, The Bahamas National Trust through support from the National Audubon Society conducted various outreach activities in North and Central Andros to address these issues.



Figure 9– Eco-Camp student interviewing an Androsian on the importance of shorebirds and the Joulter Cays.



Figure 10 – BNT Science Officer training students in Andros to ID shorebirds.

Questionnaires administered through the Bahamas National Trust's Eco-camp Programme engaged 180 residents in North and Central Andros, to determine the level of awareness on the Joulter Cays, and its importance for the Piping Plovers and other shorebirds (Figure 9).

Training exercises were implemented to build local capacity for monitoring shorebird populations while increasing awareness. Teachers and students were given classroom (Figure 10) and field sessions (Figure 11) on the identification of the various shorebirds found in the

Joulter Cays, and the role communities can play in assisting with managing these species through scientific monitoring.

A series of Public Meetings were held in various communities in North and Central Andros to gain a broader perspective on the level of support regarding the protection of the Joulter Cays, and to agree on proposed boundaries for the Andros Joulter Cays National Park. Based on the significance of the Joulter Cays from an economic standpoint for Androsians, and the increasing threats that can impact their livelihoods, there is agreement for a National Park, once subsistence and small scale use is still allowed.

Commitment to the Andros Community

The BNT is aware that amongst many key stakeholders, including the Government and local communities, there is some hesitation to support the creation of National Parks as there is a fear that the area will then be locked away from use. Aware of this issue, BNT works hard to develop a relationship with the communities and stakeholders as we advance the process for creating new national parks. We seek to assure stakeholders that the creation of the National Park is but the first of many important steps in the process. We commit during the proposal development stage, to a process that will include them in every step of the way as management prescriptions are developed for their new National Park.

With respect to the proposed Andros Joulter Cays National Park, The Bahamas National Trust has committed to advancing the management plan through a participatory process with the local communities of Andros. This will ensure that local people are involved in, and give guidance to the decisions that will determine the uses that will be permitted in the Joulter Cays National Park.

APPENDIX 1

Glossary of terms

Biodiversity

The entire variety of life on this planet.

Conservation

The preservation and protection of the environment and the wise use of natural resources.

Consumptive use, Non-consumptive use

Consumptive use of an area means that activities take place there that involve removing living or non-living things from the area. This would include all kinds of fishing except catch-and-release, collecting conch, land crabbing, hunting, forestry, etc. Non-consumptive use involves activities that do not remove anything from the area, such as diving and snorkeling, catch-and-release fishing, bird watching and most forms of ecotourism.

Compatible development

This is a critical element of protection within any park. It means that any development within OR near the park boundaries must be compatible with the objectives of the park (i.e., compatible with conserving the environment in a pristine condition). It must also be compatible with existing uses of the park (ecotourism, bonefishing, crabbing, etc.).

The environmental compatibility of a proposed development will depend on:

- Site of development: near existing developments or urban areas or in the wilderness, near critical habitat areas or particularly sensitive areas, inside or near the boundaries of a park or protected area
- Size and scale of development
- Size and scale of associated infrastructure such as access roads, power lines, freshwater supply, docks and jetties, etc.
- Habitat lost, fragmented or changed
- Construction related issues (pollution, siltation, land clearance, noise, fumes, etc.)
- Operation related issues (waste water treatment, waste disposal, disturbance of natural areas)
- Resources consumed both during construction and during operation (water, power, etc.)
- Activities associated with the development (watersports, fishing, etc.)
- Visual impact of development
- Disruption to existing activities such as ecotourism and fishing.

Coppice

Thick stand or dense forest of mixed broad-leaved trees.

Ecology

The study of the relationships between organisms and their environment.

Ecosystem

A community of all living organisms interacting as a system.

Ecotourism

Nature-based tourism which involves education and interpretation of the natural environment and is managed to be ecologically sustainable.

Endangered

A plant or animal species which is in danger of extinction throughout all, or a significant portion of its range because its habitat is threatened with destruction, drastic modification, or severe curtailment, or overexploitation.

Endemic

Native or confined naturally to a very restricted geographic area or region.

Extinct

A species of plant or animal that is no longer living.

Fringing reef

A coral reef consisting of a sea-level flat built out from the shore of an island or continent.

Geographic Information System (GIS)

An organized collection of computer hardware, software, geographic data and personnel designed to efficiently capture, store, update, manipulate, analyze and display all forms of geographically referenced information that can be drawn from different sources both statistical and mapped.

Intertidal

The area that is above water at low tide, and under water at high tide, and can include many different types of habitats (rocky shores, cliffs, sandy beaches, wetlands, mudflats), with many types of animals, i.e. starfish, sea urchins, and numerous species of coral.

Marine

Of or relating to the sea.

National Park, Protected Area, Reserve

These three terms are used interchangeably for any area set aside by law for conservation of the natural environment. Levels of protection, use and management can vary. In this proposal, the terms “park”, “park system” (for a park with several discrete areas) or “protected area system” are used to cover all the areas proposed for some kind of protection.

Participatory

A process that involves or provides the opportunity for an individual person to participate in management decisions.

Productive

Producing something abundantly and efficiently.

Replenishment zone, No-take zone

Marine areas where no fishing or other consumptive uses are permitted. They include areas where exploited species such as grouper and crawfish can be allowed to recover and increase numbers in surrounding areas. An entire marine park may be a replenishment zone, or it may be a smaller area within a park.

Substrate

The base on which an organism lives.

Spawn

To produce young especially in large numbers.

Scientific monitoring zone

In this proposal, this is used to mean an area set aside for scientific work, where no consumptive

OR non-consumptive uses are permitted.

Terrestrial

Living on land, as opposed to marine or aquatic.

APPENDIX 2

BNT Parks and Protected Areas Selection Criteria

1. NATURAL RESOURCE VALUES

1.1 Biogeographic Importance

- Rare biogeographic qualities or represents a biogeographic type or types
- Unique or unusual geological features
- Characteristic of the biogeographic province or region in which it is located (the degree to which the area exemplifies undisturbed habitat types, ecological processes, biological communities, physiographic features, or other natural attributes associated with the province or region)

1.2 Ecological Importance

- Essential part of ecological processes or life-support systems
- Area's integrity or the degree to which either the area by itself or in association with other protected areas encompasses a complete ecosystem
- The variety of ecosystem
- Presence of habitat for rare or endangered species
- Presence of feeding, courtship, breeding, rest or migration areas
- Rare or unique habitat for any species
- Genetic diversity
- Characterized by its high level of primary and/or secondary production and attendant higher trophic level communities

1.3 Biodiversity Importance

- Significant in relation to the variety and number of life forms and communities that occurs within the specified habitat type or within the biogeographic province or region
- Contains a representative variety of species or an important sample of the diversity of ecosystems, communities, species, populations, and gene pools found within the prescribed region or habitat

1.4 Naturalness and/or Habitat Structure or Features Importance

- Extent to which the area has been protected from, or has not been subject to human-induced change
- Characterized by unique, rare, or unusual chemical, physical, geological, and/or oceanographic features, structures, or conditions

2. ECONOMIC IMPORTANCE

Existing or potential economic value by virtue of its protection (for example, protection of an area for recreation, subsistence, use by traditional inhabitants, appreciation by tourists or others or as a refuge nursery area or source of economically important species).

3. SOCIAL IMPORTANCE

Existing or potential economic value to local, national or international communities because of its heritage, historical, cultural, traditional, aesthetic, educational or recreational qualities.

4. SCIENTIFIC IMPORTANCE

Value for research and monitoring

5. INTERNATIONAL OR NATIONAL IMPORTANCE

Potential to be listed on the World (national) Heritage List, declared a Biosphere Reserve, or included on a list of areas of international or national importance, or is the subject of an international or national convention agreement

6. PRACTICALITY/FEASIBILITY

- Degree of insulation from external destructive influences
- Social or political acceptability, degree of community support
- Accessibility for education, tourism, recreation
- Compatibility with existing uses, particularly by locals
- Ease of management or compatibility with existing management regimes

Appendix 2 (cont'd)
BNT Parks and Protected Areas Selection Criteria Ranking

SITE NAME: Joulter Cays

Criteria	High Value	Medium Value	Low Value
Biogeographic Importance	X		
Ecological Importance	X		
Biodiversity Importance	X		
Naturalness/Habitat Structure	X		
Economic Importance	X		
Social Importance	X		
Scientific Importance	X		
International/National Importance	X		
Practicality/Feasibility		X	

SITE NAME: Joulter Cays

Biogeographic Sub-Criteria	High Value	Medium Value	Low Value
Presence of rare biogeographic qualities or representative of a biogeographic type	X		
Unique or unusual geological features	X		
Characteristic of the biogeographic province or region	X		
Ecological Sub-Criteria	High Value	Medium Value	Low Value
Essential part of ecological process or life-support systems	X		
Area's integrity encompasses a complete Ecosystem	X		
Variety of ecosystem	X		
Habitat for rare or endangered species	X		
Nursery or juvenile area	X		
Feeding courtship breeding rest or migration Areas	X		
Rare or unique habitat for species	X		
Genetic diversity		X	
High level of primary and/or secondary production and attendant higher trophic level communities	X		

APPENDIX 3

List of Plant Species present in the Joulter Cays

	Scientific name	Family	Common Name	
1	Borrchia arborescens	Asteraceae	Sea Ox-eye	native
2	Flaveria linearis	Asteraceae	Narrow-leaved Flaveria	native
3	Avicennia germinans	Avicenniaceae	Black Mangrove	native
4	Casuarina litorea	Casurinaceae	Australian Pine	invasive
5	Conocarpus erectus	Combretaceae	Buttonwood	native
6	Caesalpinia vesicaria	Fabaceae	Brasiletto	native
7	Cassytha filiformis	Lauraceae	Love-vine	native
8	Scaevola plumieri	Goodeniaceae	Black Inkberry	native
9	Scaevola taccada var. sericea	Goodeniaceae	White Inkberry	Invasive
10	Rhizophora mangle	Rhizophoraceae	Red Mangrove	native
11	Casasia clusiifolia	Rubiaceae	Seven -year Apple	native
12	Erithalis fruticosa	Rubiaceae	Black Torch	native
13	Ernodea littorals	Rubiaceae	Common Ernodea	native
14	Rachicallis americana	Rubiaceae	Wild Thyme	native
15	Strumphia maritima	Rubiaceae	Strumphia	native
16	Suriana maritima	Surianaceae	Bay Cedar	native
17	Jacquinia keyensis	Theophrastaceae	Joe-wood, Joe-bush, Ironwood	native

(H. Eshbaugh, P Moore)

APPENDIX 4

Acknowledgements

National Audubon Society, US Geology Service, US Fish and Wildlife Service, Disney Wildlife Conservation Fund, The Nature Conservancy, Kerzner Marine Foundation, Environment Canada, Perry Institute for Marine Science, International Field Studies – Forfar Research Station, Andros Conservancy and Trust, Vortex Optics, DuPont’s Clear into the Future Foundation, Dr. Hardy Eshbaugh, Local Government of North and Central Andros, and the wider Andros Communities.

APPENDIX 5

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APPENDIX 6
Support Letters

P.L.P
North Andros Branch
Nicholl's Town
North Andros

February 25, 2014

Rt. Hon. Perry G. Christie, M.P
Prime Minister
Commonwealth of the Bahamas
Cecil Wallace-Whitfield Centre
P.O. Box CB 10980
New Providence, Nassau
The Bahamas

RE: Letter of support

Dear Prime Minister Christie:

This letter serves as a notice that the North Andros Branch of the Progressive Liberal Party fully supports the efforts of The Bahamas National to protect the Joulter Cays as a National Park, as we feel that it is in the best interest of our island.

Please let us know if there is anything further we can do to support your efforts.

Sincerely Yours,



Donna Pickstock
Chairperson



NORTH ANDROS DISTRICT COUNCIL
LOCAL GOVERNMENT
NORTH ANDROS, THE BAHAMAS
TEL: (242) 329-2336 FAX: (242) 329-2820

February 12, 2014

Rt. Hon. Perry G. Christie, M.P.
Prime Minister
Commonwealth of the Bahamas
Cecil Wallace-Whitfield Centre
P.O. Box CB 10980
New Providence, Nassau
The Bahamas

Dear Prime Minister Christie:

Re: Proposed National Park for the Joulter Cays, Andros

The beautiful Joulter Cays have miles and miles of pristine flats and productive sea grass beds. It is perfect bonefish habitat, and various fish that reside in vast numbers throughout the entire chain of cays. It is excellent for fly-fishing. Androsian fishermen have been using this area for decades because of its proximity to the main land.

The Jouters are a bird watchers paradise because of its vast species of rare and uncommon birds. Its unique sand is prized in the aquarium trade, and is vulnerable to exploitation. The Joulter Cays are the gem of Andros and indeed The Bahamas and should be protected for generations to come.

The North Andros District Council of Local Government supports the efforts of The Bahamas National Trust to protect the Joulter Cays as a National Park as we feel that it is in the best interest of our island.

On behalf of the North Andros District Council of Local Government and the community of North Andros we wish you a happy and prosperous new year. God bless you!!

Best regards,


Vanda P. Rahming, J.P.

No. MAM&LG/CA/0/01
In Replying Please
Quote this Number



**OFFICE OF THE ADMINISTRATOR
DISTRICT OF CENTRAL ANDROS
THE BAHAMAS**

Telephone # (242) 368-2010/185
Fax # (242) 368-2340

February 24, 2014

Rt. Hon. Perry G. Christie,
Prime Minister
Commonwealth of the Bahamas
Cecil Wallace-Whitfield Center
P. O. Box CB 10980
New Providence, Nassau
Bahamas

Dear Prime Minister Christie,

Re: Proposed National Park for the Joulter Cays, Andros

Andros is uniquely blessed with a rich interconnected marine system that sustains the life cycles of species of commercial and economic importance. The Joulter Cays located in the north eastern point of north Andros is a habitat for fish and birds and is used by fishermen and guides from the Central Andros District as far as Behring Point.

It is our understanding that the Bahamas National Trust is proposing a National Park for the Joulter Cays. The fishing community of Central Andros and the District Council of Local Government supports the protection of the Joulter Cays, as it would provide more opportunities to enhance the livelihoods of all stakeholders which will be sustained for many generations if managed.

The Bahamas National Trust has the full support of the Central Andros District in protecting Joulter Cays, extending to the offshore reef system to include a portion of the barrier reef.

Yours truly,

A handwritten signature in dark ink, appearing to read 'Cleola A. Pinder'.

Cleola A. Pinder
Family Island Administrator
Central Andros District

APPENDIX 7

Stakeholder Meeting Notes

Town Meeting for the proposed Andros Joulter Cays National Park Lowe Sound, Andros

Friday, December 6, 2013
7:30 pm

Panelists:

Donnamae Pickstock of Mastic Pt., acted as Chairperson

Sheree Woodside of Mastic Pt., acted as Secretary

Sheree Woodside read the notes of the previous meeting; and the Chairperson recognized the invited persons from BNT namely, Tavares Thompson, warden and Shelly Cant, assistant director of education of BNT.

It was noted that BNT members were invited to clarify a few points raised at a town meeting in Red Bays in October wherein the Secretary noted that attendees were not pleased with the proposed Joulter Cays Park would become a no take zone, and certain activities would be prohibited thus putting residents at an economic disadvantage and the term "multi-purpose use" was not articulated for the attendees. Tavares took the floor and firstly informed the Chairperson that a meeting was held in Red Bays on November 15, 2013 subsequent to the meeting the Chairperson called in October. He reiterated that the follow up meeting was delayed due to the passing of Rev BA Newton; BNT chose to wait until after the community had a period of mourning. He further informed the chair and attendees of 2 women and 6 men, that the Red Bays meeting was well attended and there were concerns raised by one person in particular on the possibility of the park becoming a no take zone. Tavares went over the key points of the rapid ecological assessment discussed at the Red Bays meeting. A resident of Lowe Sound asked about the necessity for a ban on sea turtle. Shelly discussed the importance of the sea turtle ban and the need for continued education and awareness.

A resident of Lowe Sound asked about educating the youth about the environment. Shelly informed the attendees that there are Discovery Clubs held at schools throughout The Bahamas that serves to teach kids about the environment. The Discovery Clubs in Andros were named. Sheree informed the attendees that her group has been active since 2009 and that the other schools were not participating because certain named teachers were no show for workshops, Lowe Sound being one of them.

BNT staff members advised the attendees that the programs are expensive to run and funding comes from private sector or public donations. BNT members excused themselves from the reminder of the meeting.

ACTION POINT:

Send copies of the Westside National Park Management Plan to the Chairperson and map of proposed area of protection for the Joulter Cays.

Joulter Cays Town Meeting held at Red Bays, Andros on Friday 15 November, 2013 at 5:30 pm.

Presenter: T. Thompson

Notes by: L. Brace

It was noted that the meeting of the day, was postponed after the death of Rev. B A Newton in September, 2013. This is the follow up of the meeting held 17 July 2013.

T. Thompson distributed copies of the West Side National Park Management Plan 2013 and copies of the Joulter Cays map.

The slide presentation was narrated by Thompson and a question and answer session followed. Much of the question and answer session was a dialogue between S. Marshall and T. Thompson on the various scenarios that would trigger the park becoming a no-take zone and how the park would then be managed and the negative impact on Androsians who fish as a livelihood, should this happen.

Power point presentation on the Importance of Joulter Cays discussion topics:

- shore birds (area is an important birding area)
- oolitic sands, sand for mining and aquariums
- focus group meeting summary feedback
- rapid ecological assessment (8-11 September 2013, 299 surveys completed)

Chairman emphasized that area will continue to be a multi-purpose area and the things not permitted are the things against the fisheries law. Fishing with line and spear are still permitted. Some restrictions on gear type may be taken into consideration, fishing pots in particular. New boundaries were proposed because it was found that the shorebirds roost in the northern area of Joulter Cays, so the new boundaries include this area.

Questions and Answers following the presentation on Joulter Cays:

Q: nothing was mentioned about sponge. Is sponging allowed?

A: Yes, sponging is still permitted

Q: What is to say area will become a no take zone in two years?

A: We are guided by the management plan; we have to go through the process where a creating a management plan on how to operate the park.

Q: There may be a time when the area is quarantined and who's to say the effect it is going to take. Can BNT guarantee Bahamian fisherman, especially Androsians and Berry Island fisherman, that in the next 4-5 years the area won't be made a no-take zone?

A: No, we (BNT) cannot guarantee that and here is why, worst case scenario, if all of the area is impacted by disease and the only area left for the fish to recuperate is the Joulter Cays, so what

has to happen is that the management plan is going to have to adapt to changes in the environment.

Q: What will happen to us as fisherman if you (BNT) decided to close out the park, because not only Androsians fish in this area?

A: People from Nassau and elsewhere come into the area, but if there is an area under threat in the park, a decision would have to be made after consultation that the area is under pressure and measures need to be taken to protect it, to include no take.

There is a spin off from the conservation that is to train people in areas of eco-tourism, to include bird watching guides, sport fishing and divers.

There is growing pressure on fishing grounds in Andros because people other than Androsians are fishing the areas.

Q: So, what about the crabs on the cay?

A: Crabbing is still permitted, but want to discourage the poking of crabs, allow the crab to spawn. It is a good source of income for Androsians, and Nassauvians. But no shooting birds.

Q: What is the timeframe for doing this? Because when are you going to start volunteering people to watch out for those breaking the law. Is there going to be a payroll?

A: BNT would like to set up a post in Red Bays but if you are patrolling or fishing the area it should be your civic duty to report it. We need to have volunteers and BNT is funded by donations. Right now, other organizations are getting the funds, conservation is not a high priority for public support. Breast Cancer is of a higher public priority for funding and support.

Q: Do you know the history of the Joulters? Does the government own all of the land?

A: The land is public with the exception of a small holding by H.G Christie.

Q: Who came up with the idea of the park?

A: At first, the proposed West Side National Park was intended to extend to the Joulters Cays, but there was push back. The main purpose of designating a park at the Joulters is to discourage development and other major threats that can cause irreversible damage to important shorebird habitat, and surrounding marine areas. The area, also designated as a IBA, provides roosting grounds for Piping Plovers, in which the 5,000 that are left in the world nest in the area.

Q: Who agree for the park or not?

The Government approves all National Park and Protected Area designations. This decision is guided by the voice of the people, whom will be affected by these declarations, and is therefore the objective for these meetings. BNT has to provide the Government with the status of the proposed parks, and the feedback received from the communities, which is presented in the park proposals.

It was noted that:

1. From Joulters Cays, an area called Point of Land, come from Lowe Sound southwards, areas of REA, the reef damage is primarily from hurricane and surges, and the gas (propane) and bubbles from air compressors act as a bleaching agent.

2. There are no sea cucumbers in the area. The Bahamas Government granted permission for sea cucumber harvesting, allowing the Chinese to come and fish out the sea cucumbers. But there are some areas of the Joulter where there are many sea cucumbers.
3. Crabbing needs to cease when they are molting.
4. No pigeon shooting in off season. The area is a winter nesting ground
5. Concern that BNT will impose stringent rules to make area a no-take zone, even in some areas thus causing economic pressure on the fisherman, to include Androsians and Nassauvians. Not just Bahamian fisherman but foreign fisherman too.
6. If the area becomes “code red” fish under threat, it should be made no take zone

Attendees:

1. Norma Knowles
2. Pastor Rev. Rudell Marshall
3. Wilton Russell
4. Melvitis Colebrooke
5. Sam Marshall
6. Dave Colebrooke
7. Clarence Colebrooke
8. Nathaniel Barr
9. Ghandi Knowles
10. Glendera Newton
11. Roy Parkinson
12. Dwight Bain
13. Joel Colebrooke
14. Allison Demeritte
15. Alesa Marshall
16. Shonell Russell
17. Lakitehra Colebrooke
18. Jennifer Colebrooke

Summary of points from the Andros – Community Meetings on the Joulter Cays proposal from 16 -19 September, 2013

16 Sep - Lowe Sound Community Centre

This meeting had the largest attendance of residents/fishermen and voiced the most concerns:

- What restrictions we/BNT plan to put in the park?
- Do we/BNT plan to implement a no take zone?
- What if we change our plan and do it later in time?
- How far will the park boundaries from the Joulter's hard land?
- Some residents opinion was that construction/development would create jobs – construction/guides.
- Others counteracted this idea with – if it ends up being 'all inclusive' the owner would be the greater beneficiary and the nearby communities would end up being excluded for the most part.
- A resident identified himself as a retired career sand barge operator and vows to support the proposal to ensure the damages of sand mining to the environment that he observed over the years don't happen in the Joulter's.

Several of the older persons asked that we come into the community and explain/share this type of information with the residents and not only turn up when a matter arises.

Attendance: 53 persons signed in

17Sep – Salem Baptist Church, Red Bays

The meeting was cancelled due to the death of Pastor Bertram Newton during the afternoon. He was head of the above church where the meeting was scheduled to be held and the patriarch of the community. We were asked to respectfully postpone the meeting to a later date.

18 Sep – Clarence A. Bain, Fresh Creek

The attendance was low, probably due to inclement weather, RBC social event or just lack of interest.

Some of the concerns were:

- If the area was granted – what are the plans to police /monitor the park?
- How do we/BNT plan to fund/build capacity to patrol the park?
- How can The Bahamas institute harvest limits on marine species e.g. fish, conch, starfish etc. following the debacle of the sea cucumber in North Andros?
- Who will clear up the debris from the sea floor in the Joulters?

Peter Douglas (ANCAT) mentioned the Japanese film team that recently visited the Joulters thru MOT and suggested we/BNT may wish to contact them as they were very impressed with the cays and mentioned having funds in their budget for conservation – he could provide a contact if we were interested.

He added, it is one thing to protect areas but we have to think about how we will manage them!

The group firmly supports the park proposal.

Attendance:

Name	Telephone	Email
Thomas Kee	464-3026	flyfishandrosbahamas@gmail.com
Henry Bain	368-5221/471-5686	
Peter Douglas	368-2882	ancatoffice@gmail.com

19 Sep – Behring Point Primary School

The attendees at the meeting participated in an intelligent discussion.

They showed a lot of interest in the REA results:

- Who will take the lead to clean up the debris on the sea floor
- Any plans for research in the creeks?
- Can we do anything to correct the damages on the reefs

- How do we determine the size of the park/boundaries?
- Any way to stimulate the recovery of the sea cucumbers?

What is the process to make an area a NP and what follows this meeting?

It was suggested that BNT should consider using the method of 'Petition Letter' to reach the residents instead of community meetings as persons are not eager to drive long distances to meetings, esp. with fuel cost at \$7 per gallon. With the Petition staff/volunteer would canvas the residents of the community with question(s) are you OR are you not in favour of.....? if they agree they would sign. It is a method worth considering!

The group supports the Joulter Cays proposal for a national park.

Attendance:

Name	Telephone	Email
Dwain Neymour	368-4088	idney22@hotmail.com
Lavonne Neymour	368-4088	lavonneney150@hotmail.com
Calvin Bowe	368-4114	
Benry Smith	368-283	
Andy Smith	368-4261	
Cardinal Seymour	556-7481	
Stephen Smith	471-7761	outtadabightlive@hotmail.com
Stacy Taylor	368-5171/368-5183	
William Tucker	368-4225	
Tamica Rahming-Leadon	426-0385/368-5167	androsbonefish@batelnet.bs/exploreandros@gmail.com
Shenica Smith	471-6131	leadinglady55@hotmail.com

It is my opinion that BNT needs to change their strategy on Outreach and Education – it is a good thing to educate the youth/next generation but we need to also work with the adults, because they are the ones that have to make the decisions in the present.

Focus Group Meetings for proposed Joulter Cays National Park

Cargill Creek

Monday, July 15, 2013

Moderator: Tavares Thompson

Asst: Leslie Brace

Present: Danny Newbold
 Tamica Rahming
 Christopher Leadon
 Felix Bowe
 Barry Neymour
 Shawn Leadon
 Julie

- 1) *Which of you fish in the area of the Joulter Cays, and how important is this area to you?***
 - All have fished the Joulter Area
 - Area is not as productive as once was
 - Area has been “hammered” overfished, especially for bonefish
 - Joulters used mainly by lodges in the north, ie Staniard Creek – northward
- 2) *What do you fish for?***
 - bonefish
- 3) *What measures are taken to ensure customers are satisfied?***
 - some anglers want to keep fish
 - competition drives the need to fish the area
- 4) *Should individuals be allowed to use any type of fishing gear around the Joulter Cays, recognizing the risks of overfishing and the importance of this area to you?***
 - not all gear is suitable for sustainability of fish population
 - educate anglers of best tackle to use
- 5) *What can BNT do to help fishermen while at the same time protecting key areas in the Joulters?***
 - Too late to make a difference the area is already being used by boaters who are invested in the area. Some areas are overfished, eg. Fish Cay
 - Too many boats on the flats at once, or daily, so limit number of boats in the region to 4-5 a day.
- a) *do you see sharks?***
 - there is a shark invasion, bonefish are easily spooked
 - sharks are attracted to boat engine associate it with food

- poor fish handling technique causes released fish to become vulnerable to sharks
- need to avoid touching the fish and removing the protective mucus from body
- use right tackle so as to not exhaust the fish and tools to remove hook

6) What does the future hold for fishing in the Joulters? ;:-

a. Threats

- Too many fishing boats on a daily basis during the season
- Area has to be regulated – industry driven not BNT
- Handling practices –know how to catch and release (or even no touch)
- Guides - ethics, must be industry driven
- Joulters became the area mainly fished by novice fisherman (tourist) because bonefish population was plentiful.

b. opportunities

- education
- handling practices
- hold all Andros meeting
- share best practices between North and Central Andros
- establish proper etiquette