

Big Sand Cay, Turks & Caicos Islands

Protocol for visiting

In addition to natural vegetation and surrounding marine life, Big Sand Cay is extremely important for three types of vulnerable animals. These are the nesting sites for certain types of seabirds and marine turtles, with Big Sand Cay providing some of the most important hawksbill turtle nesting habitat in the Turks and Caicos Islands, and one of the most important nesting areas for seabirds in the Caribbean. Nesting sites for turtles and for certain types of seabirds occur across the island, often in high densities. In addition, Critically Endangered TCI rock iguanas are also breeding and nesting here. Both the turtles and the seabirds are essentially marine animals, but both need land to nest and, for the seabirds, to rear their young until these can fly. Iguanas are vulnerable to the trampling of their burrows and predation by dogs, cats and rats. The seabirds choose this nesting area because it is remote from land-based predators and near to their feeding areas out at sea. Neither turtles nor these seabirds have much in the way of defences against land-based predators (and a human looks to them like a land-based predator), so are extremely vulnerable to disturbance, which can cause loss of eggs or young or even death of adults, thereby threatening survival of these populations.

For these reasons, ***Big Sand Cay*** has the highest form of protection in TCI, it is a ***statutory Sanctuary***.

Some animals and plants are extremely sensitive to disturbance, and their survival may be endangered by such disturbance. Sanctuaries, nature reserves and other protected areas have been established to protect these organisms. It is important for humans to do this as part of their international responsibilities, but also for the potential benefits to humankind. Many aspects of our modern life utilize natural products and services which have been understood only by setting aside some areas to allow natural processes to continue and vulnerable wildlife to survive.

The rules that exist for these protected areas tend to appear restrictive, and indeed they are. However, they are



Colony of sooty terns and brown noddies
© Dr Mike Pienkowski, UKOTCF

restrictive for good reasons, and we try to explain these reasons here.

No one can land on Big Sand Cay without a written permit in advance from the Department of Environment & Maritime Affairs. However, whilst keeping this law-enshrined protection as top priority, **DEMA and other conservation bodies wish to give the best opportunity for viewing the wildlife spectacles, if and only if, this can be achieved while minimising disturbance to a tolerable level. Therefore, DEMA will allow access for visitors to Big Sand Cay, provided they follow the guidance provided in this leaflet.** Failure to follow this guidance would both pose an unnecessary threat to wildlife and could result in prosecution.

Do not take any turtle or seabird within the Big Sand Cay Sanctuary. Do not take any seabird egg or turtle egg within the Big Sand Cay Sanctuary. Under the TCI National Parks Ordinance it is an offence to take any plants, animals and animal eggs from within any Sanctuary, and under the Fisheries Protection Ordinance it is an offence to take nesting turtles or their eggs. If you encounter nesting birds or turtles on Big Sand Cay, make every effort to avoid disturbing them, and keep your distance. Any person in contravention of this is committing an offence which could result in prosecution.

Do not land on Big Sand Cay at night. Any noise, light or movement could disturb nesting turtles, which



usually nest at night. Disturbance can lead female turtles to abandon nesting attempts, and repeated disturbance could result in turtles aborting eggs at sea where they will perish. Avoiding the trampling of seabird and turtle eggs and young would be virtually impossible at night, and any lights used could be disruptive.

If you are on a boat at night off Big Sand Cay, minimise your lighting and noise, minimise engine noise, and do not use search-lights, flood-lights or similar. These distract and can even temporarily blind seabirds and will disturb turtles from nesting.

Do not take food on to Big Sand Cay. This can attract alien scavengers and predators, posing a threat to the natural wildlife. ***For the same reasons, do not discard waste material (including human waste) on the island or in the seas immediately adjacent,*** which are part of the sanctuary. Please take any of your garbage off the island when you leave and dispose of it responsibly at your destination. Litter can entangle birds or hatchling turtles and threaten their survival. Do not remove litter already present beside or around existing bird nests, as this can cause the birds not to be able to find their own nests.

Do not take dogs, cats or other animals on to Big Sand Cay, or allow stowaway plants or animals on to the shore. Some of the most damaging and expensive losses of wildlife throughout the world have been caused by people intentionally or unwittingly introducing animal and plant species on to islands, where the native animals or plants do not have behaviours or ecologies to deal with these unnatural introductions. Even if your dog is well-trained, the birds do not know that it is well-trained and will panic. Their panicking in relation to this unusual land-animal could allow other predators to attack eggs or chicks, will cause a loss of feeding time, and a loss of continuity of incubating of eggs or brooding young. Unattended dogs may also locate and excavate turtle nests under the sand, and eat turtle eggs or hatchlings.

Do not dig on the beach or remove any sand (anywhere on the island). Turtles nest on the island and their populations are at risk. Collecting or disturbing their eggs is illegal.

Do not light any fires at any time within Big Sand Cay Sanctuary, as this can disturb seabirds and nesting turtles.



View southward from the building and viewing site on Beacon Hill. The boat has landed at a suitable place. Do not walk where this individual is. (He is undertaking specially authorised monitoring work.) © Dr Mike Pienkowski, UKOTCF



Track of nesting hawksbill turtle from the shore up the beach at Big Sand Cay.
© P. Richardson/
MCS

Monitoring the visits to Big Sand Cay is an important element of responsible management.
Salt Cay Divers

(phone: 649-241-1009; email: scdivers@tciiway.tc)

is the nearest operation to Big Sand Cay that is staffed the year round, and their Debbie Manos has kindly volunteered to collect this information for the conservation bodies. Please advise them before your visit (so that you can be given any updated advice), and after your visit (to report any sightings of wildlife or threats to it).

If you wish to land on Big Sand Cay, land as far north as possible on West Bay (the long sandy beach on the central west side of Big Sand Cay).

Turtle nests are usually made at the back of the beach, where the females bury their eggs under the sand. Eggs and emerging hatchlings can be damaged by people walking over the nest. Walk along the shoreline from your landing towards Beacon Hill (the bluff to the north), rather than along the back of the beach. If you see tracks on the beach, by all means photograph them, but resist following them up the beach as you may unintentionally trample a nest under the sand. Walk up beach as near to Beacon Hill (the bluff to the north of the beach) as you can.

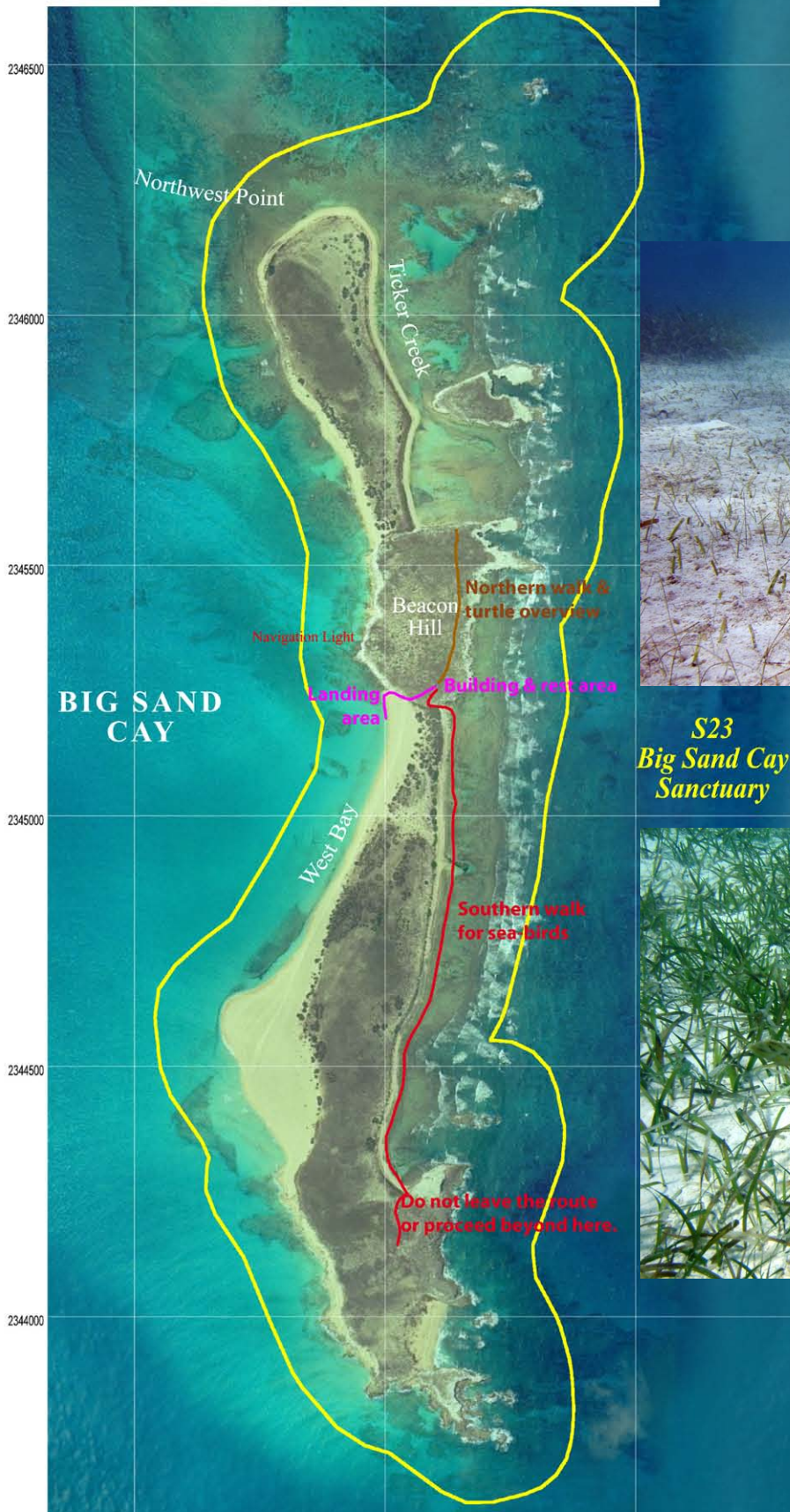
Even landing here will cause some disturbance to nesting sooty terns, but the above area is not the densest part of the colony, so disturbance is minimised.

Walking up the hill towards the building takes you out of the nesting area, and gives a good vantage point. You can rest near the building and take in the view from here, without significantly disturbing the birds. In other places on the walk, you are discouraged from lingering (except where indicated), so that disturbance to any one group of birds is minimised.

Wherever you are on Big Sand Cay, avoid shouting or making other loud or sudden noises, or running or waving or making other sudden or exaggerated movements, as these will increase the range of disturbance around you.

Big Sand Cay Sanctuary

An area of 372 acres south of Salt Cay comprising the entire island of Big Sand Cay and nearby islets, including Little Sand Cay and the surrounding 400 ft of sea. Site Plan S23.



If you want a walk mainly for the views or to see the interesting plant and marine life, go to the north from Beacon Hill, staying near the east coast, where there are fewer birds. However, avoid the beach on the west coast north of Beacon Hill as the disturbance effects here would be severe. Avoid also any areas where you see birds are flying up from the ground. At present, these are mainly on the western coast just to the north of

Juvenile green turtle (can often be seen feeding in the lagoon). ©:P. Richardson



S23
Big Sand Cay
Sanctuary

Beacon Hill and the northernmost point of the island, but these areas can shift. The lagoon located on the north-east part of the island can be over-looked from

Hawksbill turtle. © P Richardson/MCS



a rocky ledge. It is sometimes possible to look down and view juvenile green turtles feeding in the lagoon as well as nurse sharks. Do not approach the northernmost parts of the island (see above)

A survey of the outer cays of both the Turks and the Caicos Banks conducted in 2002 for UKOTCF by Mike Pienkowski, Ann Pienkowski and Bryan Naqqi Manco found larger numbers of brown noddies and bridled terns than found in any other Caribbean country. There were



Sooty terns.
© Dr Mike Pienkowski, UKOTCF

very large numbers also of sooty terns and internationally important numbers of white-tailed tropicbirds, magnificent frigatebirds, laughing gulls, royal terns, Sandwich terns, roseate terns and least terns. These birds spend most of their lives at sea but need to nest on islands away from predators and close to marine feeding areas. The cays of the Turks and Caicos Banks are uniquely important in this regard. Big Sand Cay is a very important nesting area for many of these, but holds a spectacular 90% of the TCI breeding population of sooty terns, about 44,000 pairs.

To view these natural wonders with the least amount of disturbance, follow the route described below. It is about 1.5 km (1 mile) out and 1.5 km back. The total walk takes about 1½ to 2 hours at gentle pace. However, you can shorten this at any time by turning back to retrace your steps.



Brown noddy
© Dr Mike Pienkowski, UKOTCF

As soon as you come off the hill you will be disturbing the birds, so do not linger in one place.

You will see mainly sooty terns, nesting in the bushes and on the ground. Mixed with these are smaller numbers of brown noddies (like the sooty terns, a very marine species)

and laughing gulls (seen throughout TCI, but preferring remote locations to nest).



Pair of laughing gulls displaying
© Dr Mike Pienkowski, UKOTCF



Wilson's plover on nest, with chick to right.
© Dr Mike Pienkowski, UKOTCF

The chick is very well camouflaged – and even more difficult to see when it crouches still in response to its parents' alarm calls.

You may also see Wilson's plover pairs which nest and rear chicks in this area, as do oystercatchers. If these birds seem particularly noisy or agitated, move on as they will have eggs or chicks nearby. Be very careful where you walk, as the very well-camouflaged chicks



American oystercatcher
© Dr Mike Pienkowski, UKOTCF

hide by crouching very still on the ground. They are easy to trample on if you do not take great care. Do not stop to hunt for them. You are unlikely to find them, but your presence will prevent them from feeding or their parents from brooding them, so that you would increase their risks of death.

You may see also the tiny common ground-doves which nest here.



Common ground-dove
© Dr Mike Pienkowski, UKOTCF

You will also see curly-tail lizards and, if you are lucky, rock iguanas. Several species of reptile occur on TCI but nowhere else in the world. This applies to both these reptiles.



Curlytail lizard on Big Sand Cay
© Dr Mike Pienkowski, UKOTCF

Looking south along the east shore of Big Sand Cay. Walk on the intertidal rock platforms and gravel to the left, not on the sand to the right. © Dr Mike Pienkowski, UKOTCF



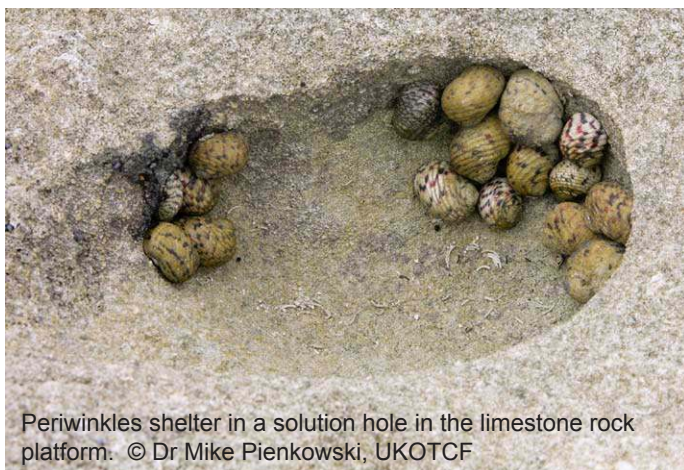
Obviously, it is a global responsibility for TCI to conserve these animals. The curlytails are doing quite well on most islands, but the rock iguanas are critically endangered.

Avoid walking on the dry-land area of the island, except as indicated. Leave the hill and immediately turn left to the east coast. This shore is a mixture of gravel and rocky platforms, and is relatively easy walking, if somewhat uneven, so take care. Stay in the inter-tidal area, below the strand line, so take particular care if this is still wet. Walk slowly and quietly along and below the tide wrack line. This will cause moderate disturbance, and is also slightly easier walking. Do not walk on the dry land which will cause high disturbance. If at any point the noise and attention of the birds becomes intense, move away (lower in the inter-tidal if possible, or onwards, or retrace your steps if you have seen enough).

The birds which lift off from the ground and bushes as you pass will be leaving their nest or young. DO NOT go to look for nests or chicks, but move on.

Much of the way along here, you will be walking along intertidal rock platforms. The walking is generally firm, but uneven, so watch your step. Among the interesting things you may see are periwinkles of a great range of shell-patterns in rock crevices below the tide-line, interesting rock-pools, and coral embedded in some of the rock, now eroding.

Big Sand Cay is a Sanctuary, so do not remove any shells, corals, etc. However, you can remove trash, especially



Periwinkles shelter in a solution hole in the limestone rock platform. © Dr Mike Pienkowski, UKOTCF

Bridled tern. © Dr Mike Pienkowski, UKOTCF



plastic – take this away with you and dispose of it responsibly. But do not linger to gather this in the seabird nesting season as, to do so, would cause more damage by increased disturbance than the benefits from your good works in human trash removal.

After walking south along the shore for about 1½ km (about 1 mile), you reach a sandy beach with a steep rocky bluff beyond it. If you wish, you may leave the beach at the southern end and ease inland to ascend the bluff. Take care: it is steep and there are no emergency rescue services here. Your actions on the Cay are at your own risk. Do not linger at the base of this bluff, because you will be disturbing breeding seabirds nearby. However, as you climb the bluff, you may find that you are disturbing fewer birds. If that is the case, you may linger a few minutes here to watch out for bridled terns. These close relatives of sooty terns prefer rocky nest sites, such as the low inland cliff ahead of you and some of the rocky cliff shores. The white patch above the eye is thinner than the sooty terns', and extends further back than the eye.



Rock iguana on Big Sand Cay. © Dr Mike Pienkowski, UKOTCF

If you are lucky, you may catch a glimpse of rock iguanas which sometimes like to sun-bathe here, and, in the air, white-tailed tropicbirds, which also like hollows in cliffs as nesting sites.

Do not go further south than the line of the low inland cliff, as to do so would be likely to cause excessive disturbance. You have now had a good chance to see the seabird species for which Big Sand Cay is internationally



White-tailed tropicbird
© Dr Mike Pienkowski,
UKOTCF

important – although, as with all wildlife viewing, nothing is guaranteed!

Several other tern species also use Big Sand Cay, but their nest sites are not usually viewable without causing undue disturbance. However, you may well see these overhead as you walk, or at the resting place by the building on Beacon Hill, or from your boat. Some of these are illustrated on this page.

Now is the time to return to your starting point, by retracing your steps along the intertidal of the east shore, before crossing back to the west shore at the base of Beacon Hill.

Please do not attempt to cross the island anywhere other than the southern base of Beacon Hill, or venture inland except where indicated above, as this will cause severe disturbance to nesting birds.

However, you are free to retrace your steps from any earlier point if you do not wish to walk as far as this point – but please do not stop at any point to wait for others going further, as this would concentrate longer periods of disturbance to the birds nesting in that area.

Acknowledgements

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Hawksbill turtle
hatchlings
© Sue Ranger/MCS

Tiny least tern fishes and brings its catch to its mate.
© Dr Mike Pienkowski, UKOTCF



Least terns



Roseate tern
© Dr Mike Pienkowski,
UKOTCF



Pair of Sandwich terns in display flight
© Dr Mike Pienkowski, UKOTCF

Pair of royal terns
© Dr Mike Pienkowski,
UKOTCF

