National Conservation Council
Cayman Islands

October 2022

Information for Landowners Within Areas Proposed for Critical Habitat in the Draft Species Conservation Plan for Colonial Nesting Seabirds Under the National Conservation Act

Red-footed Booby © Courtney Platt

The National Conservation Act makes provisions for establishing Protected Areas and Critical Habitats in the Cayman Islands, so that our most ecologically important wild spaces and threatened native species can be preserved for future generations.

From 28 September through 7 November, 2022, the National Conservation Council (NCC) is conducting a public consultation of the draft version of a Species Conservation Plan for colonial nesting seabirds which proposes Critical Habitat designation for six species of native seabirds at risk of becoming locally extinct.

Landowners were advised of the draft proposal by post in June 2022. This publication was created to address some of the primary concerns raised by landowners with property within, or adjacent to, proposed Critical Habitats.

The Draft Conservation Plan may be viewed at:
www.conservation.ky/seabirds

Frequently Asked Questions

1. What is the primary impact to landowners?

The only affected landowners are those within the proposed Critical Habitat nesting areas on the cliffs of Cayman Brac and Grand Cayman. The proposed Critical Habitat designation would extend 50 ft. inland from the physical edge of the bluff.

Restrictions within a designated Critical Habitat generally include no construction activities, damaging of vegetation, no vehicles, no roaming of domestic animals, alien species control, and maintaining safe distance from the Protected Species by human, pet or UAV. Please refer to the full Plan at conservation.ky/seabirds for the breakdown. The remainder of the land beyond 50 ft. from the cliff edge remains entirely unrestricted outside of current zoning and planning regulations.

2. Where are the birds actually nesting?

The proposed Critical Habitats outlined in the draft Plan are based on multiple and repeated surveys, conducted by DoE scientific researchers in collaboration with internationally recognized seabird experts, and which identify individual nests within the proposed and surrounding area.

In order for the Conservation Plan to have a positive effect on the species in question, there must be sufficient space for the seabirds to naturally select optimal nesting grounds within their preferred habitats year after year, with those spaces being relatively free from disturbances such as development, excessive, unnatural noise, invasive predators and human traffic. Therefore, optimal area boundaries have been identified containing the highest densities of nests currently and historically, and spanning an area large enough to support the populations as they recover.

Frequently Asked Questions

Proposed Critical Habitats

Brown Boobies

The proposed Critical Habitat for Brown Boobies in Cayman Brac is:

- Long Beach
- East Lighthouse Bluff face and edge from Peter's Cave, around the point, and to the intersection of South Beach.

Bo'sun Birds (White-tailed Tropicbirds)

The proposed Critical Habitat for 'Bo'sun Birds' (White-tailed Tropicbirds) is the bluff face and edge in:

Cayman Brac

- North - from North East Bay Rd to the end of Long Beach
- South - from Goat Bay to east of Great Cave

Grand Cayman

- Two sections along Pedro bluff between Buena Vista Drive in the west and Beach Bay to the east.

Least Terns

The proposed Critical Habitat for Least Terns is Sand Cay in South Sound which is **already a Protected Area.**

Bridled Terns

The proposed Critical Habitat for Bridled Terns is Vidal Cay in Barkers which is **already a Protected Area.**

Red-footed Boobies & Magnificent Frigatebirds

The proposed Critical Habitat for Red-footed Boobies and Man o' war (Magnificent Frigatebirds) is the Little Cayman Booby Pond which is **already a Protected Area and Ramsar Site.**

Frequently Asked Questions

3. Why can't I see any Bo'sun bird nests when I walk along the Bluff?

Bo'sun birds or White-tailed Tropicbirds are extremely cryptic as they nest quite deep within the crevices of the ironshore and are very difficult to spot. Seasonal nesting is expected from December to July.

White-tailed Tropicbirds are out at sea for most of the day and when on the wing, they are rarely along the shore to reveal their nesting sites. Bo'sun birds also fly much higher in the sky than other birds so you will often hear them rather than see them.

4. What is the current building setback on cliff faces?

On Grand Cayman, residential and other development zones have a construction setback of 50 ft. from the physical cliff edge. All other buildings within the tourism zone must be set back 130 ft. DoE may recommend exceeding the minimum setback in some cases to mitigate flooding and/or other potential dangers, for example in the Savannah Gully area, because of hurricanes and the geo-biological particulars of a site.

White-tailed Tropicbird © Marique Cloete

Under the Development & Planning Regulations (2022) the building setbacks are as follows:

• Regulation 8 (10)(c) "in areas where the shoreline is ironshore (except hotel and tourist related zones), all structures and buildings, including ancillary buildings, walls and structures, shall be setback a minimum of fifty feet from the high water mark;"

• Regulation 8 (10)(e) "in a Hotel/Tourism zone, all structures and buildings up to three storeys, including ancillary buildings, walls and structures, shall be setback a minimum of one hundred and thirty feet from the high water mark, with an additional fifteen foot setback for each of the fourth through the seventh storeys, and the minimum setback for the eighth through the tenth storeys shall be the same as that for the seventh storey;"

Frequently Asked Questions

Question 4 Continued

On Cayman Brac there is no legal setback, however, the 1975 Appendix to the Development Plan that guides the Sister Islands does make specific reference to preserving the Bluff edge and cliff face, so DoE generally recommends the same 50 ft. setback as in Grand Cayman.

(iii) It is recognized that the Bluff is a unique feature of Cayman Brac and an important attraction to visitors. Every effort should therefore be made to retain the unspoiled visual aspect of the cliff face of the Bluff. The setback in each case is to be determined by the Development Control Board and each application will be dealt with on its merits.

(iv) It is recommended, wherever possible that sufficient access be provided at the top of the Bluff to permit the public to enjoy the scenic views along the Bluff edge. This can be done as the Bluff is developed and as suitable opportunities occur over the period of this Statement.

(V) The people of the Brac believe that the Bluff is needed for residential use in view of the potential danger of hurricanes on the low lying land and the limited amount of such low land available for residential and other development purposes.

(vi) Particular care should be taken in the siting of septic tanks near the edge of the Bluff to avoid potential leakage and pollution of low-lying land and water supplies. Septic tanks should be of a high standard as recommended by the Department of Personal Health Services.

https://www.planning.ky/wp-content/uploads/1997-Development-Plan_Statement.pdf

Nesting Brown Booby by Judy Singh Hurlston © DoE

Frequently Asked Questions

5. Can the Critical Habitat be reduced?

The proposed Critical Habitats outlined in the draft Plan are based on multiple and repeated surveys conducted by DoE scientific researchers in collaboration with internationally recognized seabird experts, and which identify individual nests within the proposed and surrounding area.

In order for the Conservation Plan to have a positive effect on the species it aims to protect, there must be sufficient space for the seabirds to naturally select optimal nesting grounds within their preferred habitats year after year, with those spaces being relatively free from disturbances such as development, excessive, unnatural noise, invasive predators and human traffic. Therefore, optimal area boundaries have been identified containing the highest densities of nests currently and historically, and spanning an area large enough to support the populations as they recover.

6. Why does the proposed Critical Habitat along Pedro Bluff exclude a middle section of the cliff when the habitat appears to be exactly the same?

Seabird surveys, conducted as early as 1984 and as late as 2022, of the cliff stretching along from Beach Bay to the end of Sea Spray Drive, revealed that this stretch of cliff is of lower elevation and is fully exposed to wave action which eliminates any nesting opportunities along that stretch. The stretch of cliff east of Beach Bay is also of lower elevation but is sheltered from the wave action by the fringing reef so allows for nesting.

Frequently Asked Questions

7. Will a Critical Habitat designation take away part of my land?

No. Your land remains your property. All that changes is the Critical Habitat designation which extends 50 ft. from the physical cliff edge and restricts ecological disturbances including construction. On Grand Cayman, this area falls within the existing development setback on the cliff. The remainder of the land beyond 50 ft. from the cliff edge remains entirely unrestricted outside of current zoning and planning regulations.

8. Will a Critical Habitat designation "sterilize" my land (i.e. make it undevelopable)?

Absolutely not. It is solely the land within the proposed Critical Habitat which extends 50 ft. from the physical cliff edge that is subject to Critical Habitat restrictions. The rest of the land remains subject only to existing zoning and planning regulations.

The **only** circumstance where a development application to the Central Planning Authority, the District Control Board, (or any other government agency), may be subject to a ruling by the National Conservation Council; is when the development is likely to have an adverse effect on a Critical Habitat **that cannot be mitigated**. This might be an issue for industrial development, or quarrying, for example, but is unlikely to arise in cases of residential development. Persons developing land adjacent to Critical Habitats may wish to hold pre-application discussions with the Department of Environment's Sustainable Development Unit, who are happy to review plans and advise on ways to minimize any possible risk of harm to the Critical Habitat.

Frequently Asked Questions

9. Will a Critical Habitat designation reduce the value of my land?

Owning land with Critical Habitat can make your property value higher, lower or remain the same, depending on what you plan to do with your land. Ecological services are a growing trend in land valuation which ascribe higher valuations for areas which support and strengthen biodiversity.

Land for residential development potentially becomes more valuable, because the untouched Critical Habitat grants natural views, which are highly valued. On the other hand, land which was envisaged for a quarry or other heavy industrial use may lose some value for that purpose with a Critical Habitat designation. Explosive rock throw from a quarry landing in the Critical Habitat, for example, or toxic fumes entering the habitat, could be considered harmful to the Protected Species. In these types of situations the NCC may require the planning authority concerned to place conditions on the development approval that ensure the Critical Habitat is not harmed in such a way.

10. What are the historic accounts and assessments that are referenced in the Conservation Plan showing substantial declines in the number of nesting seabirds over the last century?

One primary source is "An Inventory of Breeding Seabirds of the Caribbean" by Patricia Bradley. In the chapter "The Cayman Islands" (pp. 58-65) there are several annotated references for nesting populations of all six seabird species noted in the plan, ranging from 1975 through 2005. See below for the historic estimation of White-tailed Tropicbird, Bridled Tern, and Least Tern on Grand Cayman (first table below), as well as White-tailed Tropicbird, Brown Booby, and Least Tern on Cayman Brac (second table below). We compare these estimates to current surveys conducted by the DoE.

Least Tern chick & egg by Jane Haakonsson © DoE

Frequently Asked Questions

Question 10 Continued

The most notable historic declines have occurred in the Brown Booby colony on Cayman Brac and the White-tailed Tropicbird colonies on both Cayman Brac and Grand Cayman.

Table 6.2. Status of seabird pairs breeding on Grand Cayman, 1985–2004

Species	Total (pairs)	Year
White-tailed Tropicbird	5	2004
	10	2003
	9	2000
	10	1997
	10	1996
	15	1985
Bridled Tern	16	2004
	20	2002
	21	1997
	19	1996
	17	1995
Least Tern	81	2004
	14	2003
	35	1998
	109	1997
	115	1996
	122	1995

Table 6.4. Status of seabird pairs breeding on Cayman Brac, 1983–2004

Species	Total (pairs)	Year
White-tailed Tropicbird	110	2003
	35	2000
	25	1997
	28	1996
	208	1985
Brown Booby	110	2003
	49	2000
	30	1997
	32	1996
	170	1983
Least Tern	3[a]	2004
	0	2003
	15[a]	2002
	20[a]	2000
	45	1997
	27	1996

a. no young fledged.

"An Inventory of Breeding Seabirds of the Caribbean" by Patricia Bradley

Nesting White-tailed Tropicbird by Jane Haakonsson © DoE

Nesting Brown Booby by Jane Haakonsson © DoE

Question 10 Continued

Brown Booby:

In the early 20th century and into the 1930's and 40's the Brown Booby nesting colony spanned most of the coast of Cayman Brac and numbers were in their thousands according to Brac residents Tennson Scott and Temple Tatum who, in 2001, relayed information from their late grandfather Mr. Ballinger Christian.

The following is taken from: "*Management Plan to conserve and sustain the brown booby colony and its habitat on Cayman Brac, 2002-06*" by Patricia Bradley:

"Residents (and cousins) Tennson Scott and Temple Tatum gave Bradley the following information in 2001. In the early 20th century, their grandfather, Mr Ballinger Christian, told them that the colony, with 'thousands of birds', extended from Spot Bay bluff east around the headland to First Cay bluff and along almost the entire south bluff to the site of the present public dump at the Marshes. He also reported that, as well as birds nesting on top of the bluff edge and bluff face, they also nested on the ground at both Long Beach on the north coast and First Cay on the south coast.

T. Tatum said that, in the 1930s and 40s, his mother regularly collected eggs with friends at Long Beach on the Ironshore and among low rocks below the bluff. In a single day, she reckoned to fill a large container (a sugar tin from Jamaica) holding an estimated 160-180 eggs. By the 1950s, birds had ceased nesting on the ground on the north and south coasts but the colony continued to extend from Spot Bay on the north coast, around the eastern bluff and along the entire south coast bluff edge to the Marshes until the late 1970s.

Both men commented on the large number and size of the flocks of brown boobies around the coasts into the 1970s, although D.W. Johnston observed fewer birds in summer 1970 than in 1966. The cousins collected booby eggs systematically, beginning in December, and by timing the removal of newly laid eggs from the nests, birds continued to lay until April, when they were left alone to raise their young. The same sites were harvested year after year and both mentioned several sites familiar to Bradley from fieldwork, 1983-2000.

T. Scott said nests were so common and close together in the 1950s that they could 'take 150 eggs in a 1000 foot line'. He also remembers one day in the 1970s when he did 'a round-up', ie visited all known booby nests, in late December and returned with 150 eggs. Of these 100 were' spoiled', ie fertile and 50 were 'fresh', ie contained no visible embryo. Both stopped egg collecting around 1975."

"Management Plan to conserve and sustain the brown booby colony and its habitat on Cayman Brac, 2002-06"
by Patricia Bradley

Frequently Asked Questions

Question 10 Continued

When the Brown Booby population was first monitored in 1983 by Patricia Bradley, only 170 pairs were recorded in five subgroups along the coastline.

In 2001, 61 pairs were recorded at four active sites and in 2019, when surveyed by the DoE, 46 pairs were recorded across only three active sites.

Brown Boobies by Jane Haakonsson © DoE

White-tailed Tropicbird:

On Cayman Brac

The White-tailed Tropicbird colony on Cayman Brac was so large that abundant deposits of subfossils and well-preserved feathers have been found from the late Pleistocene to late Holocene (14,000-4,500 YBP to present). In 1985, Patricia Bradley recorded 208 pairs on Cayman Brac (see above table), while the population crashed to only 35 pairs in 2000, and with DoE surveys showing less than 30 nesting pairs on Cayman Brac in 2021.

On Grand Cayman

The nesting population of White-tailed Tropicbirds on Grand Cayman was at its highest ever recorded in 1985 with 15 breeding pairs (Patricia Bradley, see table above) and is now down to around 5-10 breeding pairs with the most recent survey conducted by DoE in 2022.

White-tailed Tropicbird © Marique Cloete

Other questions?

The Department of Environment is always happy to discuss any concerns you may have.

Feel free to call the DoE on 949-8469 or email doe@gov.ky to set up an appointment with the appropriate staff.