

Terrestrial Protected Area Nomination: Tarpon Lake (Revised), Little Cayman

The attached revised nomination has been considered by the National Conservation Council, which has resolved to propose that Tarpon Lake be made a Protected Area under Section 7 of the National Conservation Law. If Cabinet approves this proposal, the natural environment in this wetland will be protected and managed according to a Management Plan to be developed under Section 10 of the Law.

The nomination consists of Tarpon Lake (88A/30 in part) and a small adjacent coastal mangrove parcel (83A/33), both owned by Crown.

Tarpon Lake lies between South Hole Sound and Little Cayman's Central Forest, linking also to the National Trust's Sparrowhawk Hill property. It is surrounded by mangroves, and dotted with small mangrove islets in various stages of regeneration after successive hurricanes.



This is one of Little Cayman's largest and most characteristic inland natural areas, easily viewed from a boardwalk built and maintained by Government, which enters Tarpon Lake from the south coast road. Traditionally used as a base for tarpon fishing, the boardwalk is increasingly visited by visitors to Little Cayman. Tarpon can often be seen cruising in the shallow water and a wide range of resident and migratory water birds frequent the mangroves. Fiddler Crabs abound on exposed mud flats, and White Land Crabs burrow near the interface between mangroves and adjacent dry land.



Protected Area Nomination

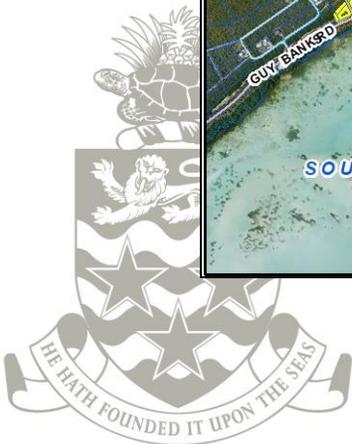
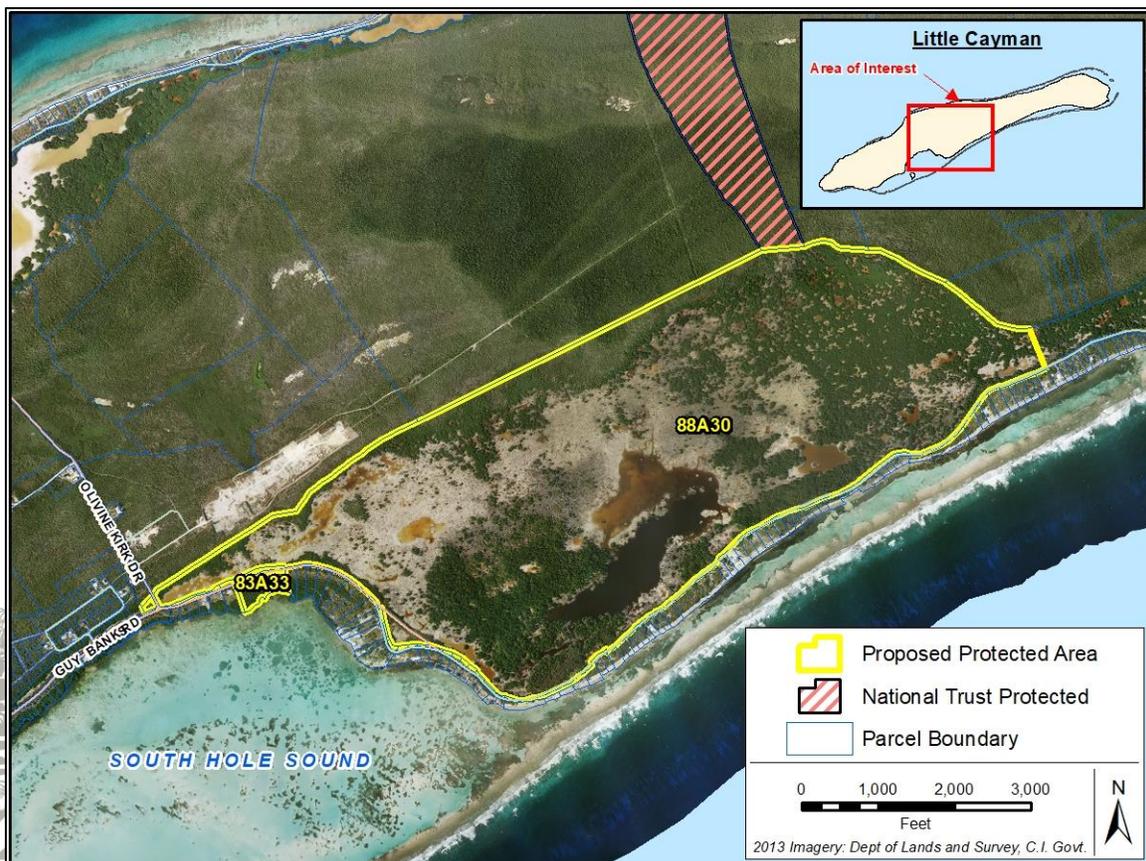
Tarpon Lake

This nomination is made under Section 9 of the National Conservation Law, 2013

1. Description of the Area

The nomination comprises Tarpon Lake itself, and a small adjacent mangrove parcel on the shoreline of South Hole Sound. Tarpon Lake borders Little Cayman's Central Forest to the north, including the National Trust's Sparrowhawk Hill property. The nomination excludes the narrow coastal part of 83A/30 which extends eastwards from the lake. It also excludes those parts of 83A/30 which extend over the existing public road.

| Block | Parcel | Ownership | Portion of parcel |
|-------|--------|-----------|-------------------|
| 83A | 33 | Crown | Whole |
| 88A | 30 | Crown | In part |



2. Reasons for Nomination

Purposes and Objectives

- 2.1** Protection of this nominated wetland will safeguard extensive feeding habitat for a variety of migratory duck species, including the West Indian Whistling Duck. NCL ref. 8 (1) (a)
- 2.2** Protection of the nominated wetland will safeguard habitat which is representative of Little Cayman's coasts, supporting long term maintenance of the biodiversity that depends on it. This specific wetland complex is unique within Little Cayman in that it never dries out, and so it is biologically highly productive year-round. NCL ref. 8 (1) (b)
- 2.3** Protection of the nominated wetland will maintain its functions as a carbon reservoir, a filtered nutrient source for Little Sound, a food source for migratory waterfowl, and a hydrogeological buffer between the sea and the Central Forest. NCL ref. 8 (1) (c)
- 2.4** Protection of the nominated wetland will conserve Little Cayman's largest single wetland complex which is of strong cultural and recreational value in Little Cayman. A long-established boardwalk to facilitate viewing and Tarpon fishing has been restored and maintained by Government. NCL Ref. 8 (1) (e, f)

Criteria for Protection

- 2.5** The nominated wetland is almost entirely in a natural state. NCL Ref. 8 (2) (a)
- 2.6** The nominated wetland supports a significant diversity of life, especially waterfowl and aquatic fauna, and mangrove communities. NCL Ref. 8 (2) (b)
- 2.7** The nominated wetland is of ecological importance in that it supports Species of Special Concern, and helps to support adjacent ecosystems. It is an exceptionally productive system, due to its size and the fact that it never dries out completely, and so it provides a substantial and reliable food source for resident and migratory waterfowl. NCL Ref. 8 (2) (c)
- 2.8** The nominated wetland includes species and habitats of scientific interest, notably related to the way mangrove and saline pond systems like Tarpon Lake respond to hurricanes and rising sea level, and the presence of the Species of Special Concern. NCL Ref. 8 (2) (e)
- 2.9** The nominated wetland is of international importance in that the living mangroves' peat substrates are incrementally increasing local carbon stores responding to rising sea level, and as such they are assisting in global efforts to reduce atmospheric carbon dioxide accumulation. NCL Ref. 8 (2) (f)
- 2.10** Management of the nominated wetland is expected to be quite simple, and is outlined in "Management Considerations" below. NCL Ref. 8 (2) (g)



2.11 The nominated wetland offers an ongoing nature tourism opportunity, thanks to the Tarpon Lake boardwalk. As nature tourism in Little Cayman develops it is expected that Tarpon Lake will remain one of the key sites of interest for visitors. NCL Ref. 8 (2) (h)



3. Species of Special Concern

The following table lists the species of concern known to depend at least in part on the nominated wetland:

| Common name | Scientific name | Description | NCL Schedule 1 | Habitat use |
|----------------------------|------------------------------|--------------------|--|---------------------------------------|
| West-Indian Whistling Duck | <i>Dendrocygna arborea</i> | Duck | Part 1. Classified as Vulnerable on a regional scale. | Foraging and reproduction |
| White Land Crab | <i>Cardisoma guanhumi</i> | Crab | Part 2 | Lake edges are a major nursery |
| Black Mangrove | <i>Avicennia germinans</i> | Mangrove | Part 2 | Mainly near southern margins of lake |
| Red Mangrove | <i>Rhizophora mangle</i> | Mangrove | Part 2 | In coastal parcel and in lake islands |
| White Mangrove | <i>Laguncularia racemosa</i> | Mangrove | Part 2 | Throughout |
| Buttonwood | <i>Conocarpus erectus</i> | Mangrove associate | Part 2 | Mainly on northern margin of wetland |

4. Conservation Problems and Special Protective Measures Required

None currently known.

5. Management Considerations

The only established point of entry to Tarpon Lake is the boardwalk which has been restored and maintained in recent years by Government, and is used on an informal basis for recreational tarpon fishing using privately owned small skiffs without motors.

A management plan for Tarpon Lake will have to address ongoing maintenance of the boardwalk, and should involve current and potential future stakeholders to ensure that entry onto the pond is appropriately regulated.

