

CAYMAN ISLANDS REPORT

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1. PROTECTED AREAS

Currently 4.8% of the combined land areas of the Cayman Islands are under some degree of environmental protection, as follows:

- 1a. NATIONAL TRUST PROPERTIES, protected in perpetuity under strong legislation: a total of 511 ha (1263 acres) as of July 1996, including
- *Salina Reserve, Grand Cayman*.—252 ha (623 acres) of primary habitats, including fresh and brackish wetlands and dry evergreen woodland supporting resident and migratory birds, also endangered rock iguanas, bats, and endemic flora; no public access. Iguana release program in progress.
 - *Mastic Reserve, Grand Cayman*.—118 ha (292 acres) of primary dry evergreen woodland have been purchased by the National Trust of the Cayman Islands, out of a target area of 405 ha (1000 acres). On-going long-term fund-raising and land purchase efforts are underway to secure the remaining 286 ha (708 acres). The Mastic Trail, a traditional footpath through the Reserve, has been restored by the Trust and RARE, and a natural history warden has been trained to provide income from low-volume guided tours since December 1995. A maximum capacity of ca. 300 walkers per month will generate net revenue for reserve management and further land acquisition.
 - *Booby Pond Nature Reserve, Little Cayman, and Ramsar site*.—55 ha (135 acres) are currently Trust-owned out of a total Sanctuary area of 82 ha (202 acres). The privately owned sections are protected under the Animals Law, 1976.
 - *Brac Parrot Reserve, Cayman Brac*.—73 ha (180 acres) of dry evergreen woodland, including extensive primary areas of flora. In 1996 Brac Trust members opened a nature trail through less sensitive areas of the habitat, which is important for migratory warblers and buntings, and endemic landbirds, including the Cayman Brac Parrot (*Amazona leucocephala hesterna*).
 - *Governor Michael Gore Bird Sanctuary, Grand Cayman*.—0.7 ha (1.84 acres), including a fresh water pond of local significance as a breeding site for the Purple Gallinule (*Porphyryula martinica*) and Least Bittern (*Ixobrychus exilis*), and seasonally important foraging for migrant waterfowl. A hide has been installed.
 - *Botanic Park, Grand Cayman*.—The Trust owns 50% of the Park shared with the Cayman Islands government. The Trust owns the 14-ha (35 acres) woodland nature trail loop and the enclosed woodland. The Botanic Park

has created a lake from an existing wetland, which is already a significant site for breeding waterfowl.

- 1b. ANIMAL SANCTUARIES, protected under the Animals Law, 1976. Though much weaker legislation than the Trust Law, these Sanctuaries were set up explicitly to protect waterfowl. The Sanctuaries total ca. 138 ha (342 acres) (does not include Animal Sanctuaries which are also Trust owned).

- Meagre Bay Pond, Grand Cayman
- Colliers Pond, Grand Cayman
- Salt Water Pond, Cayman Brac
- Booby Pond Nature Reserve, Little Cayman

- 1c. MARINE PARKS ENVIRONMENTAL ZONE, Grand Cayman. This zone is protected under the Marine Parks Law; it is primarily marine, but it includes approximately 607 ha (1500 acres) of the Central Mangrove Wetland fringe bordering Little Sound. It is regarded as the most ecologically sensitive area in the Cayman Islands.

2. PROPOSED RAMSAR SITE

The Marine Environmental zone, together with a further 243 ha (600 acres) of Crown property in the Central Mangrove Wetland (CMW), were proposed as a Ramsar site earlier in 1996 with Ministerial support. However, a decision has been deferred by the government and is unlikely to be considered until after the November 1996 elections. The draft also includes proposals for establishment of an Environmental Trust Fund as a mechanism for gradual purchase of the entire wetland for conservation. A Trust member has raised \$500,000 toward land purchase but resistance from landowners is facing the Trust as developers seek higher prices.

The 3238-ha (8000 acres) Central Mangrove Wetland is of immense ecological importance to Grand Cayman, providing large scale nutrient flow to the marine environment, fueling rainfall in the western districts and recharging groundwater reserves, providing breeding habitat for herons and endemic landbirds, providing storm protection, and functioning as a major carbon sink.

The greater part of the mangrove habitats in western Grand Cayman has been cleared or is scheduled for development, making the protection of the CMW an even greater priority.

3. WETLAND POND STUDY

Salt and brackish ponds in the three islands are undergoing biological assessment (funded by HMG) by the National Trust and P. E. Bradley -in partnership with the Gulf Coast Research Laboratory, Mississippi and the University of Tampa. The aim is to describe food webs and hydrology of a

range of ponds and to understand the seasonality that cause them to be critical waterfowl foraging habitat. Management strategies will then be designed to maximize the ecological value of these areas, and to reduce conflict with neighboring residents arising from foul pond odors.

4. NATIONAL TRUST PRIORITY SPECIES CONSERVATION PROGRAMS

4a. GRAND CAYMAN BLUE IGUANA (*CYCLURA NUBILA LEWISI*).

Since 1990 a program for the iguana has included field research, education, habitat protection, captive breeding, and release of captive bred animals into protected areas. Trial releases have been conducted and there are now 30 animals captive with some breeding success yearly since 1990.

4b. PROPOSED 1997 PARROT CENSUS.

The two subspecies of the Cuban Parrot, *Amazona leucocephala caymanensis* (Grand Cayman) and *A. l. hesterna* (Cayman Brac), have been censused by the Trust, Jim Wiley, and the Cayman Islands Bird Club on a three-year interval schedule. The Cayman Brac counts (max. 430 birds, February 1991; 497, February 1994) are stable. Grand Cayman counts (max. 1500 in 1992, 1900 in 1995) showed a marginally significant increase partly due to its removal from the Game Bird list in 1990 and despite progressive deforestation and still being treated as a pest by farmers. Comparison of population densities in the two islands suggest the Cayman Brac population may be close to the carrying capacity of this small island. The Trust is currently seeking funding for a mid-February 1997 Cayman Brac parrot census. Scarcity of human resources on Cayman Brac requires volunteers to come by air from Grand Cayman for one week (ca US\$3500).

4c. WEST INDIAN WHISTLING-DUCK (*DENDROCYGNA ARBOREA*).

The first survey of the population on Grand Cayman since Bradley (1986) was carried out in summer 1995 by a graduate student from Queen's University, Belfast. That survey yielded a population estimate of 397 birds. Bradley's 1995 estimate for Little Cayman was 130 birds. Although breeding on Cayman Brac had not been recorded for over 15 years, ducks nested there in 1994 and 1995, but not in 1996. The Cayman Islands will be part of the West Indian Whistling-Duck Conservation Working Group efforts.

4d. RED-FOOTED BOOBY (*SULA SULA*) CENSUS ON RAMSAR SITE,

LITTLE CAYMAN. The Trust's Management Plan for the Booby Pond Nest Reserve calls for a census and colony area assessment of the Red-footed Boobies (ca. 3500 pairs) and Magnificent Frigatebirds (*Fregata magnificens*; ca. 150 pairs) in February 1997. The last census was conducted in 1986 by R. B. Clapp, who updated A. W. Diamond's original 1975 assessment. The Trust hopes to obtain assistance from a seabird specialist, and is seeking US\$5000.

There is widespread concern over the location and construction of the new airport and how it will affect the booby colony. Monitoring should be in place by the end of 1996.

5. THE CHECK-LIST OF CAYMAN ISLAND BIRDS

by Patricia E. Bradley, in preparation, will be published (estimated date 1998) by the British Ornithologists' Union. Three grants have been obtained for visits to collections in the United States.

6. LEAST TERN (*STERNA ANTILLARUM*) BREEDING SURVEY.

The Cayman Islands Bird Club conducted a breeding survey of Least Terns in early August 1996, which resulted in an estimation of 120 pairs.

7. BROWN BOOBY (*SULA LEUCOGASTER*) SURVEY.

Patricia E. Bradley has visited Cayman Brac three times in 1995–1996 to conduct surveys of Brown Boobies. Her counts (ca. 60 birds) suggest a large reduction in numbers compared to her 1983–1986 surveys of 170–190 pairs.

8. BREEDING BIRD SURVEY.

The breeding bird survey conducted by the Cayman Islands Bird Club in May 1996 provided important new nesting data on the Vitelline Warbler (*Dendroica vitellina*).

9. NEW RECORDS include:

- confirmed breeding of Least Bittern
- a second year of breeding for Bridled Tern (*Sterna anaethetus*)
- two breeding records for American Coot (*Fulica americana*; normally a migratory species) on Grand Cayman
- two ibis species (Glossy Ibis *Plegadis falcinellus* [5 individuals] and White Ibis *Eudocimus albus* [1 individual] in continual residence for 14 months, 1995–1996
- A single Tropical Kingbird *Tyrannus melancholicus*, October 1995

10. NEW CONSERVATION LEGISLATION

is being drafted by the Head of the newly formed Department of the Environment, with an estimated completion date of late 1997.

NOTE: The Trust operates a program for visiting scientists who contribute and share biodiversity assessment and conservation research in the Cayman Islands. The Trust can often assist with low-cost accommodations and local technical expertise in return for freely shared results. Inquiries to: National Trust Scientific Programs Manager, P. O. Box 31116 SMB, Grand Cayman, Cayman Islands; telephone: 809-949-0121; fax: 809-949-7494; e-mail: ntrust@candw.ky