sites for tropicbirds, and a rudimentary estimate of 750–1000 pairs made by Lee and Walsh-McGehee makes Saba the largest known colony of breeding Red-billed Tropicbirds in the Caribbean Basin. Some components of the study are being documented with video, and an educational video will be created for use in schools and other community gatherings.

Public awareness of the tropicbird study has produced an

increased interest in birds in general. One nature club has already been established at the Saba School of Medicine to coordinate volunteer assistants for nest monitoring. Other volunteers have come from the local community.

The final draft of A Guide to the Birds of Saba, by Walsh-McGehee, has been reviewed and should be ready for publication in 1998.

THE CAYMAN ISLANDS

TREVOR BAXTER

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TERRESTRIAL CONSERVATION EFFORTS in the Cayman Islands are primarily undertaken by the National Trust for the Cayman Islands, a statutory non-profit NGO, whereas the Cayman Islands Government's Department of Environment focuses on marine conservation, and regulatory/legal matters regarding the environment. The Trust now owns and manages 655 ha [1,619 acres] of protected conservation land in all three of the Cayman Islands, which includes significant habitat for resident and migratory birds. Major terrestrial reserves on Grand Cayman are the Salina Reserve (253 ha [625 acres]) of primary woodlands, thickets, buttonwood wetland and sedge swamp; the 155-ha [382 acre] Mastic Reserve (old growth woodland); and parts of the Central Mangrove Wetland (approx. 648 ha [1,600 acres] are partially protected). On Cayman Brac, the Brac Parrot Reserve protects 73 ha [180 acres] of woodland, and in Little Cayman the 81-ha (200 acre) Booby Pond Nature Reserve protects a large breeding colony of Red-footed Boobies (Sula sula). Overall, 5 °% of the total area of the Cayman Islands now enjoys some level of environmental protection.

In March 1997 the Trust conducted a survey of the large Red-footed Booby (Sula sula) rookery in Little Cayman (F. J. Burton, P. E. Bradley, E. A. Schreiber, G. Schenk, and R. W. Burton, in prep.). The nesting population was estimated at 5,000 pairs, occupying an area almost entirely protected in the Trust's Booby Pond Nature Reserve, which is currently the Cayman Islands' only Ramsar site (Table 1). This large seabird rookery appears to have expanded since it was last surveyed by R. Clapp in 1986 when 2,800 pairs were counted, and is clearly thriving. Several other species were surveyed, including Magnificent Frigatebird (Fregata magnificens), Bridled Tern (Sterna anaethetus), and Least Tern (S. antillarum) (Table 1). Bradley surveyed the West Indian Whistling-Duck, frigatebird, and Least Tern on Little Cayman.

Immediately after the Red-footed Booby survey, the Trust teamed up with volunteers from the Cayman Islands Bird Club, to perform the third triennial census of the endangered Cayman Brac Parrot (Amazona leucocephala hesterna). Occupying fixed stations at 0.6 km spacing, first established in 1991, the survey team observed parrot activity for 3 hours beginning at dawn and 3 hours ending at dusk for each of 7 days to estimate the parrot population area by area throughout the island. All three censuses, in 1991, 1994 and 1997 have indicated the Cayman Brac population is currently stable, at approximately 400 birds. No statistically significant differences were detected between the three censuses. Census of the Grand Cayman parrot, using the same standardized technique, show this subspecies (A. L. caymenensis) also to be stable, with a population of approximately 2,000 birds in 1992 and 1995.

The 1997 Brac Parrot Census was funded by a Partners in Flight grant through the Georgia Department of Natural Resources: this was the first formal Partners in Flight project in the Cayman Islands, and we hope to build on this relationship. The habitat for the Cayman Islands parrots is also important habitat for neotropical migrants.

The population of the West Indian Whistling-Duck (Dendrocygna arborea) continues its recovery in Grand Cayman, where we have recent sightings in the developed western districts long vacated by this species. The population was estimated at approximately 400 adults by Fiona O'Brien in 1995. The species is also present in Little Cayman and Cayman Brac. A total of 220 adults in five populations was estimated in 1996-1997 (P. E. Bradley). One population at Booby Pond consisted of 22 adults with 48 young in August 1997 (P. E. Bradley). Since hunting ceased, the ducks feed on roadside ponds throughout the day and breed from January through August.

On Cayman Brac, Patricia Bradley conducted a survey of the wetlands and a survey of the waterbirds for the Department of Environment, including surveys of the tropicbirds, Brown Booby, Least Tern, and West Indian Whistling-Duck (Table 2). Building on early work by W. B. Richardson, C. B. Cory, then Percy Lowe and James Bond, Patricia Bradley and members of the Cayman Islands Bird Club now have records of over 200 bird species in the Cayman Islands, and records of rare migrants are being continuously added. Bradley and Baxter have compiled a list of migrant warblers recorded in the Cayman Islands up to 1997 (Table 3).

Patricia Bradley has produced the fourth checklist (following Cory 1892, Lowe 1911, and Johnston et al. 1971) of birds of the Cayman Islands for the British Ornithologists' Union series, The manuscript is scheduled for publication in 1998. Records, including those of unpublished visiting birders, Cayman Islands Bird Club members, residents, and P. E. Bradley (1982-1997) bring the total species list to 220. In 1996-1997, Bradley studied the Cayman Islands collections in the American Museum of Natural History, U. S. National Museum, Louisiana State University Museum, Field Museum of Natural History, and British Museum of Natural History.

Table 1. Results of surveys of birds in Little Cayman and Grand Cayman, Cayman Islands, 1983-1997.

Species	Site	Year	Estimated population
Red-footed Booby (Sula sula)	Little Cayman	1986	2,800 pairs (Clapp)
		1997	5,000 pairs (Burton et al.)
Magnificent Frigatebird (Fregata magnificens)	Little Cayman	1983	150 pairs (Bradley)
		1986	150 pairs (Bradley)
		1996	350-400 pairs (Bradley)
		1997	350-400 pairs (Bradley)
Bridled Tern (Sterna anaethetus)	Grand Cayman	1995	19 pairs (Bradley)
		1997	21 pairs (Bradley)
Least Tern (Sterna antillarum)	Little Cayman	1996	60 pairs (Bradley)
		1997	54 pairs (Bradley)

Table 2. Results of Patrica E. Bradley's surveys of wetlands in Cayman Brac, Cayman Islands, 1983-1997.

Species	Year	Estimated population
White-tailed Tropicbird (Phaethon lepturus)	1984	ca. 800 adults
	1996	ca. 85 adults
	1997	54 adults
Brown Booby (Sula leucogaster)	1983	ca. 360 adults, ca. 130 young
	1996	65 adults, 20 young
	1997	60 adults, min. 15 young
West Indian Whistling-Duck (Dendrocygna arborea)	1996	25 birds
	1997	22 birds
Least Tern (Sterna antillarum)	1996	27 pairs
	1997	45 pairs

Table 3. Status of migrant warblers recorded in the Cayman Islands up to 1997, compiled by Trevor Baxter (from Bradley and Rey-Millet, Birds of the Cayman Islands (1995). Status data are preliminary and these observations represent a guide to the frequency in an average year.

Species	Status
Blue-winged Warbler Vermivora pinus	Very rare
Golden-winged Warbler Vermivora chrysoptera	Very rare
Tennessee Warbler Vermivora peregrina	Uncommon-common
Orange-crowned Warbler Vermivora celata	Unconfirmed
Nashville Warbler Vermivora ruficapilla	Very rare
Northern Parula Parula americana	Fairly common
Yellow Warbler Dendroica petechia	Common
Chestnut-sided Warbler Dendroica pensylvanica	Rare
Magnolia Warbler Dendroica magnolia	Uncommon
Cape May Warbler Dendroica tigrina	Fairly common
Black-throated Blue Warbler Dendroica caerulescens	Fairly common
Yellow-rumped Warbler Dendroica coronata	Rare to locally common
Black-throated Green Warbler Dendroica virens	Rare
Blackburnian Warbler Dendroica fusca	Uncommon
Yellow-throated Warbler Dendroica dominica	Fairly common
Pine Warbler Dendroica pinus	Rare
Prairie Warbler Dendroica discolor	Common to fairly common
Palm Warbler Dendroica palmarum	Common
Bay-breasted Warbler Dendroica castanea	Very uncommon
Blackpoll Warbler Dendroica striata	Very uncommon
Cerulean Warbler Dendroica cerulea	Very rare
Black-and-white Warbler Mniotilta varia	Fairly common
American Redstart Setophaga ruticilla	Fairly common
Prothonotary Warbler Prothonotaria citrea	Rare
Worm-eating Warbler Helmitheros vermivorus	Fairly common
Swainson's Warbler Limnothlypis swainsonii	Rare
Ovenbird Seiurus aurocapillus	Fairly common
Northern Waterthrush Seiurus noveboracensis	Fairly common
Louisiana Waterthrush Seiurus motacilla	Very rare
Kentucky Warbler Oporornis formosus	Rare
Connecticut Warbler Oporornis agilis	Unconfirmed
Common Yellowthroat Geothlypis trichas	Fairly common
Hooded Warbler Wilsonia citrina	Rare
Wilson's Warbler Wilsonia pusilla	Vagrant
Canada Warbler Wilsonia canadensis	Very rare
Yellow-breasted Chat Icteria virens	Unconfirmed