

# CHRISTMAS ISLAND— a photographic essay

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Text/Susan R. Drennan*

**All of the exotic appeal of a tropical  
island paradise can be found here—  
along with many seabird species  
and a wealth of sea life.**



**F**or hundreds of years people have dreamed of the black and white sand beaches, exotic fragrant flowers, crystal-clear, ultramarine lagoons, and the palm-shaded lush-green islands of the South Seas. Along with those dreams go fantasies of warm, hospitable natives, and the romanticized possibility of escaping to one of these havens to spend the rest of one's life surrounded by magnificent scenery, unsophisticated and delightful recreation, totally conquered by the spell of the islands. Does this sound like paradise? More than one travel-jaded tourist has journeyed to Oceania after Herman Melville, Somerset Maugham, Robert Louis Stevenson, Joseph Conrad, or James Michener touched his or her seed of wanderlust.

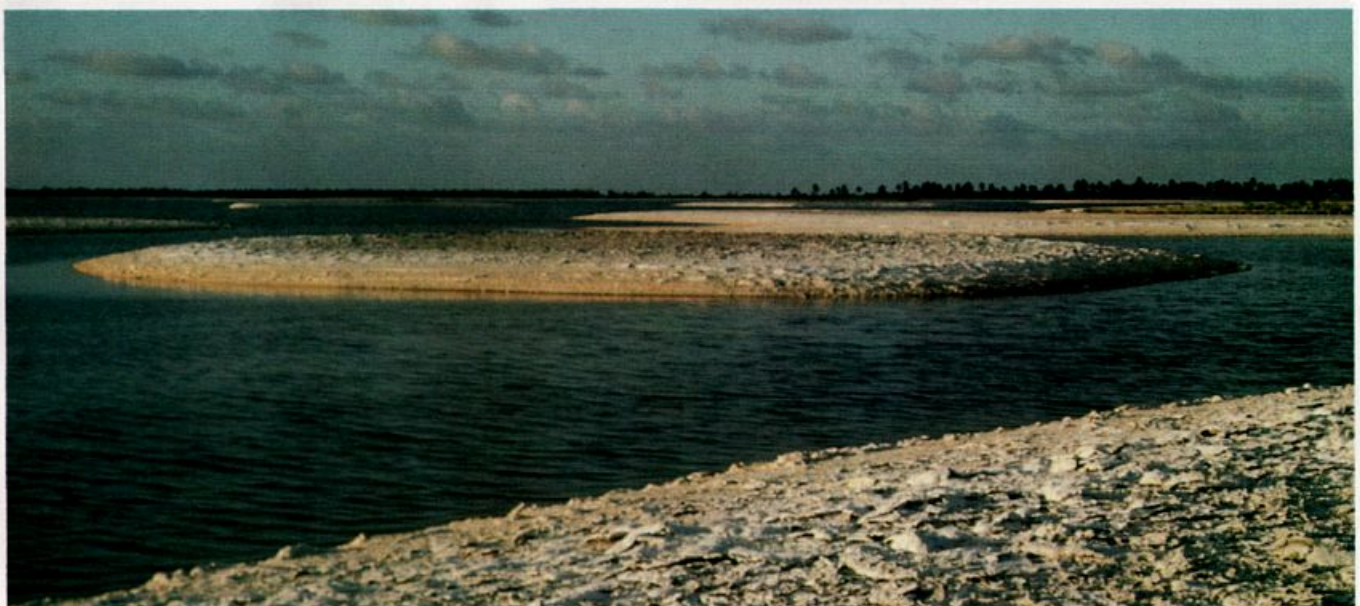
What landlocked, stuffy banker doesn't daydream now and again about Paul Gauguin painting ultra-beautiful people on Tahiti? Which film buff doesn't think wistfully about escaping to Pago Pago after seeing Sadie Thompson portrayed in the film "Rain" or actors Marlon Brando and Trevor Howard in "Mutiny on the Bounty?" Anyone with the most rudimentary knowledge of anthropology knows that Margaret Mead depicted life on Samoa Island as tension-free, peaceful, and guilt-free among dignified, warm, highly intelligent, and virile natives, unaffected by contact with other civilizations, and coveting nothing. Which of us has never had a yen for the dazzling beauty of an "instant paradise"?



*Tree (Beach) Heliotrope (Messerschmidia argentia) provides shade in front of the Captain Cook Hotel and is the bush in which the Christmas Island Warbler (Acrocephalus acuinocialis), the only island endemic, and the only land bird present, builds its nest. In the heat of the day the gentle sea breeze comes in over the ocean and makes the shade of the Beach Heliotrope along the beach crest an ideal place for a siesta.*



*Land crabs (Cardisoma sp.) commonly inhabit the moist land regions of the atoll, where they spend the day under water in burrows, coming above ground and onto the roads when the temperature cools around sunset. Many are killed by automobile traffic and Lesser Golden-Plovers (Pluvialis dominica) and other land crabs make full use of the meat.*



*Innumerable highly saline lagoons cover large portions of the atoll, and the small islets in them provide safe nesting locations for most of the species of seabirds nesting on Christmas Island. Cats and rats inhabit the rest of the island and prey on eggs, nestlings, and adult birds. These islets are critical for the survival of most species of birds on the atoll.*





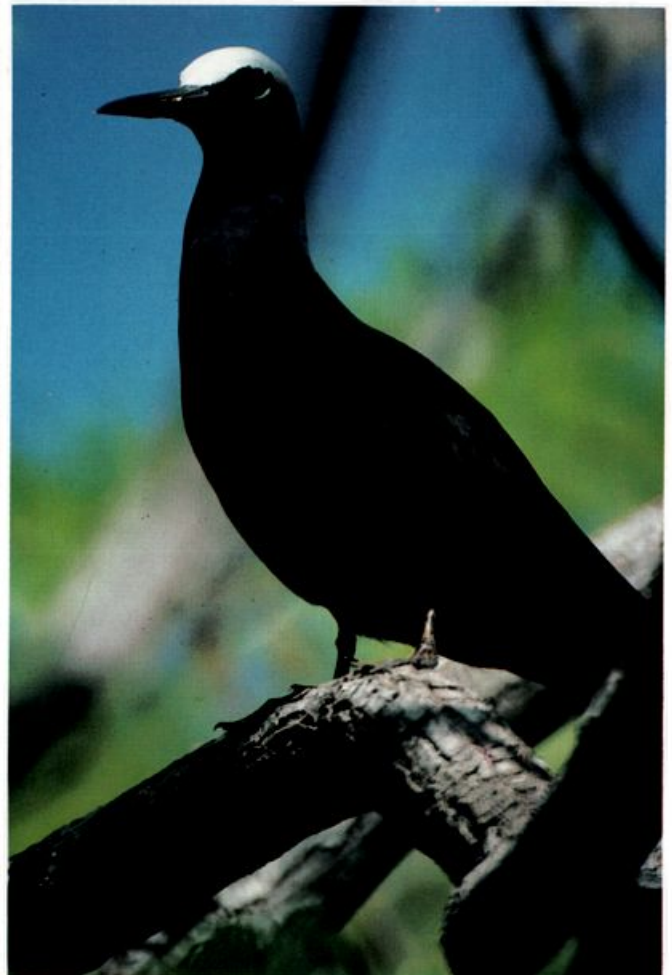
*White (Fairy) Terns (Gygis alba) are the most photogenic birds on the island since their curiosity brings them close overhead when humans visit the main nesting colonies.*



*Bottom left: Gray-backed (Spectacled) Terns (Sterna lunata) lay their eggs on sand and do not build a nest. This small relative of the Sooty Tern (S. fuscata) is also much less common on the atoll, probably numbering fewer than 3000 pairs. Gray-backed do nest in very small colonies of only three to ten pairs, mostly on small islets. Very little is known about the biology of this species.*

*Lower left: Crested Terns (Sterna bergii) nest only in one colony on Christmas Island, the easternmost nesting locale for this species that is found commonly in the western central Pacific Ocean. About 300 pairs lay their single speckled egg in May or June. This species feeds primarily along the reef top and was not apparently affected by the El Nino-Southern Oscillation in 1982-1983. This is the largest tern on the atoll and the eggs and young are camouflaged and difficult to find. Adults are noisy and roost in several locations on the main island.*

*Below: Black (White-capped) Noddies (Anous minutus) nest only in trees in large, dense colonies. They lay one egg in a platform nest that the pair constructs from seaweed. Most feeding is done during the day and large flocks can be seen flying away from the colony in the morning and back to roost around twilight. The egg is speckled like all tern eggs and the young hatch with a full, black, downy coat.*







The Phoenix Petrel (*Pterodroma alba*) builds only a shallow burrow and is the most active Procellariid during the day. Most species are strictly nocturnal at the nesting colonies. Phoenix Petrels commonly fly in their chattering courtship flights over the main colonies during the day. Along with the shearwaters, petrels lay only one large heavy egg and apparently do not relay if an egg is broken. Along with all tropical seabirds, it requires both members of a pair to incubate the egg and feed the nestling successfully to fledging.

Christmas Shearwaters (*Puffinus nativitatis*) were originally described from Christmas Island in 1877. They lay one large white egg each season in shallow burrows or under vegetation. No other nest material is used for the nest. This species is among the most active shearwaters during the day while most are rarely seen flying except at night. Many eggs are lost because of competition for nest sites.

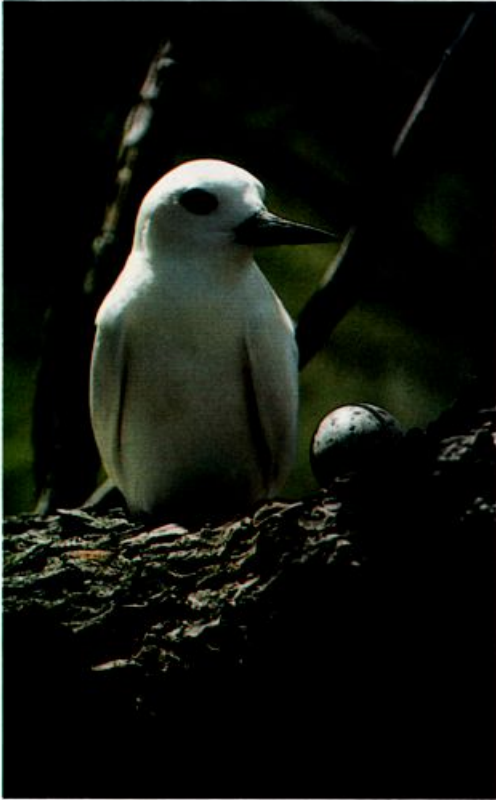
Blue-grey (Grey) Noddies (*Procelsterna cerulea*) nest on small islets, primarily in the largest land-locked lagoons, but also are widely scattered throughout the atoll. This small, seemingly delicate species appears to be unsuccessful in most nesting attempts for reasons that remain unclear. Eggs are frequently coated with salt from the hypersaline lagoons and this salt may kill the eggs. Blue-grey Noddies specialize in eating marine insects called water striders (*Holabates sp.*), an unusual food for a seabird.



The Lesser Frigatebird (*Fregata ariel*), an adult male shown here, is found in many locations throughout the central Pacific Ocean. On Christmas Island the population was dramatically reduced by cat predation in the late 1960s but rebounded to about 3000–4000 pairs by 1980, when they began nesting on an islet in a lagoon. During the 1982–1983 El Niño-Southern Oscillation (ENSO) all chicks died of starvation, but the adults may not have been affected, and, since 1984, are reproducing successfully. This is one of the few species that was not drastically reduced by the heavy rains and lack of marine productivity and fish during the ENSO. They nest in large colonies only in Seriana, or salt bush. Incubation lasts for about 60 days and both parents feed the young which fledge in six months. This species undergoes a long migration away from the central Pacific Ocean to the west during the non-breeding season.







Fairy Terns generally do not build a nest but lay a single, very rounded egg in a slight depression on a level branch of a tree. The chick has long claws that stick like fly paper and which assist them in holding on to their tree limb. This nesting habit is unique among tree nesting birds and it is amazing that the eggs do not fall off in the constant trade wind conditions where they nest. The striking white plumage is in marked contrast to their black skin, probably an adaptation to high temperatures.



Masked (Blue-faced) Boobies (*Sula dactylatra*) are the largest birds on the atoll, weighing about two kilograms. They nest on the ground in isolated, open areas where they can use the wind to assist them in becoming airborne with a long take-off run. A pair does not build a nest but a circle of clear dirt is created around the eggs as the adults turn around. They usually lay two eggs but have not been known to raise two young, probably because the adults cannot provide sufficient food for both. Both male and female actively defend their egg and nestling from intruders and this is one species on Christmas Island that cats probably do not bother. Pairs probably mate for life and use the same nest sites for many consecutive years, breeding once per year. The females are distinctly larger than males and their voices are also much more raucous rather than a high pitched whistle.



Red-tailed Tropicbirds (*Phaethon rubricauda*) have an interesting courtship ritual in which two to ten birds, squawking loudly, fly backwards in vertical circles. They may be checking each other out to see who can fly well and will be a good provider for their chicks. This species nests only under bushes where there is shade for the eggs and young. They lay a speckled egg instead of a white egg as do other members of the Pelecaniformes, and their young are hatched with a full coat of down. Other Pelecaniformes hatch naked. This information along with the recent data by Dr. Charles Sibley for DNA hybridization would indicate that tropicbirds should not be classed as Pelecaniformes. A young tropicbird spends a minimum of 48 months away from its nesting island feeding at sea before returning to nest. Data indicate they mate for life and will occupy the same nest site for many years in succession.



Among the South Seas there still remains a fascinating variety of islands to intrigue every type of traveller. Deserted beaches fringed with rustling palms, fishy and coralline wonders, sun-drenched, secluded bays, fern-covered mountains, uncrowded, unpolluted tropical islands peopled with unspoiled folks, and the bonus of duty-free shops, sounds like the worn-out tourist cliché. Of course the proof of the publicity is in the actual visiting. Very often the cliché is remarkably correct. Rhapsodic descriptions do not sufficiently characterize the still-peaceful, lesser-known islands. Life is not now what it was in the days of Melville and Captain Cook. It is not accurately portrayed in the Rogers and Hammerstein musical *South Pacific*. But the oceanic isolation, idyllic settings, and gentle tradewinds are the same; the people are hospitable and comfortable with their environments. The pace is relaxed and there is a noticeable lack of urgency everywhere. Services and standards vary from island to island, but the experience of visiting one of these emerging micronations in the South Pacific and exploring its mysteries is an adventure and a lesson in the art of living life for the simple joy of it. This is "the pacific way." Men have mutinied for it.

island freighters bringing supplies and taking families to visit each other. They have a population of 2500 people; mostly Micronesians—descendants of a hybrid Malaysian/Polynesian stock. These people have physical similarities to the Philipinos and Polynesians. Micronesians are generally credited with having invented the outrigger canoe. Many anthropologists, ethnologists, and marine historians consider them the greatest sailors the world has known. They sailed their huge, double, ocean-going canoes, carrying 100–500 people, using heavenly bodies, and ocean and wind currents to navigate to new islands. Their colonization began approximately 1000 B.C. Progress was slow and their migration probably occurred over a period of 5000 years. These hardy, brave people settled on the least hospitable, sometimes half-drowned atolls and miniscule islands in the northwestern Pacific Ocean. Some of the populations of the Line Islands are not endemic as a good many people were brought in to work on coconut plantations. The languages spoken in the Republic of Kiribati are English and Gilbertese. The only exports of the Line Islands are dried coconut meat, called copra, and fish.

All of the Line Islands, including Christmas Island,



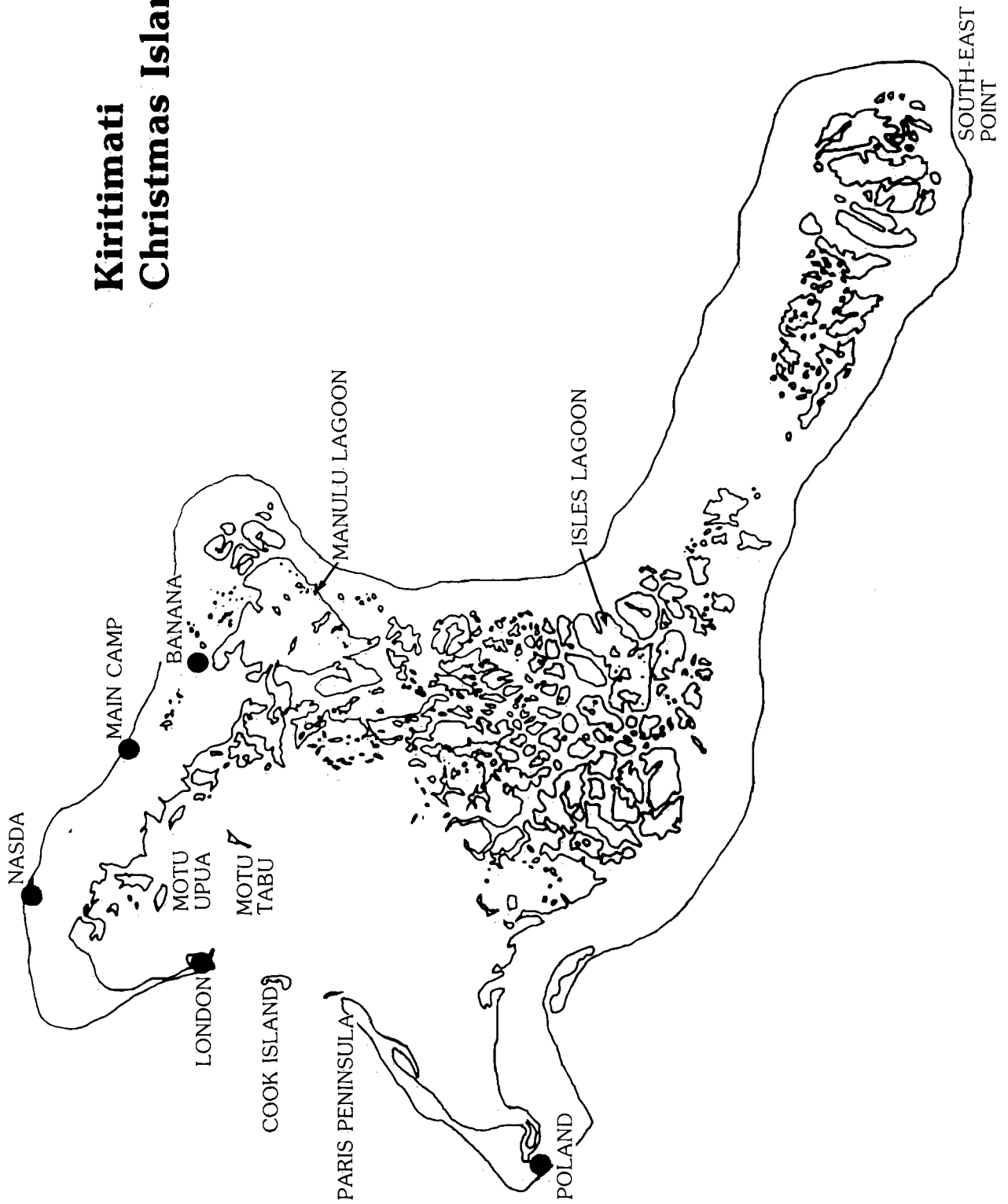
Christmas Island in the central Pacific Ocean has all of the allure of Oceania. Its ethereal skies, opalescent seas and natural splendor give way to the dry, scrubby vegetation of this flat coral atoll. It has, however, a feature that makes it irresistible—birds! Hundreds of thousands of seabirds of eighteen species nest on Christmas Island. These include five species of petrels and shearwaters, six species of tropicbirds, frigatebirds and boobies, and seven tern species.

Christmas Island (2°N, 157°W) is one of the Line Islands, which group straddles the Line (as the Equator is sometimes called). The eight Line Islands (south of the Hawaiian Islands) stretch between Flint Island, 750 miles south of the Equator and Kingman Reef, at 6° North latitude. This group includes one more, Johnston Island, at 169°31' West longitude. This is the site of a United States military establishment and is off limits. Most of the Line Islands, along with those previously known as the Gilbert Islands, have recently become independent and are now a nation called the Republic of Kiribati (pronounced "kiribas"). The sparsely populated Line Islands are infrequently visited by inter-

are classified by geographers as atolls and have an island height of fewer than 25 feet. Were it not for the 30–40 foot coconut palms, they would appear no more than moundless, streamless sandbanks. A shortage of fresh water makes survival extremely difficult. Christmas Island has a maritime equatorial climate with an annual mean temperature of 80°F (25.7°C). Northeasterly trade winds blow constantly, except when the El Niño–Southern Oscillation causes a reversal of the normal pattern.

Christmas Island is the largest coral atoll in the world. There are approximately 300 atolls in the tropical Pacific Ocean. Essentially these are massive reef formations, often horseshoe or ring-shaped, built over a quieted volcanic base. The typical atoll is comprised of a series of small coral islets, strung together by often-submerged coral reefs, similar to beads on a necklace. These islets have interior lagoons that are sometimes the size of salt-water ponds or as long as fifty miles and as wide as twenty or thirty miles. Dazzling white beaches create a border between the translucent turquoise sea and the green oases of coconut forests, scented bushes

# Kiritimati Christmas Island



and flowering trees. The inner lagoons provide protected conditions where marine life flourishes unhindered; a wealth of sea life can be viewed in a setting lavish with color and diversity. The surface water varies from aquamarine to indigo; pinks, blues, purples and yellows of the live coral gardens provide food and shelter for colorful tropical fish, whose patterns would spark the imagination of any naturalist. Clams, mussels, snails and pearl oysters reside along with giant turtles, graceful manta rays and the illusive octopus. These marine refuges also hold moray eels, barracuda, sea urchins, stingray, and stonefish. The atoll lagoons in the Pacific are usually 150–200 feet deep. Some reefs are physically spectacular with abundant marine life on isolated banks and shoals close to the islands.

On Christmas Island, birds are concentrated on islets. The burrow-nesting species, shearwaters and petrels, are found primarily on islets although the Wedge-tailed Shearwater does nest in large numbers on the mainland. The main prey items brought to the island by the birds are flying fish and squid.

Traditionally, seabirds have provided commercial benefits to human societies in many nations—from egg gathering and bird eating and hunting. Eggs, guano, down, plumes, and meat are the major products seabirds have and continue to supply. Historically, the

unregulated consumption of eggs and birds has occurred throughout Oceania, but they are now protected in many places. Habitat loss and introduced mammalian predators continue to threaten seabird populations throughout the islands.

On Christmas Island wildlife sanctuaries have existed on the main nesting islets of Cook, Motu Tabu, and Motu Upua for at least 50 years. The Republic of Kiribati enacted a Wildlife Conservation Ordinance in 1975. This Ordinance forbids bird-eating and the taking of eggs on Christmas Island, although poachers continue to take adults and eggs. In 1977, a Wildlife Conservation Unit was established on Christmas Island, with financial assistance provided by the World Wildlife Fund and the British Overseas Development Administration. The aims of the Unit were to provide conservation education for islanders, enforce wildlife legislation, and to control feral cat and pig populations. Since its establishment, the Wildlife Conservation Unit has affected some control of exploitation of birds and eggs for food, and they work at eradicating feral cats and pigs that pose a serious threat to ground-nesting bird species. As the human population continues to expand on the island, the courts ultimately will have to enforce the provisions of the laws if the bird populations are to survive.

