

**ATOLL RESEARCH BULLETIN**

**NO. 405**

**CHAPTER 7**

**AN UPDATE ON BIRDS OF THE COCOS (KEELING) ISLANDS**

**BY**

**T. STOKES**

**ISSUED BY  
NATIONAL MUSEUM OF NATURAL HISTORY  
SMITHSONIAN INSTITUTION  
WASHINGTON, D.C., U.S.A.  
FEBRUARY 1994**

CHAPTER 7  
AN UPDATE ON BIRDS OF THE  
COCOS (KEELING) ISLANDS  
BY  
T. STOKES \*

INTRODUCTION

The birds of the Cocos (Keeling) Islands were reviewed by Stokes et.al. (1984) and this paper summarises that paper and provides additional species records. It also provides an update of conservation comments provided in that paper.

Forty-four species of bird (6 introduced) have been recorded from the Cocos (Keeling) Islands (Appendix). The following species notes are additional to those recorded by Stokes et. al. (1984).

SPECIES

Herald Petrel *Pterodroma arminjoniana*. A few were recorded on two occasions at North Keeling Island in April and June 1986 on the ground and in the air, suggesting nesting (Stokes and Goh 1987).

Christmas Frigatebird *Fregata andrewsi*. An adult female was recorded on 21 March 1986 at North Keeling Island (Stokes and Goh 1987).

Glossy Ibis *Plegadis falcinellus*. Four were recorded by a party of touring bird-watchers at the airstrip on 8-9 May 1990 (Richard Jordan and Peter Goh pers. comm.).

Greater Flamingo *Phoenicopterus ruber*. A vagrant was recorded on North Keeling Island from April-June 1988 (Marchant and Higgins 1990).

Australian Kestrel *Falco cenchroides*. A pair were recorded over several weeks at the West Island airport in May-June 1990 (P. Stevenson, pers. comm.). They are common on Christmas Island and may have originated from there.

Buff-banded Rail *Rallus philippensis andrewsi*. An endemic endangered subspecies, formerly widespread on the main atoll and now virtually restricted to North Keeling Island where it is common (Stokes et. al. 1984). However occasional birds are still seen on the main atoll and the latest was a carcass, probably cat killed, found in 1991 at the West Island settlement (P. Stevenson, pers. comm.).

Bridled Tern *Sterna anaethetus*. A specimen was collected on North Keeling Island by Gibson-Hill (1948) and there was a local report that it nested there. It has not been recorded since.

---

\* Great Barrier Reef Marine Park Authority, P.O. Box 1379, Townsville, QLD 4810

## CONSERVATION

When Charles Darwin visited the Cocos (Keeling) Islands in April 1836, the "immense number" of marine birds recorded in 1828-29 on the main atoll (cited Gibson-Hill 1949) were probably still present though somewhat diminished. He refers to trees on the island where he first landed on the main atoll, as being occupied by many nests of gannets (sic), frigatebirds and terns, and to a smell in the air which led him to call it a "sea rookery" (Darwin 1979). From his diary it would appear that the forest of the main atoll was by then well on the way to being transformed into the monoculture coconut plantation that it was by 1885 when most main atoll birds had been eliminated (Forbes 1885). The reason for the decline in main atoll birds was almost certainly due to habitat change, intense hunting by people and predation by cats and rats. Today there are still very few birds on the main atoll.

However birds remain in large numbers on North Keeling Island due to its isolation, the difficulty of landing, and access restrictions placed by the former Clunies-Ross clan rulers up to the mid 1970s. In the late 1970s and early 1980s, the lifting of access restrictions and the acquisition of more efficient boats and weapons by the Cocos-Malay people greatly increased the frequency and efficiency of bird-hunting on North Keeling Island. In the early 1980s the Australian Government became aware of concern on the islands and elsewhere that the number of seabirds being taken was not sustainable. I was despatched in January 1982 by the Australian National Parks and Wildlife Service (ANPWS) to investigate the situation and urgent control of hunting was recommended (Stokes et. al. 1984).

In March 1986, the ANPWS Conservator on Christmas Island, about 900 km east of Cocos, was required also to provide conservation advice to the Cocos (Keeling) Islands Administrator. As incumbent at the time, I or my assistant (Peter Goh) flew to the Islands every 4-6 weeks to discuss conservation matters on the Islands and to survey North Keeling Island seabirds. By July 1986 agreement had been reached with the Cocos-Malay people :

- to introduce a moratorium on seabird hunting on North Keeling Island pending seabird survey results,
- to restrict any future seabird hunting to red-footed boobies,
- to permit while the North Keeling moratorium was in place, certain numbers of red-footed boobies to be taken on Horsburgh Island on the main atoll (where small numbers come to roost in certain weather conditions at certain times of the year),
- that hunters would try to avoid killing adult birds, and on
- a series of administrative arrangements to regulate seabird hunting.

The conclusion of the 1986 seabird hunting agreement brought considerable praise to the Cocos-Malay community from the Australian and international community. ANPWS created a permanent Conservator position on the Cocos (Keeling) Islands in December 1986. The moratorium on hunting at North Keeling Island eventually extended to December 1988 by which time surveys had revealed that about 34 000 pairs of red-footed boobies nested annually on the Island. Although hunting was prohibited on North Keeling between 1986-88 many illegal hunting trips probably occurred and one person was prosecuted. Hundreds and possibly thousands of red-footed boobies are believed to have been taken in the period. A cyclone in January 1989 caused considerable damage to the North Keeling Island vegetation and post-cyclone surveys suggested that more than 40% of red-footed booby chicks raised in the previous breeding season, and 1300 (or

1.9%) of breeding adults were killed (ANPWS 1989). In the subsequent breeding season there was a 60% reduction in the number of red-footed booby nests on North Keeling Island compared to the number at the peak of the best previous season in 1987 (ANPWS 1990). Although seabird poaching was reported to have declined in the 1989/90 with the purchase of a new patrol vessel, no seabird population surveys occurred in 1990 or 1991 due to lack of suitable transport (ANPWS 1990, J. Tranter pers. comm. ). Monthly surveys recommenced in the second half of 1992. A clear picture of the red-footed population status will not emerge until late 1993. However it appears that a cyclone in February 1992 caused sufficient damage to significantly reduce breeding success in the year (J. Tranter pers. comm.). The level of seabird poaching is reported to have been very high in 1990 and 1991 (J. Tranter pers. comm. ). This was exacerbated by a lack of adequate patrol vessels. However a new vessel was acquired in late 1992.

An action plan to assist the recovery of the endangered rail population has been proposed by Garnett (1992). It includes enhanced access by management staff to North Keeling Island, a research program on the Island, declaration of the Island as a reserve, rat and cat control on main atoll islands and, if necessary, the re-introduction of rails to predator-free islands as conditions become suitable. Education to assist conservation is also proposed. Restrictions to ensure that North Keeling Island remains cat and rat free should also be considered.

Since the mid-1980s ANPWS has developed a limited conservation education program in the Islands. This is being enhanced (J. Tranter pers. comm.) and should be accompanied by the declaration of North Keeling Island as a Nature Reserve, as recommended by Stokes et. al. in 1984. Seabird populations have low natural recruitment, and usually only inhabit and survive on islands free of predators. Although there may be a case for arguing that seabird hunting on the Cocos (Keeling) Islands is a legitimate part of the traditional Cocos-Malay culture, it should only continue if the take is sustainable and hunting is restricted to red-footed boobies on the main atoll under tight and enforceable controls. There will remain justifiable cause for conservation concern about seabird status in the Islands until this occurs. For this reason the International Council for Bird Preservation (ICBP) and other conservation agencies should continue to monitor the situation and seek rectification where necessary.

### ACKNOWLEDGEMENTS

I thank Richard Jordan (New`South Wales), Peter Goh (Christmas Island), Paul Stevenson (former Conservator, Cocos (Keeling) Islands), and Jeff Tranter (current Conservator, Cocos (Keeling) Islands) for assistance with this paper.

### REFERENCES

- Australian National Parks and Wildlife Service Annual Report 1988/89
- Australian National Parks and Wildlife Service Annual Report 1989/90
- Darwin, C. 1979. The journal of a voyage in HMS Beagle. Guildford (England). Genesis Publications.
- Forbes, H.O. 1885. A naturalists's wandering in the eastern archipelago. London: Sampson, Low, Marston, Searle and Rivington.

Garnett, S. 1992. The Action Plan for Australian Birds. Canberra : Australian National Parks and Wildlife Service.

Gibson-Hill, C.A. 1948. The Island of North Keeling. J. Malay Br. Royal Asiatic Soc. 21: 68-103.

Gibson-Hill, C.A. 1949. The birds of the Cocos-Keeling Islands. Ibis 91 : 221-243.

Marchant, S. and P. Higgins (Co-ordinators). 1990. Handbook of Australian, New Zealand and Antarctic Birds. Vol. 1. Melbourne: Oxford University Press.

---

Stokes, T. and P. Goh. 1987. Records of Herald Petrels and the Christmas Frigatebird from North Keeling Island, Indian Ocean. Aust. Bird Watcher 132-133.

Stokes, T., W. Shiels and K. Dunn. 1984. Birds of the Cocos (Keeling) Islands. The Emu 23-28.

# **LIST OF BIRDS RECORDED FROM THE COCOS (KEELING) ISLANDS**

## **KEY TO SYMBOLS**

*	=	introduced,
r	=	resident,
m	=	migratory,
v	=	vagrant,
e	=	no longer occurs on the Islands ,
b	=	breeding,
?	=	unknown status.

Herald Petrel <i>Pterodroma arminjoniana</i>	(?)
Wedge-tailed Shearwater <i>Puffinus pacificus</i>	(mb)
Red-footed Booby <i>Sula sula</i>	(rb)
Masked Booby <i>Sula dactylatra</i>	(rb)
Brown Booby <i>Sula leucogaster</i>	(rb)
Christmas Frigatebird <i>Fregata andrewsi</i>	(v)
Great Frigatebird <i>Fregata minor</i>	(rb)
Least Frigatebird <i>Fregata ariel</i>	(rb)
Red-tailed Tropicbird <i>Phaethon rubricauda</i>	(rb)
White-tailed Tropicbird <i>Phaethon lepturus</i>	(rb)
White-faced Heron <i>Ardea novaehollandiae</i>	(r - possibly breeding)
Cattle Egret <i>Ardeola ibis</i>	(v)
Eastern Reef Egret <i>Egretta sacra</i>	(rb)
Rufous Night Heron <i>Nycticorax caledonicus</i>	(rb)
Glossy Ibis <i>Plegadis falcinellus</i>	(v)
Greater Flamingo <i>Phoenicopterus ruber</i>	(v)
Unidentified hawk	(v)
Marsh Harrier <i>Circus aeruginosus</i>	(v)
Australian Kestrel <i>Falco cenchroides</i>	(v)
Feral Chicken <i>Gallus gallus</i>	(rb)
Guinea Fowl <i>Numida meleagris</i>	(*rb)
Buff-banded Rail <i>Rallus philippensis andrewsi</i>	(rb-endemic subspecies)
Lesser Golden Plover <i>Pluvialis dominica</i>	(m)
Ruddy Turnstone <i>Arenaria interpres</i>	(m)
Little Curlew <i>Numenius minutus</i>	(m)
Common Sandpiper <i>Tringa hypoleucos</i>	(m)
Greenshank <i>Tringa nebularia</i>	(m)
Pin-tailed Snipe <i>Gallinago stenura</i>	(m)
Sanderling <i>Calidris alba</i>	(m)
Oriental Pratincole <i>Glareola maldivarum</i>	(m)
White-winged Tern <i>Chlidonias leucoptera</i>	(m)
Sooty Tern <i>Sterna fuscata</i>	(rb)
Bridled Tern <i>Sterna anaethetus</i>	(v b - specimen record of Gibson-Hill 1948, overlooked by Stokes et. al. 1984)
Common Noddy <i>Anous stolidus</i>	(rb)