

A NOTE ON A NINETEENTH CENTURY SIGHTING OF A SPECIES OF GROUND-DWELLING BIRD ON BOKAK, A NORTHERN ATOLL OF THE MARSHALL ISLANDS

INTRODUCTION

Recent literature has focussed on the early distribution of rails and megapodes in the Pacific Islands based on historical as well as archaeological evidence. During unrelated research into disaster management actions by the German Colonial government in the Marshall Islands the author encountered a description of an 1895 visit to Bokak Atoll. This article exemplifies the unique information contained in some of the colonial records, which to date have been the realm of only social and economic historians.

THE AVIFAUNA ON BOKAK

Located at 14°32'N and 169°00'E, Bokak, also reported as Taongi or Gaspar Rico in the literature, is the northernmost atoll of the Republic of the Marshall Islands, half way between Wake Atoll and Uterik Atoll in the Ratak Chain of the Marshall Islands. The avifauna of Bokak is reviewed by Amerson (1969) who described sightings and catches for 19 species of seabirds, five species of shore birds, as well as one duck and one heron species. Another summary is given by Fosberg (1990). A re-survey as part of the Northern Marshall Islands Biodiversity and Protected Areas study found 20 species, all seabirds (Thomas 1989). None of these surveys comment on the presence of any sort of ground-dwelling bird, such as a rail or megapode. It is thus significant to mention that such a bird is mentioned in the historic materials.

AN EXPEDITION TO BOKAK 1895

On 30 November 1895, the Imperial German Government District Administrator Dr Georg Irmer, normally resident in Jaluit, conducted an inspection of Bokak to collect guano samples for analysis and to reaffirm the German claim to the island. Irmer mentions that he observed a vast number of seabirds on the islands, with 4–5 pairs breeding on each bush. The species were mainly huge frigate birds, tropic birds, terns of various species and a species of ground dwelling bird ('Art von Trappe'). Irmer mentions that the sea birds were not afraid of people, and could be picked up by hand without a problem. Most birds are reported as usually sitting on only one egg or having one chick. In view of the ease with which the birds could be picked up, Irmer suggested in his report that the Jaluit Gesellschaft might wish to exploit the bird plumes (Irmer 1895; Krieg 1895).

Irmer (1895) does not comment any further on the bird and does not furnish any further description, and apparently no specimens were collected. It is not totally clear from Irmer's (1895) description whether he saw only one or more individuals. None of the known birds in the Marshall

Islands even remotely resemble Irmer's description of the bird as a kind of 'trappe' (bustard, OTIDAE). A megapode or large rail appears to be the most probable identification.

RAILS IN THE MARSHALLS

It is quite conceivable that the bird sighted by Irmer was a White-browed Crake *Porzana cinerea*. This species is reported as a vagrant on Bikini Atoll (approximately 300 km SW of Bokak) in the late 1930s or early 1940s (Yamashima 1942, quoted after Amerson 1969, p. 309), but has not been seen since (Amerson 1969; Fosberg 1990). It is possible the animal collected was the only one present. White-browed Crakes are common in the Western Caroline Islands, some 1 500 km to the west (Pratt *et al.* 1987).

Prior to human-induced habitat alteration, rails were common on many islands in the Pacific (Steadman 1995) and were not uncommon even on isolated atolls, as attested by the Laysan rail in NW Hawaii or the flightless Wake Island Rail *Rallus wakensis*. The latter was a non-migratory land bird native to Wake Atoll (at present US territory; 300 km north of Bokak), which forms, geographically, the northernmost atoll of the Marshall Islands. This bird, which appears to have survived the Japanese plumage collection of the early 20th century, is now extinct (Bryan 1959). It seems to have disappeared during or as a result of World War II. Whether it was unable to withstand the pressure of the wartime change of the ecology of the island or whether it was eradicated by Japanese soldiers in their quest for food is not known.

THE FATE OF THE BOKAK RAIL

The fate of the Bokak rail is unclear. It certainly does no longer exist, and it is quite possible that it was exterminated as a result of the wholesale slaughter of birds caused by Japanese feather collectors active in the Central Pacific in the early 20th century and which decimated the bird populations on Bokak between 1907 and 1909 (Spennemann 1998; in press).

If on the other hand Irmer's description refers to a sighting of a vagrant White-browed Crake then Irmer's observation may document a successful dispersal of this bird species over large stretches of water to a new atoll, which, however, did not result in the formation of a new colony.

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PEER REVIEW

The following is a copy of a letter from Ian Rowley to Evan Kennedy, who wrote to us about the problems he is having with colour bands and Shore Plovers in New Zealand. The letter is reprinted here with permission from Ian, as it may assist other banders also.

Dear Euan,

I read your letter to the editor of Corella (22, 94) with interest and horror. I have been colour-banding birds for forty years and never in my worst nightmares dreamt of such a happening as has befallen your Shore Plovers.

Not that it will be much help with such a difficult bird, but for the record: During the 1960s, I (and assistants) manufactured our own Darvic bands from flat sheets of 1 mm thick commercially available materials (from ICIANZ as it was). They (ICI) provided us with a solvent/sealant named TENSOL 50; I have no idea what it was — probably nasty, but we are all still alive!

We formed 10 mm strips into circular bands with a one half overlap, to give us 8 or 9 mm internal diameter bands for White-winged Choughs *Corcoras melanorhamphos* (ABBBS size 9) or Australian Ravens *Corvus coronoides* (ABBBS size 10). We would have colour-banded more than

100 individuals of each species during the 1960s (Rowley 1973, CSIRO Wildlife Research 18, 1–23; Rowley 1978, *Ibis* 120, 178–97).

To our knowledge, we never had any problems with bands coming unstuck or wearing unduly over four or five years (but see Rowley 1966, *Aust. Bird Bander* 4, 47–9 for story with metal bands).

I was amazed that your recent solvent took 15 minutes to dry, but then I realized that the Chathams are probably even colder than Canberra mid-winter! Our bands used to take about five minutes to dry. We used to clip them shut with artery forceps while they dried; only one bird was released with forceps still in place — but could not fly far, fortunately, as they were expensive!

I doubt if this ancient history is of any value to you, but may be of interest since I have never published details of the technique anywhere. We followed Coulson's 1963 Bird Study 10, 109–111 paper.

Good luck,
With best wishes,
Ian Rowley.

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