

A BIRD IN THE HAND: ANDREAS REISCHEK AND THE STITCHBIRD

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ABSTRACT

Early accounts of Little Barrier Island by Andreas Reischek emphasise that the Stitchbird was very rare there in the 1880s. Re-examination of the original accounts, in conjunction with dated specimens, suggests that the Stitchbird was in fact very rare in 1880 and 1882 but increased markedly in 1883 and 1885. The rarity of the species on Little Barrier in 1880 and 1882 coincided with its extinction on the mainland and may have been due to introduced disease. However, several fluctuations in population size have taken place since. At least 78 and up to 130 of the 181 extant 19th-century specimens were taken by Reischek.

INTRODUCTION

The Stitchbird (*Notiomystis cincta*) once occurred throughout much of the North Island and on Great Barrier, Little Barrier, and Kapiti Islands. In the 1870s it declined rapidly, and by the mid-1880s it had vanished, except for a remnant on Little Barrier. The last mainland record was of one seen in 1883 in the Tararua Range (Buller 1888). The Stitchbird was thus one of the first passerines to disappear after the arrival of Europeans. Its extinction in the North Island preceded by several decades those of the Huia, Piopio, and Bush Wren. The causes of the Stitchbird's decline are unknown, but predation and disease have been suggested.

If predation was the cause, the black rat (*Rattus rattus*), an arboreal nest-predator, is most likely to have been responsible because its spread through the North Island in the 1870s (Atkinson 1973) coincided with the period of the Stitchbird's greatest decline. Of the other potential predators Norway rats (*R. norvegicus*) and feral cats (*Felis catus*) were widespread early in the 19th century, well before the Stitchbird's major decline, and mustelids were not introduced until the mid-1880s, after the species had gone (Wodzicki 1950).

Oliver (1955) suggested that the Stitchbird was swept away by disease. Between 1860 and 1880, 90 species of exotic birds were introduced to New Zealand (Wodzicki 1950). The Stitchbird could have been vulnerable to pathogens brought in with these birds.

The Austrian collector Andreas Reischek visited Little Barrier several times between 1880 and 1886. In his early accounts (Reischek 1885, Buller 1888) he emphasised the rarity of the Stitchbird. Reischek's observations contrast markedly with those of both earlier and later

visitors to Little Barrier, most of whom found the Stitchbird to be not uncommon.

Little Barrier remained free of black rats and other European predators except for feral cats. Stitchbirds coexisted with cats on Little Barrier for over a century and, despite cats, had recovered by the 1890s. Cats alone are unlikely to have caused a reduction of the extent described by Reischek. If a decline did occur on Little Barrier in the 1870s or 1880s introduced disease is the most likely cause, carried there by the House Sparrow, Greenfinch, Blackbird, or Song Thrush; all had reached Little Barrier by the 1880s (Reischek 1886).

Because it may be relevant to the Stitchbird's decline on the mainland, I review here the sometimes contradictory accounts of Reischek and others on the status of the Stitchbird from the 1860s to the present. I also present information on Stitchbird specimens in New Zealand and overseas museums, many of which were collected by Reischek, and compare it with the original accounts.

THE ACCOUNTS

The first record of the Stitchbird on Little Barrier was that of Hutton (1868), who spent four days on the eastern side in December 1867 and found the species to be "not uncommon" (Buller 1873, Reischek 1885). Hutton is not known to have collected any specimens.

Among Reischek's first-hand accounts of bird species on Little Barrier in *Transactions of the New Zealand Institute*, one dealt with the Stitchbird (Reischek 1885). Additional information on Reischek's expeditions appeared in Buller's second edition (1888) of the *Birds of New Zealand*. Buller said that "Mr. Reischek has communicated to the New-Zealand Institute . . . a short account of his expedition in search of [the Stitchbird]; but I prefer to give, in my own words, the more detailed information obtained from him immediately after his return."

In addition, some of Reischek's letters in German to Julius von Haast mentioned his trips to Little Barrier. One of these, dated 29 December 1883, goes into some detail on his observations of the Stitchbird (see Appendix 2).

Reischek died in 1902; in 1924 his son, Andreas Reischek junior, published *Sterbende Welt*, an account (in German) of his father's New Zealand work derived from the senior Reischek's original field notes and diaries. A considerably rearranged and edited English translation by H. E. L. Friday appeared later under the name *Yesterdays in Maoriland* (Reischek 1930). Both books contained considerable information on the Stitchbird.

The exact dates of Reischek's trips are difficult to determine. His original accounts are often vague and are sometimes contradicted by *Sterbende Welt* and *Yesterdays in Maoriland*. In addition, the latter are sometimes internally inconsistent, probably because they were compiled many years after Reischek's death (King 1981).

Reischek made five trips to Little Barrier (Reischek 1886), not counting two occasions when bad weather prevented his landing. On his first trip, in October 1880, he searched the "western and southwestern parts of the island" (Reischek 1885) for three weeks (Buller 1888, Reischek 1883) or six weeks (Reischek 1924), but did not see any Stitchbirds at all. He did not penetrate the central part of the island at this time.

In May 1882 he sent his assistant Dobson to the island. After three months Dobson succeeded in shooting a pair but "knocked them to pieces with heavy shot" (Buller 1888). Reischek twice tried to join Dobson, in June and July, but was prevented by heavy seas (Reischek 1924, 1930). However, in the 1924 account Reischek later described collecting a Kaka's nest and four small nestlings with Dobson on 17 June. Because Kaka are normally summer breeders I suspect this date must be an editor's error and that the incident took place on some other trip.

On 15 October Reischek finally landed, and he and Dobson immediately set off for the interior from the southeastern side. Reischek did not hear a Stitchbird until 23 October and did not see one well until the 25th, which "disappeared before [he] attempted to use [his] gun" (Reischek 1885). Although he often heard them after this, he did not see another until 7 November and succeeded in shooting a pair the following day. Reischek collected an unfinished nest nearby, which he presumed to belong to this pair. Buller exaggerated the time Reischek searched unsuccessfully, saying that "[a]fter five weeks' continuous search . . . he was at length rewarded by the sight of [a Stitchbird]." In *Sterbende Welt* Reischek specified that he was able to shoot only four specimens on this trip. By this account he left the island on 10 December, but according to the von Haast letter he stayed until January 1883.

In early December 1883 Reischek returned to Little Barrier and once again visited the central part of the island. He spent only 10 days in the field, during which time he had very bad weather (Reischek 1883). The 1930 account reads in part: "I went partly at the request of Sir Walter Buller, for whom I procured specimens of which his collection was deficient. To my great joy I found this rare bird [the Stitchbird] had increased since my last visit, which I put down to the fact that I had on that occasion shot a number of wild cats and the older male birds. I was able to watch whole families of them . . ." He also noted that he "often" found the remains of Stitchbirds in the crops of Moreporks he had shot. It is unlikely that Moreporks take Stitchbirds out of proportion to their abundance; if Reischek's remark is true it implies that Stitchbirds were very common. On 19 December he returned to the small Maori settlement on the southwest coast and several days later went back to Auckland.

Buller's (1888) account of this trip differs somewhat. Buller stated that he asked Reischek to collect Stitchbirds for him in 1884,

not 1883. According to Buller the Stitchbird was still rare at this time, and although Reischek "was fifteen days on the island [he] did not even hear [it] till within the last three days of his stay." Reischek's earlier accounts (1883, 1885) also made no mention of an increase of Stitchbird numbers in 1883.

Reischek revisited Little Barrier on 8 April 1885 "to procure specimens for the use of New Zealand museums" and remained until mid-May (Reischek 1930). Both the 1885 and 1930 accounts state that this was his last expedition to the island. However, elsewhere Reischek said that he "visited [Little Barrier] five times, spending in all about ten months" (Reischek 1886). The four visits described above account for between five and eight months, depending on which of the versions is followed. Several specimens dated 1886 suggest that Reischek revisited the island in that year (see below), although these do not bear his name on the labels. Reischek was employed by the Auckland Institute and Museum in 1885 and 1886 and would have had opportunity to revisit Little Barrier. This final trip postdated the 1885 account and was evidently overlooked by Reischek's son in compiling *Sterbende Welt*.

According to Buller (1891), no collector went to Little Barrier between Reischek's last expedition and 1892, when an "Auckland collector" visited the island "for a few hours only, for the purpose of getting specimens [of the Stitchbird], several of which were obtained" (Buller 1892, 1905). Charles Robinson, who served as temporary ranger on Little Barrier from 1893 to 1896 (Hamilton 1961), remarked that at that time the birds were in "an unmolested state" and ". . . the song from the tui and bell-bird is a perfect ding-dong" (Robinson 1895). Boscawen (1895) found Stitchbirds to be "not uncommon up the head of the Weka-weka [probably Awaroa] Creek. One hears them, but they are hard to see in the thick bush."

The Auckland Institute Annual Report for 1895 recorded that, although Robinson and the resident Maoris were unaware of any collectors visiting Little Barrier that year, there were persistent rumours that such visits had occurred. Inquiries failed to prove or disprove the rumours (Auckland Institute 1895).

R. H. Shakespear was the first permanent caretaker on Little Barrier. He and his family arrived on 19 January 1897 and made several trips to the interior during the first few months of their stay. His sons saw a Stitchbird on their second trip inland on 7 February. Shakespear himself glimpsed a Stitchbird on 24 February but did not get a "good view" of one until 25 April (Shakespear 1897). The frequency of sightings suggests that, although Stitchbirds were rather uncommon, they were not as rare as in 1882. No collectors were known to have visited the island between 1897 and 1907 (Auckland Institute 1897, 1899-1904, Drummond 1907).

Drummond visited Little Barrier for two weeks in early 1907. He saw no Stitchbirds until he climbed to the central parts of the

island. He then saw seven females in one day on a track near "Herikohu" peak. He reported that Stitchbirds favoured the north of the island, keeping to the "rugged parts." They were numerous there, up to 15 being counted "at one time." Shakespear, still caretaker, was then of the opinion that Stitchbirds were increasing (Drummond 1907).

Guthrie-Smith (1925) visited the island from October 1919 to January 1920. He saw Stitchbirds on his first day on the island and later found five nests. Oliver (1922a, b) noted that in "certain places . . . a few can nearly always be seen." Robert Nelson, caretaker from 1911 to 1932, wrote in 1930 that "there was a time when it was difficult to find a single Stitchbird, but 'I counted four on one particular morning, and on another occasion I saw fourteen in two hours'" (quoted in Gordon 1938).

Sibson (1947) found that Stitchbirds were easily seen and located in December 1946 and considered the species to be "flourishing." McKenzie (1948) heard them near the caretaker's house every day during his trip in June 1947. Dawson (1950) saw Stitchbirds every time he went into the Te Waikohare Valley behind the caretaker's house during a visit in November and December 1949.

Kikkawa (1964) saw Stitchbirds regularly in 1959 and conservatively estimated the population at 200 pairs. Gravatt (1969, 1971) studied the Stitchbird in 1967 and 1968 and agreed with Kikkawa's population estimate. However, Kikkawa and Gravatt both worked primarily in areas that were relatively poor habitat for Stitchbirds. From March 1982 to April 1984 I ran transects, similar to those used by Kikkawa and Gravatt, in a representative sample of forest types on the island at intervals of six weeks. Using the census data in Kikkawa (1964) and Gravatt (1969), I recalculated population densities based on present knowledge of Stitchbird distribution in different forest types. A more likely population estimate for these years is in the order of 800-1200 birds. In the mid-1970s the population appears to have been about 1000 (C. R. Veitch, unpublished data). In the late 1970s and early 1980s, the population increased dramatically, perhaps six-fold (Veitch 1980 and unpublished data; Angehr unpublished data), from c. 1000 to c. 6000.

THE SPECIMENS

I have located 181 19th-century Stitchbird specimens (skins, mounts, and skeletons) worldwide (see Appendix 1). In common with most old museum specimens, the data on these is often lacking or questionable, and few labels carry information simultaneously on locality, date of collection, and collector. Frequently labels have only the year the specimens were registered by a museum or collection, rather than the actual date of collection or acquisition, and bear the name of the owner of the collection rather than that of the collector.

With the exception of 6 skeletons and 13 skins in Vienna

(Naturhistorisches Museum Wien), no specimens still bear Reischek's original labels. However, 55 specimens from Little Barrier (counting those from Vienna) have dates coinciding with Reischek's trips. The six skeletons in Vienna are all dated 1882. Twenty specimens are dated 1883 (16 of them December), and 29 are dated 1885 (one of them April). In addition, two skins originally in Buller's collection are labelled March 1882, apparently too early for Dobson's arrival in May of that year. I suspect there has been some confusion of dates, either in Reischek's account or on the labels, which may not be originals.

Six Little Barrier specimens are dated 1886 (two of them July) and probably were taken on Reischek's fifth trip (see above). Four more without specific dates, in the Auckland Museum and the Oberosterreichisches Landesmuseum in Reischek's home town of Linz, Austria, can also be attributed to Reischek with some confidence. Eleven more Little Barrier specimens were originally in collections (Rothschild, Buller, and Spencer) to which Reischek is known to have made major contributions, although these lack collector's name or date.

There are eight more specimens from Little Barrier, one of which rather puzzlingly bears the date March 1893. This date seems too late for the trip referred to in Buller (1892), unless this is a registration or preparation date. One specimen labelled "North Island 1892" could be the last mainland bird collected but is more likely from the trip to Little Barrier mentioned by Buller.

Two skins collected in 1875 "near Wellington" are the only specimens from a specific mainland locality. However, owing to the difficulty of landing on Little Barrier it is likely that most specimens taken before 1880 were from the mainland. Twenty-five specimens have collection or registration dates between 1839 and 1877 but no specific localities, although some of these are labelled "North Island." Another 14 specimens are labelled "North Island" without dates.

Fifty-three specimens lack any good information on dates, locality, or collector. Mainland specimens have significantly greater wing-lengths than those from Little Barrier (Angehr, unpublished data), although there is a great deal of overlap. Measurements are available for 35 of these "orphan" specimens. Three can be identified as mainland birds by measurements, but none can be identified unequivocally as Little Barrier birds. However, the overall distribution of available measurements suggests that a large majority of these specimens were collected on Little Barrier.

DISCUSSION

In all, 78 specimens can be assigned to Reischek with some degree of confidence (including the 63 dated between 1882 and 1886, four attributed to Reischek without dates, and 11 undated specimens from the Rothschild, Buller, and Spencer collections).

Of the eight remaining Little Barrier specimens, only one can be assigned to a collector other than Reischek (the one dated 1893). Up to 50 of the 53 specimens with inadequate data could also be from Little Barrier. Many, if not most, of these poorly documented specimens were probably collected by Reischek as well, judging by the proportion of documented specimens that are his. I estimate that between 100 and 130 of the 181 known 19th-century Stitchbird specimens were collected by Reischek.

The number of Stitchbirds shot on Little Barrier would have been even greater because some (such as the ones blown to pieces by Dobson) would have been unsuitable for specimens and others may have been unretrievable in the heavy undergrowth. In addition I may have missed some specimens in smaller museums or private collections, and many specimens have surely been destroyed in the past 100 years. Johannes Andersen, in a letter to the Department of Internal Affairs in 1924, stated that Reischek killed 150 Stitchbirds on Little Barrier (Andersen 1924, and quoted in King 1981). The source of Andersen's information is unknown, but his figure may not have been an exaggeration.

Reischek erred in identifying the nest he collected as a Stitchbird's. All 19 known Stitchbird nests have been in holes in trees (Guthrie-Smith, Sibson 1949, Parkin 1956, Angehr 1983, Angehr & G. Rasch unpublished data), whereas the nest found by Reischek was "placed in a bunch of mangimangi creeper hanging from a low tree . . ." (Buller 1888). Reischek's only evidence that the nest belonged to Stitchbirds was that he had seen a pair nearby. The nest was possibly a Bellbird's; Potts (1869, 1870) had previously described and figured a Bellbird's nest and egg as those of a Stitchbird. (Potts' erroneous description of the egg was repeated in Oliver 1955.)

It is difficult to reconcile Reischek's accounts of the extreme rarity of the Stitchbird with the large numbers of specimens he collected. Perhaps Reischek tried to inflate the value of his specimens by exaggerating their rarity. Most telling in this regard is the difference between his own and Buller's accounts of the 1883 expedition. As described above, Reischek evidently told Buller that he did not even hear a Stitchbird until the last three days of his stay, and yet the specimens reveal that he collected at least 16 birds in 10 (or 3!) days.

When the number of dated specimens from each trip is compared with the trip's duration, however, it becomes apparent that Reischek's fortunes varied considerably from year to year. Although many specimens are undated, it is likely that the number of dated specimens is at least correlated with the actual number collected on each trip.

No specimens are known from a trip of (probably) three weeks in 1880, in agreement with Reischek's statement that he found no birds that year. In 1882 Dobson spent five months on Little Barrier by himself and then was joined for (probably) 11 weeks by Reischek.

Despite this prolonged stay there are only eight dated specimens from this trip (if the two from March were in fact collected by Dobson). Four others dated 1883 with no month could possibly have been collected in January of that year but are more likely to have been from December. Although Reischek may have taken more specimens than the four mentioned in *Sterbende Welt*, it does appear that he and Dobson were rather unsuccessful.

At least 16 and probably 20 dated specimens were taken in 10 days of very bad weather in December 1883. This seems to support Reischek's assertion that Stitchbirds increased between 1882 and 1883. Stitchbirds were apparently reasonably common in 1885, when at least 29 were collected in six weeks.

Reischek's failure to find Stitchbirds in October 1880 could have been partly due to local seasonal movements. Reischek searched the west and southwest of the island, second growth manuka and kanuka forest where Stitchbirds are uncommon even today. In addition, in October *Alseuosmia macrophylla* blooms heavily in the stream valleys and central parts of the island, attracting Stitchbirds into these areas and away from the coast (Angehr 1983). However, it is unlikely that Reischek would have completely failed to find Stitchbirds if they were as common in 1880 as they have been in the recent past.

More difficult to account for is the apparent increase between 1882 and 1883. This increase is not mentioned in any of the original accounts (Reischek 1883, 1885, Buller 1888); it only appears in the later versions by Reischek's son (Reischek 1924, 1930). In 1921 the junior Reischek attempted to sell his father's manuscripts to the New Zealand government. This offer was rejected largely on the advice of Johannes Andersen, who in his recommendation to the government cited the large number of Stitchbirds collected on Little Barrier as one example of the senior Reischek's rapacity (King 1981). Reischek's son may have been trying to show that his father's activities on Little Barrier, namely the killing of several cats, moreporks, and the "older male birds," had ultimately been of benefit to the species.

However, the difference in the numbers of specimens traceable to the 1880, 1882 and 1883 expeditions, in conjunction with Reischek's account, leads me to believe that there were real differences in Stitchbird abundance between these years. Reischek had far more difficulty finding Stitchbirds in 1880 and 1882 than those who visited Little Barrier immediately before and after. Hutton in 1868, the "Auckland collector" of 1892 (Buller 1905), and Boscawen in 1895 found them to be not uncommon, at least in the central parts of the island.

Since the 1880s there seem to have been several other fluctuations in Stitchbird numbers, although none so severe as the one described by Reischek. Stitchbirds were not uncommon in 1895 (Boscawen) but uncommon in 1897 (Shakespear); by 1907 they had increased (Drummond). They were again hard to find in the early 1910s, but they had increased by 1919 (Guthrie-Smith 1919, Gordon 1938).

The population increased dramatically in the late 1970s (Veitch 1980). This last increase took place at the same time as the eradication of feral cats by the New Zealand Wildlife Service and may have been partly due to reduced predation. However, the foraging habits of Stitchbirds should not make them particularly vulnerable to ground predators such as cats because the Stitchbirds do not often feed near the ground (Angehr 1983). Their nests, in tree cavities with small entrance holes, are well protected against cats. The mean height of 13 measured nests was 5.7 m. Fledglings usually perch and feed at least 5 metres up shortly after leaving the nest (Angehr & G. Rasch, unpublished data).

There is no evidence to link the earlier changes in Stitchbird numbers with changes in the numbers of cats, although a connection cannot be ruled out. These fluctuations could have been due to differences between years in the flowering or fruiting of Stitchbird food plants. The amount of food available can vary markedly between years (Angehr, unpublished data), possibly due to climatic effects.

Although other changes in abundance have occurred, the reduction in 1880 and 1882 is the most severe on record. Possibly it is only coincidental that this reduction took place at the same time as the Stitchbird was dying out on the mainland. However, if Oliver's (1955) speculation that disease caused the mainland extinction is correct, disease could have affected the species on Little Barrier as well. More difficult to explain is the survival of some birds on the island when none survived on the mainland. Perhaps a small percentage of birds were immune. If the mainland population was at a lower density than that on Little Barrier, owing to black rats and other predators, the few survivors of an epizootic may have been too scattered to re-establish a viable breeding population.

Andreas Reischek exemplified an attitude prevalent among many naturalists in the 19th century: if a bird in the hand was worth two in the bush, a museum cabinet of birds was worth an island full. Reischek's collection of large numbers of Stitchbirds from their last refuge, when the species was already gone from the mainland, was certainly irresponsible. Yet at the same time this enigmatic man was genuinely concerned about the preservation of threatened species; for example, he attempted (unsuccessfully) to transfer Kakapo from the South Island to safety on Hen Island (King 1981). Fortunately, Reischek's activities on Little Barrier seem to have had little real effect; Stitchbirds increased in the mid-1880s in spite of them.

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APPENDIX 1

Location of 19th-century specimens of *Notiomystis cincta*.

New Zealand: Auckland Museum 12; National Museum, Wellington 12; Canterbury Museum, Christchurch 20; Otago Museum, Dunedin 4; Wanganui Regional Museum 1. (In addition Auckland and National have 5 and 3 recent specimens respectively, and Canterbury has skeletal material from cave deposits). United States: American Museum of Natural History, New York, 33; National Museum of Natural History, Washington D.C. 4; Museum of Comparative Zoology, Cambridge, 5; Carnegie Museum, Pittsburgh 3; Peabody Museum, New Haven, 1. United Kingdom: British Museum of Natural History, Tring 17; Cambridge University Museum 4; Merseyside County Museum, Liverpool 4; Oxford University Museum 2; Royal Scottish Museum, Edinburgh 1. Austria: Naturhistorisches Museum, Vienna 21; Oberosterreichisches Landesmuseum, Linz 2. Federal Republic of Germany: Staatliches Museum fur Naturkunde, Stuttgart 2; Niedersachsches Landesmuseum, Hannover 1. Democratic Republic of Germany: Museum fur Naturkunde, Berlin 4; Staatliches Museum fur Zoologie, Dresden 2. Australia: Australian Museum, Sydney 3; Museum of Natural History, Adelaide 1. Canada: Royal Ontario Museum, Toronto 15. Netherlands: Rijksmuseum van Natuurlijke Historie, Leiden 5. Belgium: Institut Royal des Sciences Naturelles, Brussels 2 (type specimens of Dubus).

APPENDIX 2

Translation of a letter from Andreas Reischek to Julius von Haast, dated Auckland, 29 December 1883:

[The letter opens with conventional salutation and season's greetings, followed by a two-stanza poem on the New Year. Then it proceeds:] Today I arrived back from Little Barrier Island. I was not very lucky because of the bad weather: nothing but rain and storm. It is very bad climbing over the slopes when it is wet; one slips too much. These slopes are very steep and over 2000 feet high. The nights were so cold I had to burn a fire all night. This time I spent only 10 days on the heights inhabited by *Pogonornis* [= *Notiomystis*] *cincta*, the Stitz Bird [sic], which can only be taken by surprise before dawn. It is found on the higher ground overgrown by supplejack, mange-mange, and other creepers. It is a very agile bird, daily roaming through its favourite spots, the male occasionally piping very beautifully. His piping consists of several sounds, like "Ti-au-i." The female, which is seen very rarely, only utters a call like "Tyk-Tyk." When these birds are scared, the male hops [away] quickly. The young and the female hide on the ground under ferns and other dense growth, until they think the pursuers have disappeared, then the female appears cautiously from her hideout and leaves the spot. I believe that the breeding season of these birds starts in October, as I found a partially built nest in some low bushes in the same month of 182 [sic] where I observed a male and female of *Pogonornis* nearby. In December 183 [sic] I found 3 young adult birds. I found these birds only in the higher mountain ranges in the centre of Little Barrier Island. They are very timid and rare; I think wild cats, which are in abundance here, destroy these and many other birds which inhabit these remote islands. I investigated the island from all sides and, I believe, from all high ridges and

from West to East, and found the paths of the feathered inhabitants: [There follows a list of bird species which Reischek observed on Little Barrier]. Then I found nothing but very large petrels which I saw for the first time in New Zealand: above dark brown, below ash-grey. I will show it to Dr. Buller, which I anticipate [doing] in a few days. I am writing from my house. During his absence I have [obtained] a beautiful pair of *Pogonornis* for him. He may also again copy my notes for his book. [In the margin:] I visited Little Barrier in October 1880 for three weeks, then in October 1882 to January 183 [sic] and in December 1883. [There follows a conventional closing and a request for a reply.]



SHORT NOTE

A PARADISE SHELDUCK IN THE CHATHAM ISLANDS

In January 1984, while on South East Island, we visited on 20 January the Fur Seal colony at the southern end of the island near The Clears. Our attention was drawn to the presence of a male Paradise Shelduck (*Tadorna variegata*) by the repeated mobbing activities of Red-billed Gulls. Mobbing occurred continuously, whether the Paradise Shelduck was in flight or settled. The bird flew rather weakly, appearing to be tired, and had dishevelled plumage.

Williams (1971) gave three records of bone finds from the Chatham Islands, all related to pre-European occupation. He considered that a small local population may have existed on the Chatham Islands and had perhaps been exterminated by hunting.

B. D. Bell (pers. comm.) and M. Campbell (pers. comm.) have reported unconfirmed sightings of vagrant Paradise Shelduck by local people on a few occasions. However, this seems to be the first dated record.

The mobbing activity of Red-billed Gulls promotes some speculation as it does not widely occur on the mainland of New Zealand, except near gull colonies. The gull activity could be simply a reaction to a stranger. However, gulls frequently mob Southern Skua, which breed on South East Island, and the prominent white wing-coverts shown by the Paradise Shelduck may have provoked the attacks, being suggestive of the skua wing flashes.

Advice given by E. G. Turbott is appreciated.

LITERATURE CITED

WILLIAMS, M. 1971. The distribution and abundance of the Paradise Shelduck (*Tadorna variegata*, Gmelin) in New Zealand from pre-European times to the present day. *Notornis* 18: 71-86.

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