

DISTRIBUTION AND BREEDING RECORDS OF THE WELCOME SWALLOW FOR THE SOUTH ISLAND, NEW ZEALAND, 1955 - 1968

By G. A. TUNNICLIFFE
Zoology Department, University of Canterbury

INTRODUCTION

The purpose of this paper is to assemble new nest and sight records in the South Island of the Welcome Swallow (*Hirundo neoxena*) as an extension of the earlier records compiled by Edgar 1966 (2).

I wish to thank the many people who have made their observations available to me either through the O.S.N.Z. Recording Scheme or by personal communication. Each record in the text bears the initials of the observer(s) given in the following list.

J. Adams (J.A.), A. J. Baker (A.J.B.), F. M. Climo (F.M.C.), B. D. Bell (B.D.B.), Mrs. M. M. Buchanan (M.M.B.), J. A. Cowie (J.A.C.), P. S. Crosier (P.S.C.), M. P. Daniel (M.P.D.), Dr. M. P. Buchler (M.P.B.), R. Dunipace (R.D.), D. K. S. Graham (D.K.S.G.), Mrs. J. B. Hamel (J.B.H.), G. Harrow (G.H.), M. Keillor (M.K.), F. C. Kinsky (F.C.K.), J. Mackel (J.M.), W. Mawson (W.M.), R. Melhopt (R.M.), J. A. Mills (J.A.M.), B. N. Norris (B.N.N.), P. J. Reece (P.J.R.), P. Sagar (P.S.), R. B. Sibson (R.B.S.), M. H. Sinclair (M.H.S.), Miss C. H. Turner (C.H.T.), M. Small (M.S.), Dr. R. Smith (R.S.), D. Smith (D.S.), R. R. Sutton (R.R.S.), Dr. K. E. Westerskov (K.E.W.), Dr. E. C. Young (E.C.Y.).

Edgar's 1966 (2) records showed that in the South Island the Welcome Swallow occurred on Cook Strait Islands, in Nelson, Marlborough, Westland, Canterbury and possibly Southland, but bred only at Lake Ellesmere in Canterbury.

They now appear to be well established in all provinces except Westland.

The distribution and breeding records are summarised below for each province except for the Cook Strait Islands which are treated separately. Edgar's 1955-65 records are included for comparison.

The order followed is locality, number of Swallows (in brackets), date, and observers' initials (in brackets). Fig. 1 shows the South Island Provinces and localities referred to in the text and Fig. 2 mid-Canterbury localities.

COOK STRAIT ISLANDS

1955 - 1965

Sightings: Stephens Island, (2), December 1961. Brothers Islands, (1), September 1964.

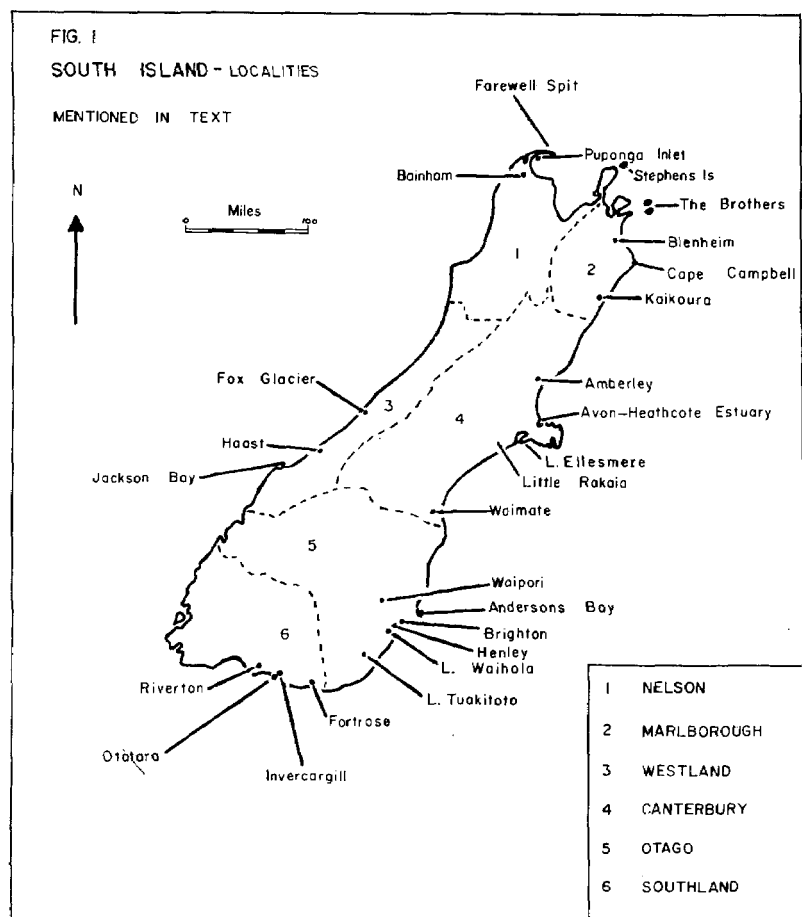
Swallows have not yet bred on these islands and there are no recent sightings.

MARLBOROUGH

1955 - 1965

Sightings: Smiths Bridge (five miles east of Blenheim), (2), 24 July 1957.

Breeding: No records.



1965-1968

Sightings: Spring Creek (three miles north of Blenheim), (1), 12 December 1966, (J.M.); (2), April 1967, (J.A.C.); (10) July 1967 (J.A.C.). Lake Elterwater (22 miles south-east of Blenheim), (2), May 1967, (B.D.B.), (R.B.S.). Near Cape Campbell, (30-40), late September 1967. Kaikoura, (1), 9 May 1968, (J.A.M.).

Breeding: South end of Wairau Lagoons (four miles north-east of Blenheim); nest found in mid-December 1967 inside an iron tank that was used as a duck shooting stand; two adults and three young flew from this nest (J.A.).

NELSON
1955-1965

Sightings: At the base of Farewell Spit (1), 25 November 1955; over a lake at the base of the spit, (8), April 1965; Twelve miles along the spit, (7), April 1965.

Breeding: No records.

1965 - 1968

Sightings: At twelve miles on Farewell Spit, (7, numbers estimated) early April 1965 and (12) in June 1966 Bell 1966 (1). Flying above ponds along the Spit, Freeman's Pond, Puponga Inlet, (number of swallows not given for these localities), January 1967 (B.D.B.). Flocks were recorded at all the above localities in January 1968 (F.M.C.). At Bainham in Aorere Valley (6), January 1968 (A.J.B.). At Freeman's farm, Farewell Spit (90-100, the largest flock yet recorded in the South Island), February 1968 (W.M.).

Breeding: Cape Farewell Light; one nest was located in January 1967 under the overhang of a small dam (B.D.B.).

WEST COAST

1955 - 1965

Sightings: Jackson Bay (1), 31 August 1962.

Breeding: No records.

1965 - 1968

Sightings: Between Haast and Fox Glacier, (1) November 1965 (M.P.D.).

Breeding: No records.

CANTERBURY*

1955 - 1965

Sightings (see Fig. 2): Between late 1961 and February 1964 Swallows were recorded at Lakeside, Kaituna, Ataahua, Kaituna Valley and at the LII River Mouth. All sightings for Canterbury were at Lake Ellesmere.

Nesting: The first record of a Swallow nest for the South Island was at Lakeside during the 1961/62 season. Swallows nested again there in 1962/63, possibly in 1963/64 and again in the 1964/65 season. Juvenile Swallows were seen in the 1963/64 season at Ataahua. All South Island records of nests came from Lake Ellesmere.

1965 - 1968

Sightings: South Canterbury. Ki Wainono Lagoon (east of Waimate) (2), May 1967 (M.K.); (3) in June 1967 and (10) in August 1967 (P.S.).

Mid Canterbury (Lake Ellesmere and Environs). Kaitorete Spit, on the Lake margin half a mile east of the Acclimatisation Society watchtower, (2) 28 July 1966; (2) 2 November 1966; (2) late in December 1966 (G.A.T.). Half a mile east of previous locality, (2), 2 November 1966 and during December 1966 (G.A.T.). Coopers Lagoon (located three miles south of Taumutu), (5), 21 July 1966 (G.A.T.). (19), 7 March 1968 and (3) a fortnight later (P.J.R.). Little Rakaia (2), 24 September 1966 and (1) near Rakaia bridge (main south road) on 30 September 1966 (M.M.B.). Lakeside, (2) were recorded on five occasions from mid-September 1966 to the end of October 1966 and (8) on 21 July 1966 (G.A.T.). At the Irwell River Mouth (2), 15 October 1966 (P.S.C.). LII River Mouth, a flock (25, the largest flock so far recorded at Lake Ellesmere) June 1967 (G.A.T.). Coes Ford on the Selwyn River, (11) June 1967 (G.H.). A mile south

* Turbott 1965 (3), has given a detailed account of the distribution and nesting of Swallows in Canterbury from late 1961 to February 1964.

east of the Motukarara Racecourse (5), December 1966 (G.H.). At Kaituna, from June 1966 to November 1967 Swallows were seen on eighteen occasions along the Lake shore opposite the old Kaituna railway station site; on each occasion (2) were sighted together although a flock of (6) was seen in June 1966 (D.K.S.G., G.A.T.). Avon Heathcote Estuary. At the south-west corner of the Estuary (5), 5 February 1967 (G.H.).

North Canterbury. In the lower Waipara River area at Teviotdale near Amberley (4), August 1966 (E.C.Y.).

Breeding: All recent breeding records are from mid-Canterbury.

Kaituna: The following observations summarise breeding records I made under a culvert on the Akaroa highway, a quarter-mile north of the old Kaituna railway station on the eastern side of Lake Ellesmere.

10 Nov. 1966. Three nests were found. One nest contained five eggs, another was completed except for the lining and the third consisted of an incomplete mud cup.

6 Dec. 1966. The nests were at the same stage as above but contained no eggs. Five chicks and two adults flew from under the culvert.

4 Jan. 1967. A second clutch of five eggs was found in the same nest which previously contained eggs.

30 Jan. 1967. Three eggs were found in the same nest that contained eggs on the previous visit.

5 Dec. 1967. The same nests were present. Nest one contained five eggs, nest two contained two eggs and nest three was now complete but lacked a lining and contained no eggs.

5 Jan. 1968. Nest one contained four fledged chicks and one added egg. Nest two contained five new eggs.

18 Jan. 1968. Five chicks were found in nest one (C.H.T.).

27 Mar. 1968. Nest one had fallen to the ground, nest two contained one egg and nest three contained two eggs.

(Regular searches on the eastern periphery proper of Lake Ellesmere over the last three years have revealed no nesting areas other than at Kaituna.)

Kaitorete Spit: Two miles south-west of Kaituna an empty Swallow nest was found under a tank stand on 2 November 1966 half a mile east of the Acclimatisation Society watchtower on Kaitorete Spit. Swallows had previously attempted to nest inside this tank as the remains of a nest and dead Swallow were found at the bottom of the tank. In mid-November 1966, and three weeks later, the nest was still empty.

A second nest containing five eggs was found on 2 November 1966 a mile east of the previous site on the inside wall of a concrete water tank. The clay outlines of two other nests (which had fallen into the water) on the tank walls, and three eggs in the water, indicated that there had been at least two previous unsuccessful nesting attempts. On 5 December 1966 a new nest containing four new eggs had been constructed on the tank wall, and the previous nest with five eggs, was found submerged at the bottom of the tank. Late in December this new nest also became dislodged. Both tanks had fluctuating water levels and they were unsuitable as nest sites. Throughout the 1967/68 nesting season no Swallow nests were found at the first tank site and the second tank was not available for a nesting site as it had been removed.

Coopers Lagoon: This area, located just beyond the south-west corner of Lake Ellesmere, was regularly searched for nests from November 1967 to March 1968 but none were found (P.J.R.).

Lakeside: The one breeding record for this area is of two nests found on 30 October 1965. Both nests were built in a boat anchored offshore and each contained five eggs (P.S.C.).

Irwell River Mouth: Two nests were found on 9 November 1965 under the gunwale of a launch anchored at the mouth of the Irwell River. One contained four eggs, but the contents of the second nest could not be determined as it was inaccessible (M.P.B.).

Avon Heathcote Estuary: On 1 February 1967 a Swallow nest was found under a culvert on Humphrey's Drive on the south-west side of the Avon Heathcote Estuary (R.M.). Three days later three chicks were found in the nest (B.N.), and on 5 February three chicks and two adults were seen flying near the culvert (G.H.). On 16 February the same nest contained three eggs and a week later three chicks (G.A.T.).

OTAGO

1955 - 1965

Sightings: No records.

Breeding: No records.

1965 - 1968

Sightings: Near the main highway at Henley (2), in winter 1966 (R.S.). Andersons Bay (1) early August 1966 (R.D.). At Brighton (2) during autumn 1967 (I.B.H., K.E.W.). On the swampland between Lake Waiholā and Lake Waipori (9) for eight weeks up to 7 June 1967; some of these birds were possibly juveniles (H.S.). At Lake Tuakitoto (9), May 1967 (D.S.).

Breeding: No records.

SOUTHLAND

1955 - 1965

Sightings: An unconfirmed sighting at Otatara from November 1963 to March 1964.

Breeding: No records.

1965 - 1968

Sightings: All sightings of Swallows from Southland have been made by R.R.S. These records have been either in autumn or winter on the coastal strip from Fortrose to Riverton. Waimatuku Wildlife Refuge (seventeen miles north-west of Invercargill) (1) mid-July 1966. Lake Murihiku (four miles west of Invercargill) (3), late February 1967. Mātaura River at Gorge Road (eight miles north-west of Fortrose) (11), 12 May 1967; (3) 15 May 1967. Eastern end of Waituna Lagoon (twelve miles south-west of Invercargill, (1) late in November 1967; (5) 17 March 1968.

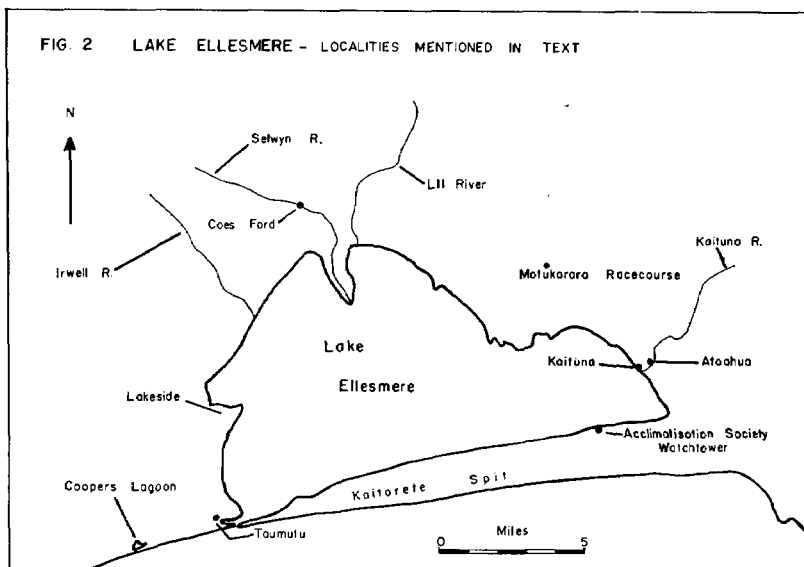
Breeding: No records.

SUMMARY

Sightings:

Apart from Westland, Swallows now appear to be established in all provinces of the South Island. The largest numbers of birds were recorded from the Farewell Spit area in Nelson Province, Cape Campbell in Marlborough and Lake Ellesmere in Canterbury. Recent first sightings of Swallow flocks near Waimate, Otago, and Southland indicate the species is spreading through the South Island.

FIG. 2 LAKE ELLESMERE - LOCALITIES MENTIONED IN TEXT

*Breeding:*

For the first time Swallows have been recorded breeding in the Nelson and Marlborough provinces. The largest number of nests was at Lake Ellesmere.

Since Turbott's 1965 (3) account, Swallows have nested at four new localities at Lake Ellesmere and, for the first time, at the Avon Heathcote Estuary.

One factor that has limited nesting success of Swallows at Lake Ellesmere is the type of nest site chosen. On Kaitorete Spit nest mortality was high because of fluctuating water levels inside tanks used for nesting. Further, the lack of nesting records at Lakeside and the general agreement amongst Lakeside residents that Swallows are not occurring there in their usual numbers during recent nesting seasons may be attributed to the absence of the traditional Swallow nesting site (the launch "Loretta"; see Turbott). Casual observations would suggest that, although there is an abundance of insects available at Lake Ellesmere for Swallows, the success of this species will be dependent upon the availability of suitable nest sites. One potential source for nest sites at Lake Ellesmere is the more permanent shooting stands found scattered along the Lake margins but there are no records of these being used.

ACKNOWLEDGEMENTS

I am grateful to Dr. B. Wisely, Dr. E. C. Young and Mr. K. A. Liggett for the assistance they provided during the preparation of this paper. I would also like to thank Mr. A. T. Edgar for allowing me to examine O.S.N.Z. Recording Scheme data.

REFERENCES

1. BELL, B. D. B. (1966): Farewell Spit, April 1965, *Notornis* XIII: pp. 104-105.
2. EDGAR, A. T. (1966): Welcome Swallows in New Zealand, 1958-1965, *Notornis* XIII: pp. 27-60.
3. TURBOTT, E. G. (1965): Welcome Swallow: First breeding records for South Island. *Notornis* XII: pp. 241-244.