

Distribution and breeding of the Spur-winged Plover on Stewart Island

The Spur-winged Plover (*Vanellus miles novaehollandiae*) established itself in New Zealand in Southland, after the breeding of a pair that arrived in about 1932; by 1971 there were about 1000 birds within a 16 km radius of Invercargill (Barlow 1972). The species is now common throughout the North and South Islands. In spite of the large population in Southland, Spur-winged Plovers have been reported infrequently from nearby Stewart Island. Although Barlow (1985) stated that the species had "established itself in New Zealand's three main islands", the latest edition of the Checklist describes the species as a straggler to the island (Checklist Committee 1990). Previous records and our own recent sightings suggest that it should indeed be considered a well-established breeding species there.

Sightings 1967-1985

Two birds seen at Mason Bay in 1967 appear to be the first published record; two were also seen at Horseshoe Bay and two at Lonneker's Bay in 1971 (Barlow 1972). There are three records in Bull *et al.* (1985), all from 1979. These are at Halfmoon Bay in January and February, in the Toitoi River area in February and at Mason Bay in October. During searches for Kakapo (*Strigops habroptilus*) in southern Stewart Island during 1984-85, the Spur-winged Plover was recorded only from two adjacent 1 km squares in Cooks Arm (R.G. Powlesland, Science & Research Internal report No. 11, Department of Conservation, Wellington, 1988).

Sightings 1988-1993

During a series of visits to Stewart Island between December 1988 and March 1993 to study NZ Dotterels (*Charadrius obscurus*), we recorded Spur-winged Plovers at a number of widely scattered localities (Table 1). At some sites they were regularly present.

We found indirect and direct evidence of breeding. One of the birds seen on 5 December 1988 on Table Hill was displaying, as though a nest or chicks were nearby. Two birds occupying the area south and east of SH 579 were present throughout two-week periods in December 1991, September/October 1992 and December 1992. The bird seen at Doughboy Hill on 15 December 1992 was defending a nest containing four eggs, sited on a stunted, prostrate manuka (*Leptospermum scoparium*) bush. The eggs measured (mm) 49.1 x 35.1, 48.4 x 35.3, 47.7 x 34.2, and 50.0 x 34.8.

Discussion

Our records and those of others suggest a steady increase in range and numbers of the Spur-winged Plover on Stewart Island during the past 25 years. Colonisation may have been slow because there is little of the rough pasture which the species favours as breeding habitat in other parts of New Zealand (Barlow 1985).

Our finding of a nest in December 1992 proves that the Spur-winged Plover does indeed breed on Stewart Island. Egg dimensions were well within the ranges given for Southland birds by Barlow *et al.* (1972). Peak laying in Southland occurs in August and September (Barlow *et al.* 1972, and the date of the Doughboy Hill nest suggests a late re-nest after failure(s) or an

TABLE 1 — Sightings of Spur-winged Plovers on Stewart Island between December 1988 and March 1993

Date	Locality	Grid reference	No. of birds
05-12-88*	Saddle NW of Table Hill	D49 174400	2
09-03-89	The Neck	E48 426513	2
13-03-89	Dunes, Mason Bay	D48 114530	3
31-10-89	In flight over Mt Anglem	D48 212734	3
15-11-89	Beachfront, Mason Bay	D48 111520	2
12-02-90*	Duck Cr, Mason Bay	D48 118522	2
10-04-90	Beachfront, Mason Bay	D48 112524	2
21-11-90	Broad Bay	D50 023155	2
26-11-90	E of SH 579	D49 190401	2
26-11-90	Knoll NW of Table Hill	D49 174402	2
29-01-91	Knoll NW of Table Hill	D49 170405	1
13-04-91	Cooks Arm, Port Pegasus	D49 015212	2
18-04-91*	Duck Cr, Mason Bay	D48 120520	1
11-12-91*	S of SH 579	D49 177410	3
29-12-91	SH 511	D49 248455	2
30-09-92*	S of SH 579	D49 177410	2
10-11-92	E of SH 579	D49 190401	2
03-12-92*	S of SH 579	D49 177410	3
09-12-92	SW of Blaikies Hill	D49 166370	2
15-12-92	Doughboy Hill	D49 095410	1
25-03-93	Duck Cr, Mason Bay	D48 120520	1
28-03-93*	Cooks Arm, Port Pegasus	D49 007210	2
31-03-93	Evening Cove, Port Pegasus	D49 030204	3

*further sightings in the same area on subsequent days, presumably of the same birds.

attempt to raise a second brood. In most parts of the species' range in New Zealand, adult birds are relatively sedentary and site faithful (Barlow 1985). Repeated sightings of two birds at Cooks Arm, Mason Bay and the area around SH 579 (on the northern flank of Table Hill) suggest that these are also breeding places; all contain suitable open areas, free of high vegetation.

The three birds seen over Mt Anglem on 31 October 1989 were flying high and heading south and so were probably en route from the mainland. This raises the possibility that some birds may commute to and from the mainland, as some NZ Dotterels do (Dowding & Murphy 1993), although they could have been young birds dispersing. The species has been recorded on Ruapuke Island (e.g. Bull *et al.* 1985) and Centre Island (Cooper 1991) in Foveaux Strait.

The Spur-winged Plover is now widespread on Stewart Island and should be considered well established, although it is not yet in large numbers. Much of the island is covered in unsuitable habitat (scrub, forest or swamp) and the species may never be very numerous there.

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South Island Saddlebacks transferred to Breaksea Island

The rescue of the South Island Saddleback (*Philesturnus carunculatus carunculatus*) from Big South Cape Island in 1964 is a well-known story. At that time, 36 of the birds were removed from the rat-plagued island and successfully released on Kaimohu and Big Islands. Further transfers took place, and by 1990, 300-500 Saddlebacks were distributed over nine small islands, ranging from 6 to 141 ha and located around Stewart Island.

Breaksea Island (166°35' 45°33') was the next site targeted for release by the draft South Island Saddleback Recovery Plan. A successful release on this island would be special for several reasons. It would mark the return of Saddlebacks to Fiordland National Park after an absence of nearly a century. Breaksea Island (170 ha) would be the largest island with South Island Saddlebacks, as transfers to Maud Island (309 ha) and Inner Chetwode (240 ha) in the Marlborough Sounds had failed. Finally, Breaksea is one of the first islands (and the largest so far) from which Norway rats (*Rattus norvegicus*) have been eradicated. A joint Department of Conservation/DSIR Ecology Division operation in 1988 had rid the island of this introduced pest. Islands free of European introduced rats are the only suitable habitat for South Island Saddlebacks, and even kiore (*Rattus exulans*) may have a detrimental effect on the birds. Putahinu Island is 141 ha, but holds a population roughly estimated at only 20 birds.