

SHORT NOTES

Surveys of South Georgian Diving Petrels (*Pelecanoides georgicus*) on Codfish Island

In 1978, Imber & Nilsson (1980) found that South Georgian Diving Petrels breed on Codfish Island (46°46'S, 167°39'E). In November 1980, December 1981 and December 1983 counts of their burrows were made by officers of the New Zealand Wildlife Service working there on management projects. In October 1985, JW visited the island to investigate the status of these diving petrels.

South Georgian Diving Petrels burrow in the sand dunes behind the only sandy beach on the island, the habitat described by Imber & Nilsson (1980). The unstable sand made study burrows risky to prepare and so all information was gathered by observing burrow entrances. Initially, JW found that many of the burrow marker tags placed by previous workers still remained but their numbers were not legible; 26 still had a burrow nearby but eight did not. Between 1 and 10 October 1985 all burrows found, including 18 new ones, were monitored daily and all were numbered.

Each burrow entrance was fenced with leaves or twigs so that any petrel entering or leaving the burrow would be detected, giving evidence of occupation. Three adult birds were captured at night (two from one burrow), and their identity was confirmed by the criteria described by Payne & Prince (1979). Particular note was taken of the posterior black line on the tarsus, present in these three.

At that time, these diving petrels were cleaning out their burrows in preparation for laying. Newly opened burrows were found almost daily as digging and prelaying activity increased. Many of these burrows had not been visible because of sand accumulated in the entrances but, once opened, they remained clear as long as regular visits continued.

TABLE 1. The status of burrows of South Georgian Diving Petrels counted on Codfish Island from 1978 to 1985

Month/Year	Number of burrows				Total
	Active	Inactive	Uncertain	Not Found (marked 1978)	
Oct. 1978 (1)	35	10	—	—	45
Dec. 1978 (1)	28	11	2	4	41
Nov. 1980 (2)	32	3	0	9	35
Dec. 1981 (2)	33	9	0	3	42
Dec. 1983 (3)	38	—	—	—	38
Oct. 1985	41	0	3	8	44

1 Imber & Nilsson (1978)

2 Count by J. West and E. Kennedy (Wildlife Service)

3 Includes burrows higher on the dunes at the SE end of the beach, probably of Common Diving Petrels (*P. urinatrix*) (A. Cox pers. comm.)

Table 1 gives the numbers of burrows found on this and earlier counts. Thirty-six burrows were visited nightly, or nearly so; three were visited on less than 50% of nights; two were not visited during the observation period; one was opened on the night before final observations. Two were found only two days before observations ceased.

The population of South Georgian Diving Petrels on Codfish Island may be over 120 birds: 80-90 breeders and 40 + non-breeders.

DISCUSSION

This colony seems to have been stable between 1978 and 1985. Apparently the distribution of burrows gradually changes, some burrows being abandoned and others newly dug from time to time. When these birds arrive over their colony, they land and enter their burrows without delay (pers. obs.), making them unlikely prey for Stewart Island Wekas (*Gallirallus australis scotti*). This was borne out of the lack of corpses of diving petrels when the large weka population was killing other species of petrel (R. J. Nilsson, pers. comm.), although wekas may well have taken a few fledglings. All wekas had been removed or killed or had died by 1986. Sealers Bay has about 1 km of beach and, as the burrows are scattered along the entire length of the dunes, space for burrows is not likely to be limiting the number of birds. Kiore (*Rattus exulans*) are in the dunes. Whether they are affecting the diving petrels is not known.

This small population does not seem under threat of extinction but it must be watched regularly to see that it remains secure.

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LITERATURE CITED

- IMBER, M. J.; NILSSON, R. J. 1980. South Georgian Diving Petrels (*Pelecanoides georgicus*) breeding on Codfish Island. *Notornis* 27: 325-330.
PAYNE, M. R.; PRINCE, P. A. 1979. Identification and breeding biology of the diving petrels *Pelecanoides georgicus* and *P. urinatrix exsul* at South Georgia. *NZ J. Zool.* 6: 299-318.

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