## Short Communications

# Kelp Gulls Larus dominicanus in the Antarctic Pack Ice and at Australian Antarctic Stations

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This note reports seven observations of Kelp Gulls Larus dominicanus in the pack ice zone during the Australian Antarctic Division's Marine Science Cruise (ADBEX III), 16 September to 29 December 1985. It also summarises records of the species at Australian Antarctic stations.

MV Nella Dan visited Heard Island (53°07'S, 73°31'E) from 29 September-4 October and entered the pack ice on 8 October at 59°30'S, 59°00'E. Sea ice cover was measured on a scale from zero to 10 tenths; 10/10 indicating a complete cover of ice. On 27 October MV Nella Dan became beset in 10/10 pack ice and drifted off the coast of Enderby Land until 14 December when she was freed by the Japanese icebreaker MV Shirase and returned to Hobart.

Bird observations were made for ten minutes approximately hourly during daylight throughout the voyage, though less frequently while the ship was beset. The methodology outlined by the BIOMASS Working Party on Bird Ecology (1984) was used. The observers are familiar with the species both in Tasmania and New Zealand.

### Results

Kelp Gulls were commonly seen while the ship was near Heard Island where the species breeds. All other observations were in the pack ice, and these are listed chronologically in Table 1. The ages of individuals are based on plumages.

The juvenile seen on 8 October approached the stationary ship and landed on the ice less than 200 m away. After several minutes it flew close to the ship in company with a Southern Fulmar Fulmarus glacialoides, several Cape Petrels Daption capense, Snow Petrels Pagodroma nivea and Antarctic Petrels Thalassoica antarctica. No interactions were observed.

The first second year bird was disturbed from the water. The second was pursued by a South Polar Skua Catharacta maccormicki; the Gull took evasive action by swooping and altering direction several times until the Skua gave up and the Gull resumed its northward flight. Four hours later another Kelp Gull, thought to be in its third year, flew by.

The Gull seen on 14 December followed in the wake of the MV Shirase as she led MV Nella Dan through the pack ice. Both adults were seen briefly as they flew past the ship.

At least seven sightings of Kelp Gulls at Australian Antarctic stations have been reported since Johnstone & Murray (1972) summarised records up to that time, Table 2. In several of these reports the gulls were chased by South Polar Skuas.

Finally, a single adult Kelp Gull was seen from MV Icebird on 31 January 1987 by Dr J. C. Alonso-Lopez at 68°31'S, 77°32'E some 30 km WNW of Davis Station, over open water with many icebergs in the vicinity.

#### Discussion

The movements of Kelp Gulls away from their southern breeding places on the islands of the Scotia Arc and the Antarctic Peninsula during winter are little known. At

TABLE 1 Sightings of Kelp Gulls from MV Nella Dan, October-December 1985.

Date	Location	Ice	Age	Flight direction
08/10/85	59°57′S, 60°02′E	9/10	Juv. $(< 1 \text{ yr old})$	_
09/10/85	60°46′S, 60°02′E	8/10	2nd yr	_
20/10/85	66°00'S, 50°32'E	10/10	Adult	SE
07/11/85	66°12′S, 49°12′E	10/10	2nd yr	Ν
07/12/85	66°12′S, 49°12′E	10/10	3rd yr	SE
	66°12′S, 49°12′E	10/10	Adult	·
	66°14′S, 49°06′E	10/10	2nd or 3rd yr	

- = Not recorded

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Palmer Station (64°46'S, 64°03'W) most Gulls leave in March and return in September (Bernstein 1983), dispersing generally northward (Watson 1975). Griffiths (1981) reports two records of vagrant Gulls near the Antarctic continent. At Heard Island there is no evidence of any migration away from the island (Downes *et al.* 1959) and the same is probably true at other Subantarctic islands.

It is not possible to link the Kelp Gulls seen in the pack ice in October and December 1985 with any particular breeding population. The southern-most sighting was 1920 km south-west of the nearest breeding place, Heard Island, but no Gulls were seen in the 1000 km after clearing Heard Island and before entering the pack ice. Three apparently different Gulls were seen in the space of two days at this southern-most position, only 50 km from the edge of the pack ice and another 740 km from the coast where Adélie Penguins *Pygoscelis adeliae* were already coming ashore to breed (Bassett *et al.* unpubl.). Possibly this is an area where the few Gulls passing through are attracted to stay at this time of year, perhaps to scavenge in the Penguin colonies.

Johnstone & Murray (1972) speculated that the sightings they reported might have marked 'the beginning of a(n) ... expansion of range in the south'. Sightings since then, summarised in Table 2, show no evidence of an increased frequency of Kelp Gulls in the region.

Johnstone & Kerry (1976) reported only two sightings of Kelp Gulls in the pack ice zone of the Australian Antarctic Territory during annual voyages in the 10 years 1964-1973. However, the frequency and quality of observations were less than during the 1985 voyage reported here, and those voyages did not normally enter the pack ice until December. Improved techniques of observation and perhaps the earlier dates of observation provide an adequate explanation for the greater frequency of sightings of Gulls in the pack ice reported here.

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 TABLE 2
 Sightings of Kelp Gulls at Australian Antarctic stations, 1962-1985.

Location	No. of birds	Source
Wilkes 66° 15'S, 110° 31'E		
/57		Ingham 1962
31/10/62		Johnstone & Murray 1972
Casey 66° 17'S, 110° 32'E		
18/11/68	1	Johnstone & Murray 1972
13/11/71	2	Johnstone & Murray 1972
18/11/76	1	ANARE Records (J. Tyrrell)
Davis 68° 35'S, 77° 58'E		
16/01/72	l adult	Johnstone & Murray 1972
29/01/77	l adult	ANARE Records (T.J. Tierney)
14/12/77	perhaps 2	ANARE Records (R.M. Hand)
17/12/77	2 individuals	
26/12/77 <b>J</b>	1 J in all	
FebMar. 81	1 3rd year	ANARE Records (T.M. Walker)
26/11/81	1 3rd year	ANARE Records (T.M. Walker)
04/11/85	1	ANARE Records (N. Trupp)
Mawson 67° 36'S, 62° 53'E		
12/12/58	1 3rd year ) perhaps same	Ingham 1962
31/01/59 \$	1 3rd year 5 individual	
01/85	3 sightings, perhaps same bird	ANARE Records (A. Everett)