

VAGRANT BIRDS AT ILES KERGUELEN, SOUTHERN INDIAN OCEAN

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SUMMARY

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Recent records of vagrant seabirds, shorebirds and landbirds at îles Kerguelen are presented and previous data are summarized. Six species of vagrant seabirds and seven species of vagrant shorebirds and landbirds have been observed on the archipelago. Five out of the six seabird species are Antarctic in origin. The sixth species, the Erectcrested Penguin *Eudyptes sclateri*, has never been observed elsewhere in the southwestern Indian Ocean. We discuss the reason for the paucity of vagrant landbirds at îles Kerguelen compared to other islands in the southern Indian Ocean.

INTRODUCTION

îles Kerguelen (48 27S - 50S, 68 27E - 70 35E) are situated in the southern Indian Ocean, just north of the Antarctic Polar Front (APF), 3 500 km from South Africa and 2 000 km from the Antarctic Continent. The nearest islands are Heard Island (480 km to the southeast), îles Crozet (1 200 km to the northwest) and îles Saint-Paul and Amsterdam (1 450 km to the northeast). The Kerguelen archipelago consists of a mainland and approximately 300 islands and islets (Fig. 1). The total land area comprises some 7 000 km². Thirtyfive species of birds have been recorded breeding (Weimerskirch *et al.* 1989).

Vagrant birds were recorded between 1986 and 1988 during field trips to the eastern and southern parts of the archipelago, and from a boat for the northern and western parts. The continual presence of ornithologists since 1985 has allowed for regular monitoring of the eastern part of the archipelago. Throughout the year, we provide a systematic list of vagrant birds recorded, detailing

new records (1986-1988) and also summarizing previous known records.

SEABIRDS

Emperor Penguin *Aptenodytes forsteri*

This species has been recorded twice only: at Passe Royale on 2 February 1898 (a young moulting bird) and at Cap Cotter on March 1973 (no details of age and moult), (Hall 1910 in Falla 1937, Derenne *et al.* 1974). Two birds were observed at Heard Island (Downes *et al.* 1959), but the Emperor Penguin has not been recorded from îles Crozet or the Prince Edward Islands (Stahl *et al.* 1984, Gartshore 1987). Offshore records during the austral summer of 1984 show that Emperor Penguins are concentrated on the border of the pack-ice but are also present on the southern Kerguelen-Heard continental shelf (Stahl 1987).

Adélie Penguin *Pygoscelis adeliae*

Adélie Penguins were observed twice by Tollu

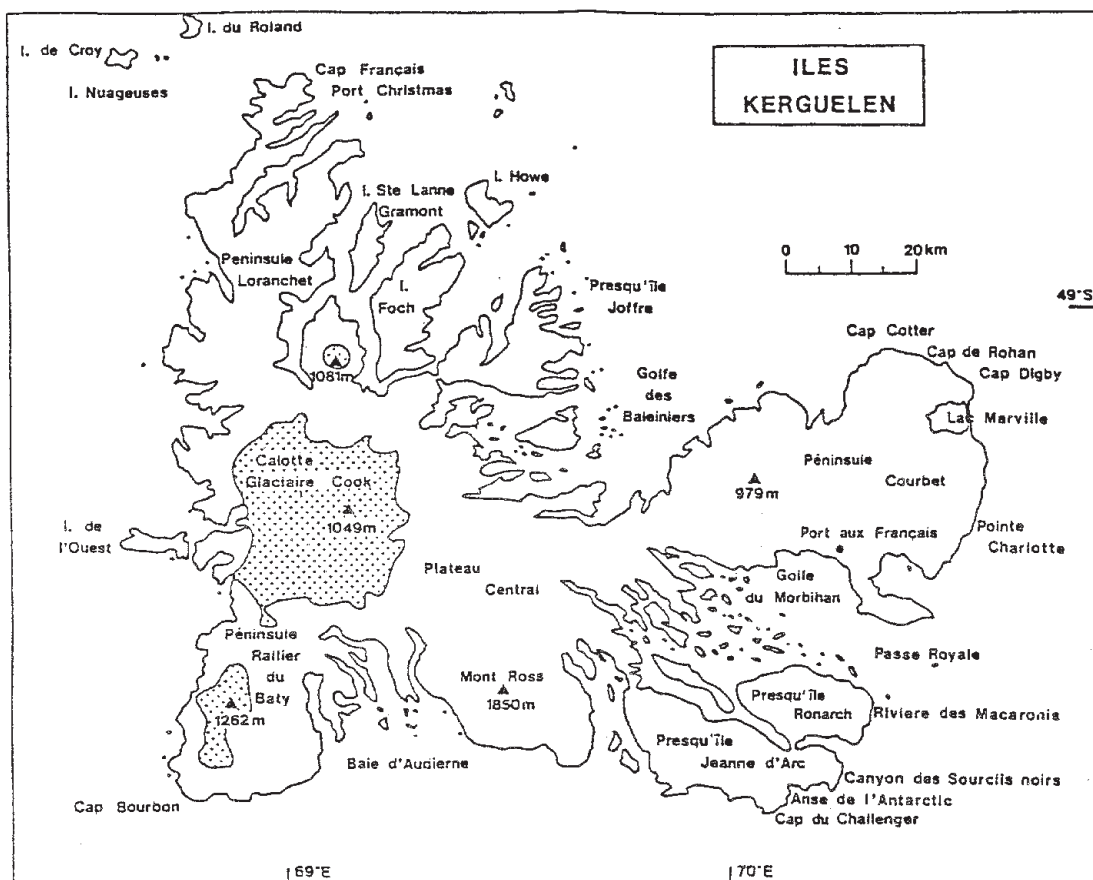


Figure 1

Iles Kerguelen, showing places named in the text

(1967) in September 1965, at Passe Royale, and in March 1966 in the northern part of the archipelago. One individual was observed by Thomas (1983) at the Port aux Français Station on 27 October 1978. No details are available on age and moult. The Adélie Penguin is a regular visiting seabird to Heard Island (Downes *et al.* 1959) but it has not been recorded on îles Crozet or the Prince Edward Islands (Stahl *et al.* 1984, Gartshore 1987).

Chinstrap Penguin *Pygoscelis antarctica*

Five records were obtained between December 1985 and February 1988. Each concerned single adults in colonies of King Penguins *Aptenodytes patagonica* (Pointe Charlotte, 3 June 1986), Gentoo Penguins *Pygoscelis papua* (Anse de l'Antarctic, 5 March 1987) and Macaroni Penguins *Eudyptes chrysolophus* (Rivière des Macaronis, 21 December 1987 and Canyon des Sourcils noirs, 3 February 1988). The last sighting was of a single bird (Lac Marville, 30 November 1987). The bird observed on 21 December 1987 was a male (sexed by its behaviour) building a nest in a colony of Macaroni Penguins and the one seen on 3 February 1988 was in a premoult stage. This species has already been observed on îles Kerguelen by Voisin (1970), and twice by Thomas (1983) at the Port aux Français Station in February and December 1978. It has also been recorded at îles Crozet and the Prince Edwards Islands (Stahl *et al.* 1984, Gartshore 1987) and is frequently observed on Heard Island (Downes *et al.* 1959).

Erectcrested Penguin *Eudyptes sclateri*

One bird was photographed standing in a group of moulting Gentoo Penguins on 22 February 1986 on the northeastern coast of the archipelago at Cap de Rohan (Fig. 2). It was an immature of at least one year of age with the following dimensions: culmen 55 mm; bill depth at base 25 mm; flipper length 190 mm. This is the first record of the species in the southwestern Indian Ocean. The breeding localities of this penguin are the Bounty, Antipodes, Campbell and Auckland Islands (Warham 1975).

Immatures seem to disperse widely (Harrison 1983), and two stragglers have been recorded on the Falkland Islands (Strange 1982).

Antarctic Fulmar *Fulmarus glacialoides*

Five birds were found dead on the northeastern coast of Péninsule Courbet on 27 and 28 September 1987 and one in the southern part of the Plateau Central on 11 October 1986. Those with a well-preserved plumage were not moulting. Many sightings of this species were made offshore in 1986 and 1987. They concern isolated individuals or groups of four to five birds between the months of September and November. An exceptional group of 1 035 moulting birds was observed on 12 November 1987 in a fjord between îles Ste Lanne Gramont and Foch. These observations indicate that most of the birds observed at îles Kerguelen may be nonbreeders. Indeed, breeding birds generally return to the colonies in October (Mougin 1967). Bierman & Voous (1950) observed six birds at sea (57°30'S, 5°E) moulting their primaries at the end of December and the beginning of January, but the presence of brood-patches showed that they were probably unsuccessful breeders. In the Arctic or Northern Fulmar *F. glacialis*, breeding birds moult body feathers during incubation and primaries at the end of chick rearing (Carrick & Dunnet 1954). The Antarctic Fulmar is abundant at the end of the austral winter and in spring around the archipelago. This period of observation corresponds to the offshore records of Antarctic Fulmars off Heard Island (Downes *et al.* 1959), îles Crozet (Stahl *et al.* 1984), the Prince Edward Islands (William & Burger 1978, Gartshore 1987) and îles Saint-Paul and Amsterdam (Roux & Martinez 1987).

Antarctic Petrel *Thalassoica antarctica*

One individual was observed on 13 October 1987 flying with Pintado Petrels *Daption capense* near île Howe (48°35'S, 69°35'E) on the northern part of the archipelago. This species has previously been recorded at îles Kerguelen by Dujardin (1975) and

Thomas (1983). It has also been seen off îles Crozet (Stahl *et al.* 1984), the Prince Edward Islands (Gartshore 1987) and Heard Island (Downes *et al.* 1959).

SHOREBIRDS

Great Sandplover *Charadrius leschenaultii*

A group of three individuals was recorded on 24 August 1986 on the northeastern coast of the Péninsule Courbet. They were identified in the field from the colour pattern of the plumage and the size of the bill (Hayman *et al.* 1986) and careful analysis of a drawing has since confirmed the conclusion. This record is the first for îles Kerguelen. The species has never previously been reported in the southern Indian Ocean (Stahl *et al.* 1984, Gartshore 1987) but one sighting was made at île Amsterdam in October 1987 (B. Leroy pers. comm.).

Greenshank *Tringa nebularia*

Four individuals remained in the vicinity of the Port aux Français Station between 15 January 1988 and 20 January 1988. Eight Greenshanks were recorded on 17 March 1988 and four on 3 April 1988 at the same locality. A previous sighting was made on Péninsule Courbet on 22 January 1979 (Thomas 1983). This species has also been recorded on îles Crozet (Stahl *et al.* 1984), the Prince Edward Islands (Burger *et al.* 1980) and île Amsterdam (Roux & Martinez 1987).

Common Sandpiper *Actitis hypoleucos*

One sighting was made on 10 October 1978 in the south of the archipelago at Canyon des Sourcils noirs (Thomas 1983). The species has been recorded at îles Saint-Paul and Amsterdam, the Prince Edward Islands and îles Crozet (Stahl *et al.* 1984, Gartshore 1987, Roux & Martinez 1987).

Turnstone *Arenaria interpres*

This species has been recorded three times in 1986 on the eastern coast of the archipelago (Pointe Charlotte). Three individuals were observed on 29 January 1986, three on 29 July 1986 (one of which was in breeding plumage) and one on 19 September 1986, also in breeding plumage. Turnstones have not previously been recorded from îles Kerguelen but it is a regular visiting shorebird to îles Crozet (Stahl *et al.* 1984) the Prince Edward Islands (Burger *et al.* 1980, Gartshore 1987) and îles Saint-Paul and Amsterdam (Roux & Martinez 1987).

Curlew Sandpiper *Calidris ferruginea*

This shorebird was the most regularly recorded visitor to îles Kerguelen during 1986 and 1987. Groups of two to 11 birds were observed between Pointe Charlotte and Lac Marville between 29 January 1986 and 24 January 1987 (seven on 29 January 1986, six on 1 June 1986, four on 1 July 1986, 11 on 12 September 1986, three on 14 January 1987, two on 24 January 1987). One of the birds seen in June 1986 and four seen in July 1986 were in breeding plumage. One individual had been recorded previously on Péninsule Courbet on 10 October 1978 (Thomas 1983). This species is regularly recorded on île Amsterdam (Roux & Martinez 1987) and two sightings have been made at îles Crozet (Stahl *et al.* 1984).

Sanderling *Calidris alba*

One individual was observed on 24 January 1987 on the northeastern coast of the Péninsule Courbet, identified by the colour pattern of the winter plumage (Hayman *et al.* 1986). This is the first observation of this shorebird at îles Kerguelen. It has been reported from îles Saint-Paul and Amsterdam and îles Crozet (Roux & Martinez 1987, C.A. Bost & B. Lequette unpubl. data).

Broadbilled Roller *Eurystomus glaucurus*

One individual of this species was found dead, killed by a Subantarctic Skua *Catharacta antarctica*,

in November 1961 (Derenne *et al.* 1974). No details are available of the date or place.

DISCUSSION

Most of the vagrant seabirds recorded at îles Kerguelen are Antarctic breeding species (Table 1), and offshore observations in the Kerguelen sector in summer have provided no additional species (Stahl 1987). No seabirds that breed in the tropics or the northern hemisphere have so far been observed. In contrast, data from îles Crozet and the Prince Edward Islands, which are respectively only 3° and 2° of latitude to the north of îles Kerguelen, include numerous records of species breeding in the subtropics and the northern hemisphere, as well as three Antarctic species (Stahl *et al.* 1984, Gartshore 1987, Table 1). The Kerguelen archipelago lies on the APF which separates Antarctic and Subantarctic water masses (Deacon 1982). The APF appears to be an effective barrier to Adélie and Emperor Penguins, which have been recorded at îles Kerguelen and Heard Islands but not at the more northerly îles Crozet and Prince Edward Islands. The Chinstrap Penguin is also frequently observed at îles Kerguelen and Heard Island but is a rare vagrant visitor to îles Crozet and the Prince Edward Islands. The almost complete absence of vagrant seabirds other than Antarctic species on îles Kerguelen and Heard Island indicates that the APF also limits dispersal to the south of subtropical and northern hemisphere species.

Data on vagrant shorebirds and landbirds visiting sub-Antarctic islands in the southwestern Indian Ocean are summarized in Table 2 (no recent published data are available for Heard Island). All of them are African or Palaearctic breeders that winter in the southeastern part of the African Continent. Whereas most of the observations from îles Crozet were made during the southern spring and summer, shorebirds were recorded at îles Kerguelen all around the year.

The îles Kerguelen appear to receive a significantly lower number of species of vagrant shorebirds and landbirds than do îles Crozet, Saint-Paul and Amsterdam and, particularly, the Prince Edward Islands (Table 2). Because of the permanent westerly winds, landbirds are likely to reach îles Kerguelen only from the African Continent, which is much closer to the Prince Edward Islands, îles Crozet and Amsterdam than it is to îles Kerguelen. Moreover, since the îles Kerguelen are very large and inhabited on the eastern side only, the chances of seeing vagrant landbirds may be small even if there is greater opportunity for landfalls. Although very few vagrant landbirds apparently reach the archipelago, with only one record to date, shorebirds are regular visitors and some, like the Curlew Sandpiper, are probably able to overwinter. Two Turnstones are known to have spent three months from the end of January to the beginning of May at îles Crozet and to have attained breeding plumage (Stahl *et al.* 1984), but no records exist of overwintering by shorebirds at îles Crozet, Saint-Paul and Amsterdam or the Prince Edward Islands (Burger *et al.* 1980, Berruti & Schramm 1981, Newton *et al.* 1983, Stahl *et al.* 1984, Gartshore 1987, Roux & Martinez 1987). Overwintering may occur at îles Kerguelen due to their large size and to the presence of the Péninsule Courbet, which comprises a large, flat and marshy lowland with numerous ponds.

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TABLE 1

RECORDS OF IDENTIFIED VAGRANT SEABIRDS AT SUB-ANTARCTIC ISLANDS IN THE SOUTHWEST INDIAN OCEAN

Species	Prince Edward Islands (a)	îles Crozet(b)	îles Kerguelen	Heard Island(c)
ANTARCTIC SEABIRDS				
Emperor Penguin <i>Aptenodytes forsteri</i>			+	+
Adélie Penguin <i>Pygoscelis adeliae</i>			+	+
Chinstrap Penguin <i>P. antarctica</i>	+	+	+	+
Antarctic Fulmar <i>Fulmarus glacialis</i>	+	+	+	+
Antarctic Petrel <i>Thalassoica antarctica</i>	+	+	+	+
Snow Petrel <i>Pagodroma nivea</i>				+
SUBANTARCTIC SEABIRDS				
Royal Albatross <i>Diomedea epomophora</i>	+			
Blackbrowed Albatross <i>D. melanophris</i>	+	breed	breed	breed
Shy Albatross <i>D. cauta</i>	+	"		
Pintado Petrel <i>Daption capense</i>	+	"	breed	breed
Whiteheaded Petrel <i>Pterodroma lessonii</i>	+	"	"	"
Dove Prion <i>Pachyptila desolata</i>	+	"	"	breed
Wilson's Stormpetrel <i>Oceanites oceanicus</i> (d)	+	"	"	"
SUBTROPICAL SEABIRDS				
Erectcrested Penguin <i>Eudyptes sclateri</i>			+	
Whitenecked Petrel <i>Pterodroma externa</i>		+		
Great Shearwater <i>Puffinus gravis</i>		+		
Sooty Shearwater <i>P. griseus</i>	+	+		
Little Shearwater <i>P. assimilis</i>	+	+		
Australasian Gannet <i>Sula sarrator</i>	+	+		
NORTHERN HEMISPHERE SEABIRDS				
Cory's Shearwater <i>Calonectris diomedea</i>	+			
Grey Phalarope <i>Phalaropus fulicarius</i>	+			

Arctic Skua <i>Stercorarius parasiticus</i>	+			
Lesser Blackbacked Gull <i>Larus fuscus</i>	+			
Franklin's Gull <i>L. pipixcan</i>	+			
Sabine's Gull <i>L. sabini</i>	+	+		
Arctic Tern <i>Sterna paradisaea</i>	+	+		
<hr/>				
Total no. of identified taxa	20	10	6	6

- (a) Williams & Burger 1978, Cooper 1984, Gartshore 1987
 (b) Stahl *et al.* 1984
 (c) Downes *et al.* 1959
 (d) also an Antarctic breeding species

TABLE 2

RECORDS OF IDENTIFIED VAGRANT LANDBIRDS AT ISLANDS IN THE SOUTHWEST INDIAN OCEAN

Species	îles Saint-Paul and Amsterdam(a)	Prince Edward Islands(b)	îles Crozet(c)	îles Kerguelen
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SHOREBIRDS

White Stork <i>Ciconia ciconia</i>		+		
Cattle Egret <i>Bubulcus ibis</i>	+	+	+	
Blackcrowned Night Heron <i>Nycticorax nycticorax</i>	+			
Yellowbilled Egret <i>Egretta intermedia</i>		+		
Eleonora's Falcon <i>Falco eleonorae</i>	+			
Falcon <i>Falco</i> sp.		+		
Ringed Plover <i>Charadrius hiaticula</i>		+		
Threebanded Plover <i>C. tricoloris</i>		+		
Great Sandplover <i>C. leschenaultii</i>	+(d)			+
Terek Sandpiper <i>Xenus cinereus</i>		+		
Turnstone <i>Arenaria interpres</i>	+	+	+	+
Blacksmith Plover <i>Vanellus armatus</i>			+	
Whimbrel <i>Numenius phaeopus</i>	+	+	+	
Bartailed Godwit <i>Limosa lapponica</i>	+			
Greenshank <i>Tringa nebularia</i>	+	+	+	+
Common Sandpiper <i>T. hypoleucos</i>	+	+	+	+

Greytailed Tattler <i>T. brevipes</i>	+			
Wood Sandpiper <i>T. glareola</i>		+		
Knot <i>Calidris canutus</i>	+			
Sanderling <i>C. alba</i>	+		+(e)	+
Curlew Sandpiper <i>C. ferruginea</i>	+		+	+
Little Stint <i>C. minuta</i>		+		
Pectoral Sandpiper <i>C. melanotos</i>		+		

LANDBIRDS

	introduced		breeds	breeds
Kerguelen Pintail <i>Anas eatoni</i>		+		
Lesser Cuckoo <i>Cuculus poliocephalus</i>	+			
Redchested Cuckoo <i>C. solitarius</i>	+			
African Cuckoo <i>C. gularis</i>		+		
European Cuckoo <i>C. canorus</i>			+	
Broadbilled Roller <i>Eurystomus glaucurus</i>				+
European Swift <i>Apus apus</i>		+		
Sand Martin <i>Riparia riparia</i>			+	
European Swallow <i>Hirundo rustica</i>		+		
Cape Turtle Dove <i>Streptopelia capicola</i>		+		
Laughing Dove <i>S. senegalensis</i>		+		
Willow Warbler <i>Phyllosopus trochilus</i>		+		
Yellow Wagtail <i>Motacilla flava</i>		+		
Mountain Chat <i>Oenanthe monticola</i>		+		
Redbacked Shrike <i>Lanius collurio</i>		+		
Flycatcher <i>Muscicapa (striata ?)</i>		+		
House Sparrow <i>Passer domesticus</i>		+		
Pipit <i>Anthus</i> sp.			+	
Total no. of identified taxa	15	26	11	7

- (a) Roux & Martinez 1987
 (b) Burger *et al.* 1980, Berruti & Schramm 1981, Newton *et al.* 1983, Gartshore 1987
 (c) Stahl *et al.* 1984
 (d) C.A. Bost & B. Lequette, unpubl. data
 (e) B. Leroy, unpubl. data

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Figure 2

Erectcrested Penguin *Eudyptes sclateri*, Cap de Rohan, îles Kerguelen, photographed on 22 February 1986