

# Bulletin of the BRITISH ORNITHOLOGISTS' CLUB

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The seven hundred and fifty-eighth Meeting of the Club was held in the Senior Common Room, South Side, Imperial College, London, S.W.7 on Tuesday, 2 April 1985 at 7 p.m. The attendance was 28 Members and 20 guests.

Owing to the Underground strike expected to take place on Tuesday, 21 May 1985, the Meeting of the Club due to be held that evening had to be cancelled and we look forward to the presence of Mr W. H. M. Wilkinson as speaker at a later date.

## ANNUAL GENERAL MEETING

On Tuesday, 21 May 1985 at 6 p.m. at Imperial College, Prince's Gardens, London, S.W.7 the Hon. Treasurer, Mrs Diana Bradley took the Chair and formally adjourned the Meeting until 6 p.m. on Tuesday, 2 July 1985 at the Senior Common Room, South Side, Imperial College, Prince's Gardens, London, S.W.7.

Members present were: B. GRAY (*Chairman*), P. J. BELMAN, K. F. BETTON, Mrs DIANA BRADLEY, P. A. BROWN, D. R. CALDER, R. D. CHANCELLOR, N. J. CROCKER, R. J. DOWSETT, J. H. ELGOOD, A. GIBBS, Revd. T. W. GLADWIN, D. GRIFFIN, P. HOGG, T. J. JAMES, R. H. KETTLE, J. KING, S. MARCHANT, Revd. G. K. McCULLOCH, Mrs AMBERLEY MOORE, A. G. MOORE, P. J. OLIVER, R. E. F. PEAL, P. S. REDMAN, Revd. Dr W. SERLE, S. A. H. STATHAM, N. H. F. STONE and C. E. WHEELER.

Guests present were: Mrs S. BETTON, D. BRADLEY, G. CLOAKE, Miss V. COX, M. DOUGLAS, Dr FRANÇOISE DOWSETT-LEMAIRE, Mrs SUSAN FUCHS, Mrs J. M. GLADWIN, Mr & Mrs J. B. HEIGHAM, Mrs CHRISTINE JAMES, R. LEACH, Mr & Mrs G. P. M. McCULLOCH, Miss I. E. M. McCULLOCH, Mrs I. M. McCULLOCH, A. J. RANDALL, Mrs HILARY TYE, J. VAUGHAN and Mrs C. E. WHEELER.

Dr Françoise Dowsett-Lemaire and Mr R. J. Dowsett spoke on A Survey of the Endangered Forest Birds of Malawi and illustrated their addresses with slides and sound recordings, using their considerable knowledge of the birds and of the habitats to make very clear what was involved. An abstract will appear in a future number of the *Bulletin*.

## A new race of Audubon's Shearwater *Puffinus lherminieri* breeding at Moheli, Comoro Islands

by M. Louette & M. Herremans

Received 14 August 1984

Moheli, the smallest of the 4 main islands in the Comoro archipelago has a forested dorsal ridge, upon which is situated the "Chalet St Antoine II" at nearly 700 m asl. This is a cabin with a meteorological station, owned by R. Legrand of Miringoni, and graciously made available by him for the Second Belgian Zoological Expedition. During our stay, loud calls were repeatedly heard on the evenings of 6, 7 and 8 November 1983 which could be rendered as "tche-reh-tè", 3-5 times consecutively, *ad nauseam*. The calls occurred after dark between c. 19:00 and 20:00, occasionally later at night and again before dawn, and were obviously uttered by nocturnal seabirds flying rather low over the vegetation. The birds, however, could not be seen well in the darkness and the steep-sided and forested surroundings, nor did they show themselves over the ridge or the chalet itself. What were without doubt the same calls had been heard already before at this locality by other members of the expedition on 29 and 30 September 1983 and over many years by R.



Legrand himself, who also informed us that he once picked up a seabird, about 9 November 1968, after it collided with the chalet. It can be assumed safely that the screaming behaviour on Moheli is related to breeding activities (cf Penny 1974, on the Seychelles). On the night of 9 November 1983, after a clearing had been cut through the vegetation downhill and north from the chalet, we were both looking for the birds when at 18:43 the first one arrived directly above us, circling at c. 10 m above the ground and repeatedly screaming as described above. The bird was shot, but it was found only the next morning after its head and neck had been partly eaten by a nocturnal animal. Several other birds were heard later that evening and again on the nights of 10 and 11 November.

The specimen belongs to the shearwater group of *Puffinus lherminieri* and *P. assimilis*, considered nowadays as different species (see Jouanin & Mougin 1979), of which the tropical races are all included in *lherminieri*, including the nominate race from the Caribbean, and called Audubon's Shearwater. *P. lherminieri* has not previously been found in the Comoros (Benson 1960), although there is an observation on 20 July 1970 at sea (13°S, 44°15'E, c. 80 km SE of Moheli) by Lofgren (*in* Bourne & Dixon 1975) attributed to it.

In the western Indian Ocean, Jouanin (1970) recognizes the race *bailloni*, with a completely white undertail, as breeding on the Mascarenes, whereas the Maldives, Seychelles, Amirantes and Aldabra are inhabited by the race *nicolae*, with mainly brown undertail coverts, the Seychelles population being smallest and those from Aldabra and the Maldives somewhat larger, tending in size towards the even larger *bailloni*. Both these subspecies possess a white underwing. M.L.'s measurements are given in Table 1, but for a larger sample see Jouanin (1970). The Moheli bird agrees with *nicolae* in its dark undertail coverts, but it is remarkable in having a darker "cloudy" underwing (Fig 1), which is also found, but to a lesser extent, in the race *persicus* of which there exist only very few specimens, and is not discussed by Jouanin. *P.l. persicus* occurs from Somalia to northwestern India, though the Indian birds may in reality belong to *nicolae* (W. R. P. Bourne). Breeding colonies have been discovered only recently on the Kuria Muria Islands near the Arabian peninsula (Gallagher & Woodcock 1980, Gallagher 1983). It is distinctly shorter tailed than the Moheli bird and also has apparently a finer bill: bill depth distal to the nostril in 2 specimens 6.5, 7 mm, whereas the Moheli specimen measures 8 mm, and *bailloni* and *lherminieri* c. 7-8 mm. However, different methods of preparation of skins make it difficult to take this measurement consistently in the same way. Nominate *lherminieri*, geographically still farther away, agrees best in measurements with the Moheli specimen, but it has a white underwing. However, on geographical grounds, if all these races belong indeed to one species, one would assume the Comoro population to be closest to *nicolae* or *bailloni*, not to *persicus* or *lherminieri*. It is however an isolate, with a unique combination of characters, viz. rather large size and cloudy underwing. The only other shearwaters with cloudy underwings in this group occur in the Pacific: in *dichrous*, of which M.L. measured several (only one with dark underwing, see Table 1); apparently in *polynesiae*, considered a synonym of *dichrous* by Jouanin & Mougin (1979) (several measured from French Polynesia but none of these very "cloudy"); and in the short-tailed *subalaris* from the Galapagos (see Murphy 1927 and Harris 1969, the latter indicating much variation in underwing colour).



Table 1. Measurements (in mm to nearest 0.5 mm) of *P. lherminieri* subsp.

Races, localities, catalogue-numbers ♂ = male; ♀ = female; o = unsexed	Wing chord	Tail	Tarsus	Middle toe with claw	Total culmen	Culmen from nostril
<b>nicolae</b>	<b>Seychelles</b>					
8 ♂♂						
BMNH 1939.12.9.2966	187, 193, 189, 185.5	75, 76, 75, 74, 73.5,	38.5, 37.5, 39.5,	42, 39.5, 41.5, 38,	26.5, 27.5, 27.5,	20, 21, 21, 20.5, 21,
BMNH 1878/1051, 1069;	189, 195.5, 181, 193.5	74.5, 75.5, 77	35.5, 37, 38, 37,	40.5, 40.5, 42, 40.5,	25.5, 27, 28.5, 26.5,	22, 21, 20.5
1949/526;			38		26	
RNL 5951/1; 9701/4, 6, 7						
3 ♀♀						
BMNH 1878/1057; 1914/37	185, 186.5, 189	67, 73, 74.5	37.5, 36, 39.5	39, 41.5, 44	26, 26.5, 29	20, 21, 22.5
RNL 9701/5						
1 o						
RNL 9701/2	197	78.5	37.5	43	28	22
	<b>Laccadives</b>					
1 ♂						
RNL 6036	185	73.5	38.5	36.5	28.5	21
	<b>Réunion</b>					
6 ♂♂						
BMNH 1966/2416, 2417,	199.5, 198, 206, 205,	76, 77, 79.5, 81.5,	37.5, 38, 40, 40.5,	43.5, 44, 44, 44.5,	29, 31, 31, 29, 30,	22, 22.5, 23, 23, 22,
2419, 2420, 2421, 2426	200, 204.5	74, 80	39.5, 40	44.5, 44	29.5	23
1 ♀						
RNL 2	198	79	—	—	29.5	23
4 oo						
KBIN 58073; 60207; 60208;	204, 203, 200, 205.5	79, 78.5, 74.5, 80	42, 40, 42, 38.5	42, 46, 43.5, 40.5	31, 29.5, 28.5 28.5	22, 23, 22, 22
60209						
	<b>Mauritius</b>					
1 o						
KBIN 10556	205	76	42	—	28.5	22.5
	<b>persicus</b>					
1 ♀						
USNM 571356	197.5	70.5	40	42	32.5	25
	<b>Somalia</b>					
2 ♂♂						
BMNH 1962.9.2;	203, 213	74, 74	39.5, 40	45, 43	32.5, 31	25, 24.5
97.11.29.5						
	<b>Aden</b>					



1 ♂ BMNH 1976.1.27	Oman	199.5	72	39.5	42	33	25.5
1 ♀ BMNH 91.5.20.871	Mekran	197.5	69.5	38	42	—	—
4 ♂♂ KBIN 44333 MNHN 1952/689, 690, 693	Iherminieri Caribbean	198, 198.5, 198, 204	84.5, 84, 86, 84.5	40, 40, 41, 41	46, 45, 47, 46.5	29, 28.5, 29.5, 29	23, 24, 23.5, 23
2 ♀♀ KBIN 44331 MNHN 1952/691		206, 206	91, 94	40.5, 41.5	43, 46.5	31, 28.5	25, 23
1 ♂ RNL 5147	boydi Atlantic near Cape Verde	182	78.5	38	40.5	—	21
1 ♂ MNHN 1976/252	dichrous Marquesas	194	84.5	37.5	40	26.5	21
3 ♀♀ MNHN 1976/249, 250, 251		197.5, 199, 187	77, 81.5, 82	39, 38.5, 36.5	39, 37, 37.5	27.5, 27.5, 26	21, 22, 21
3 ♂♂ RNL 7: 1/6, 3/8		209, 207, 197	79, 84.5, 81.5	37, 38, 38.5	42.5, 41, 43	27.5, 26.5, 26	21.5, 22, 21
7 ♂♂ MNHN 1966/1826, 1827; 1967/101, 105; 1969/ 308, 309	"polynesiae" French Polynesia	195, 197, 192, 189, 196, 195, 192	80, 82, 78.5, 76 82.5, 80, 80	41, 42, 41, 38, 39, 40, 39	41, 44, 40, 42, 42.5, 41, 39	28, 26.5, 28, 26.5, 27.5, 27, 27	22.5, 21.5, 22.5, 21, 22.5, 22, 21.5
1 ♂ KMMA 83.43.A.756	temptator Moheli	>(203)	86	40.5	43	(31)	23.5



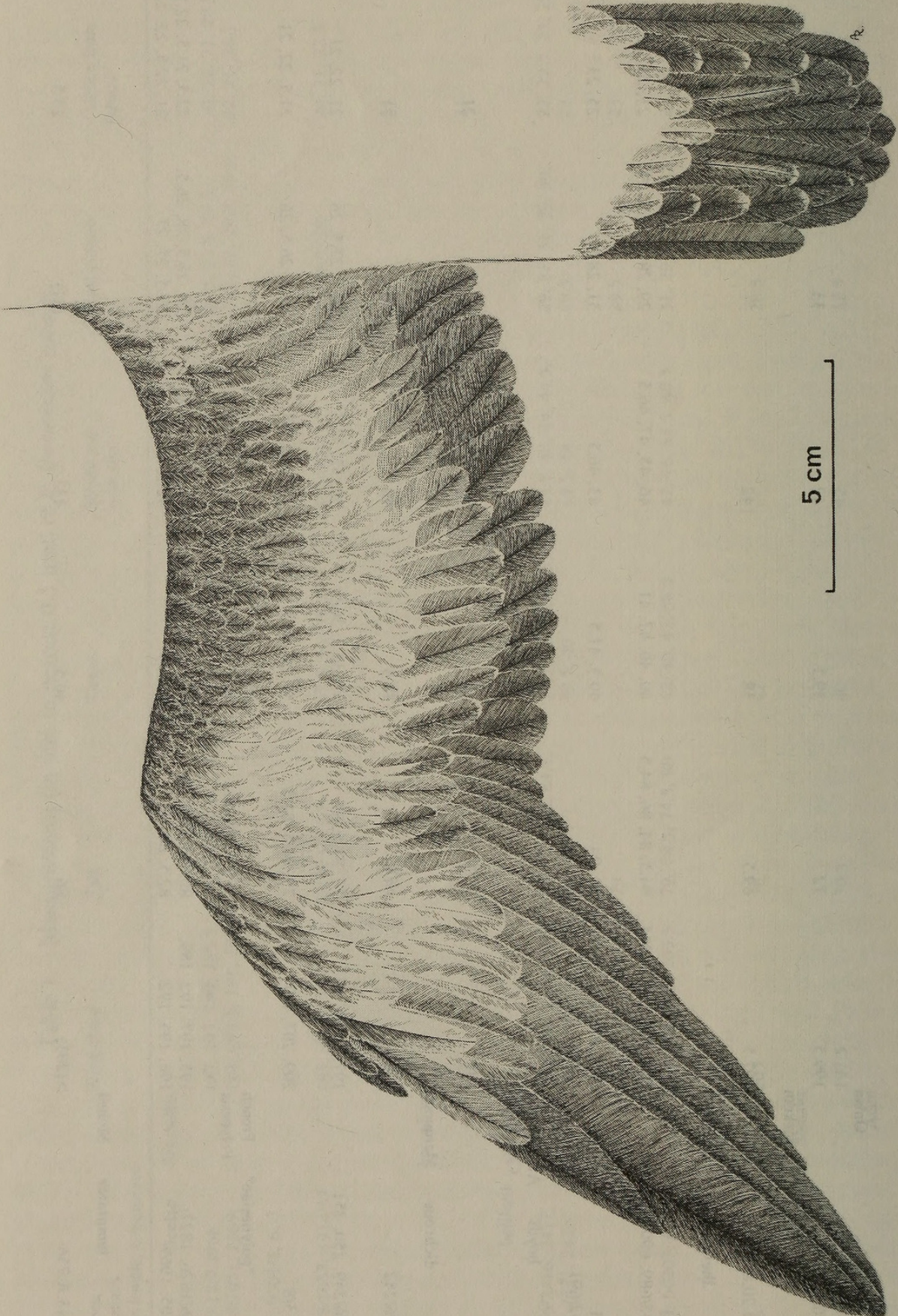


Figure 1. Right underwing and undertail of *P.l. temptator* (subsp. nov.).



Although the first 2 of these Pacific races generally also possess rather long tails, they all have smaller bills and our specimen cannot possibly be united with them.

The Moheli specimen is moulting the outermost primary. In the other races this primary, or more rarely the second, is found to be the longest, whereas the wing-chord measured on the Moheli bird is obtained from the third outermost primary. The difference between the longest and the third is found to vary from 6.5 mm to as much as 14 mm in *bailloni*, *nicolae* and *persicus*. It must be assumed therefore that actual wing-chord could be several mm longer than the 203 mm measured in our Moheli specimen. (Incidentally, the fact that a bird screaming in the neighbourhood of its nesting hole is replacing its final (outermost) primary seems to indicate that it was about to start breeding – see Harris 1969 on Galapagos birds.) We are convinced there is enough evidence to name the Moheli specimen

### *Puffinus lherminieri temptator* subsp. nov.

*Description.* General colour dorsally black, fading gradually to brownish black during the months after collection. Crown and sides of head also black with a few whitish feathers in the region above the eye towards the bill. The whole underside, starting from a line approximately through the eye, white. Sides of breast and upper flanks dark blackish. Undertail coverts white (shortest) and black with whitish tips (longest). Underwing coverts white with dark points ("cloudy") and leading edge dark (Fig 1). No other specimen examined is so dark under the wing. Axillaries dark.

*Distribution.* Only known from the ridge of Moheli Island. Several observations in Comoro waters of similar birds refer probably to this population (see Draulans *et al.* in press). Similar habitat on nearby Anjouan (Gouniyagnombé) prospected for several nights (24-28 October 1983), was at that time unoccupied by shearwaters.

*Holotype.* No. 83-43-A-756 in Koninklijk Museum voor Midden-Afrika, Tervuren, Belgium. From near Chalet St Antoine II, Moheli, Comoros at 12° 17'S, 43° 40'E at c. 670 m asl, 9 November 1983. Dried after formalin injection.

*Measurements of holotype.* Wing (chord) 203 mm (but outermost primary only half grown, actual chord probably several mm larger, see above); tail 86 mm; tarsus 40.5 mm; middle toe with claw 43 mm; total culmen 31 mm (but nostrils almost completely destroyed so that this measurement is possibly inaccurate); culmen from nostril 23.5 mm; depth of bill at nostril 8 mm. Weight on 10 November: 175 g.

*Colours of soft parts.* Legs bicolored: outer side of tarsus and toes black, inner side bluish flesh (respectively 3/0 and 8/0 in Munsell 1954). Inner toe of right leg missing due apparently to congenital deformity. Bill: bluish grey (7.5 y R 7.5/0) in Munsell (1954). Iris: dark, circled pale blue.

*Etymology.* It is said that St Anthony was subject to many temptations.

*Material examined.* All available specimens of *Puffinus lherminieri* and *P. assimilis* were examined in the Muséum National d'Histoire Naturelle, Paris (MNHN), the Rijksmuseum voor Natuurlijke Historie, Leiden (RNL) and the Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussels (KBIN); one *persicus* was received on loan from the Smithsonian Institution,



Washington (USNM) and 4 *persicus* and one *nicolae* from the British Museum (Natural History), Tring (BMNH). Specimens measured for this study appear in Table 1.

*Voice analysis.* Several recordings of the screams mentioned above were made near St Antoine and 3 types are rendered in Fig 2. A weak recording, made by Jadin & Billiet (1979) on Réunion was also studied. Structurally, to our ears, both races seem to utter rather similar sounds. The race *bailloni*'s scream is however lower pitched (about 400 Hz) and both syllables appear to be longer and more separated, making a phrase lasting about 50% longer than in the *temptator* records. The variation found in *temptator* may be due to sexual or other individual difference and therefore detailed comparison with *bailloni* must be postponed until more recordings of several individuals become available.

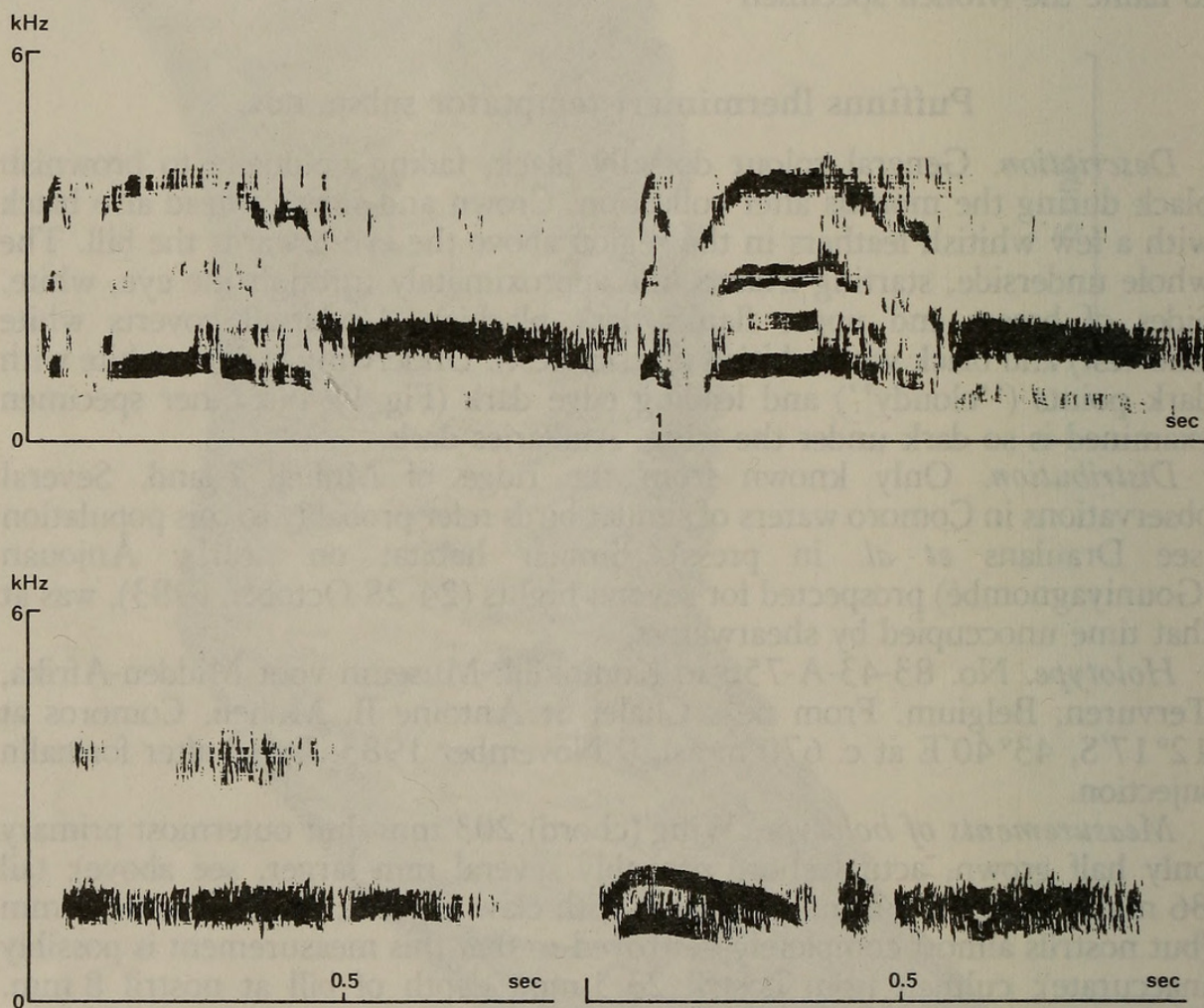


Figure 2. Sonagram of 3 types of call of *P.l. temptator*, type 1 also showing time between phrases.

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Addresses: Dr M. Louette, Koninklijk Museum voor Midden-Afrika B-1980 Tervuren, Belgium. M. Herremans, Labo voor Physiologie der huisdieren. Katholieke Universiteit Leuven, 3030 Heverlee, Belgium.

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## Notes on some Brazilian seabirds

by Dante Martins Teixeira, Jorge B. Nacinovic  
& Ronaldo Novelli

Received 23 August 1984

In the last decade we have accumulated some observations on Brazilian seabirds, based mainly on specimens deposited on beaches by bad weather. In addition, study of the little seabird material available in Brazilian ornithological collections surprisingly has revealed a number of misidentifications, some of them already absorbed into the South American ornithological literature. Thus, it seems to be necessary to clear up the existing mistakes and also to comment on the new data obtained. For specimens in Brazilian ornithological collections we have used the initials MN (Museu Nacional) and MZUSP (Museu de Zoologia da Universidade de São Paula) with the respective catalogue number of each institution.

### GREY-HEADED ALBATROSS *Diomedea chrysostoma*

In Brazil recorded only off the coast between São Paula and Santa Catarina (24°–27°S—*fide* Sick 1979). However, we obtained a specimen (MN 33293) from Barra da Tijuca, Rio de Janeiro (c. 23°S) in September 1983.

### GREAT-WINGED PETREL *Pterodroma macroptera*

Blake (1977) noted that South American records of this species are erroneously credited to *Pterodroma brevirostris* in many works (Pinto 1938, 1964, 1978, Meyer de Schauensee 1966, etc). Apart from sight records, the occurrence of the Great-winged Petrel in Brazil seems to be based on 2 skins from Santos, coastal São Paulo (c. 24°S; *fide* Pinto 1938, Meyer de





Louette, Michel and Herremans, M. 1985. "A NEW RACE OF AUDUBONS SHEARWATER PUFFINUS-LHERMINIERI BREEDING AT MOHELI COMORO ISLANDS." *Bulletin of the British Ornithologists' Club* 105, 42–49.

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