A HIGH FLIGHT OF BLACK SWAN.

By L. R. Richardson, Victoria University College, Wellington.

A flight of migrating birds which can be reasonably identified as black swan was observed over Wellington Harbour in the pre-dawn light at 7.10 a.m. on June 21, 1954. The sky was brightening in the first light, clear excepting for streaks of alto-cirrus, and some sparse low scud at 1,000 feet. While watching soaring black-backed gulls over Kelburn, a small dark patch of irregular and changing shape was detected in peripheral vision. This first sight placed the patch in the vicinity of Worser Bay and near the eastern shore of the harbour. It was then at approximately four times the altitude of the eastern ranges, which can be taken as giving a general skyline at 2,500 feet. The light beyond the hills threw the patch into high relief and with binoculars it could be seen as a compact group of large birds flying with a leisurely wing-beat on a track close to true north. The formation of the flight was not constant. There was no indication of a leader, and the general appearance was somewhat that of a small evening flight of starlings since there was a movement of the mass of the birds through various formations which, seen from the left and below, held closely to altitude and track although changing in formation, occasionally swinging from square to triangular and often with an irregular front.

The formation was so far away that individual birds were visible only at the margin of the formation and not in the main body. By diagrammatic representation of several formations as scattered dots, the agreeing density indicates at least 50 to 70 birds were present in the flight. Using the observed elevation above the skyline which is about 13 miles from the observation point and a track passing over Somes Island where a good vertical orientation was possible, the true altitude of the formation can be set at 6-13ths of the extended skyline elevation. This places the formation at a minimum height of 4,500 feet. The flight was in sight for six minutes and became invisible beyond Somes Island with the strengthening of first light.

The altitude and track indicate an origin of the flight in the South Island. The observed track gives no satisfactory point of departure but is suitable for a flight to Porirua Harbour. The time of sighting establishes that the flight had commenced well before first light. The ground speed estimated from the distance covered and time between first sight and last sight is of the order of 25 miles per hour. The nearest probable points of departure from the South Island are 45 to 50 miles away and the indication is then of a starlight flight commencing not later than 5 a.m.

The description of the formation was referred to Dr. R. A. Falla, who confirms the probability that this was a flight of black swan.

REVIEWS.

Ashton, E. H. Third Progress Report. Bird Ringing, 1951-1952. The Ostrich, XXV., No. 1, Feb. 1954, 2 - 12.

The progress of bird ringing in the Union of South Africa—the area of operations extends in fact from Rhodesia to Marion Island and Tristan da Cunha in the subantarctic—is well summarised in the abovementioned report. Twelve thousand rings were issued, nearly half as many again as in the previous year, and over 5,000 were used. The rate of recovery is regarded as disappointingly low, but reasonable in view of the composition of the human population. The author of the report suggests that the time has come to consider limiting ringing to those species that may be expected to give better returns, namely, those that can be ringed in large numbers, such as herons, cormorants, gannets, swifts, swallows, queleas, and those likely to be readily recovered such as birds of prey and game birds.

Some of the recovery records, notably those of petrels and gannets, are of interest as directly comparable to those obtained for the same or

allied species in New Zealand. Thus mollymawks and Cape hens ringed near Table Bay were recaptured a year later within a hundred miles of the point of ringing. Two Cape gannets, ringed as fledglings on Malgas Island in January, 1952, were recovered on 1st July, 1952 off Benguella, some 1400 miles N.N.E. This is comparable with the movement to Australia of young New Zealand gannets, though capensis presumably follows a coast line all the way and reaches more tropical water than serrator has yet been shown to do.—R.A.F.

Ornithological Material from the Transit of Venus Expedition (1874) St. Paul Island Station, by C. Jouanin. (Bull. Mus. d'Hist. Nat. (Paris), Vol. 25, No. 6, 1953). (In French.)

An inventory of specimens remaining in the Paris Museum, unfortunately after much over-generous dispersal (Otago Museum was one recipient) and some loss of original labels. The birds were not the subject of a special expedition report. The expedition was at St. Paul from October 4, 1874, till January 4, 1875 and the naturalists visited New Amsterdam during this time but obtained no known bird material. Lantz, the chief worker on birds, made extensive collections now mostly dispersed.

Four St. Paul and two New Amsterdam skins of rockhopper penguins confirm Falla's views on the subspecific differences between the Tristan-St. Paul-New Amsterdam populations (moseleyi) and those of Kerguelen and Campbell Island. E. c. moseleyi breeds more than a month earlier than Falkland Island birds, and more than two months earlier than Kerguelen, Heard and Macquarie Island birds. A single (unsexed) albatross is attributed to Diomedea exulans exulans (wings 632, culmen 165.5 mm.) but is apparently not a breeding species. Several specimens each of blackbrowed, grey-headed and yellow-nosed mollymawks are listed. The last is generally admitted as a breeder at St. Paul, even if Pelzeln's text, on which the record depends, is not adequately explicit. Skins and eggs of Phoebetria fusca confirm its breeding at St. Paul. The expedition recorded Procellaria cinerea (of which an undated skin remains) as quite rare, in small flocks appearing only on December evenings. Jouanin suggests this represents early reconnaissance flights by individuals intending to nest the following autumn, but there is no proof of breeding.

Broad-billed prions are represented by five eggs and the following seven specimens, welcome additions to our knowledge of the St. Paul subspecies, Pachyptila vittata macgillivrayi (Mathews) previously known to most writers from the single type.

			/F				Width
		Wing.	Tail.	Tarsus.	Mid Toe.	Culmen.	of Bill.
Adult mal	le, Oct 20	212	105	35	40	32.5	19.4
		204	97	33. 5	42	32	19.2
Male		200	102	32	39	30	17.5
Male	Dec. 11	199	100	33. 5	40.5	33	17.2
Female		196	97	31	38.5	29.5	17.2
	_	197	98.5	34	37.5	31.5	16.3
	_	209	102	34	40.5	31.5	16.2

Unfortunately, Jouanin could not follow Falla in his subtle distinction of adults from juvenals but he assumes the October specimen, at least, to be adult, confirming the alleged smaller bill size of the subspecies.

- St. Paul skuas are put in the circumpolar subspecies lonnbergi. A series of Antarctic terns, attributed to Sterna vittata tristanensis Murphy, includes moulting yearlings.
- St. Paul's bird life had probably already suffered from human exploitation and introduced animals before 1874. Jouanin lists additional species reported in the literature but lacking specimens to vouch for their validity as inhabitants of the island.—C.A.F.