Our daily records on the size and composition of flocks, summarized in Fig. 1, differ from those reported by Leopold (1948) for Agriocharis in southern México during November and by Steadman et al. (1979) for breeding flocks at Tikal in February–March. Leopold observed 12 mixed flocks of hens and gobblers, ranging in size from 3 to 10 birds, as well as several single adult males and a pair of adult males. He suggested that segregation of hens and young from old males does not occur in winter populations of Ocellated Turkeys, a situation unlike that of its northern relative, Meleagris gallopavo, in which marked segregation of sexes is almost universal (Bailey and Rinell 1967). Steadman et al. (1979) present results on flock composition from 24 February to 15 March that are similar to those of Leopold; there is a decline in the average flock size, however, from 10.6 birds during 6–15 March to 2.9 birds during 5–13 April. This decline is attributed to adult males becoming more solitary with the onset of strutting and gobbling and to females leaving the flock to begin egg laying. By contrast, our results for January show no mixed flocks of hens and adult males, although the average flock size (2.8 birds) is similar to that reported by Steadman et al. for 5–13 April (2.9 birds). All sightings made in the vicinity of the ruins were males, either solitary, in pairs, or trios, and the only mixed groups were two flocks of hens with young found near the airstrip. Females were never seen alone. According to local residents, adult females and their young spend most of the year deeper in the jungle, returning to open areas only during the breeding season. This account is consistent with our own observations on the sociality of the species and suggests a social system similar to that of the Common Turkey (Meleagris gallopavo).

We thank John Terborgh, Joan Hall, David Tonkyn, and Blaine Cole for their aid in the field work and in providing identifications of plants and insects. Stephen Eaton and David Steadman offered useful criticism on an earlier draft. This work was supported by NSF Training Grant SMI 7707900.

LITERATURE CITED


Received 17 July 1979, accepted 13 October 1980.

New Southerly Record for the Macaroni Penguin (Eudyptes chrysolophus) on the Antarctic Peninsula

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Dispersal of northern birds into the Antarctic Peninsula region has long interested biogeographers (e.g. Darlington 1965), and evidence of southerly range extensions are of note. This paper reports on the southernmost confirmed collection of a Macaroni Penguin (Eudyptes chrysolophus) and discusses the significance of this observation with studies from other locales.

According to Watson (1975), the breeding range of the Macaroni Penguin is confined to South Georgia Island, the South Orkney, South Sandwich, and northern South Shetland islands, with additional colonies on Bouvet, Crozet, Heard, Kerguelen, Macquarie, Marion, and Prince Edward islands. Although Hold-
gate (1963) reported a Macaroni Penguin on Humble Island near Palmer Station (64°46'S, 64°03'W), Parmelee et al. (1977) list this record as hypothetical.

On 3 March 1979, an adult female Macaroni Penguin in heavy molt was captured on Humble Island (sex of the bird was determined by examination of remnants of an ovary and by bill size). Ten days before, Bernstein had sighted a Macaroni Penguin, possibly the same individual, on Cormorant Island, 6 km to the southeast. The specimen is now housed in the James Ford Bell Museum of Natural History, University of Minnesota.

These observations reflect a possible range extension of the Macaroni penguin southward that is supported by the discovery of a few nests on King George Island (62°10'S, 58°28'W), reported by Polish researchers at Arctowski Station in austral summer, 1979–1980 (Arctowski Station pers. comm.). With the exception of a possible colony on Macaroni Point, Deception Island (58°S, 62°40'W) (Parmelee pers. comm.), the King George Island nests are the southernmost breeding population of Macaroni Penguins that we know of on the Antarctic Peninsula. As Macaroni Penguins feed almost exclusively on krill (Euphausia sp.) (Croxall and Prince 1980), these observations may reflect changing abundances of krill, as discussed by Trivelpiece and Volkman (1979) in reference to an increase in numbers of Chinstrap Penguins (Pygoscelis antarctica). Given these observations, populations of Macaroni Penguins should be closely monitored along with other penguin species in conjunction with planned Antarctic biomass studies.

This study was supported by N.S.F. grants DPP77-22096 to D. F. Parmelee and DPP77-21861 to D. E. Murrish. The crew of Palmer Station receives our thanks for their assistance, with special acknowledgment to P. Moriarty.

LITERATURE CITED


Received 11 February 1980, accepted 20 November 1980.