

Wounds Due to Flipper Bands on Penguins.—Penguin population studies require flipper banding to obtain information on known-age birds. With the increasing interest in research on Antarctic penguins, more scientists will initiate banding programs. Sladen (1952) designed adequate flipper bands without safety fasteners and today these can be obtained commercially. However, at least in one large penguin colony, a different type of flipper band has been used extensively. These metal rings have safety fasteners that flatten to form a projection anterior or posterior to the flipper and fit the flipper close to the humeral articulation. This type of flipper band frequently causes severe injury to the birds regardless of how it is applied (Figs. 1 and 2) and can attract predators or result in death of the banded individual.

During the 1979–1980 reproductive season a research team from the German Democratic Republic applied a total of 491 such flipper bands: 7 on Adelie Penguins (*Pygoscelis adeliae*), 34 on Gentoo Penguins (*P. papua*), and 450 on Chinstrap Penguins (*P. antarctica*) at Ardley Island (62°13'S lat., 58°56'W long.), South Shetland Island Antarctic. In the following breeding season 1980–1981, 112 additional flipper bands were applied, 77 on Adelie Penguins and 37 on Gentoo Penguins (Bannash and Oddening 1981, Bannash and Lundberg 1984).



FIGURE 1. Chinstrap Penguin banded with an injurious flipper band, with safety fastener projecting anteriorly.



FIGURE 2. Wound on the left flank of a Chinstrap Penguin caused by friction from a safety fastener projecting caudally.

By the 1981–1982 breeding season, the research team estimated that 65% of these flipper-banded birds had developed wounds and they began to remove them. During the 1984–1985 breeding season, we observed 10 Chinstrap Penguins with Sladen-type flipper bands at Ardley Island and none showed evidence of wounds, nor have other researchers reported injuries due to flipper bands without safety fasteners.

We stayed for a week at Ardley Island in January 1983. While conducting censuses of the three species of pygoscelid penguins present (Valencia and Sallaberry 1983), and found 15 penguins with severe wounds in the thorax area caused by flipper bands with safety fasteners (1 mm thick, 15 mm width, and 50 mm long) encircling the proximal portion of the flipper (Fig. 1). Examination of the wounds revealed complete erosion of the feathers, skin and, in some instances, the musculature, leaving the ribs visible. We found one dead penguin (*Pygoscelis* sp.) marked on the left wing with a similar flipper band marked with Vogelwarte-Hiddensee-DDR/GDR N 00120 it was not possible to identify the species due to decomposition and loss of the skull.

Clearly, careful application of the proper kind of band (i.e., no projecting safety fastener) is essential to minimize the risk of severe injury or death to the penguins.

Our field work was supported by the Chilean Antarctic Institute (INACH) and logistical support was given by the Chilean Air Force. We thank J. P. Myers and D. Roby who made important comments on the manuscript.

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American Black Duck Record from Korea.—On 18 June 1977, two American servicemen stationed at Kwang Ju Air Base in Korea found a dead bird, carrying a U.S. Fish and Wildlife Service band, in rice paddies 3 mi (4.8 km) west of Kwang Ju, and sent the band, number 767-65352, to the FWS.

According to the records of the FWS Bird Banding Laboratory, the band had been placed on an American Black Duck (*Anas rubripes*) at the Elm Hill Game Management Area 1 mi (1.6 km) east of Kerr Dam, Mecklenberg Co., Virginia, on 11 February 1969. The bird had been identified as an after-hatching-year male by the bander, D. B. Duffer, of the Virginia Commission of Game and Inland Fisheries. It was one of 15 American Black Ducks banded at that location on that day.

This appears to be the first report of the American Black Duck in Asia. The species is a casual migrant or visitant as far northwest in North America as central Alaska (Kessel and Gibson, *Studies in Avian Biology* no. 1, 1978; American Ornithologists' Union, *Checklist of North American Birds*, 6th ed., 1983). A bird in central Alaska might join a flock of Mallards (*Anas platyrhynchos*) or another species that migrates to Asia with some frequency. American Black Ducks have been reported as vagrants in northern Europe (A.O.U., op. cit.), so flights of some distance are not unprecedented.

I thank Kathleen Klimkiewicz of the Bird Banding Laboratory for making information about this band recovery available to me, and the Virginia Commission of Game and Inland Fisheries for permission to publish this report of its band recovery.—RICHARD C. BANKS, *Denver Wildlife Research Center, U.S. Fish and Wildlife Service, National Museum of Natural History, Washington, D.C. 20560*. Received 17 Feb. 1985; accepted 29 May 1985.

Comments on Preparing Owl Pellets by Boiling in NaOH.—I have used Schueler's (*Bird Banding* 43:142, 1972) NaOH-boiling method to prepare approximately 20 kg of owl pellets and find it superior in speed and accuracy to manual sorting. In my experience a few slight modifications of Schueler's recommended procedure are desirable. Schueler recommends decanting the NaOH solution off pellet material "as soon as all of the hair and feathers are dissolved." This is a critical point. Hair and feathers are separated from bones within 5 min after the solution begins to boil, and further boiling often damages bones. I have found that it is best to use a 2% rather than a 3% solution and to pour it off before all hair and feathers are dissolved when preparing pellets containing very small bones. Even such a short boiling period in a dilute solution loosens hair and feathers enough that they can be removed by washing with water. This modification has another virtue: it does not corrode aluminum band numbers enough to make them illegible, so that one does not need to sort pellets manually to detect aluminum bands. Detecting bands by manual sorting defeats the time-saving quality of Schueler's method. I recovered 30 aluminum ear tags from my pellets, 14 after they went through the boiling process, and all identification numbers were still readily legible when the NaOH treatment was restricted to the short time periods encouraged here. Boiling longer, however, would indeed necessitate prior removal of metal tags.—WILLIAM S. LONGLAND, *Department of Biology, University of California, Riverside, California 92521*. Received 8 Jan. 1985; accepted 30 Apr. 1985.

Water Loss from Pipped Eggs of Two Species of Noddies.—Rahn et al. (1976) reported that water loss from eggs of two congeneric noddies (Black Noddy, *Anous minutus* and Brown Noddy, *A. stolidus*), over the incubation period, represented 16% and 14% of the mass of the freshly-laid eggs. These values likely underestimate water loss from the eggs because they did not include the accelerated water loss that occurs from pipped eggs.