

the faunal remains suggest late winter to summer occupation of the site (Cox and Spiess 1980).

The remains of Great Auk from Avayalik-1 consist solely of a complete right coracoid, a portion of the proximal end of a left coracoid, and a complete left femur. The coracoids are from birds of noticeably different size, so at least two individuals are represented. The rarity of the Great Auk in these deposits indicates the likelihood that the few birds taken were in passage and that the species did not breed in the area.

Not only were Great Auks used for food by Eskimos and Indians, as demonstrated by bones in middens from Greenland to Florida (Greenway 1958, Brodkorb 1967), but in some cultures the bird evidently had ceremonial significance as well. This is best exemplified by a burial in a Maritime Archaic cemetery, Port au Choix-3, in northwestern Newfoundland, dating to 2300–1800 B.C. A single human skeleton found here had over 200 beaks of the Great Auk distributed over its length, the body having apparently been clothed in a garment consisting entirely of Great Auk skins (Tuck 1976). The fact that the bones obtained from Avayalik Island come from deep within the body (coracoids and femur), and thus would not have been included with a skin, practically precludes the specimens having been obtained through trade with contemporaneous cultures to the south.

The only certainly known breeding site of the Great Auk in the Western Atlantic in historic times is Funk Island, Newfoundland. Although the species is known from midden deposits and a skin from western Greenland, there is apparently no conclusive evidence that it ever bred there (Greenway 1958). Todd (1963: 403) considered that it was not unlikely

that the Great Auk "may have strayed to the coast of Labrador," but he showed that there was no satisfactory evidence of such an instance. The specimens from Avayalik Island thus constitute the sole record of *Pinguinus impennis* from Labrador.

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A Hybrid between the Hooded and Silver Grebes (*Podiceps gallardoi* and *P. occipitalis*)

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Hybrids between species of grebes are rare. Voous and Payne (1965, Ardea 53: 9) reported extensive hybridization between the Madagascar endemic, *Tachybaptus rufolavatus*, and the Little Grebe, *T. ruficollis*, which is common on the mainland of Africa and probably represents the stock from which *T. rufolavatus* was derived after an earlier invasion. In this instance, the endemic form evidently had not evolved isolating mechanisms that would have prevented hybridization with the reinvading *ruficollis*. The only other instance I know of is the likely, but unproved, case of hybridization between a Horned

Grebe (*Podiceps auritus*) and an Eared Grebe (*P. nigricollis*) reported by Dennis et al. (1973, Scottish Birds 7: 307). In this case, an adult of each species was observed feeding and carrying a single young.

While studying the recently described Hooded Grebe (*Podiceps gallardoi*) (Rumboll 1974, Com. Mus. Argent. Cienc. Nat. 4: 33), James D. Hammond, Miguel Hinrichsen, Maurice A. E. Rumboll, and I were surprised to observe an apparent hybrid between that species and the Silver Grebe (*P. occipitalis*). For several days we were aware of a rather pale-headed grebe swimming about in close com-

TABLE 1. Weights and measurements of females of *Podiceps o. occipitalis* and *P. gallardoi* and their hybrid.

Parameter	<i>P. o. occipitalis</i>			Hybrid	<i>P. gallardoi</i>
	Extremes	Mean	<i>n</i>		
Weight	278–410 g	334 g	4	505 g	530; 610 g
Wing	116–130 mm	125 mm	19	140 mm	148; 157 mm
Tarsus	38.0–43.0 mm	39.8 mm	17	46.5 mm	46.6; 47.1 mm
Bill from nostril	10.1–13.0 mm	11.6 mm	18	13.1 mm	12.3; 13.4 mm
Bill depth	5.3–6.9 mm	5.9 mm	13	6.8 mm	7.5; 7.7 mm

pany with a Hooded Grebe, to which it appeared to be mated. Rumboll collected it on 8 January 1976, and it was prepared as a partial skin and partial skeleton, with the complete skull and the bones of one wing and one leg retained in the skin (Univ. Mich. Mus. Zool. 220,944). It was a female; the ovary contained two small corpora lutea and many small follicles approximately 2 mm in diameter. No grebe nests were seen in the course of our visit, and it is assumed that the hybrid and its apparent mate had made an unsuccessful attempt at nesting. The hybrid weighed 505 g and had moderate fat under the feather tracts. The pectoral muscles on one side weighed 18 grams. The stomach contents were largely snail tissue and shells, with a few dytiscid adults and larvae, a few chironomid (*Psectrocladius*) pupae, and many small feathers. There was no pyloric plug of feathers, however, as is found in many species of grebes (e.g. Storer 1969, Condor 71: 185; 1976, Trans. San Diego Soc. Nat. Hist. 18: 117). No bursa was present, indicating that the bird was at least 2 yr old.

In size, the hybrid is intermediate between the parental species, although closer to or within the range of the larger *P. gallardoi* in most measurements (Table 1). As in *P. occipitalis*, the forehead and lores are gray and the nape black. The anterior part of the crown is whitish, blending with pale straw-colored plumes (slightly tinged with rufous) posteriorly. These plumes resemble those of *P. gallardoi* in position but are shorter and much paler. They mingle with the black of the posterior part of the crown in contrast with the sharp demarcation of the colors in the parental species. The chin and throat are gray (mixed with white posteriorly), intermediate between the light brownish gray of *P. o. occipitalis* and the velvet black of *P. gallardoi*. Posterior to the eyes there are elongated plumes like those of *P. o. occipitalis*, but these are fewer, paler, and shorter in the

hybrid. There is no trace of the postocular wattle found in *P. gallardoi*. The color of the upper parts is dark gray, as in *P. occipitalis*. The amount of white on the wing is intermediate; the six outer primaries are dark, and the white of the inner primaries is confined almost entirely to the inner web of the feathers. The alula and greater coverts of the outer primaries are almost entirely dark.

How the mating that produced this hybrid came about is unknown. Because *P. occipitalis* is widely distributed both to the north and south of the range of *P. gallardoi*, it is likely that the parental species have been in contact for a long time, long enough for both morphological changes and differences in the pair-formation ceremonies to have evolved through selection against hybridization in the sympatric populations. In view of the difference in the head patterns, Advertising calls, and in the Discovery Ceremony, in particular the unique Sky-jabbing display of the Hooded Grebe (Storer, in press, Living Bird), I think it unlikely that a long pair bond between birds of these quite different species was involved. On the other hand, Hooded Grebes are, in my experience, much less aggressive than other grebes. I once watched a lone Hooded Grebe resting on a platform of *Myriophyllum* a few centimeters away from a mating pair. Under somewhat similar circumstances, it might be possible for a Silver Grebe to sneak a copulation with a Hooded Grebe whose mate was not at hand.

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