

OBSERVATIONS OF TWO APPARENT HYBRID GULLS IN MASSACHUSETTS

by Richard S. Heil, Peabody

As a group, gulls exhibit such a variable degree of characters and plumages it is little wonder that most of us find them to be among the most difficult birds to identify. The larger species in particular have several stages of immature and seasonal adult plumages separated by often confusing molts. In addition, there is often marked individual, sub-specific, and geographical variation, and many may be subject to albinism and/or hybridity. With these points in mind, it is not difficult to understand why this group is increasingly referred to, although not always with admiration, as "the large gull complex." As Ludlow Griscom once put it, "If anybody wishes to vent his spleen and disappointment [about gull identification], his quarrel is with God rather than with men!"

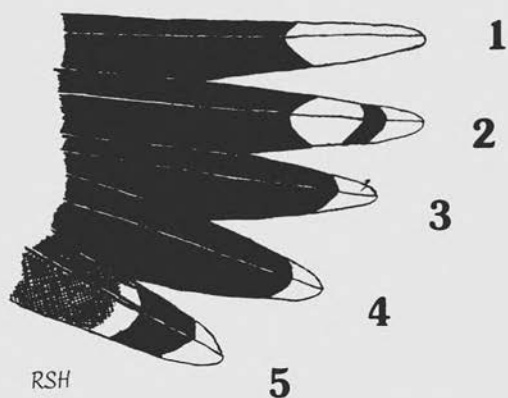
Probable hybrid of Larus argentatus and L. marinus. On 21 May 1981, an adult gull with characters intermediate between a Herring Gull (Larus argentatus) and a Great Black-backed Gull (L. marinus) was found in a mixed breeding colony of the two species on Muskeget Island, Massachusetts. Although present in the colony throughout June, the gull was apparently not nesting and was most often observed in "loafing areas" frequented by non-breeding and immature gulls of both species. The bird was also observed by Richard Forster on May 26 and briefly by Richard Veit in late June. The author was able to obtain a series of color photographs of the gull in flight and standing in the colony.

At least five adult specimens of presumed argentatus x marinus hybrids exist for North America (Foxall, 1979). All but the one taken on Staten Island, New York (Jehl, 1960) are from the Ottawa, Ontario - lower Great Lakes area. Crosses have also occurred in captivity (Gray, 1958).

The Muskeget gull was in breeding plumage; the head, neck, underparts, and tail were pure white. The back and wing mantle were slate-gray, contrasting with the darker primaries and being slightly paler than an adult Lesser Black-backed Gull of the L. fuscus graellsii race and thus closer in color to argentatus than to marinus. The primary pattern, however, most closely resembled that of L. marinus: the outer four feathers were largely black, lacking the extensive gray tongues of argentatus, and the first primary (outermost, using the British numbering system) possessed a long white tip. The extensive white tip on the first primary, the large white mirror on the second, and a lack of extensive gray tongues on primaries one through four eliminate the reasonable possibility of other dark-mantled gulls such as Lesser Black-backed Gull (L. fuscus), Slaty-backed Gull (L. schistisagus), Western Gull (L. occidentalis), and dark-mantled races of



*Probable Herring Gull (*Larus argentatus*) x Great Black-backed Gull (*L. marinus*) hybrid in flight showing primary pattern
Muskeget Island, MA ; May 1981
Photo by Richard S. Heil*



*Primary pattern of probable Herring Gull x Great Black-backed Gull hybrid
drawn from photographs taken on Muskeget Island, MA, May 1981*

argentatus. Interestingly, of the five presumed argentatus x marinus specimens, only the one from New York has a primary pattern similar to the Muskeget gull. All the others most closely resemble the pattern in argentatus with a subterminal mirror instead of a long white tip on the outermost primary.

The iris was yellowish while the orbital ring (eye-ring) appeared reddish-orange. The bill was deep yellow with an extensive reddish spot at the gonys similar to L. marinus. The legs were flesh-colored. The gull's size and build seemed intermediate between the hypothesized parents although the structure of the head and bill most resembled that of L. marinus - a heavy, flat head and a scowling appearance to the eye. The bill was rather long and deep at the angle of the gonys but, again, intermediate in appearance between the presumed parents.

The Great Black-backed Gull has increased markedly along the Massachusetts coast since it was first found breeding in 1931. Recent expansion has perhaps been at the expense of the less aggressive Herring Gull, now outnumbered four to one at Muskeget. As these gulls continue to compete and utilize the same nesting colonies, there will probably be further reports of argentatus x marinus hybrids in Massachusetts.

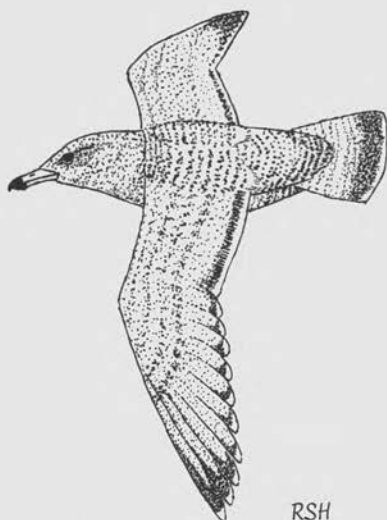
Probable hybrid of Larus argentatus and L. hyperboreus. On 1 December 1982, the author discovered a large, pale gull roosting on the breakwater with other gulls at Eastern Point, Gloucester, Massachusetts. It appeared to be a Glaucous Gull (L. hyperboreus) in first-winter plumage. The head and body were pale buff-colored, uniformly so on the head and underparts but possessing pale brownish-buff barring on the back and wing coverts. Eventually the gull flew out to scavenge behind an approaching fishing boat that was cleaning its catch. When it took flight, I was surprised to observe that the primaries, typically the whitest part of a Glaucous Gull wing, were in fact darker than the wing coverts and that the bird possessed a solid, although pale, tail band. To my dismay, the bird soon disappeared in a mass of several hundred feeding gulls behind the boat.

Fortunately, about an hour later, the same gull was observed at close range bathing and preening at nearby Niles Pond where it was carefully studied both on the water and in flight for forty-five minutes and where I was able to obtain a detailed description. The bird was larger than all adjacent Herring Gulls (L. argentatus) but about the same size as the smaller Great Black-backed Gulls (L. marinus) present. The bill was long and heavy with a sharply demarcated black tip and the basal two-thirds was pinkish. The legs were flesh-colored. The head was pale buff-colored, bulky, and had a flat-topped profile; pale feathering above and below the dark eye formed a broken ring. The body and the wing

mantle were pale buff-colored but with darker brownish-buff barring and chevrons on the back, wing coverts, and upper- and undertail coverts. The belly was uniformly grayish-brown. These areas appeared no darker than is usual for juvenile or fresh first-winter plumages of hyperboreus. The tail was finely and indistinctly barred from the base fusing gradually into a pale, but solid, grayish-brown subterminal band, paler and less extensive than in first-winter argentatus. All of the rectrices were pale tipped.

The flight feathers, particularly the outer primaries, were pale grayish-brown in color but contrastingly darker than the tone of the wing mantle. This coloration was most extensive on the outer webs with pale tongues present on the inner webs of the primaries. All of the primaries and secondaries had fairly broad pale tips. The extent and tone of color in the flight feathers was, however, considerably paler and much less extensive than in any first-winter argentatus, so much so that if the bird's size and bill were not considered, it might have been taken for a first-winter Thayer's Gull (L. thayeri) which has a similar primary pattern, tail band, and general color tone.

The first-winter Glaucous-winged Gull (L. glaucescens) has a bill which is largely or entirely black while the plumage has a darker tone overall with little or no contrast between the primaries and the mantle. That one of the parents might have been marinus rather than argentatus is thought to be unlikely since such a cross would be expected to possess darker flight feathers and at least a suggestion of the black and white checkered pattern typical of a first-winter marinus mantle.



Drawing of a probable Herring Gull (Larus argentatus) x Glaucous Gull (L. hyperboreus) hybrid observed at Niles Pond, Gloucester, MA, December 1982

Smith (1966) in his monograph, Evolution of Some Arctic Gulls (Larus): An Experimental Study of Isolating Mechanisms, discusses several factors that reduce the chance of hybridization between argentatus and hyperboreus, even though their breeding ranges overlap extensively. In the Canadian arctic he found that the peak of sexual activity for hyperboreus precedes that of argentatus by about two weeks. For nesting, hyperboreus utilizes cliffs while argentatus breeds in tundra valleys and flat, marshy areas. Differential coloration of both orbital ring (argentatus: usually orange; hyperboreus: yellow) and wing tip (argentatus: black; hyperboreus: white) also serve to keep these species reproductively isolated and thus reduce potential interbreeding. Despite Smith's findings, these two species are now known to hybridize in Iceland and may also do so somewhere in the vastness of the Canadian arctic.

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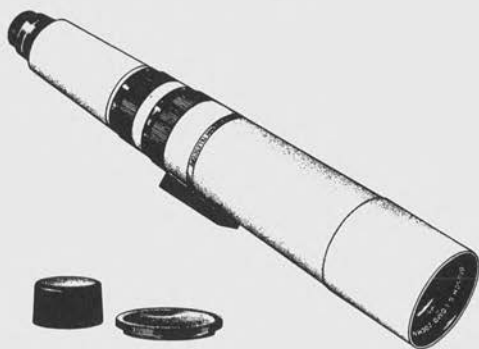
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