

## "THAYER'S" GULL IN THE NIAGARA FRONTIER REGION

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DURING autumn and winter thousands of gulls are often present on the Niagara River. Most are Herring (*Larus argentatus*), Ring-billed (*L. delawarensis*), and Bonaparte's Gulls (*L. philadelphia*), and they can be observed particularly well at such favored concentration points as Niagara Falls and the lower river in the Lewiston-Queenston vicinity. As the Niagara is usually ice-free in winter, varying numbers of gulls are able to subsist even during the coldest periods.

During past years local birders have noted on the river adult-plumaged gulls with characteristics similar to those described for "Thayer's" Gull, a form presently treated as a subspecies (*L. argentatus thayeri*) of the Herring Gull (A.O.U., 1957) and recently considered a species (*L. thayeri*) by Smith (1966) based on his studies in northern Canada. During December 1954 and January 1955 first one and later three of these birds were observed about Niagara Falls and described by Coggeshall (1955) in a paper discussing the taxon and reviewing its history. Prior to 1967 two or three attempts to secure an adult specimen failed, partly because of the difficulty in approaching and retrieving the birds in the Falls area. A specimen in first-winter plumage H. D. Mitchell collected on a Buffalo Harbor dump 4 February 1945 (♂?, BSNS no. 2857) was subsequently sent to L. Griscom, who identified it possibly as *L. glaucooides kumlieni* (Beardslee and Mitchell, 1965: 244). On 24 December 1957 at the dump on Squaw Island, Buffalo, along the edge of the Niagara River, I secured a gull (sex indeterminable, BSNS no. 4107) that is almost identical in size and coloration to the 1945 first-winter bird.

A comparison of these two immature gulls with material in the Royal Ontario Museum and the National Museum of Canada has shown that they agree well with specimens of "Thayer's" Gull from northern Canada and the Pacific coast. The culmens of the two immatures from Buffalo measure 42 and 41 mm respectively. Two first-year female specimens of *L. a. thayeri* in the Royal Ontario Museum, taken in September in Bellot Strait, Northwest Territories, Canada, have culmens measuring 37.1 and 41.3 mm. Although three of these culmens measure less than the smallest such measurement (42 mm) that I can find published for female "Thayer's" Gull, as W. E. Godfrey (pers. comm.) pointed out, first-year gulls often have smaller bills than adults. Also some shrinkage may have occurred in these specimens. In addition, the great majority of published culmen measurements for female "Thayer's" Gulls are those by Smith

(1966), who very likely measured mostly adult birds from breeding colonies.

In December 1967 at least six possible "Thayer's" Gulls were seen among several thousand gulls in the lower gorge of the Niagara River off the power plants and between there and Lewiston about 3 km downstream. It is of interest to note that almost all the gulls thought to be this form have been observed in the gorge of the Niagara where high rock cliffs rising above the water make a setting resembling the nesting sites these birds prefer in their breeding areas. During observations in the power plant vicinity from 10 December to early January, A. R. Clark and I had excellent opportunities to study at fairly close range the "Thayer's" Gulls as well as at least five individuals each of Glaucous (*L. hyperboreus*) and Iceland Gulls (*L. glaucoides*) in various plumages.

The gulls in this section of the river spent part of the time flying over the water feeding on fish, many of which were brought out and nearer the surface by the flow from the plants. They also rested on the water and perched on rocks and steep slopes near the river edge and on power plant roofs and railings. Birds moved almost continuously up and downstream and frequently spiraled high above the gorge; many circled or glided off to alight in nearby grassy plots or on the waters of the two large power reservoirs back of the plants on each side of the gorge. New York State Power Authority employees reported that the gulls also fed at night in front of their plant in the illumination cast over the river by flood-light reflection.

From the United States side of the river off the lowest level of the plant Clark and I collected three of the presumed "Thayer's" Gulls, one on 11 December and two on 17 December, retrieving them by boat as they floated downstream past Lewiston. All are females, the adult secured on 11 December (BSNS no. 5107) having irides dark brown flecked with pale grayish-brown and eyelids pale grayish-white tinged flesh. Its gonad measured  $14 \times 6$  mm and it weighed 939.35 g. The first bird collected on 17 December (BSNS no. 5108) is also an adult with irides slightly paler than those of the first individual, being a mixture of dark and light brown, gold, and gray. Its eyelids were grayish-white tinged flesh and purplish; it weighed 997.62 g and the gonad measured  $20 \times 6$  mm. The third specimen (BSNS no. 5109) is in immature plumage, had dark brown irides, grayish-white eyelids, and the gonad measured  $16 \times 8$  mm. It weighed 859.62 g. All three birds had considerable body fat.

The two adults were compared with specimens of "Thayer's" Gull at the American Museum of Natural History by J. L. Bull and E. Eisenmann, who concluded that they were this form. These adults also agreed very



Figure 1. Outer primaries of the two adult "Thayer's" Gulls (no. 5108, center; no. 5107, right) compared to those of a more or less average Herring Gull (left). The darker portions of their primaries are less extensive and in part paler than those of the Herring. Unlike the latter, the large, white subterminal areas on the outer two primaries of no. 5107 and on the second primary of no. 5108 are connected with the gray on the inner webs of the feathers.

closely with specimens of *L. a. thayeri* at the Royal Ontario Museum. The mantle color of the two birds is perceptibly darker than that of average specimens of *L. a. smithsonianus*. Their primary patterns are very similar to that of "Thayer's" Gull (Figure 1). Both the mantle color and the dark areas of the primaries are slightly darker in no. 5108 than in no. 5107. No. 5108 also has more and darker streakings in the head region, which Bull suggests indicates that a greater amount of melanin has affected three portions of the bird's plumage.

The immature specimen (no. 5109) is in second-winter plumage. It is paler overall than first-winter *L. a. thayeri* specimens, with its underparts, especially throat and breast, showing more white and a few back and scapular feathers tipped with pale gray. It is generally more grayish in the darker parts of its plumage than are first-winter birds. On the subterminal part of the first primary is a small whitish area flecked with brown, the primaries otherwise are a dark brown. Although there is no specimen of "Thayer's" Gull comparable to this one in either the American or the Royal Ontario Museum, Godfrey was able to compare this individual with five specimens each of second-year "Thayer's" and Iceland Gulls in the National Museum of Canada. He found that it is similar in coloration to those in the former series and trenchantly darker than all specimens in the Iceland series. His decision in referring this second-winter bird and also the two first-winter specimens from Buffalo to "*Larus thayeri*" seems to be warranted and one with which I concur. The measurements of the three 1967 specimens from the Lewiston area are within the range given by Smith (1966) for females of this form. Their exposed culmens measure 42, 45.5, and 43.5 mm respectively.

The A.O.U. Check-list (1957) mentions three records of *L. a. thayeri*

for eastern North America south of their Canadian breeding areas. These are based on an adult female secured at Tadousac (Tadoussac), Quebec, on the north shore of the St. Lawrence River on 26 July (year?) (Dwight, 1917); a specimen taken by S. N. Rhoads at Mt. Ephraim, New Jersey, near the Delaware River on 9 March 1888 (Stone, 1924); and an immature female collected by M. B. Trautman (1956) on 26 February 1946 near South Bass Island, Ohio, in Lake Erie. Another record is a specimen collected by J. C. Cahoon at Cuslett, Newfoundland, on 24 June 1890 (Peters and Burleigh, 1951: 230). Dwight (1925: 196) also records a specimen from Chicago, Illinois. I have not examined any of the five specimens mentioned above.

The immature "Thayer's" Gull Mitchell collected at Buffalo in 1945 is the first specimen of this form for the Niagara Frontier Region and also apparently for New York State. The immature taken in 1957 and the two adults and one immature secured in 1967 make a total of five specimens for the region. All are in the Buffalo Museum of Science. The 1967 specimens might also be considered the first three for the Province of Ontario because these birds frequently flew back and forth across the International Boundary before being collected on the United States side, and they probably were retrieved from the Canadian portion of the river.

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