by the relatively large proportion of species associated with the early-successional field habitat. The rice stage supports large numbers of seasonally resident species. Forests occupy a small area of the Hacienda, but were used to some extent by about one-third of the resident species observed. The comparatively low usage of pastures and residential areas indicates that creating these habitats by clearing forests greatly decreases species richness on a given area. Of the 60 species recorded in decreasing habitats, 32 (53%) were considered either uncommon or scarce, further underscoring the importance of forest conservation in contributing to avian community composition in this region.

This survey was conducted during a study of avian agricultural damage, sponsored by the Colombian Agricultural Institute (ICA). I am grateful for the assistance of La Corocora Ltda., D. Valencia G., D. Leal and E. Barriga B.—WALLACE D. MCKAY (deceased), *Smithsonian-Peace Corps Environmental Program, U.S. Embassy, Bogotá, Colombia.* *Accepted 20 Apr. 1979.*

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**Three more probable hybrids of *Larus hyperboreus* and *L. argentatus*.**—Although widespread hybridization between Glaucous (*Larus hyperboreus*) and herring (*L. argentatus*) gulls has taken place in Iceland and Eurasia (Ingolfsson, Ibis 112:340–362, 1970), there are few reports of its presumed natural occurrence in North America (Jehl and Frohling, Auk 82:498–500, 1965; Ingolfsson 1970; Jehl, Calif. Birds 2:27–32, 1971). Smith (Ornithol. Monogr. no. 4, 1966) was able to induce hybridization by experimental manipulation of eye-ring color and wing-tip pattern.

Of the 3 new presumed hybrids, 1 was found by Arthur Clark, Arthur Schaffner and me on 7 November 1976, on the Niagara River near its mouth off Niagara-on-the-Lake, Ontario. We collected it (BSNS 7057) on 13 November 1976. The other 2 were secured by Richard Poulin in Ontario at the Ottawa dump in Gloucester Township on 23 November 1974 (NMC 61982), and at Beare Road dump, Dunbarton, Ontario Co. (now Durham RM), on 25 October 1975 (NMC 65619). The Niagara bird was probably in its second year, the Ontario specimens in first-year plumage. All 3 birds in most measurements are intermediate between Glaucous and Herring gulls (Table 1). The Niagara specimen is quite whitish, but has dark markings on wings and tail, unlike any plumage of Glaucous Gull. The Ontario birds are generally brownish and white and markedly paler overall than Herring Gulls of corresponding age.

The Niagara River specimen's plumage is not worn. The head, neck and under-parts are white with medium to dark brown streaks on crown, nape, sides of neck and throat; the lower breast and belly are tinged pale brown with some darker brown markings, and undertail coverts are barred with medium brown. Mantle is whitish with scattered tan, medium brown and gray feathers (Pallid Neutral Gray of Ridgway, Color standards and color nomenclature, 1912) are evident, especially on scapulars and back. Outer 5 primaries are Hair Brown on outer vane, paler on inner with "tongues" of white on inner vane of primaries 6 to 9. Primary shafts are buffy-white and there is a narrow, whitish, approximately 15 mm-long area on the outer vane of each 10th primary about 17 mm from the tip. Outer webs of secondaries are also Hair Brown, some slightly mottled with whitish, the inner webs paler brown, except for proximal ones which are whitish peripherally. Terminal half of tail is Hair Brown blending into mottled pale brown on white and then to white. Bill was pale whitish, the terminal third black. Iris was pale brownish-gray, the orbital ring whitish-gray, and the legs and feet flesh color. All soft part colors were noted immediately after collecting.

In general coloration our specimen resembles a probable *L. hyperboreus* × *L. argentatus* hybrid (AMNH 468816) collected by Jehl and Frohling (1965) in New Jersey except that ours

TABLE 1

MEASUREMENTS OF MALE GULLS OF *L. HYPERBOREUS* AND *L. ARGENTATUS* FROM DWIGHT (1925), AND THOSE OF 4 PROBABLE HYBRIDS FROM ONTARIO AND NEW JERSEY

| | *L. hyperboreus* (N = 11) Range | + $\bar{x}$ | BSNS[1] 7057 | NMC[2] 61982 | NMC[2] 65619 | AMNH[3] 468816 | *L. argentatus* (N = 19) Range | + $\bar{x}$ |
|---|---|---|---|---|---|---|---|---|
| Wing (chord) | 435–477 | (459.1) | 440 | 463 | 442 | 440 | 405–460 | (433.8) |
| Tail | 180–210 | (196.6) | 182 | 191 | 185 | 184 | 151–190 | (175.2) |
| Tarsus | 69–77 | (72.6) | 69.4 | 69 | 65 | 73 | 60–74 | (67.8) |
| Exp. culmen | 57–67 | (62.6) | 62.5 | 62.5 | 57.5 | 54 | 49–62 | (57.0) |
| Bill (depth at base) | 20–24 | (21.8) | 23 | 23.7 | 20.9 | 19.0 | 17–22.5 | (19.5) |
| Bill (depth at gonys) | 21–25 | (22.4) | 21 | 20.2 | 18.6 | 18.9 | 18–22 | (20.3) |

[1] BSNS—Buffalo Society of Natural Sciences.
[2] NMC—National Museum of Canada.
[3] AMNH—American Museum of Natural History.

has more brown on head, neck and underparts and more brown and less gray on the mantle. In addition to the possible plumage variations in immature hybrid gulls, the fact that the Niagara bird was secured in November and the New Jersey bird in February could also partially account for these differences between the 2 birds. Soft parts are about the same colors in both specimens.

It is possible that the Niagara bird is an aberrantly plumaged Glaucous Gull, but I think that this is very unlikely, and have not seen any individuals of this species in the field or in collections with primary and tail coloration and the overall plumage pattern of this specimen. Also, I have seen no plumage of a dark-mantled species in which such a combination of colors appears. Jehl and Frohling could not match their specimen with any in several large collections. Our bird's primary shafts are whiter than those of the New Jersey specimen. However, they are not the cream color of *L. hyperboreus* primary shafts. Those of *L. argentatus* are dark brown or blackish. Fig. 1 shows the spread wing and tail of the probable Niagara hybrid compared to the wing and tail of a second year *L. hyperboreus* specimen (BSNS 7058). Note the considerably darker shade of the secondaries, primaries and rectrices of the former, as well as its darker wing coverts.

The Niagara specimen is smaller than the mean for *L. hyperboreus* males in all dimensions except bill depth at base (Table 1). Its wing, tail, tarsus, and bill depth at gonys are in the overlap zone between *L. hyperboreus* and *L. argentatus*. Unlike AMNH 468816, whose bill is smaller than the mean for *L. argentatus*, our bird's bill is quite large, near the mean measurements for *L. hyperboreus*. Its testes measured (right) 4.5 × 1.9 mm, (left) 5.0 × 2.3 mm and it weighed 1931.2 g. Our specimen was about 200 g heavier than the New Jersey bird, and the latter, Jehl and Frohling state, was more than 300 g heavier than any male Herring Gull in the University of Michigan (Ann Arbor) collection.

Considering the most probable origin of the Niagara gull as eastern North America, it

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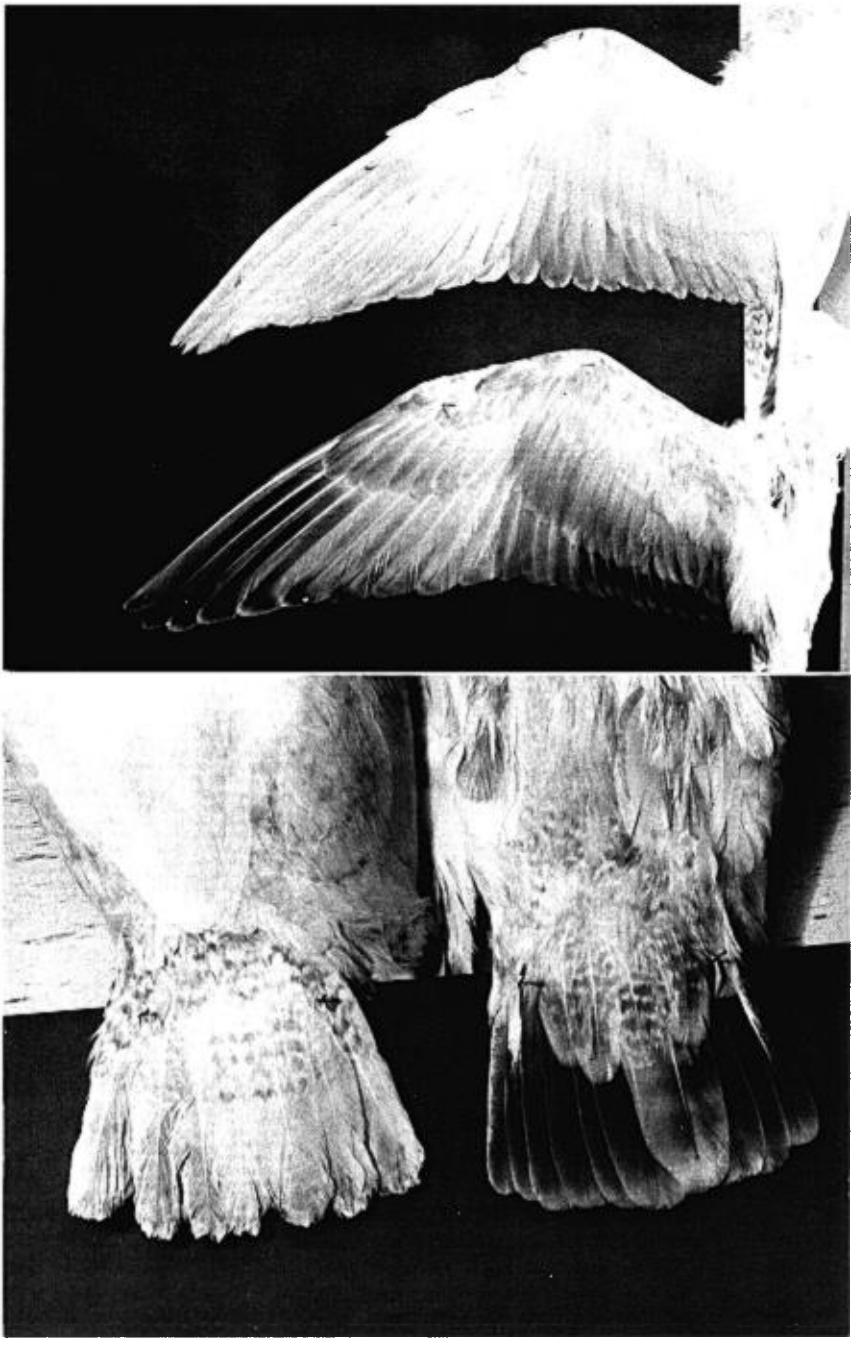
FIG. 1. Wing and tail of probable Niagara River hybrid *Larus hyperboreus* × *L. argentatus* (lower wing and tail to the right) compared to those of *L. hyperboreus*.



seems most likely that *L. hyperboreus* was the lighter parent and that 1 of the 3 dark-mantled forms sympatric there with the Glaucous Gull (Great Black-backed [*L. marinus*], Herring, and Thayer's [*L. thayeri*] gulls) was the darker parent. Our bird is unlike Lonnberg's (Arkiv för Zoologi 12:1–22, 1919) description of a zoo-bred immature *L. marinus* × *L. hyperboreus* cross, which is much more similar to a young *L. marinus*, especially in dark pattern of back, wings, and tail, than to the pale *L. hyperboreus* of a similar age. Also, though its bill is near the mean measurements for Glaucous Gull, its wing, tail, and tarsus are close to the minimum size for that species.

It is not possible to determine from coloration or size of the Niagara specimen which of the other 2 dark-mantled species is the likely darker parent because their plumages and sizes differ only slightly. However, it seems more likely that it was the Herring Gull for its eye and orbital ring color is very like that of the Glaucous Gull, unlike that of *L. thayeri*, and Smith (1966) has shown that orbital ring color may act as an isolating mechanism in these gulls. Also, the Herring Gull appears to be extending its range northwards and individuals on the edge of the range might mate more readily with a different species than those well within the range (Jehl and Frohling 1965).

The brown and white pattern of the 2 Ontario specimens resembles Herring Gull plumage of corresponding age. Underparts are generally plain brown with some white streaking on throat and upper breast and mottling on abdomen. Upperparts are brown with whitish fleckings on feathers forming a mottling on back, rump and wings and a more streaked appearance on head and nape. However, they are noticeably paler overall than the Herring Gull with less contrast between light and dark color, particularly on the back. The Ottawa bird is slightly paler overall than the Dunbarton specimen, with whitish areas more extensive and brown portions lighter. The brown outer primaries and the rectrices of the 2 specimens are considerably paler than the Fuscous, Fuscous-Black, or Clove Brown of average Herring Gull primaries and rectrices. In shade they fall between these colors and the Hair Brown of the Niagara bird. As in the latter, inner vanes of outer primaries have "tongues" of white and are paler than the outer vanes. Primary shafts are paler than those of Herring Gulls, but they do not approach the buffy white shafts of the Niagara bird. Tails of these 2 Ontario specimens are largely brown with whitish frecklings basally. They are generally similar in pattern to that of a first-year Herring Gull, except that they have more frecklings on outer vanes of the 2 outer rectrices than has the latter.

Data on the Ottawa specimen are: weight—1734.1 g; iris—medium brown; eye ring—buff; bill—basal ⅔ flesh, tip dusky; tarsus—dull pink; and on the Dunbarton specimen weight—1623.3 g; iris—light brown; eye ring—buff; bill—base pinkish flesh, tip dusky; tarsus—dusky flesh.

The generally pale coloration of these 2 specimens most closely resembles some first-year Thayer's Gull plumages. They are lighter shades of brown on breast and belly and have slightly darker brown primaries and tails than 2 first-year *L. thayeri* specimens in our collection. Their 2-tone bills are unlike the largely dark bills of these young *L. thayeri*.

In all measurements except bill depth at gonys the Ottawa specimen falls within the range given by Dwight (Bull. Am. Mus. Nat. Hist. 52, 1925) for *L. hyperboreus*. It exceeds his maxima for *L. thayeri* in all measurements and *L. argentatus* in all except tarsus and bill depth at gonys. Unlike the Niagara bird, only tarsal length is intermediate to *L. hyperboreus* and *L. argentatus*. As large as this bird is, it is still about 200 g lighter than the Niagara individual. The Dunbarton bird is smaller than the Ottawa specimen and falls within the range of *L. argentatus* but exceeds the mean of that species in wing, tail, exposed culmen and bill depth at base. However, only in tarsus and bill depth at gonys is this bird less than the minimum measurements of *L. hyperboreus*, its other measurements being in the lower range for the latter species (Table 1). In all except these 2 dimensions it exceeds

maxima for *L. thayeri* and falls within the overlap zone between *L. hyperboreus* and *L. argentatus*.

I do not recall specifically seeing any gulls in the field or in collections that match these 2 birds. Despite their resemblance to *L. thayeri* in overall coloration and shading and the fact that first-year Thayer's Gulls exhibit a rather wide range of plumage variation, I think that the larger size and different bill coloration of these 2 Ontario birds preclude the possibility that they are this form. Their soft part colors and general plumage coloration are unlike that of first-year *L. glaucescens*, a species with which they are somewhat comparable in size. I believe that these 2 birds are also hybrids, that *L. hyperboreus* was most probably the lighter parent, and a Herring Gull the darker parent.

Although populations of *L. argentatus* and *L. hyperboreus* have apparently been sympatric for some time in parts of North America and allopatric in western Europe until this century when widespread contact occurred, there is considerable hybridization in the latter area and apparently very little in the former. This may be owing to the opportunity for development of isolating mechanisms in the New World between these 2 species as Ingolfsson (1970) suggested, but also may involve some aspects of the breeding biology. Certainly more study on this whole subject is needed, particularly in western North America where the distribution of gull colonies is not well known and the 4 large gull species, though largely allopatric in breeding ranges (Jehl 1971), show cases of hybridization in the wild and in specimens where overlap occurs.

I thank John Farrand, Jr., for the loan of the specimen from the American Museum of Natural History and Henri Ouellet for the loan of the 2 specimens from the National Museum of Natural Sciences at Ottawa, Ontario, Canada—ROBERT F. ANDRLE, *Buffalo Museum of Science, Humboldt Parkway, Buffalo, New York 14211.* *Accepted 1 June 1979.*

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**A Paint-billed Crake in Virginia.**—On 15 December 1978, Charles and Kay James observed a strange rail wandering in a surburban area in western Henrico County near Richmond, Virginia, and after a short chase were able to capture it. The bird, which I subsequently identified as a Paint-billed Crake (*Neocrex erythrops*), was alive but obviously not in good health when I first examined it. It died overnight and I preserved the specimen by freeze-drying. Although the wings, tail and nails of the specimen were not worn and therefore showed no indications that the bird had been in captivity, I assumed the occurrence represented an artificial introduction. However, the first United States record for this species (Arnold, Auk 95:745–746, 1978) and the unusual occurrences of the Spotted Rail (*Pardirallus maculatus*) (Parkes et al., Am. Birds 32:295–299, 1978) prompted me to investigate the bird further. Richard C. Banks and Storrs Olson of the U.S. National Museum confirmed the species identification and Banks tentatively suggested that the specimen represents *N. e. olivascens*, rather than the nominate race, but very limited comparative material is available. The occurrence of *olivascens* is geographically far more probable than *N. e. erythrops* since the latter is found only in a relatively restricted area on the Pacific slope of Peru south of Lima, while the former exists at a wide variety of locations in northern South America (Blake, Manual of Neotropical Birds, Univ. Chicago Press, Chicago, Illinois, 1977:510–511). The specimen was donated to the collections of the U.S. National Museum (USNM 575802) and Olson believes that the skeleton contained within the dried body may be the only 1 of the genus preserved (other than a partial skeleton; see Arnold 1978).