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—PIERCE BRODKORB, *Department of Biology, University of Florida, Gainesville, Florida.*

A Probable Hybrid of *Larus argentatus* and *L. marinus*.—Hybrids between the Herring Gull *(Larus argentatus)* and the Great Black-backed Gull *(L. marinus)* have been produced under captive conditions on several occasions. Palmgren (Medd. Soc. Fauna Fl. Fenn., 44: 250–251) has reported offspring from the mating of an *argentatus* ♂ to a *marinus* ♀, and Heinroth (Jour. für Ornith., 53: 256–258) has noted young by the reciprocal cross. However, these and other reports in the literature are distinguished by the nearly complete lack of descriptions of the hybrids at any age, and I am unable to find any reference to this interspecific cross having occurred under natural conditions.

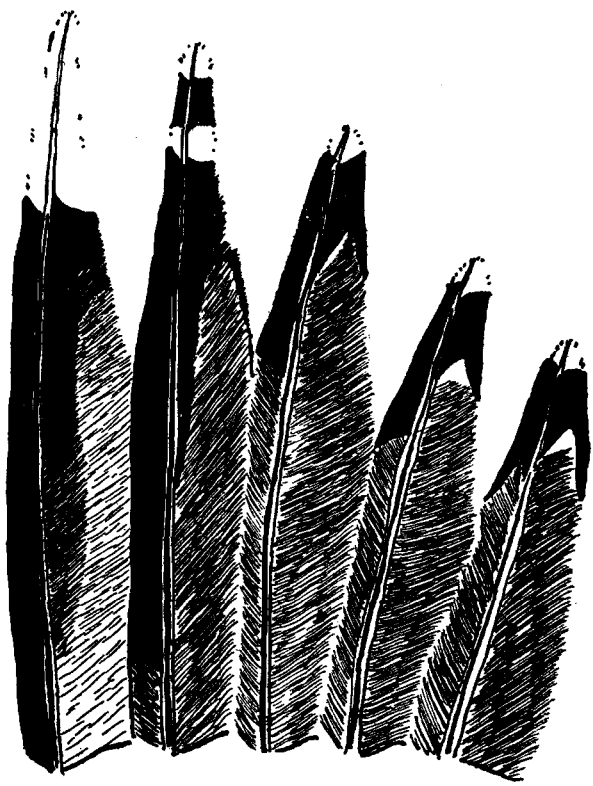

Figure 1. Primary pattern of *L. argentatus* x *L. marinus*. (Drawn by Helen Hays.)

On 10 January 1959 I collected a large, darker-backed gull from a flock of Herring Gulls feeding on a garbage dump on Staten Island, New York. The bird was an adult female in winter plumage with ovary 13 mm. in length; it weighed 1,423 gms. and was moderately fat. I had expeeted that the specimen (AMNH No. 707766) would be referable to one of the darker-backed races of *L. argentatus;* yet, comparison of the bird with specimens in the American Museum of Natural History indicated that such was not the case. Not only was the bird too large for any race of *argentatus,* but also the mantle color was too dark for inclusion in the *argentatus* group, and too light for inclusion with the *fuscus* group. Dwight's (1926) key suggested that the bird might be a Slaty-backed Gull *(L. schistisagus),* but reference specimens showed that the mantle was too light for this species or the Western Gull *(L. occidentalis),* although the measurements were comparable. Mr. Eugene Eisenmann suggested that the bird might represent a hybrid between the Herring and Great Black-backed gulls, and with this I fully concur.

Description. Head and neck white with wide, dark-brown streaking sparsely scattered on the occiput and nape. Mantle: Best matched by the Neutral Gray of Ridgway (1912) and extremely similar to that of the California Gull *(L. californicus).* Wing: The primary pattern is illustrated in Figure 1. The outer 60 mm. of the 10th (outermost) primary are white with only a trace of black 15 mm. from the tip of both vanes. The 9th primary is crossed by a large, white, subterminal band, which is extensive on both vanes. Other primaries are not noticeably different from those of the supposed parent species except in ground color, which is a reflection of mantle coloration. Tail and underparts white. Bill yellow with red spot at gonys. Iris pale yellow. Orbital ring deep chrome-yellow. Legs pale grayish-white with faint flesh tone.

Measurements. The dimensions of the specimen are contrasted with those given by Dwight (1926) for adult females of *L. argentatus smithsonianus* and *L. marinus.*

	L. a. smithsonianus (16 ♀)	*Hybrid*	*L. marinus* (7 ♀)
Wing (chord)	397–422 (410.6)	436	454–491 (465.8)
Tail	154–178 (165.3)	172	181–209 (189.4)
Tarsus	57–66 (62.1)	70	74–81 (75.7)
Exp. culmen	47–53 (50.1)	57	57–66 (60.7)
Bill (base)	16–18 (17.0)	22	21–24 (22.3)
Bill (angle)	17–20 (18.0)	21.5	22–27 (24.0)

Discussion. The measurements show that the specimen is essentially intermediate in size between *argentatus* and *marinus.* The tail falls within the limits of *argentatus,* but the massive bill clearly approaches *marinus.* The relative sizes of the three birds are indicated in Figure 2, which also shows the mantle color of the hybrid to be nearer *argentatus* than *marinus.* This coloration agrees with the only available description of a known hybrid. Heinroth *(op. cit.)* described the mantle of the one hybrid he studied that attained adult plumage as being "etwas dunkler als das die Mutter [*argentatus*] ist."

Another point supporting hybrid origin is the character of the occipital streaking: the streakings of the specimen are identical in shape and color to those of *marinus.* The pattern of the primaries, often used in gull taxonomy, approaches that of many specimens of *marinus,* but differs from most United States specimens

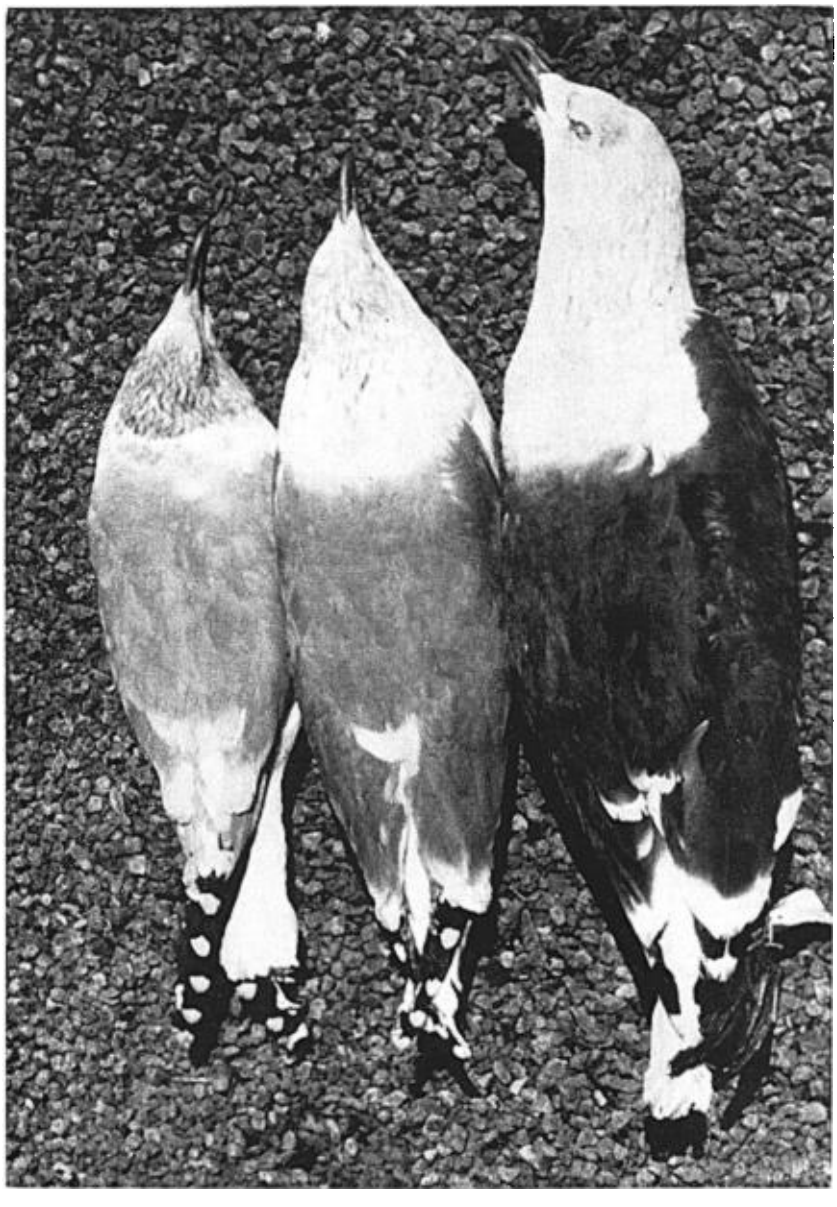

Figure 2. Left: ***Larus argentatus smithsonianus*** (Ad♀); middle: ***L. argentatus*** x ***L. marinus*** (Ad♀); right: ***L. marinus*** (Ad♀). **All birds in winter plumage.**

Figure 1. Rivoli's Hummingbird observed in Colorado.

of *argentatus* in that the tip of the 10th primary is essentially white. However, primary patterns are highly variable, and differences may even be noted between the wings of the same bird. Since the patterns of the supposed parent species are often similar, it is felt that this character is not definitive but may be indicative of relationship.

The color of the orbital ring in gulls has been considered to have taxonomic implication. In this case, the color, chrome-yellow, is neither that of *marinus* (red) nor of five adult *argentatus* examined in life at the same locality during January 1959 (orange or yellow-orange). However, there is some evidence that different populations of *L. a. smithsonianus* may show differences in orbital ring color. In any case, the hybrid was in wintering, not breeding, condition, and, thus, the color of the orbital ring is not of extreme significance.

The color of the legs, too, agrees with neither of the supposed parents. But modifications in leg color of larids in winter are frequent enough that we may consider this bird as a variant.

Miss Helen Hays prepared the sketch of the gull's primary pattern, and Mr. Eugene Eisenmann made many helpful suggestions during the preparation of this paper.—JOSEPH R. JEHL, JR., *385 Grove Street, Clifton, New Jersey.*

Rivoli's Hummingbirds in Colorado.—A male Rivoli's Hummingbird *(Eugenes fulgens)* was observed in Jackson County, Colorado, for a period of about five weeks during the summer of 1942. The bird came regularly to feeding bottles placed in an aspen grove at an elevation of 8,700 feet (Bailey, Auk, 62: 631, the only report).

During the summer of 1959 at least one and probably two other birds were observed in Colorado. Mrs. M. F. Shickley of Eldora reported that a female Rivoli's was seen at a feeding bottle at her summer home near Eldora, Boulder County, on 10 July 1959. The following morning the bird appeared again. Patricia Bailey Witherspoon and I were able to take a few photographs of the rare bird. The Shickley's home is on the north slope of an aspen-clad mountain at 8,500 feet elevation. We arrived at 5:30 A.M., 19 July, and Mr. and Mrs. Shickley reported the bird had been active and had been at the bottles several times, even though the early-morning temperature on the feeding station was 4.4° C (40° F). During the next two hours the large-sized, light-colored bird, with the distinctive throat streaks and white spots behind the eye, came in three times, and we were able to secure photographs.

Mrs. Shickley observed the bird at irregular intervals during the next two weeks, and it was last seen on 24 July. On 10 August a neighbor, who also had feeding bottles, reported seeing a large hummer with a bright-green throat once in the morning and again in the evening: "a bird so large which flew so slowly I thought at first it could not be a hummer." Although a careful watch was kept, this bird was not observed again.

Mr. H. B. Allesbrook saw a hummingbird "fully three-fourths of an inch larger than any Broadtails" at his feeding station five miles southwest of Estes Park for two seasons—the bird being last sighted in 1958 on 1 September. On 9 August 1959 the bird, or another, appeared; it was noted three times on 30 August, and on several occasions on 5 and 6 September. The previous week a neighbor, Mrs. John Tutt, had a large hummingbird coming regularly to her feeding bottles. In reporting to us by letter of this strange bird, Mr. Allesbrook referred to it as a