CONTINENTAL BIRDLIFE
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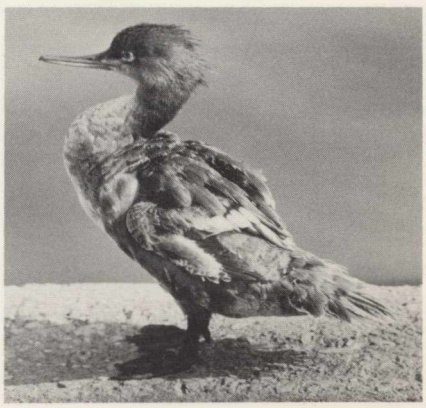
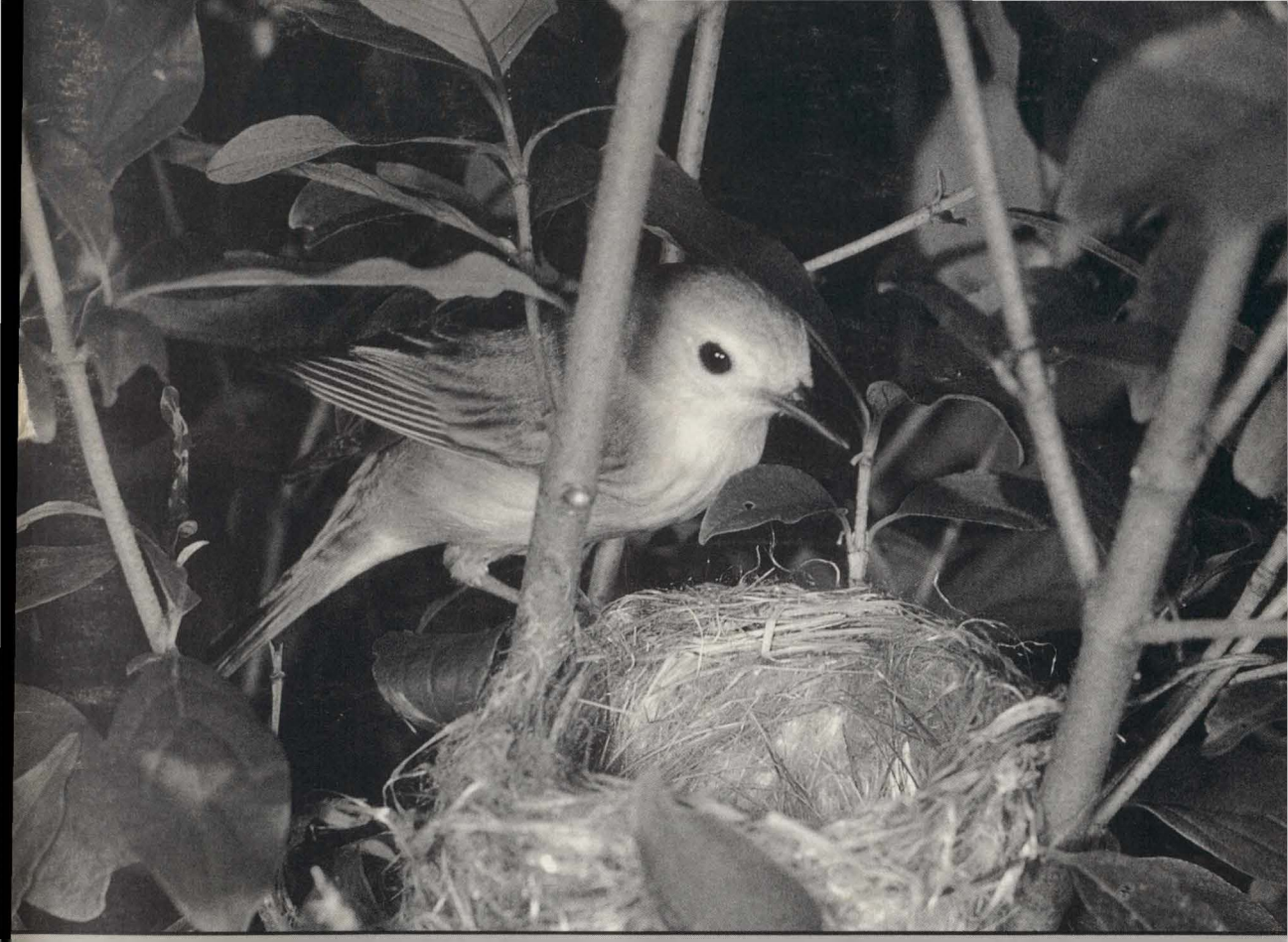
# Snap Judgment 9

You spot this duck on a mid-summer outing. It is clearly in an odd plumage, causing you to wonder about the applicability of "normal" field marks; can the bird still be identified?

The answer, a discussion of the identification, and the name of the photographer will appear in the August 1981 issue of *Continental Birdlife*.





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Drawing of Mountain Plover *Charadrius montanus* on p. 69 by Keith Hansen.

*Cover photograph:* Yellow Warbler *Dendroica petechia* at nest near Kirtland, Ohio. Photo by Morton P. Strauss.

CONTINENTAL BIRDLIFE
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# Mountain Plovers on the New Mexico — Arizona Border

TERRY B. JOHNSON AND ROBERT B. SPICER

THE MOUNTAIN PLOVER *Charadrius montanus* is a North American endemic that nests in shortgrass prairie from Montana southward to New Mexico and northwestern Texas. Its local distribution and natural history are not well known over much of its presumed breeding range, especially in the southwestern parts. Herein we report observations that document Mountain Plovers nesting in western New Mexico, and describe aspects of their behavior previously undescribed in the literature.

The birds of central-western New Mexico and adjacent Arizona have not been well studied by ornithologists. Thus, new records for breeding birds are not unexpected. The region here treated, from Red Hill (Catron County, New Mexico) west to Springerville (Apache County, Arizona) and northward along the New Mexico-Arizona border, is mainly shortgrass prairie. We believe that much of the habitat in this area is suitable for nesting by Mountain Plovers, though to date few birds and only one nest have been found.

The breeding status of Mountain Plovers in the Red Hill-Springerville area is based on a few recently published records. The only documented breeding locality near the area is in New Mexico, east of Fence Lake, Valencia County (Hubbard 1978a,b and pers. comm.). Plovers bred 40 mi. east of Fence Lake in 1968. They were recorded in the summers of 1972 and 1975, ca. 30 miles east of Fence Lake. On the Arizona side, the only record is from Ligon, who, in August 1914, observed "several flocks northeast of Springerville," suggesting the possibility of breeding in the area (Phillips *et al.* 1964). It has been speculated elsewhere that those birds might have been early migrants (Tolle 1976). There are no confirmed records of Mountain Plovers breeding anywhere in Arizona.

On 12 June 1978 we located a pair of Mountain Plovers and their nest, containing

3 eggs, at 10km WSW of Red Hill and 11km east of the Arizona Stateline. We had previously seen one to three adult plovers (but no nests) at the same locality in May and June 1977. The nearest known nesting locality is east of Fence Lake (see above), which is 60km NNE of Red Hill. Other known localities in the general area are: 255km north, near Burnham Trading Post, San Juan County (Tolle 1976); and 80km SE in the San Augustin Plains, Catron County (Hubbard 1978a,b).

The nest site was a level spot (slope less than $1^0$) in a gently rolling, heavily grazed field that was adjacent to ungrazed grasslands (Figure 1). The vegetation of the area was dominated by blue grama *Bouteloua gracilis* and snakeweed *Gutierrezia sarothrae*. Rabbitbrush *Chrysothamnus nauseosus* was also common, especially around shallow natural depressions (0.5ha and larger) in the valley floor. Junipers *(Juniperus* spp.) dominated the rocky outcrops and hillsides in the vicinity.

Few descriptions of Mountain Plover nests have been published (Bent 1929, Graul 1975, Ligon 1961). The nest that we observed was in gravelly, sun-baked dirt between hummocks of blue grama. The nest scrape was lined with pebbles, bits of blue grama and rabbitbrush rootlets. The nest and eggs blended in well with their surroundings, and the incubating adult increased conspicuousness of the nest only slightly (Figure 2). The adult was still adding and rearranging debris in and about the scrape on 13 June 1978.

The 3 eggs in the nest were ovate, with the blunt end of each placed up in the nest (Figure 3). They were all Olive-Gray (see Smithe 1975) and had small, blackish spots concentrated at the blunt end. Their colors were similar to those described in Bent (1929) but differed from Tolle's (1976) description of "3 extremely light-buffy-brown eggs that were flecked with dark brown."

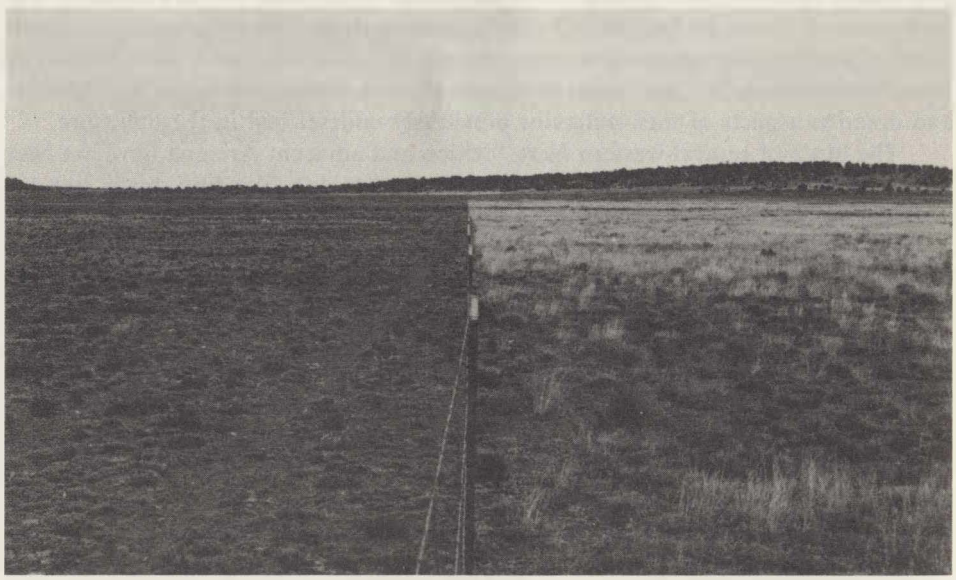

Figure 1. Mountain Plover nesting area, Catron County, New Mexico, 12 June 1978. Looking easterly, ca. 2388m elevation. Nest in heavily grazed area to left. Pasture to right ungrazed since spring 1977.

Figure 2. Mountain Plover on nest, Catron County, New Mexico, 12 June 1978. Note position of nest between grass hummocks.

The behavior of the adult plover at the nest was similar to that described for Mountain Plovers in Colorado by Graul (1973, 1975). Two adult plovers were seen near the nest on 12 June 1978 but we could not determine whether or not only one individual attended the nest. Only one (sex undetermined) was seen at the nest at any one time during 359 minutes of continuous observation (0656 to 1255 MST) on 13 June 1978. An adult was at the nest for 63% of the observation period. The 9 attentive periods observed ranged from 7 to 46 minutes ($\bar{x}$ = 25). The 7 inattentive periods ranged from 5 to 33 minutes ($\bar{x}$ = 18).

The behavior of the attentive bird varied with change in surface temperature ($T_S$, measured at 2cm above soil surface, 15m from the nest) and indicated thermal stress at higher temperatures. The incubating adult began panting and gaping when $T_S$ rose above 42°C. Above $T_S$ = 44°C, the bird continued panting and gaping and stood over the scrape, shading the eggs and exposing them to a slight breeze. Purdue (1976) found that Snowy Plover *Charadrius alexandrinus* egg temperatures were significantly lower at high ambient temperatures when shaded by a standing adult in a similar manner. At $T_S$ = 46°C, we observed the standing bird, which was facing *into* the wind, erect its back feathers while continuing to gape and pant. The feathers were held erect for 9 minutes, ending at 1210. Panting, gaping and shading were observed for a total of 30 minutes, from 0936 to 1210. At 1210 cloud cover became continuous and ambient temperatures began falling: $T_S$ = 38°C at 1211 and $T_S$ = 29°C at 1240. During this period the adult resumed sitting on the nest, with no gaping, panting or shading behavior. At 1253 the adult left the nest (see below) and did not return before the observation period was ended abruptly at 1255, at the onset of a rainstorm. However, incubation was still in progress on 24 June, when the nest was checked for the last time.

Figure 3. Mountain Plover nest and eggs, Catron County, New Mexico, 12 June 1978. Note lining of pebbles, blue grama *Bouteloua gracilis* and rabbitbrush *Chrysothamnus nauseosus*.

Graul (1975) stated that incubating Mountain Plovers crouch low on the nest in response to aerial predators, but we observed different responses. At 1052 a Ferruginous Hawk *Buteo regalis* flew over the nest. The incubating plover skulked slowly away from the nest, squatting for a few seconds every 3 meters or so, and then finally flew away. The hawk showed no response and continued on its way. The plover returned to the nest and resumed incubating 18 minutes after having left the nest. At 1253 a male American Kestrel *Falco sparverius* flew over the nest. The incubating plover explosively flew from the nest in a zig-zag pattern. It began calling after flying some 75 meters. The kestrel hovered above the nest briefly and then flew away. The plover had not returned to the nest when the observation period was ended at 1255 (see above).

The historic and present breeding status of Mountain Plovers in the Red Hill-Springerville shortgrass prairie is unclear. For several reasons it seems likely that the recent evidence for "new" breeding localities in western New Mexico (see Hubbard 1978a, Tolle 1976 and this paper) represent only an apparent increase in the breeding range occupied. These grasslands are and have been historically dominated by blue grama, which is characteristic of Mountain Plover breeding habitat throughout the Great Plains (Graul and Webster 1976). The area is also heavily grazed, which might increase blue grama frequency (Mitchell 1971) and thus favor use by plovers (Graul and Webster 1976). Plover habitat in the area has not been reduced significantly (nor is it likely to be) by agricultural practices, as has been the case elsewhere in the historic breeding range (Graul and Webster 1976). The area has never been thoroughly studied by ornithologists. Thus we believe presence of breeding Mountain Plovers in the area has probably been overlooked in the past. Mountain Plovers may be scattered but

locally common breeders in the shortgrass prairie from Red Hill to Springerville and north and west to the area of Holbrook, Arizona.

ACKNOWLEDGMENTS

We thank John Hubbard, Scott Mills and Steve Alden for commenting on earlier drafts of this manuscript. This work was conducted with C.H. Lowe in an ecological monitoring program for Tucson Gas and Electric Company.

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# The *Larus* Gulls of the Pacific Northwest's Interior, with Taxonomic Comments on Several Forms (Part II — Conclusion)

JOHN W. WEBER

*Editors' note: Part I of this paper appeared in Continental Birdlife Volume 2, Number 1, pages 1-10 (February 1981).*

*Unless otherwise indicated, specimens mentioned herein are deposited in Washington State University's Conner Museum (WSUCM).*

**GLAUCOUS-WINGED GULL *Larus glaucescens***

Burleigh (1972) lists this species as casual in the northern part of Idaho, presumably on the basis of an immature bird photographed by J. Acton along the Spokane River at Coeur d'Alene, Kootenai County, on 22 February 1963 (LaFave 1965). Two other records are known: an adult bird observed by the writer at Coeur d'Alene, Kootenai County, on 28 December 1977; one seen at Nampa, Canyon County, on 17 February 1978 (Rogers 1978).

Apparently eastern Washington's first records of this primarily marine, west coastal species are of adult birds seen in the Potholes Reservoir region of Grant County by Johnsgard (1954) on 22 April 1954 and 4 May 1954; the first documented record is of three gulls photographed by LaFave (1965) on 5 February 1956, presumably at Spokane, Spokane County. By the winter of 1974-75, this species had become a regular winter visitor along the Columbia River in south-central Washington, where it was present from 7 December 1974 to at least 17 February 1975 (Rogers 1975). An adult female was collected by the writer along the Columbia River at Pasco, Franklin County, on 20 November 1978 (WSUCM No. 79-120); its measurements: wing, 420.0mm; tail, 180.0mm; exposed culmen, 55.0mm; depth of bill at angle of gonys, 22.1mm; tarsus, 72.0mm; weight, 1298.0g. To the best of the writer's knowledge, No. 79-120 is the first specimen of *glaucescens* from the interior of the Pacific Northwestern United States. Two additional specimens were collected by the writer at Pasco: an adult female intermediate *(L. glaucescens* toward Western Gull *L. o. occidentalis;* see discussion under *L. occidentalis)* on 28 December 1979; a first-year immature female *glaucescens* (WSUCM No. 80-278) on 3 January 1980.

This species remains unrecorded from the region of the confluence of the Snake and Clearwater rivers in Washington and Idaho.

## WESTERN GULL *Larus occidentalis*

### *Status in the interior of the Pacific Northwest*

In the Pacific Northwest, this species is known with certainty only from marine environs. The specimen purportedly documenting the occurrence of *L. occidentalis* from the Pacific Northwest's interior has been reidentified by the writer as a first-year immature California Gull *L. californicus* (Weber 1979), leaving one record from this region's interior: an undocumented sighting of two adults by W.A. Hall and L.D. LaFave (LaFave 1965) at O'Sullivan Dam, Grant County, Washington, on 16 January 1959.

### *An intermediate from eastern Washington*

Hybridization between the Glaucous-winged Gull *L. glaucescens* and *L. o. occidentalis* (northern race of the Western Gull) has been known from Pacific Northwestern coastal waters since the turn of the century (Dawson and Bowles 1909) but has only recently been studied in detail (Hoffman *et al.* 1978). Both species are typically marine, with *glaucescens* breeding from the Aleutian and Pribilof islands and the southern Bering Sea coast south to the central Washington coast, and *occidentalis* from the southern Washington coast to Baja California and the Gulf of California (A.O.U. check-list 1957). Hoffman *et al.* found extensive interbreeding of these two forms within their range of sympatry (180km) along the Washington coast.

On 28 December 1979, the writer collected an intermediate *(L. glaucescens* toward *L. o. occidentalis;* adult female; WSUCM No. 80-253) from a mixed flock of Herring *L. argentatus* and Ring-billed *L. delawarensis* gulls at the Pasco, Franklin County, Washington, garbage dump. This gull had the yellow-orange orbital ring of *L. o. occidentalis,* and iris coloration showed a combination of *L. glaucescens* and *L. o. occidentalis;* that is, irides were brown and flecked with dark brown melanin. Typical *L. glaucescens* have purple or magenta eye-rings and dark brown irides, while typical *L. o. occidentalis* have yellow to orange eye-rings and yellow irides flecked with brown melanin (Hoffman *et al.* 1978). An attempt to quantify mantle and wing tip darkness by the same standard (Kodak density-calibrated neutral gray scale) used by Hoffman *et al.* was unsuccessful. With only ten shades of color from white to black, the writer found the Kodak scale inadequate for measuring the nuances in relative darkness among gulls of the two forms. Instead, a sensitive electronic device (Photovolt reflection meter, model 670, with red filter) was employed for colorimetry. The mantle and wing tip reflection values of WSUCM No. 80-253 as measured by the Photovolt meter are 23.5 and 13.5, respectively (increasing numbers represent decreasing darkness). As shown in Table 3, mantle darkness of this specimen is within the range of typical *L. glaucescens* but outside that of typical *L. o. occidentalis;* wing tip darkness falls between the ranges for typical examples of these forms. But it should be noted that the data in Table 3 for typical *L. glaucescens* and typical *L. o. occidentalis* are based only upon darkness of mantle and wing tips; coloration of iris and eye-ring for the typical specimens on which the data in Table 3 are based is unknown. The writer's tendency is to consider as *L. o. occidentalis* those specimens with blackish wing tips and those with gray to dark gray wing tips as *L. glaucescens.*

Of the combined total of 22 adult specimens of these two species in the collections at Washington State University and the University of Idaho (UIM), two others (UIM No. 674 and WSUCM No. 40-63, both from coastal Washington) show evidence of either interbreeding or introgression (gene flow). UIM No. 674, designated as *L.*

TABLE 3. Mantle and wing tip darkness for adults of *L. glaucescens, L. o. occidentalis, L. a. smithsonianus,* and intermediates between *glaucescens* and nominate *occidentalis.* Data are for specimens in the collections at Washington State University and the University of Idaho. Reflection values were obtained by a Photovolt reflection meter (model 670) with red filter. Increasing darkness is represented by decreasing reflection values. Mean values are in parentheses.

| | No. of specimens | Mantle reflection value | Wing tip[1] reflection value |
|---|---|---|---|
| Typical *L. glaucescens* | 11 | 22.2-27.0 (25.7) | 17.0-27.0 (21.2) |
| Typical *L. o. occidentalis* | 5 | 14.9-19.9 (16.6) | 7.0-10.5 (8.0) |
| Typical *L. a. smithsonianus* | 7 | 25.9-33.0 (29.9) | 4.5-8.0 (6.1) |
| WSUCM No. 80-253 *(L. glaucescens* toward *L. o. occidentalis)*[2] | 1 | 23.5 | 13.5 |
| UIM No. 674 *(L. o. occidentalis* toward *L. glaucescens)*[2] | 1 | 23.5 | 10.0 |
| WSUCM No. 40-63 *(L. o. occidentalis* toward *L. glaucescens)*[2] | 1 | 23.0 | 16.0 |

[1]Readings taken about 4-5cm below tip of second outer primary on outer vane.

[2]Additional data for these specimens are given in Table 4.

TABLE 4. Bill measurements for adults of *L. glaucescens, L. o. occidentalis, L. a. smithsonianus,* and intermediates between *glaucescens* and nominate *occidentalis.* Data are based upon specimens in the collections at Washington State University, the University of Idaho, and the University of Washington. Mean values are in parentheses.

| | Exposed culmen, *l* (mm) | | Bill depth, *d*, at angle of gonys (mm) | | *l*/*d* | |
|---|---|---|---|---|---|---|
| | male | female | male | female | male | female |
| *L. glaucescens;* 7 males and 7 females | 55.0-64.0 (60.0) | 47.5-56.1 (53.3) | 19.4-22.6 (21.2) | 18.1-22.1 (19.6) | 2.66-3.09 (2.84) | 2.49-2.96 (2.71) |
| *L. o. occidentalis;* 4 males and 5 females | 51.0-60.2 (54.6) | 51.0-52.9 (52.0) | 19.9-21.6 (21.1) | 18.2-19.8 (19.3) | 2.40-2.79 (2.59) | 2.58-2.86 (2.70) |
| *L. a. smithsonianus;* 5 males and 5 females | 53.8-66.0 (58.7) | 51.8-59.0 (54.4) | 19.2-21.2 (19.8) | 17.2-20.6 (18.3) | 2.79-3.09 (2.96) | 2.85-3.11 (2.97) |
| WSUCM No. 80-253 *(L. glaucescens* toward *L. o. occidentalis;* adult female; 28 December 1979; Franklin County, Washington) | | 52.0 | | 18.7 | | 2.78 |
| UIM No. 674 *(L. o. occidentalis* toward *L. glaucescens;* adult male; 7 June 1949; Grays Harbor County, Washington) | 52.8 | | 19.4 | | 2.72 | |
| WSUCM No. 40-63 *(L. o. occidentalis* toward *L. glaucescens;* adult male; 15 July 1940; Clallum County, Washington) | 59.0 | | 21.3 | | 2.77 | |

*occidentalis* on its museum tag, is considered to be *L. o. occidentalis* toward *L. glaucescens* by the writer (see Table 3). WSUCM No. 40-63 bears the identification *L. argentatus smithsonianus* on its museum tag (collected and initially identified by G.E. Hudson); however, its mantle and wing tip reflection values are outside the ranges for *smithsonianus* but within (or between) those for *glaucescens* and nominate *occidentalis* (see Table 3). Moreover, this specimen's bill shape index (as indicated by the ratio of exposed culmen length to depth of bill at angle of gonys, the *l/d* ratio) is slightly less than the range for *smithsonianus* but within those for *glaucescens* and nominate *occidentalis* (see Table 4). Although WSUCM No. 40-63 has more white in its wing tips than is present in typical Glaucous-winged and Western gulls, some hybrids of these species have more white in their wing tips than either parental form (Hoffman *et al.* 1978). The writer considers this specimen closer to nominate *occidentalis* than to *glaucescens* primarily because of the extent, rather than intensity, of gray-black in its primaries.

If the reflection values of the three intermediates (WSUCM No.'s 40-63 and 80-253, and UIM No. 674) were included in the data to determine mean and extreme mantle and wing tip darkness for *L. glaucescens* and *L. o. occidentalis,* both mantle and wing tip darkness of the two forms would overlap (see Table 3). When six or seven of the 22 adult specimens examined by the writer are arranged in a series from lightest to darkest, there is an unbroken gradation from one form to the other, making it difficult to discern where *glaucescens* ends and nominate *occidentalis* begins (see Figure 1).

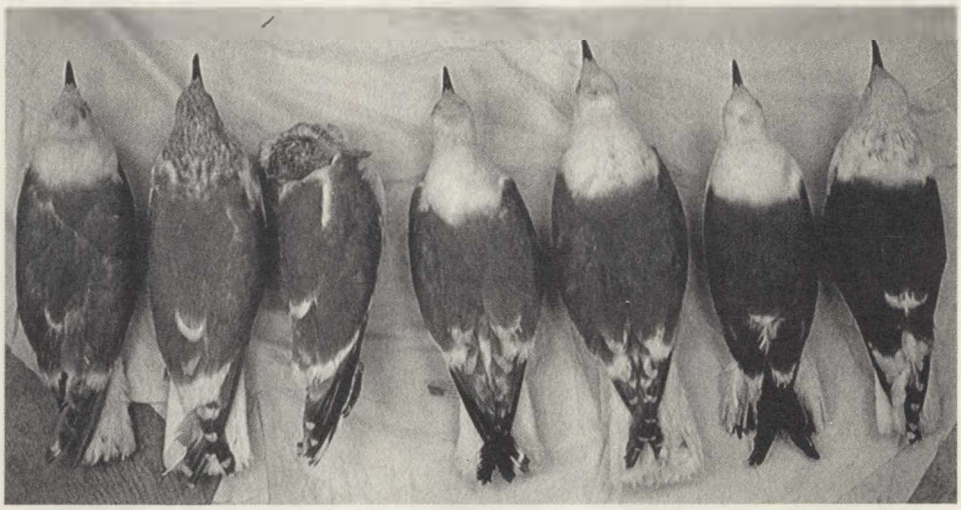

Figure 1. Series of Glaucous-winged and Western Gulls. From left to right: WSUCM No. 49-178, *L. glaucescens;* WSUCM No. 75-229, *L. glaucescens;* WSUCM No. 80-253, *L. glaucescens* toward *L. o. occidentalis;* UIM No. 674, *L. o. occidentalis* toward *L. glaucescens;* UIM No. 692, *L. glaucescens;* WSUCM No. 48-208, *L. o. occidentalis;* WSUCM No. 55-33, *L. o. occidentalis.* No. 80-253 was not yet prepared as a specimen when the photograph was taken. From left to right, the mantle and wing tip reflection values, respectively, for these specimens: 26, 20; 26,17; 23.5, 13.5; 23.5, 10; 22.2, 18; 19.9, 7.5; 14.9, 7.

***Taxonomic discussion of the* glaucescens-occidentalis-argentatus *complex***

Hoffman *et al.* (1978) treat *glaucescens* and nominate *occidentalis* as semispecies; that is, as borderline cases in speciation. They conclude that the two forms do not satisfy

the criteria for conspecificity as proposed by Mayr (1969) and Short (1969). In zones of overlap and hybridization, these criteria include the complete breakdown of isolating mechanisms (random mating), the filtering of introgressed genes into adjacent parental populations, complete intergradation (cline formation), and the absence of parental phenotypes.

The establishment of either the presence or absence of isolating mechanisms is crucial to the determination of the relationship between *L. glaucescens* and *L. o. occidentalis*. Total breakdown of these mechanisms would result in random mating, almost assuring that the remainder of the above-mentioned criteria be met. The other extreme, complete reinforcement of isolating mechanisms, would preclude interbreeding and therefore ensure the specific identity of the two forms. In the midst of the zone of hybridization, Hoffman *et al.* found hybrids to outnumber the combined total of pure Glaucous-winged and Western gulls in four colonies (Destruction Island; Sand and Whitcom islands, Gray's Harbor; South Rock, Hoh River); they also observed assortative mating (preference for similar mates) and that pure pairs of the two forms hatched significantly fewereggs than pairs containing at least one hybrid. Presumably the presence of apparently pure mated forms in this zone partially sustains the isolating mechanisms, thereby impeding a free exchange of genes between adjacent parental populations. Thus, interbreeding breaks down isolating mechanisms, while assortative mating tends to reinforce them. In some instances, a standoff conceivably occurs, and the two interbreeding forms neither merge into a continuous population nor diverge to the point of reduced hybridity. Despite the preponderance of intermediates in some colonies and their apparent reproductive advantage over pure parental phenotypes, Hoffman *et al.* believe such a stalemate possibly exists between *glaucescens* and nominate *occidentalis*. They analyzed an assumed equilibrium condition by means of a mathematical model of the Destruction Island gull population (29% Western, 19% Glaucous-winged, 52% hybrid). With immigration, density-dependent fecundity, pairing and reproduction, and mortality as parameters and a gull population of 1300, Hoffman *et al.* determined that an annual influx of 20 Western and 13 Glaucous-winged gulls would be required to maintain equilibrium, which was assumed to be represented by the above percentages of morphological classes. Thus, an annual immigration of small numbers of pure types into the colony (and therefore into the hybrid zone) can theoretically balance the reproductive advantage of the intermediates. In actuality, however, the yearly number of pure forms either entering or leaving the colony is unknown.

Interbreeding of *glaucescens* and nominate *occidentalis* does not fall within the five categories of population contact described by Mayr (1969:194), who includes zones of overlap with occasional interbreeding (semispecies) and those with complete intergradation but does not consider intermediate conditions. By treating *glaucescens* and nominate *occidentalis* as semispecies, Hoffman *et al.* expand the semispecies concept so as to include persistent interbreeders in a presumed state of equilibrium, a condition perpetuated by the operation of partial isolating mechanisms.

The conclusions drawn by Hoffman *et al.* regarding speciation of Glaucous-winged and Western gulls conform to the data they gathered and its somewhat narrow interpretation of Mayr's and Short's criteria for conspecificity. These criteria are not satisfied because of assortative mating among the large percentage of parental phenotypes within the zone of overlap, resulting in partial rather than complete intergradation. But for reasons to be discussed later, the writer believes there is no convincing argument for assuming that interaction of the three morphological classes within this zone has stabilized; it is also possible that the zone is imperceptibly being driven toward complete intergradation. If this were the case, a less restrictive interpretation of Mayr's and Short's criteria, one weighing introgression against assortative mating, would allow a different perspective on the taxonomy of these forms.

The relationship between *glaucescens* and nominate *occidentalis* can perhaps be better understood by a brief discussion of the three subspecies (nominate *occidentalis*, *wymani*, and *livens*) of *L. occidentalis*. Nominate *occidentalis* breeds along the Pacific Coast from Washington south to central California and is replaced by *wymani* along the coast from central California south to central western Baja California; the race *livens* breeds in the Gulf of California (A.O.U. 1957). Presumably nominate *occidentalis* intergrades with *wymani* in central California, but just where this occurs was not clear to Grinnell and Miller (1944). However, there appears to be a discontinuity in range between *wymani* and *livens*, and the writer is unable to find evidence in the literature for interbreeding of these subspecies. Although the two forms have deep neutral gray mantles (all of the forms in this discussion, including *glaucescens*, have white heads and bodies), *wymani* is flesh-footed and has an orange-yellow eye-ring, while *livens* is yellow-footed and possesses a yellow orbital ring (Dickey and Van Rossem 1925). In addition, downy young of the two races are significantly different: ground color of *livens* is almost white and that of *wymani* a rich brown (Bancroft 1929). Thus, along the coast from Washington to western Baja California, there exists a gradation from nominate *occidentalis* to the slightly smaller *wymani* (Jewett *et al.* 1953) with its darker mantle. So far as the writer knows, there appears to be a gap, both geographical and morphological, between *wymani* and *livens*. If *livens* does not interbreed with *wymani*, the criteria employed by Hoffman *et al.* to test conspecific status of *glaucescens* and nominate *occidentalis* cannot be used to assess conspecificity for *livens* and *wymani*. Without intergradation with *wymani*, *livens* would presumably qualify as a race of the Western Gull for other reasons: morphological characters and behavioral similarities *livens* shares with *wymani* and nominate *occidentalis;* the marine habitat preferred by each of the three forms; *livens'* geographic proximity to *wymani*. But the combination of dark mantle and yellow legs in *livens* suggests it is perhaps closely related to other yellow-legged, dark-mantled marine species (such as *L. dominicanus*). On the other hand, if *livens* is indeed a geographical isolate of *occidentalis*, it might have crossed the threshhold of speciation; the possibility that it is a distinct species *(Larus livens)* is worthy of attention. Because of intergradation (though not complete) and extensive hybridity between nominate *occidentalis* and *glaucescens*, nominate *occidentalis* may be taxonomically closer to *glaucescens* than to *livens*.

Aside from the criteria for conspecific status proposed by Mayr and Short, other factors could reasonably be considered in assessing borderline cases in speciation. In particular, would merging two or more forms into one species enhance our understanding of the relationship of the forms, or would it reduce our comprehension of the differences among them? In the case of *glaucescens* and *occidentalis*, the writer believes the former proposition is more persuasive than the latter. It is appealing to speculate that from *wymani* (and possibly *livens*) in the south to nominate *occidentalis* and *glaucescens* in the north, these forms represent *L. occidentalis*, the marine gull of North America's Pacific Coast. Mantle color of these forms varies clinally from dark to light in the northerly direction, and average size increases in accordance with Bergmann's rule.

As with *glaucoides* and *thayeri* (see Part I), Pleistocene glaciation figures prominently in the evolution of *glaucescens* and *occidentalis*. Hoffman *et al.* note the coincidence of *glaucescens'* present distribution with the coastal edge of the Cordilleran glacier complex during the last Pleistocene maximum and the present range of *occidentalis* to the south of these glaciers. They speculate that a floating ice-shelf in the vicinity of Vancouver Island might have separated ancestral populations of Glaucous-winged and Western gulls. The writer, carrying their reasoning a step further, suggests that these forms were conspecific before the last glacial advance (Wisconsin stage) of the Pleistocene. Divergence to the point of complete speciation as a result of reproductive isolation during this era might not have occurred. Subsidence of the Cordilleran ice-sheet with climatic amelioration brought the formerly isolated populations in contact again,

resulting in the extensive hybridization observed by Hoffman *et al.* Therefore, the zone of secondary intergradation possibly extends 10,000 years into the past, back to the close of the Pleistocene. Hoffman *et al.* believe that the biological species concept would predict that the two forms would have evolved to, or at least approached, either complete intergradation or complete reproductive isolation if the zone of contact is, in fact, old; because neither has occurred, they suggest that the zone of contact is in a balanced condition. If, on the other hand, the shortest estimated time for speciation in birds is from 10,000 to 18,000 years (Selander 1971:106; Selander also mentions that shorter periods might be possible), there would be no convincing reason for assuming equilibrium in the hybrid zone, and a different interpretation of the data presented by Hoffman *et al.* becomes possible. The degree of interbreeding and apparent reproductive advantage of hybrids suggest that *glaucescens* and nominate *occidentalis* are merging, albeit slowly, into a zone of complete intergradation; concomitantly, the writer postulates that introgression (as demonstrated, for example, by some darkening of the primary tips of Glaucous-winged Gulls examined by Hoffman *et al.* at Greater Chain Island, British Columbia) may outweigh the effect of assortative mating in the zone of hybridity. If, in cases of doubtful speciation, taxonomic philosophy could be broadened so as to reflect evolutionary direction, conspecific treatment of the two forms under consideration would perhaps be more consonant with their current status.

As mentioned earlier (see Part I), Smith (1966) believes that pigmentation of eye and orbital ring is the principal sexual isolating mechanism of the arctic *Larus* gulls he studied; moreover, he reasons that the resultant eye-head contrast pattern (either light against white or dark against white) appears to have the same functional significance in species discrimination for all large *Larus* gulls of the northern hemisphere. Notwithstanding the differing eye-head contrast patterns of *occidentalis* (light against white) and *glaucescens* (dark against white), Smith's theory can be used to elucidate this anomaly in these two possibly conspecific forms. Assuming that the previously discussed separation of ancestral forms of Glaucous-winged and Western gulls during the Wisconsin glacial did occur and that the original pre-Wisconsin conspecific *glaucescens-occidentalis* form had the eye-head contrast pattern of modern *occidentalis*, *glaucescens* conceivably evolved a dark against white eye-head pattern to isolate it sexually from another *Larus* form (possibly *hyperboreus* or *argentatus*) which also frequented the coastal edge of the Cordilleran ice-sheet and which possessed a light against white eye-head pattern. Retention of the light against white eye-head pattern of the ancestral Western Gull population to the south of the Cordilleran suggests that the range of this population did not overlap that of a closely related *Larus* form with a similar eye-head contrast pattern. Distribution of present-day *Larus* gulls lends credence to this view. The writer believes that extensive interbreeding of *glaucescens* and nominate *occidentalis* would be difficult to reconcile with Smith's cogent hypothesis on the primacy of the eye-head contrast pattern as a reproductive isolating mechanism unless these forms were conspecific before the last glacial.

The case for possible conspecificity of Glaucous-winged and Western gulls is clouded by interbreeding of *L. glaucescens* and Herring Gulls *L. argentatus smithsonianus* in Alaska (Williamson and Peyton 1963; Patten and Weisbrod 1974). Of 157 nests examined by Patten and Weisbrod on North Marble Island in southeastern Alaska, only four were of mixed pairs, in marked contrast to the massive hybridization between *glaucescens* and nominate *occidentalis* along the Washington coast. However, it is also possible that further study of *glaucescens* and *smithsonianus* in their zone of sympatry will yield evidence of more extensive interbreeding; intermediate specimens collected in the Cook Inlet region by Williamson and Peyton suggest that this may be the case. Whereas *glaucescens* and nominate *occidentalis* occur in the same biotype, *glaucescens* and *smithsonianus* differ in habitat preference, *glaucescens* having a proclivity for the coast

and *smithsonianus* occurring primarily on inland bodies of freshwater. All three forms have pink legs, but color of irides and eye-rings varies. As with *glaucescens* and nominate *occidentalis*, *glaucescens* and *smithsonianus* overlap in size. However, the writer believes that *glaucescens* is morphologically closer to nominate *occidentalis* than to *smithsonianus*. Of the three forms (see Table 3), *smithsonianus* combines the lightest mantle with the darkest wing tips; in the *glaucescens-occidentalis* group, the trend is for darker-mantled forms to have darker wing tips. In addition, the Herring Gull shows more white in its tips than Glaucous-winged and Western gulls (Dwight 1925). Although *glaucescens* generally has more white in the wing tip than *occidentalis*, the two forms occasionally have the same number (two) of subapical spots; moreover, Dwight shows that the wing tip pattern for these two forms is sometimes similar. Another morphological character of use in comparing these forms is bill shape. Both *glaucescens* and nominate *occidentalis* have stockier bills than *smithsonianus*. When the *l*/*d* ratio of Table 4 is used as an index of bill shape, the data show that *smithsonianus* has the thinnest bill of the three forms. Average bill depths for *glaucescens* and nominate *occidentalis* are very close; interestingly, the *l*/*d* ratios for females of these two forms are nearly identical, while male nominate *occidentalis* tend to have stockier bills than male *glaucescens* (see Table 4).

In summary, the combination of major factors — limited interbreeding, differing habitats, and clear morphological differences — mitigates against conspecificity for *glaucescens* and *smithsonianus*, and on the basis of data presently available, the writer favors treating them as semispecies. *L. glaucescens* is ostensibly more closely related to *L. o. occidentalis*. Because of persistent and extensive interbreeding (in which the evidence suggests evolutionary convergence), comparable habitat niches, and morphological similarities, the writer is inclined to favor conspecific designation for Glaucous-winged and Western gulls; there appears to be little, if any, practical advantage in treating *glaucescens* as a separate species. In this framework, *glaucescens* is merged with *L. occidentalis* to become *L. o. glaucescens;* as a result, *L. occidentalis* and *L. argentatus* become semispecies, and their binomial distinction is retained.

The breeding range of *glaucescens* extends into coastal northeastern Asia, where it partially overlaps that of the Slaty-backed Gull *L. schistisagus* (A. O. U. 1957, Smith 1966), the dark-mantled, pink-legged marine gull of northeastern Asia. Dwight (1925) indicates that *schistisagus* averages larger than *glaucescens* but that measurements of the two forms overlap. Although one mixed breeding pair of *glaucescens* and *schistisagus* is known from eastern Siberia (W. Hoffman, pers. comm.), extensive interbreeding has not been reported. However, the natural history of *schistisagus* is poorly known; Dement'ev *et al.* (1969) have little to report on this species' breeding habits. The Slaty-backed Gull appears to be the Asian counterpart of North America's Western Gull, and it may be conspecific with Glaucous-winged and Western gulls. Further study of *glaucescens* and *schistisagus* in their zone of sympatry is needed to assess this possibility.

Because of the taxonomic complexity of the large *Larus* gulls, the discussion herein has extended beyond the relationship between *glaucescens* and nominate *occidentalis*. Bearing on the question of speciation in both *glaucescens* and *schistisagus* are two other important considerations: apparent interbreeding between *hyperboreus* and *glaucescens* in Alaska (Swarth 1934) and between *schistisagus* and *argentatus* in Siberia (Portenko 1963). In both cases, evidence based upon intermediate specimens suggests interbreeding; so far as the writer knows, hybridization has not been documented by nesting studies. Moreover, the ranges of *hyperboreus* and *glaucescens* are not known to overlap in Alaska, the former breeding farther north than the latter; however, the forms may occasionally come in contact in the Pribilof Islands (Ingolfsson 1970). Therefore, anything more than a tentative assessment of the relationship between *hyperboreus* and *glaucescens* and between *schistisagus* and *argentatus* would be premature. Because *hyperboreus* and *glaucescens* differ in both habitat preference and morphology, the

writer suggests that conspecific treatment might overstate their relationship even if interbreeding is verified, but that the two forms may prove to be semispecies. For the same reasons, *schistisagus* and *argentatus* are likely to be no more than semispecies. Less qualified statements on speciation await data drawn from the breeding grounds of these forms.

**HERRING GULL *Larus argentatus***

Burleigh (1972) describes *argentatus* as a "rare fall transient and winter visitant" in the northern part of Idaho. This species is now a common winter resident at Coeur d'Alene, Kootenai County, and is extending its range farther south in Idaho. The writer's first winter records of *argentatus* at Lewiston, Nez Perce County, Idaho, and in Asotin and Whitman counties, Washington, were during 1977-78, when about a dozen gulls were seen in the vicinity of the confluence of the Snake and Clearwater rivers from 20 October 1977 to 23 April 1978; before 1977 this species was known only as a rare migrant in this region (Weber and Larrison 1977). Herring Gulls were again present in this region the following winter (1978-79), and just as in the preceding year, first-year immatures arrived on the wintering grounds before adults. Post-1977 extreme dates of the writer are 11 October (1979) and 26 April (1979) along the Snake in Whitman County, Washington. Elsewhere in eastern Washington, *argentatus* is a fairly common winter resident about larger bodies of open water. Prior to the 1950's, there was only one record of this species from eastern Washington: a specimen (WSUCM No. 42-100, adult female) taken by J.L. Sloanaker at Spokane, Spokane County, on 10 December 1941 (LaFave 1965).

The writer collected a first-year immature female *argentatus* (WSUCM No. 77-625) on the Snake River 7.5km south of Lewiston, Nez Perce County, Idaho, on 20 October 1977 and an adult male (WSUCM No. 78-19) at Coeur d'Alene, Kootenai County, Idaho, on 28 December 1977.

Though Burleigh (1972) "carefully scrutinized" the gulls at Lake Coeur d'Alene in northern Idaho, he found no Herring Gulls. Thus, *argentatus* presumably became a common winter resident at this location sometime after Burleigh's 1958 departure from Idaho. His sole Idaho record is of two immatures seen along the Palouse River, Latah County, on 13 August 1951. This is an unusually early fall migrational date for *argentatus* in Idaho (over the past decade, the writer's earliest record is 9 October), and perhaps Burleigh's record is in error. Since California Gull *L. californicus* birds of the year arrive in this region in July and August, and since these juveniles closely resemble juvenile *argentatus* (both are gray-brown with largely dusky bills; most first-year immature *californicus* in this region do not acquire the characteristic black-tipped bill with pink base until fall), the writer suspects that Burleigh might have observed juvenile California Gulls on the above date. The four *argentatus* seen by Polumsky along the Snake River in southeastern Washington on 19 August 1974 (Weber and Larrison 1977) are also doubtful; these gulls were possibly *californicus*.

Until documented by a specimen, records of *argentatus* during summer from any region of Washington are dubious. The specimen supposedly documenting the presence of *argentatus* in summer from this state (15 July 1940, Clallum County) has been reidentified by the writer as an intermediate between *occidentalis* and *glaucescens* (see discussion under *L. occidentalis*). Such intermediates possibly account for the few published summer records (see Jewett *et al.* 1953) of *argentatus* from Washington's coastal waters.

**THAYER'S GULL *Larus thayeri***

The A.O.U. check-list (1957) and Burleigh (1972) do not list this species as occurring in Idaho. Apparently the state's first record of *thayeri* is of one adult and one immature seen at Coeur d'Alene, Kootenai County, on 19 February 1977 by D.R. Paulson and others (Rogers 1977; D.R. Paulson, pers. comm.).

A second record is of an adult seen by the writer in a flock of about 80 Herring Gulls at Coeur d'Alene, Kootenai County, from 31 December 1977 to 30 January 1978. This gull, which was collected by the writer and on the latter date, is an adult female (WSUCM No. 78-29) with an ossified skull and has the following measurements: wing, 384.0mm; tail, 161.0mm; exposed culmen, 46.0mm; depth of bill at angle of gonys, 15.2mm; tarsus, 64.0mm; weight, 866.0g. Dimensions of this specimen are in close agreement with those given by Dwight (1925) for female Thayer's Gulls (see Table 1, Part I). Irides were speckled brown, eye-ring red, and legs pink. No. 78-29 is Idaho's first specimen record of *thayeri*.

Although *thayeri* has long been known as a winter resident along coastal waters of the Pacific Northwest (Brooks 1937), it has heretofore been unrecorded from east of the Cascades in Washington (Jewett *et al.* 1953; Weber and Larrison 1977). Eastern Washington's first record is of a first-year immature (WSUCM No. 77-543) collected by the writer along the Snake River at Clarkston, Asotin County, on 6 October 1977. The measurements of this specimen: wing, 399.0mm; tail, 154.0mm; exposed culmen, 50.0mm; depth of bill at angle of gonys, 15.1mm; tarsus, 60.0mm; weight, 884.0g. Since the gonads of No. 77-543 were destroyed, this specimen is of undetermined sex; however, its measurements compare closely with those of Dwight for female *thayeri*. In addition, two other bill measurements (bill anterior nares to tip, 20.0mm; bill depth at posterior nares, 14.6mm) fit more closely with Smith's extreme measurements for female *thayeri* (see Table 2, Part I) than those he gives for female *argentatus* (22.0-25.9mm and 15.5-18.8mm; Smith 1966, pages 12 and 17). Plumage coloration is considerably darker than that of the previously described *glaucoides* specimen (No. 66-129) and more closely matches a first-autumn *argentatus* in coloration, except that No. 77-543 has primaries with a silvery sheen on the undersides, unlike the darker color of *argentatus*. The bill of this specimen is entirely dark (blackish).

**CALIFORNIA GULL *Larus californicus***

Burleigh (1972) designates this species as a "scarce summer visitant and fall transient in the northern part of the state, and a common summer resident in southern Idaho." He observed *californicus* on only three occasions in northern Idaho: along the Snake River at Lewiston, Nez Perce County, on 13 August 1954, 30 September 1954, and 24 October 1955.

The recently constructed Lower Granite Dam on the Snake River impounded water upstream to Lewiston, Idaho, in 1975, and since 1977, the writer has observed this species year-round near the confluence of the Snake and Clearwater rivers in Asotin and Whitman counties in Washington and in the Lewiston area of Nez Perce County in Idaho, where it was formerly rare (Weber and Larrison 1977) but is now common in summer and rare in winter. The writer has only one winter record from this region: an adult bird seen along the Clearwater River 21-28 January 1978. During late summer of the past two years, there has been an influx of juvenile *californicus* into this region. These birds of the year, quite dark and with largely dusky bills, were first seen on 22 July in 1978 and on 25 July in 1979 and possibly represent an annual western

movement of this species through southeastern Washington and northern Idaho from breeding grounds east of the Lewiston region to Pacific coastal wintering areas. Color-banded *californicus* birds of the year from breeding colonies in Utah have been recovered along the Snake River along the Washington-Idaho border and along the Columbia River in south-central Washington (Woodbury and Knight 1951).

The writer has three specimens from the Snake River near its confluence with the Clearwater: a third-year male (WSUCM No. 77-427) taken 7.5km south of Lewiston on 9 July 1977; a second-year immature male (WSUCM No. 77-862) collected at Lewiston on 10 November 1977; a juvenile male (WSUCM No. 78-399) taken in Whitman County, Washington, about 7.3km west of Lewiston, on 22 July 1978.

Farther north in Idaho (Kootenai County), *californicus* now occurs throughout the year. This species is common about larger bodies of water in summer; in winter, it is irregular and much less numerous. The writer saw a flock of six at the Coeur d'Alene garbage dump on 30 January 1978 but observed none at this location during the following winter.

Jewett *et al.* (1953) list this species as a common migrant and winter resident along coastal Washington and as a rare and local summer resident in south-central Washington; they list no winter records for eastern Washington. Since 1953, *californicus* has evidently increased its numbers as a summer resident in eastern Washington. Although this species is not known to breed in northern Idaho or along the Snake River in southeastern Washington, breeding colonies are known from south-central Washington along the Columbia River (Weber and Larrison 1977, Conover *et al.* 1979) and at the potholes-sand dune area near O'Sullivan Dam (Rohwer *et al.* 1979). Mattocks (1979) lists five published records for this species in winter (December through February) for eastern Washington. Apparently the first specimen record for winter from this region is of a subadult male (WSUCM No. 80-279) taken by the writer from a flock of 10 at Pasco, Franklin County, on 2 January 1980.

**RING-BILLED GULL *Larus delawarensis***

Burleigh (1972) classifies this gull as an "uncommon spring transient and a common fall transient in the northern part of the state, a few individuals occurring during the winter months when there is open water on the lakes and rivers. An uncommon and rather local summer resident in southern Idaho."

The Ring-billed Gull is now a common summer resident on larger lakes and rivers in northern Idaho. In winter, *delawarensis* is uncommon at Lewiston, Nez Perce County, but is quite common at Coeur d'Alene, Kootenai County, where the writer has observed flocks of 50 or more in winter. The writer has two specimen records from northern Idaho: an adult female (WSUCM No. 79-161) from Coeur d'Alene on 26 December 1978 and an adult male (WSUCM No. 79-226) from the Snake River 6.5km south of Lewiston on 22 June 1979.

This species is not known to breed in northern Idaho or along the Snake River on the Washington-Idaho border; however, it is known to breed in south-central Washington, as at the potholes-sand dune area near O'Sullivan Dam (Rohwer *et al.* 1979). Other breeding localities, as well as a history of the increasing numbers of this and the preceding species in Washington since the turn of the century, are discussed by Conover *et al.* (1979). The state's first saltwater breeding record (June 1976 at Willapa Bay) of *delawarensis* is noted by Penland and Jeffries (1977).

The recent history of *delawarensis* in Washington is noteworthy: less than three decades ago, it was known as a spring and fall migrant along the coast and as a summer resident (and breeder) in the eastern part of the state; in winter, it was thought to be of casual occurrence anywhere in the state (Jewett *et al.* 1953). The Ring-billed Gull now occurs throughout the year in both eastern and western Washington but is more common east of the Cascades, particularly in summer; in western Washington, *delawarensis* is more common about freshwater localities than along the coast (writer's observations).

**MEW GULL *Larus canus***

Burleigh (1972) does not list this species for Idaho. Since it is known to occur in adjacent eastern Washington as a rare spring and fall migrant (LaFave 1965), the Mew Gull heretofore has probably been overlooked in Idaho. The writer saw two adult *canus* in a mixed flock of California, Herring, and Ring-billed gulls on a gravel bar in the Clearwater River at Lewiston, Nez Perce County, on 23 April 1978. The two gulls, viewed through a 40X spotting scope, displayed field marks characteristic of adult *canus:* unmarked, short greenish-yellow bill; greenish-yellow legs; dark eyes. In addition, the two Mew Gulls were slightly smaller and noticeably darker-mantled than nearby Ring-billed Gulls. Since the writer has often seen Mew Gulls in winter along coastal Washington, identification was positive. An attempt to collect one of the gulls was unsuccessful. So far as the writer knows, this is Idaho's first record of *canus.*

LaFave collected an adult male (WSUCM No. 62-30) at Spokane, Spokane County, Washington on 27 October 1961.

**FRANKLIN'S GULL *Larus pipixcan***

Burleigh (1972) describes this species as a local summer resident in the southern part of the state and as apparently accidental in northern Idaho. He lists only one record for the northern part of the state, a subadult female collected at the reservoir east of Lewiston Orchards on 14 July 1956. A second record of *pipixcan* from northern Idaho is of a first-year immature (WSUCM No. 79-227) of undetermined sex taken by the writer along the Snake River, Nez Perce County, 3km south of Lewiston on 25 July 1979; its measurements: wing, 257.0mm; tail, 88.0mm; exposed culmen, 26.5mm; depth of bill at angle of gonys, 6.7mm; tarsus, 39.2mm; weight, 188.0g. This gull was also seen on the Washington side of the Snake River in Asotin County before it was collected. Since *pipixcan* has been reported from adjacent southeastern Washington as a rare but regular migrant (Weber and Larrison 1977), this species is probably of more than accidental occurrence in northern Idaho.

**BONAPARTE'S GULL *Larus philadelphia***

Burleigh (1972) lists *philadelphia* as a scarce spring transient and an uncommon fall migrant throughout Idaho. In Nez Perce County, he found this species to be a "rather uncommon" migrant in spring and fall, citing several records for this locality: 25 April 1953 and 30 June 1955 in spring, and several fall records from 24 October (1955) to 1 November (1953 and 1956). Recent records suggest that *philadelphia* is a more common migrant in northern Idaho than previously known.

Although Bonaparte's Gull is a fairly common migrant through south-central Washington (writer's observation), heretofore there has been only one record of this species from the state's southeasternmost block of counties (Asotin, Columbia,

Garfield, and Whitman): one seen by S.H. Lyman and P.C. Dumas near Dayton, Columbia County, on 9 August 1948 (Lyman and Dumas 1951). The writer reports the following additional records, all from the vicinity of the confluence of the Snake and Clearwater rivers (Asotin and Whitman counties in Washington and Nez Perce County in Idaho): from one to three immatures from 1 September to 6 November 1977 (WSUCM No. 77-424, female, collected on 2 September 1977 along the Snake River, Whitman County, Washington); from one to eight immatures and adults in winter plumage from 30 August to 4 November 1978, with high counts of eight on 22 October and 4 November. The writer's extreme dates in fall for eastern Washington are 26 July (1979) at a scabland pond near Lamont, Whitman County, and 18 November (1978) at Pasco, Franklin County. The gull seen near Lamont, an adult female in summer plumage, was collected by the writer three days later, on 29 July (WSUCM No. 79-228).

The writer has no spring records of Bonaparte's Gull for this region.

**SABINE'S GULL *Larus sabini***

Following the convincing analysis of Moynihan (1959), the writer merges *Xema* with *Larus;* therefore, *Xema sabini* is treated as *Larus sabini* herein.

This pelagic species apparently occurs as a rare but fairly regular migrant, principally in fall, in eastern Washington. Extreme dates in autumn are 11 September (1977) along the Columbia River near Richland, Benton County (R.E. Woodley, pers. comm.) and 6 October (1962) at Soap Lake, Grant County (LaFave 1965). WSUCM No. 62-31, a first-year immature male, was taken by LaFave (1961) on 23 September 1961 at O'Sullivan Dam, Grant County. While the writer knows of seven autumnal records from Washington's interior, there are only two for spring. LaFave (1965) saw an adult bird at O'Sullivan Dam, Grant County, on 12 June 1964 and also reports a remarkable occurrence of this species from the interior: a flock of more than 300 was seen by Hall and LaFave on 9 June 1963 at Blue Lake, Grant County, and what was apparently the same flock was seen later in the day at Reardan Slough, Lincoln County.

The writer knows of no records of Sabine's Gull from Idaho.

**BLACK-LEGGED KITTIWAKE *Larus tridactyla***

The writer follows Moynihan (1959), who merges *Rissa* with *Larus;* consequently, *Rissa tridactyla* is treated as *Larus tridactyla* in this discussion.

There are only three records of this pelagic species from the interior of the Pacific Northwestern United States (Idaho and east of the Cascades in both Oregon and Washington): 1) one adult seen by J. Verner (1974) at O'Sullivan Dam, Grant County, Washington, on 15 January 1972; 2) one seen along the Snake River at Clarkston, Asotin County, Washington, by R. Ramsey on 29 February 1976 (Weber and Larrison 1977); 3) an immature male (WSUCM No. 80-233) taken by J. Connelly in Butte County, Idaho, on 13 February 1980.

In New York state, *tridactyla* has been noted to occur along coastal areas after storms (Bull 1974). It is therefore conceivable that inland records (such as the above-listed for the interior Northwest) may also be storm-related.

TABLE 5. Mantle and wing tip darkness for typical adult specimens of the medium- to large-sized *Larus* gulls[1] (except *glaucoides*) known to occur in the Pacific Northwest's interior. Darkness was electronically measured by a Photovolt reflection meter (model 670) with red filter. Increasing darkness is represented by decreasing reflection values. Mean values are in parentheses. No. of specimens, n. Species are listed in order of increasing darkness of mantle.

| Species | Mantle reflection value | Wing tip[2] reflection value |
|---|---|---|
| *L. hyperboreus barrovianus*, n = 4 | 37.0-42.2 (38.3) | 44.0-52.0 (49.2) |
| *L. delawarensis*, n = 8 | 29.2-32.8 (30.3) | 2.9-6.5 (5.0) |
| *L. argentatus smithsonianus*, n = 7 | 25.9-33.0 (29.9) | 4.5-8.0 (6.1) |
| *L. thayeri*, n = 1 | 26.0 | 7.0 |
| *L. glaucescens*[3], n = 11 | 22.2-27.0 (25.7) | 17.0-27.0 (21.2) |
| *L. canus brachyrhynchus*, n = 9 | 20.2-24.2 (22.5) | 6.5-8.5 (7.5) |
| *L. californicus*, n = 9 | 20.5-25.1 (22.4) | 3.2-6.0 (4.8) |

[1]Reflection values for *L. o. occidentalis* are given in Table 3.

[2]Readings taken about 4-5cm below tip of second outer primary on outer vane.

[3]Reflection values for intermediates between *L. glaucescens* and *L. o. occidentalis* are given in Table 3.

## STATUS OF *LARUS* GULLS IN EASTERN OREGON

The most recent distributional account of Oregon birds (Bertrand and Scott 1973) lists only four species of gulls from eastern Oregon: *californicus, delawarensis, pipixcan,* and *philadelphia*. Because of their occurrence in eastern Washington or Idaho, it is possible that one or more of the following has been overlooked in eastern Oregon: *hyperboreus, glaucescens, argentatus, thayeri, canus, sabini, tridactyla,* and perhaps *glaucoides*.

## MANTLE AND WING TIP DARKNESS

Mantle and wing tip darkness for the medium- to large-sized *Larus* gulls (except *glaucoides*) known to occur in the Pacific Northwest's interior are given in Table 5. Data are based upon typical adult specimens in the collections at Washington State University and the University of Idaho; all specimens are from both coastal and interior regions of the Pacific Northwest and Alaska. Since *occidentalis* is not known (with certainty) to occur in the interior, it is not included in Table 5. Data for both *occidentalis* and intermediates between *glaucescens* and nominate *occidentalis* are presented in Table 3. Data were not included for *glaucoides* since there are no adult specimens of this species in the aforementioned collections. For the species examined, mantle and wing tip darkness did not appear to be sex-related; however, examination of larger numbers of specimens could alter this observation. It is hoped that the information in Tables 3 and 4 will be of use to both birdwatchers and professional ornithologists.

SUMMARY (Parts I and II)

First specimen records of *Larus glaucoides, L. glaucescens,* and *L. thayeri* from the interior of the Pacific Northwestern United States (all of Idaho and east of the Cascades in both Oregon and Washington) are discussed. To the best of the writer's knowledge, the specimen of *glaucoides* is also the first from west of the Rocky Mountains in North America. Idaho's first specimen record of *L. hyperboreus* and first sight record of *L. canus* are described, and specimen records of *L. argentatus, L. californicus, L. delawarensis, L. pipixcan,* and *L. philadelphia* provide new information on the distribution of these species in northern Idaho and eastern Washington. In addition, a specimen of an intermediate between *L. glaucescens* and *L. o. occidentalis* from eastern Washington is described.

The author follows Moynihan (1959) in merging *Xema* and *Rissa* with *Larus*. The occurrence in the Pacific Northwest's interior of *L. (Xema) sabini* and *L. (Rissa) tridactyla,* both pelagic species, is documented by specimens: *sabini* from eastern Washington, and *tridactyla* from Idaho.

For reasons presented herein, the writer is inclined to favor merging *thayeri* with *L. glaucoides,* and *glaucescens* with *L. occidentalis*.

Mantle and wing tip darkness of the medium- to large-sized *Larus* gulls (except *glaucoides*) of the Pacific Northwest's interior were determined by an electronic reflection meter. Reflection values are given in Table 5. Comparable data for nominate *occidentalis* and intermediates between *L. glaucescens* and *L.o. occidentalis* are given in Table 3.

ADDENDUM TO PART I:

In addition to photographic documentation, the occurrence of *L. hyperboreus* in eastern Washington is documented by a specimen. Verner (1974) mentions a Glaucous Gull (Central Washington University collection) taken at O'Sullivan Dam, Grant County, on 13 February 1970.

ACKNOWLEDGMENTS

Each of the following people has contributed to this paper, and the writer expresses his gratitude to all of them. R.E. Johnson was especially helpful in many ways: furnishing ammunition for the collection of specimens, providing access to specimens in his care at Conner Museum, and arranging for prompt preparation of specimens. R.F. Andrle carefully examined and discussed the *glaucoides* specimen. D.R. Paulson, E.S. Hunn, and P.W. Mattocks, Jr., reviewed the writer's identification of the *hyperboreus, glaucoides, argentatus, thayeri,* and *californicus* (No.'s 77-427 and 77-862) specimens. R.E. Johnson examined several gulls, including specimens of *glaucescens* (No. 79-120), *californicus, delawarensis, pipixcan,* and *philadelphia.* E.J. Larrison arranged for use of a reflection meter and provided access to specimens in his care at the University of Idaho's bird and mammal museum. Others who assisted in various ways (from the loan of Dwight's monograph on gulls to the typing of the manuscript): I.O. Buss, W. Hoffman, K. Kaufman, H. MacBride, L. McVicker, H. Milke, J. O'Connell, S.A. Rohwer, P.D. Skaar, and R.E. Woodley. G. Godsey, C. Herlugson, D. Mack, and G. Murray Wright prepared most of the WSUCM specimens mentioned herein.

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The puzzler on April's back cover was this bird of prey, perched at close range. Can you identify it to species?

# Answer to Snap Judgment 8

KENN KAUFMAN

Because the birds of prey can be variable in plumage and confusing in general, we must begin by placing the bird in the proper group before looking for species-specific plumage details. This bird is apparently not a *Buteo,* being more slender and elongated than any of our species of that genus; nor is it a falcon, for the simple reason that all North American falcons are dark-eyed and the bird in the photograph clearly has a pale iris. Its plumage pattern does not fit any of the kites — the immature Mississippi Kite *Ictinia mississippiensis* is superficially similar, but it would not show the strong dark-and-light barring on the underside of the wing and tail; neither would the Marsh Hawk *Circus cyaneus* (which should also appear larger-headed and bulkier). By process of elimination, it must be one of our three species of *Accipiter,* and the streaked underparts indicate it is an immature.

No doubt at this point the reader will cry foul, because the photo has been cropped (deliberately, it would seem) so as not to show the tip of the tail . . . and the field guides suggest that tail shape is the most important field mark among the Accipiters. Will it still be possible to identify the bird?

I might as well admit at the outset that if the standard field guides are your only source of reference, you will not be able to identify the bird in the photograph. You may be further out of luck if you saw an article in *American Birds* (Volume 33, No. 3, pp. 236-240; May 1979) purportedly treating identification of this group: although much of the information in that article was accurate, many birders who read it were misled to believe that Accipiters are almost impossible to identify afield.

Actually, given a reasonably good look, practically all individual Accipiters may be identified with confidence. In the case of our Snap Judgment bird, I personally didn't see the bird in question so I have no way to judge its size (and the tail shape wasn't much help even before we cropped the photo), but I have no doubt that the bird is an immature Sharp-shinned Hawk *Accipiter striatus.* Several visible characters support this identification.

The first and most obvious is the pattern of the underparts. There is streaking there, yes — certainly this is not the finely-barred breast pattern of the adult — but the streaking is broad, blurry, hardly contrasting against the underlying ground color. This is typical of the immature Sharp-shinned. Young Cooper's Hawks *A. cooperii,* by comparison, tend to be much more distinctly marked: their streaks are blackish-brown, narrow, sharply defined, standing out against a whitish ground color. This character cannot be used to identify all young Cooper's/ Sharp-shinneds, as some may show an intermediate chest-pattern, but it may be applied confidently to extreme individuals such as the one in the photograph.

Another good character here is shape-oriented: the "long-legged" look of the pictured bird. Actually, Cooper's and Sharp-shinned differ little in proportionate leg-length (although the Goshawk *A. gentilis* does appear short-legged for its bulk), but the Sharp-shinned has very *thin* legs, contributing to the illusion of length. Yet another point to note is the facial expression. The eye seems large for the size of the head and is centrally located in the face, lending a faint aura of (dare I say it?) "cuteness" to an otherwise fierce little face; on the Cooper's, by contrast, the eye appears proportionately smaller and is set farther forward, creating a more efficiently predatory look.

This immature **Sharp-shinned Hawk** was photographed near Phoenix, Arizona, by Joe DiStefano.

# *Letters*

Our review of R. T. Peterson's *Field Guide to the Birds,* Fourth Edition *(Continental Birdlife* 2 (1): 22-27) drew a remarkable response: literally dozens of cards and letters arrived, all expressing more or less agreement with what we had to say. The longest and most interesting letter came from Dr. Kenneth C. Parkes, one of the world's leading authorities on bird taxonomy, hybridization, plumages, molts, distribution, etc. Dr. Parkes brought up so many points of direct potential interest to field observers that we are, with permission, reprinting most of his comments here.

> You have done a good job in pointing out the anatomical distortions in many of Peterson's plates. One of his worst faults has always been the placement of eyes. George Sutton pointed out to me years ago that birds have very definite species-specific "facial expressions" that are based in large part on the shape and position (as well as color) of the eye. Get the eye wrong, and no matter how good the rest of the painting may be, it just won't look real to somebody who knows the bird in life. It is almost impossible to visualize a skull, orbits, and complete eyeballs under the surface of a typical Peterson bird. His uncertainty as to where the eye should go is illustrated in (among many others) the plate of *Corvus* on p. 207. The eyes of the Fish Crow and "American" Crow have their anterior edges over the gape, whereas the eye of the "Northern" Raven is almost an eye-diameter farther back in the head, a difference that does not exist in the

birds themselves. See, for example, the photographs on pp. 124-125 of the new Terres *Encyclopedia of the North American Birds,* which also show how grossly wrong Peterson got the head and bill shape of the White-necked Raven.

Your review mentions the new "three-dimensional" effect in Peterson's paintings. His new artiness has caused him to forget the philosophy behind his original field guide, the principles of which constituted a genuine innovation in bird books. There were plenty of books with accurate close-up color portraits of North American birds. Peterson's idea was to show no more than necessary to be able to *identify the birds in the field.* Highlights, ruffled feathers, and even color itself were irrelevant in many cases, and often distracting. An example of the danger inherent in the new artiness can be found in the chickadees of p. 211 (which also have hopelessly bad eye positions and bill angles). The Black-capped and Carolina have the copyright Peterson arrows pointing at their crowns, presumably to point out the black rather than brown caps (although the arrow for the Boreal Chickadee points to the nape, not the crown). However, the arrow for the Black-capped points directly to a highlight on the crown, which is almost wholly lacking in the Carolina picture. A European birder could be forgiven the notion that Peterson meant to indicate that our two chickadees could be distinguished by glossy versus non-glossy caps, exactly as is the case in the Marsh Tit and Willow Tit of Europe (see plate 52 of the Peterson *et al.* field guide to European birds). I need hardly tell American birders that this is not a field mark for our chickadees.

Peterson is proud of the fact that the increased number of color plates in this edition has permitted a reduction in the average number of bird figures per plate (see his Introduction, pp. 7-8). All too often the opportunity provided by the additional space has been wasted. It is true that he has included some additional plumages, such as the winter American Goldfinch, embarrassingly and confusingly missing in the 1947 edition. Usually, however, he filled the space by enlarging rather than augmenting the birds shown; the outstanding example is the gigantic Belted Kingfishers of p. 187, possibly done this way in atonement for the painting of this species on plate 54 of the 1947 edition, perhaps the most grossly misproportioned figure in that edition. He could have used part of the space to portray an immature individual with a mixed-color breastband, a plumage not mentioned in the text but predominating among Belted Kingfishers seen in fall. Similarly, Peterson has added a small figure of a flying Yellow-bellied Sapsucker to the adult male and (fall) "immature" that were portrayed in 1947. In neither edition does he mention any difference between the sexes except throat color, red in males, white in females. Yet a substantial number of spring females, probably all first-year birds but nevertheless molted out of the brown "immature" plumage, *lack any red on the crown.* Among specimens examined, 6 of 28 females in "adult" plumage (21.4%) had black crowns. A head vignette of such a female would have been easy to include — there is plenty of space on that plate. It would have been more useful than the head of the "southern

form" of Hairy Woodpecker on p. 193 (*unlabelled* in the first printing of the book), which is not mentioned in the text. Few birds become as dirty as woodpeckers between molts, and I predict a rash of records of "southern" Hairy Woodpeckers invading the northern states late in the winter when the local birds are well sooted.

The case of the two woodpeckers, the sapsucker and the Hairy, brings up an important point. I don't think even Roger Peterson realizes how literally the beginning birdwatcher takes his field guide. As those of us who answer written or telephoned bird questions from the public know well, if there is a discrepancy between the bird and the picture in "Peterson", there is something the matter with the bird, or rather, it is *not* the species in the picture, but some rare visitor. A sapsucker-like bird with a black cap *can't* be a female Yellow-bellied, because *Peterson* says the female is just like the male except for having a white throat, and the male has a red cap.

Needless to say, the abridgment of the text into plate captions has made impossible the mention of plumage variants (whether individual, seasonal, or geographic), but the increased plate space available would have permitted the addition of many useful figures or part figures to supplement those used. Many more birders will see male *Carpodacus* finches in the brighter red worn plumage of summer than will see the "bridled" form of "Thin-billed" Murre, of which Peterson gives a full figure. He takes the space for a head vignette of the extinct Labrador Duck, but shows male "eclipse" plumages for only the Wood Duck and Hooded Merganser (plus, of course, the homologous "winter" plumages of the Oldsquaw and Ruddy Duck). The Least Bittern is our only strongly sexually dimorphic heron, but Peterson chose to show only an adult male, along with the melanistic "Cory's" color phase, which hasn't been seen since 1928 (*fide* Palmer). Even the adult male is merely labeled "typical", with no indication of its sex or age (juveniles are quite different in color and pattern).

One could go on and on documenting the lost opportunities and the badly painted birds. It is hardly a secret that Peterson adopted the "plate-caption" text format in response to the highly successful Robbins guide; it is a pity that he did not, instead, choose to *expand* the text, which was far superior to that of the Robbins guide, and to augment rather than merely magnify and "pretty up" the bird figures.

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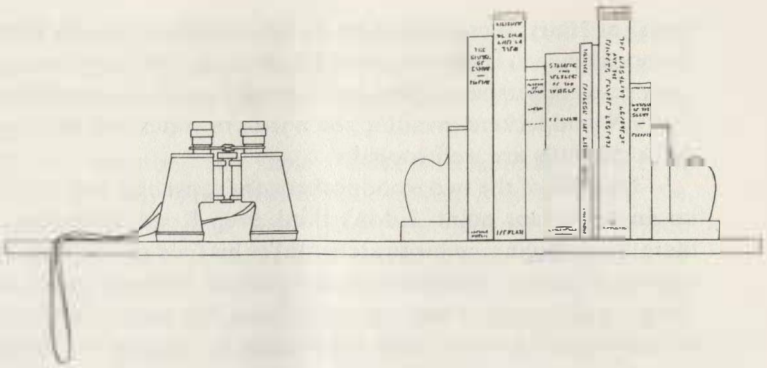
# Reviews

*Edited by*

ELAINE COOK



**Birds of Prey of the World** — Friedhelm Weick, in collaboration with Dr. Leslie H. Brown. 1980. Hamburg, Germany: Paul Parey. 159 pp., 1144 col. figs., 160 line drawings. $48.00.

Publisher's address:
Paul Parey, Scientific Publishers
P.O. Box 236
New York, NY 10016

A REMARKABLE FEATURE of this survey of all the world's Falconiformes is its slimness. This is all the more surprising since the author has undertaken the illustration of all distinctive races, adult and immature plumages, and unusual color phases (amounting to 1144 color figures), and has added a bilingual text with German and English appearing side by side. Accomplishing all this in only 159 pages is possible because the figures are done field guide style on just 40 plates with up to 30 or more forms shown on a single plate, while the text, which consists largely of a review of the genera and an oddly unusable identification key, is written in telegraphic style.

As the author rightly emphasizes in his preface, the color plates are the book's showpiece. Weick's engaging illustrations feature delicate pen-and-ink outline drawings filled in with clear watercolors. Postures and facial expressions are lifelike, and special attention has been paid to accuracy in colors of the soft parts. Leslie Brown's association with this work consisted primarily of checking the accuracy of the illustrations, for which he vouches in his complementary foreword. All the birds are shown perched in three-quarter left profile, with wings and tail slightly spread; no flight patterns are illustrated.

The arrangement of genera and species follows Brown and Amadon's classic *Eagles, Hawks and Falcons of the World* (1968: McGraw-Hill, New York). Facing each plate is a brief tabulated legend, with Latin, English and German names, a brief identification note, range, and measurements. Although the depiction of so many individuals in identical postures on the same plate creates an initial dizzy sensation, the format does allow the comparison of similar forms at a glance and encourages the reader to notice general patterns of variation in closely related species.

The plates and their legends occupy about half the book, with the rest given over to a much less impressive text. The best part of the text is a systematic review of all genera, which briefly summarizes the external characters of each genus and is illustrated with carefully executed line drawings (usually head portraits) of representative species. The key to identification, however, is not a key at all, but a compendium of species descriptions arranged in arbitrary categories such as size (e.g. "very large," "large," or "rather large") and others equally confusing. The entire text is peppered with typographical errors, the most annoying of which is the omission on p. 14 of the size scales used for the various plates.

Weick's *Birds of Prey of the World* is an odd, almost eccentric book. One wonders exactly

who the audience for this book is supposed to be. Brown suggests that it can be used as a field guide anywhere in the world, but several drawbacks discourage this, including the systematic rather than regional presentation, the absence of underwing patterns, and the largish (8 x 12") format. This book will not replace either Brown and Amadon's *Eagles, Hawks and Falcons of the World* or Grossman and Hamlet's *Birds of Prey of the World* (1964: C. N. Potter, New York) as a general reference, because information on voice, behavior and life history is entirely lacking. Neither is this a "coffee table book" to be admired for its lavish bird art, because Weick's illustrations are more functional than decorative. Weick seems to have created a kind of condensed pictorial guide to the Falconiformes as a whole, rather than a field guide designed to solve identification problems on the spot.

This book does function usefully either as a quick pictorial guide to plumages for museum work and library reference, or as a tool for learning about the range of variation in the Falconiformes. But whether readers should shell out $48.00 to join Weick's tour round the world in forty plates will depend, I fear, more on the size of their bankrolls than on the indispensability of the book. — *James R. Silliman*

**The Alaskan Bird Sketches of Olaus Murie, with excerpts from his field notes** — compiled and edited by Margaret E. Murie. 1979. Anchorage, Alaska: Alaska Northwest Publishing Company. v + 57 pp., 40 color illus., $11.95 paperbound.

Publisher's address:
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Anchorage, Alaska 99509

OLAUS J. MURIE, the man who headed the Wilderness Society from 1946 until his death in 1963, was a naturalist with an inquisitive mind and a desire for adventure. As a young man, through years of field work in various parts of Alaska, he established himself as one of the outstanding field naturalists in North America. Now, in this slim book we have some forty-odd bird sketches by Murie reproduced in color with accompanying excerpts from his field notes. Most of the sketches were done in the 1920s and 1930s in the Hooper Bay area, the Alaska Peninsula or the Aleutians.

Although Murie had no formal training as an artist, he always carried his brushes and watercolors into the field with him, managing to paint the animals he observed or collected right on the spot. These sketches in the book, more often than not, are of the heads of birds, supplemented by some other details, such as feet or legs. Except for the passerines, rarely is the whole bird illustrated. Olaus Murie's wife, Mardy, chose the text to accompany the art work. These short comments, all from Olaus Murie's field notes, are not necessarily the ones made when the original sketches were done. For example, the Dunlin *Calidris alpina* was drawn in 1936 while the accompanying notes are from 1924. However, whatever scant notes are *on* the sketches are just as Olaus Murie made them. But even these few original notations drop off after the owls in taxonomic order. This is unfortunate, since some of these notes give the reader an immediate insight into Murie's observations. For example, for the Red-faced Cormorant *Phalacrocorax urile* done on July 14, 1925, Murie wrote:

> Many birds not so bright in color, with light parts of mandibles whiter, not so yellowish. Orange lumps at margin of gular sac not so pronounced, usually, and sometimes extend on to the blue a little as tiny orange spots.

Some of his illustrations are better than others, with the passerines at the end of the book appearing almost wooden. Yet this collection of Murie's sketches should not be judged simply on artistic terms. It is, perhaps, more artifact than art, a reminder of the life and times of recent pioneer natural history in Alaska, when that area was not simply our "last frontier" but literally a wilderness. The collection serves as a glimpse into the past and should be appreciated as such.

— *Paul J. Baicich*

# *Recent Literature in Field Ornithology*

Herzog, Patrick W., and Daniel M. Keppie. 1980. **Migration in a local population of Spruce Grouse.** *Condor* 82(4):366-372.

What's that — you thought Spruce Grouse *Canachites canadensis* were non-migratory? Actually, what we're talking about here is a sort of micro-migration; none of the grouse in this study traveled more than 9.5 kilometers between summer and winter ranges. Still, some definite patterns in this migratory behavior were found.

These researchers studied a Spruce Grouse population in southwestern Alberta in which 39% of the birds were migratory. This was an individual trait: the same birds moved to consistent wintering areas each year, while the non-migratory individuals consistently stayed put, regardless of the intensity of the winter weather. More females than males were migratory, and females tended to move longer distances. Fall migration occurred between 17 August and 31 December, and spring migration between 13 February and 30 May; the males tended to move somewhat later in fall, and more than a month earlier than females in spring. Migrating birds traveled mostly early in the morning, covering a little over a kilometer a day, moving in a straight line across ravines and ridges rather than following topographic contours. — *K. K.*

Snow, D. W. 1980. **A new species of cotinga from southeastern Brazil.** *Bulletin of the British Ornithologists' Club* 100 (4):213-215.

The Black-and-gold Cotinga *Tijuca atra* is an odd cotinga restricted to upper-elevation forest in the highlands of southeastern Brazil. It is not well known, although its vocalizations and some other aspects of its behavior were briefly studied by the British ornithologists David Snow and Derek Goodwin (1974, *Auk* 91(2):360-369). In the course of their study, Snow and Goodwin noticed an odd specimen in the series of *Tijuca* skins at the University of Sao Paulo. Dr. Snow has since re-examined this bird and has concluded that it must represent a related, but distinct, species.

The new cotinga is named *Tijuca condita*. Dr. Snow did not propose an English name, which seems a wise decision since so little is known of the bird. The single specimen known is of a female. It is similar to the female Black-and-gold Cotinga, but is considerably smaller, with a thinner bill; its underparts are brighter yellow, and there is a yellowish wash on the rump; and perhaps most significantly, its primaries, outer secondaries and tail are all gray rather than olive-green.

Dr. Snow suggests that the "new" cotinga (actually, the one specimen was collected in 1942) may be a bird of high-elevation forest; perhaps it is found at higher elevations than the Black-and-gold Cotinga. If that is the case the bird is unlikely to be extinct, since the forest at the highest elevations in this region is largely undisturbed. Followers of Neotropical ornithology will be waiting with interest to hear whether anyone can discover a living population of the new species. — *K. K.*

## IDENTIFICATION AND RELATED TOPICS

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Blake, Charles H. 1980. **Warbler tail spots.** *N. Am. Bird Bander* 5(3): 98-99.

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Walsh, T.A., and A. Wassink. 1980. **Field identification of adult Long-billed Pipit.** *Br. Birds* 73(7): 313.

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Duncan, Charles D., and Ralph W. Havard. 1980. **Pelagic birds of the northern Gulf of Mexico.** *Am. Birds* 34(2): 122-132.

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## DISTRIBUTION — ELSEWHERE

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Emanuel, Victor L. 1980. **First documented Panama record of Spotted Rail *(Pardirallus maculatus).*** *Am. Birds* 34(2): 214-215.

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Schmitt, Edward C. 1980. **Notes on the Denver Zoo bird collection in 1979.** *Aviculr. Mag.* 86 (1): 49.

Stewart, Paul A. 1980. **Further research needed on present-day bird movements as a clue to the evolution of bird migration.** *N. Am. Bird Bander* 5(1): 4-7.

## FULL TITLES, AND PLACES OF PUBLICATION, OF SERIALS CITED ABOVE

**American Birds** National Audubon Society, New York. **Ardea** Nederlandse Ornithologische Unies, Arnhem, Holland. **Auk** American Ornithologists' Union, Washington, D.C. **Avicultural Magazine** Avicultural Society, Berkshire, England. **Birding** American Birding Association, Austin, Texas. **Bokmakierie** Southern African Ornithological Society, Houghton, South Africa. **British Birds** British Birds Ltd., Bedfordshire, England. **Ibis** British Ornithologists' Union by Academic Press Ltd., London, England. **Jack-Pine Warbler** Michigan Audubon Society, Kalamazoo, Michigan. **Ostrich** Southern African Ornithological Society, Johannesburg, South Africa. **North American Bird Bander** Eastern and Western Bird Banding Associations, Cave Creek, Arizona.

# *Latest Rumors . . .*

. . . Wherein we mention some of the notable bird records that have come to our attention recently. The column's title is chosen intentionally; we cannot claim that this summary is complete — nor, perhaps, even completely accurate, since we have not checked out most of these reports personally. We sincerely hope that we'll never see this column quoted as a source of information. For more carefully-screened reports, see the appropriate regional publications, or the regional reports in *American Birds*.

In late spring/early summer, two nesting species attracted much attention. — We were all waiting to see whether last year's breeding **Ross' Gulls** *Rhodostethia rosea* would return to Churchill, Manitoba. They did; up to nine adults were present by mid-June, and at least three pairs established nest sites. — At the far extreme in climatic setting, and in a locality that was perhaps more remote, southern Arizona's Chino Canyon hosted a pair of **Black-capped Gnatcatchers** *Polioptila nigriceps*. At the time of their discovery in late May they were already feeding four nestlings; the young fledged promptly, and the enterprising adults had a second nest going by the end of June. This poorly-known west Mexican species had been recorded only about three times previously in the U.S., one of those records (the first, in 1971 at Patagonia) also involving a nesting pair.

Speaking of poorly-known species, the status of *Pterodroma* petrels off California continues to surprise us. As recently as the mid-1970's no species had been recorded there (except for records hundreds of miles offshore), but since then Scaled Petrels *P. inexpectata* have washed up on several beaches, and Cook's Petrel *P. cookii* and Stejneger's Petrel *P. longirostris* have been seen offshore. This spring, a number of birds identified as **Solander's Petrels** *P. solandri* were seen off northern California. What other pelagic surprises does the Pacific have to offer? — A Massachusetts occurrence that was equally notable, although it did not constitute a first North American record, was a cuckoo of the Old World genus *Cuculus* — evidently **Common Cuckoo** *Cuculus canorus* — on Martha's Vineyard in early May. This species had been verified previously in Alaska, and in the Caribbean at Barbados, so an eventual East Coast record was perhaps to be expected.