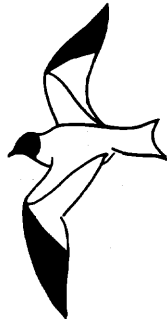


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LESSER BLACK-BACKED GULL IN CALIFORNIA, WITH NOTES ON FIELD IDENTIFICATION

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On 14 January 1978 Ronald L. Branson, Benjamin D. Parmeter, John Parmeter and I saw a British Lesser Black-backed Gull (*Larus fuscus graellsii*) on the west side of Robert's Lake, Monterey, Monterey Co., California, about 0.8 km inland from the Pacific Ocean beach. This is the westernmost record for the species in North America; the only previous western records are from Colorado, the Texas coast and the Northwest Territories (see Discussion).

The only race collected in North America is *L. f. graellsii* (American Ornithologists' Union 1957, Jehl 1958, Mumford and Rowe 1963, Woolfenden and Schreiber 1974), although the Northwest Territories bird and one observed at Newburyport, Massachusetts (Finch 1976) were thought to be nominate *fuscus*.

SIGHTING

When discovered, the Monterey bird was loafing with about 80 other gulls on a patch of bare ground near the lake edge and about 10 m from where we sat in our van. Included in the flock and thus available for direct comparison were adults of the California Gull (*L. californicus*), Western Gull (both *L. occidentalis wymani* and *L. o. occidentalis*) and Glaucous-winged Gull (*L. glaucescens*), as well as several American Coots (*Fulica americana*).

We scrutinized the bird for 10 minutes (1500-1510), using binoculars and a 20x spotting scope. Although clouds obscured the sun and a slight mist was falling, the fairly bright sky, open terrain and close range afforded good lighting. Branson obtained four good Kodachrome slides with the aid of a 400 mm lens set at f5.6, 1/60 sec.; analysis of the foot colors of the various ages of California Gulls demonstrates that the color fidelity of the slides is excellent.

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The Lesser Black-backed Gull spent several minutes preening but most of the time dozed with neck retracted and eyes often partially closed, apparently much at ease. Eventually the arrival of another car caused the flock to rise and scatter, only a few birds returning to the loafing area. The Lesser Black-backed flew inland, circled twice over a nearby pond and then flapped eastward alone until out of sight. When it took off, two of us (L.C.B., B.D.P.) obtained views of the wing pattern. Despite an intensive search during subsequent weeks, the bird could not be found again.

DESCRIPTION

The following description of the Monterey bird was written using only our original field notes and microscopic examination of the four photographs (Figure 1). A copy of this paper and the original photographs are on file with the California Bird Records Committee. References to the Herring Gull pertain to the North American subspecies, *L. argentatus smithsonianus*. **Age and molt:** adult in fresh basic (winter) plumage; no wear noticeable on wing or tail tips; when preening, bird twice spread left wing tip, revealing an outermost (10th) primary only about half-grown; slides indicate that the 9th primary was not fully grown, its white apical spot merging in part with that of the normally much shorter 8th; no other molt evident. **Body size:** length and bulk of body (including wings and tail) slightly larger than in California Gull, considerably smaller than in Western Gull, and hence very similar to those of small Herring Gull. **Body shape:** perhaps slightly more elongate than in California and thus about same as in Herring; head larger in proportion to body than in most individuals of larger gull species (e.g. Western Gull). **Forehead:** dove-shaped, slightly more vertical in relation to culmen than in California and very much less sloped than in Western. **Bill size and shape:** like that of small Herring or perhaps slightly finer throughout; field observations, supported by micrometer measurements of slide images, show bill was about 4 mm longer and 2 mm higher than bills of nearby Californias; upper and lower outlines nearly parallel as in California, but culmen very slightly recurved in middle to produce a very slightly bulbous tip; gonydeal angle very weak; compared to adult Western's bill, shorter and much shallower (hence also proportionately shallower), tip less bulbous, and gonydeal angle much less pronounced. **Head streaks** (do not show clearly in photographs): head white with narrow, sharply defined, rather short, longitudinal streaks of dark gray on crown and face, lengthening, widening and blurring on nape and hindneck; reminiscent of those of winter adult Ring-billed Gull (*L. delawarensis*) but less sharp and numerous, and spots of latter species lacking. **Underparts and tail:** solid snow white, with no suggestion of darkening that would indicate immaturity. **Mantle:** Dark Neutral Gray (capitalized colors from Ridgway 1912; see beyond), paler than jet black of wing tips and about same "shade" (see beyond) as upper back (with daylight reflections) of nearby American Coots; a half-shade darker than in nearby adult *L. o. wymani*; a full shade darker than in nearby adult *L. o. occidentalis*; two shades darker than in adult Californias; no tinge of brown could be seen; scapulars broadly tipped with white. **Primaries:** above and below dark gray, distally above jet black (with daylight reflections) of nearby American Coots; a half-shade darker than in nearby adult *L. o. wymani*; a full shade darker than in nearby adult *L. o. occidentalis*; two shades darker than in adult Californias; no tinge of brown could be seen; scapulars broadly tipped with white. **Primaries:** above and below dark gray, distally above jet black with white apical spots; outermost (10th) crossed by a subterminal white mirror (band) about as wide as long, well separated (by about width of mirror) from apical white, embracing both webs, and slightly indented both proximally and distally along rachis; no white tongues or mirrors visible on 9th or other primaries when tips spread in preening or flying, although we could have missed a small white spot on the 9th; wing tips extended well beyond tail tip. **Secondaries:** above dark gray like mantle, with broad white tips; below (as seen in flight) gray, about as in adult Western or perhaps even darker, with broad white tips;

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wing linings white. Bill color: yellow with a bright red, orange-tinged gonydeal spot, near Scarlet-Red, confined to lower mandible, not reaching tip or tomium, and very large – about twice as long as high (shape unique in my experience) and thus nearly twice the size of a Western's. Eye: irides very pale yellow with a few flecks of dusky according to our field notes, but nearly grayish-white, tinged yellowish, in slides; in proportion to head size, eye seemed about same size as California's and larger than Western's. Eyelid color: bright red, the exact shade somewhat obscured by shadow of brow but seeming in field and slides slightly darker and less orange than gonydeal spot and near Spectrum Red. Leg and foot color: tarsi and toes buffy-yellow, not a pure yellow nor tinged with greenish or pinkish, close to Buff-Yellow; color unique in my experience with gulls; web color not noted. Voice: none heard.

IDENTIFICATION

Similarity to L. fuscus graellsii. The Monterey bird was identical to a typical winter adult *L. f. graellsii* in all characteristics.

Witherby et al. (1941) state that *graellsii* ends its molt in January with replacement of the outer primaries, the condition exhibited by the Monterey bird. Judging from the fragmentary literature on this subject, most other large gulls terminate their basic molt in fall, while molt in the Kelp Gull (*L. dominicanus*) is at its height in January and February.

Ridgway (1912) presents a standard color scheme with which mantle colors, very important to identification, can be compared. He pictures six shades of gray between white and black: Pallid Neutral Gray, Light Neutral Gray, Neutral Gray, Deep Neutral Gray, Dark Neutral Gray, and Dusky Neutral Gray. I term these "full shades." The colors halfway between I term "half-shades," which are easily seen both in the field and hand when comparisons are available. In the forms with which I am concerned herein, individuals vary no more than a quarter-shade on each side of the average, or a total of one half-shade. All mantle colors mentioned herein were determined from specimens, as many literature designations, even those using Ridgway colors, were found to be untrustworthy.

In Figure 1, the reader may compare the mantle of the Monterey bird, judged to be Dark Neutral Gray, with those of adult California Gulls (Neutral Gray), a second-year *L. o. occidentalis* (between Neutral Gray and Deep Neutral Gray; second-year birds are about a half-shade paler than adults), and an American Coot (upper back Dark Neutral Gray but appearing darker in slide). To test our visual judgment of mantle colors, I took light meter readings of museum study skins of various species, including the California Gull, and correlated these with Ridgway colors. I then took readings of the slide images of Californias and the Monterey Lesser Black-backed and calculated a "specimen value" for the latter. This figure was the same as that for the coot's upper back (Dark Neutral Gray), a half-shade darker than in *L. o. wymani*, and a half-shade paler than in the Slaty-backed Gull (*L. schistisagus*), thus closely matching our visual impression.

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Witherby (1914) gives an excellent color plate of the head of an adult summer *graellsii*. Our bird matched this plate almost exactly in bill proportions, gonydeal spot color, shape and extent, iris and eyelid colors, and eye-head proportions. In the Monterey bird, however, the gonydeal angle was slightly less pronounced (more like the third-winter bird pictured), and the ground color of the bill was much yellower, less orange; this latter difference probably is a reflection of the more advanced breeding condition of the pictured bird.

Barnes (1952), in discussing the great variation in winter adult leg color in *graellsii*, states that many immigrants to England in late February and March have legs of "rich ochre yellow," a phrase that except for the word "rich" would well describe the Monterey bird.

Elimination of similar forms. Despite the fact that the Monterey bird seemed identical to *L. f. graellsii*, I deemed it necessary to eliminate all other gulls of the world, because Monterey is well outside even the known vagrancy range of that form. This required elimination on the subspecific level, as several races of Herring Gull are similar to the Lesser



Figure 1. Adult British Lesser Black-backed Gull (*Larus fuscus graellsii*; darkest-mantled bird, left center) at Monterey, California, 14 January 1978. Also shown are a second-winter Western Gull (*L. o. occidentalis*; left foreground), American Coot (*Fulica americana*) and California Gulls (*L. californicus*; remainder of gulls).

Photo by Ronald L. Branson

Black-backed Gull. I made a thorough search of the widely scattered literature and examined specimens in the California Academy of Sciences, Museum of Vertebrate Zoology, Berkeley, and some from the National Museum of Natural History, Washington, D. C. Eugene Eisenmann kindly provided comments based on the collection of the American Museum of Natural History, New York, and Jon Winter loaned photographs of the Kelp Gull.

This paper treats only those forms that are likely to be confused with *graellsii* or are grossly similar but might be unfamiliar to the reader. Table 1 lists the characters that distinguish the most similar forms (those with mantles darker than Neutral Gray) from the Monterey bird (and hence from *graellsii*). The less similar forms are discussed below.

Four similar species, the Kelp Gull, Great Black-backed Gull (*L. marinus*), Slaty-backed Gull and Western Gull, were easily eliminated by their characters as listed in Table 1. Thayer's Gull (*L. thayeri*) differs markedly from the Monterey bird in its dark pink legs and feet, magenta eyelids, darker irides, much paler mantle (between Pale and Light Neutral Gray), and white wing tips ventrally.

The Holarctic Herring-Lesser Black-backed (*argentatus-fuscus*) group, which is much discussed but poorly understood, caused the greatest difficulties. The prevalent school of thought (e.g. Vaurie 1965) holds that there are only two Lesser Black-backed Gulls in the world, *graellsii* and nominate *fuscus*, while the remaining ten or so forms are subspecies of *L. argentatus*. On the opposite end of the spectrum, some authors (e.g. Voous 1960) believe that there are only two Herring Gulls, *smithsonianus* and nominate *argentatus*, while all other forms are subspecies of *L. fuscus*. Some authors (e.g. Stegmann 1934) consider the two species conspecific, even though they are sympatric over parts of their ranges. Dwight (1925) takes an intermediate position, treating the "Yellow-legged Gull," *cachinnans*, as a separate species, *vegae* and *thayeri* as races of *L. argentatus*, and *taimyrensis* and *atlantis* as subspecies of *L. fuscus*; his monograph, however, loses considerable usefulness because it does not deal with all presently recognized forms of the complex.

For the purpose of identifying the Monterey bird, I have taken the most conservative view, that of Vaurie (1965), who recognizes two races of the Lesser Black-backed Gull, *L. f. graellsii* (Iceland, British Isles) and *L. f. fuscus* (Scandinavia, northwestern Russia), and ten subspecies of the Herring Gull, divided into two groups. Included in the northern circumpolar group of Herring Gulls, listed from west to east, are: *a. argentatus* (Iceland, British Isles, Scandinavia, northwestern Russia; includes *argenteus* and *omissus*); *heuglini* (northern Russia, northwestern Siberia; includes *antelius*); *taimyrensis* (north-central Siberia); *vegae* (north-eastern Siberia; includes *birulae*); and *smithsonianus* (North America). The southern group, listed from west to east, includes the following: *atlantis*

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(Azores, Canaries); *michahellis* (Mediterranean); *armenicus* (Armenia); *cachinnans* (middle East, southwestern Siberia; includes *barabensis* and *ponticus*); and *mongolicus* (Mongolia, Manchuria). The above ranges are very incomplete; the reader may consult Vaurie (1965) for details.

Of the ten Herring Gull races, only *argentatus* and *smithsonianus* consistently have pink legs and feet. In *heuglini*, *atlantis*, *michahellis*, *cachinnans* and *armenicus*, these parts are always some shade of yellow, while *taimyrensis*, *vegae* and *mongolicus* may have either color (Vaurie 1965).

The Herring Gull races *smithsonianus*, *argentatus*, *taimyrensis*, *vegae*, *michahellis*, *armenicus*, *cachinnans* and *mongolicus* were easily eliminated by their pale mantles, which range from Pallid Neutral Gray to Neutral Gray and thus are at least two shades paler than that of the Monterey bird. Additional distinguishing characters are as follows: *smithsonianus* and *argentatus* have orange eyelids and pink legs and feet; *taimyrensis* is said to have orange to orange-vermilion eyelids, little or no winter head streaking, and a larger body; *vegae* is larger in body bulk; *michahellis* is sedentary and usually has a slightly larger mirror on the 10th primary; *armenicus* has a very small population (and may not be a valid race) and is sedentary; *cachinnans* has the head streaking absent or restricted to the hindneck and completes its basic molt in the fall; and *mongolicus* is considerably larger in body and bill.

The remaining two races of Herring Gull, *heuglini* and *atlantis*, are the forms most similar to the Lesser Black-backed Gull, but nevertheless can be eliminated with certainty on the basis of their paler mantles and the other distinguishing characters listed in Table 1.

Separation of *graellsii* from nominate *fuscus* is, of course, difficult in the field, but I believe possible in typical birds. In the latter race, the mantle is one shade darker, nearly as dark as the primary tips (Witherby et al. 1941), and slightly tinged with brown to produce a shade of Fuscous rather than Neutral Gray. Also, in *fuscus* the "Head and neck in winter [are] considerably less streaked" (Witherby et al. 1941).

DISCUSSION

Every characteristic of the Monterey bird perfectly matches typical examples of *L. fuscus graellsii*, and every other gull form in the world is eliminated by two or more characters.

Despite the unusual locality, our conclusion is supported also geographically, as none of the three most similar forms (*L. f. fuscus*, *L. a. heuglini* and *L. a. atlantis*) has been definitely recorded in North America, whereas *graellsii* has. Furthermore, the Lesser Black-backed Gull seems to be undergoing rapid expansion in North America, although the recent increase in records may be at least in part a function of improved awareness and coverage on the part of observers. In recent years, *L. fuscus* has been reported more frequently in Texas (Watson and Goldman

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Table 1. Characteristics of selected adult winter gulls that distinguish them from the British Lesser Black-backed Gull (*Larus fuscus graellsii*), including the one photographed at Monterey, California on 14 January 1978. Key: N. = Neutral; G. = Gray; g. a. = gonydeal angle.

Lesser Black-backed Gull

L. fuscus fuscus

Head streaks fewer or absent; mantle one shade darker and tinged brown (dusky Fuscous-Black [= Dusky N. G.]) and nearly as dark as primary tips.

Herring Gull

L. argentatus heuglini

Head streaks on hindneck only; mantle one shade paler (Deep N. G.); basic molt ends Sep.-Oct.

L. a. atlantis

Mantle 1½ shades paler (between N. G. and Deep N. G.); iris perhaps amber; eyelids perhaps orange; sedentary.

Kelp Gull

L. dominicanus

Forehead more sloped; bill actually and proportionately higher; g. a. usually much stronger; head streaks absent or on crown only; mantle two shades darker and tinged brown (very dusky Fuscous-Black [= nearly Black]) and as dark as primary tips; gonydeal spot rounder and extends to tomium and almost to tip; legs and feet variable but usually with greenish tinge; basic molt at height (old feathers worn) in Jan.-Feb.

Great Black-backed Gull

L. marinus

Body much larger; forehead more sloped; bill actually much longer and higher and proportionately higher; g. a. much stronger; head streaks fewer or absent; mantle one shade darker and tinged brown (dusky Fuscous-Black [= Dusky N. G.]); mirror on 10th primary merges or nearly merges with white apical spot; mirror on 9th primary large; eyelid color somewhat more orange; legs and feet pink; basic molt ends in fall; eye smaller relative to head.

Slaty-backed Gull

L. schistisagus

Body much larger; bill actually longer and higher and proportionately higher; g. a. stronger; mantle one half-shade darker (between Dark and Dusky N. G.); mirror on 10th primary larger and nearly merging with white apical spot; usually large mirror on 9th primary; white tongues on 8th-6th primaries; legs and feet pink to reddish; basic molt ends in fall; eye smaller relative to head.

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Table 1 (cont)

Western Gull

<i>L. occidentalis</i> , all races	Body larger; forehead more sloped; bill actually longer and much higher and proportionately higher; g. a. much stronger; bill tip more bulbous; gonydeal spot smaller and rounder; basic molt ends in fall; eye smaller relative to head.
<i>L. o. occidentalis</i>	Head streaks usually absent, or when present, wide and not sharp; mantle one shade paler (Deep N. G.); iris darker, richer amber-yellow; eyelids rich orangish-yellow; legs and feet pink.
<i>L. o. wymani</i>	Head streaks absent; mantle one half-shade paler (between Deep and Dark N. G.); iris darker, richer amber-yellow; eyelids rich orangish-yellow; legs and feet pink.
<i>L. o. livens</i>	Head streaks absent; mantle one half-shade paler (between Deep and Dark N. G.); iris clear, unflecked lemon yellow; eyelids lemon yellow.

1952; Webster 1970, 1977) and Florida (Woolfenden and Schreiber 1974; Stevenson 1976); appeared once in Colorado (Denver, 11 Dec. 1976-1 Jan. 1977; Webb and Conry 1978); and has become regular enough in the northeast (Buckley et al. 1977), middle Atlantic coast (Scott 1977), and southern Atlantic coast (Teulings 1976) that it no longer merits great attention. Godfrey (1966) did not list the species for Canada, but it has since been noted in the Northwest Territories (near Albert Edward Bay on Victoria Island, 17 July 1972; Alsop and Jones 1973), Manitoba (5 June 1968; Ross and Cooke 1969), Quebec (David and Gosselin 1977), and Ontario (twice) and Nova Scotia (Alsop and Jones 1973).

Currently, the Lesser Black-backed Gull is considered primarily a winter visitor in North America; it is not known to nest closer than Greenland. It may, however, be following the same historical pattern as the Little Gull (*L. minutus*) and perhaps Black-headed Gull (*L. ridibundus*), both of which invaded eastern North America, slowly then rapidly increased in number, established breeding colonies, and are now appearing with increased regularity on the Pacific coast (Winter and Manolis 1978). The Lesser Black-backed Gull in the 1930s, increased slowly at first, then rapidly in the last 10 years, and recently has occurred a few times in summer. The Monterey bird may well be a forerunner of a Pacific coast invasion.

The adult age suggests that our bird had visited Monterey in previous years, either as a transient or winter resident. Most winter residents, including vagrants, occur first as juveniles and then return to the same area in subsequent winters. Such behavior in *L. fuscus* is demonstrated by

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the Texas City Dike, Texas, bird that appeared during three consecutive winters (Webster 1970), and the Digby, Nova Scotia, bird that has wintered for the last 8 years (Vickery 1977). The Monterey individual should be sought in future years, especially (in case it is a transient) in mid-January.

The unworn plumage and absence of leg bands argue against an escape, and I doubt there are any captive *L. fuscus* in North America. The aspect of the bird gives no indication of hybrid origin. The combination of body and bill size, mantle, leg, and eyelid color, and primary pattern rule out any geographically and/or biologically reasonable hybrid combination. That a hybrid would be identical to *graellsii* is also very unlikely.

Identification of adult dark-mantled gulls of the world is difficult but not impossible, given an exhaustive description made at close range and preferably supported by color transparencies; softpart colors, head shape and body bulk, not visible in study skins, are very useful. West coast observers encountering an unknown dark-backed gull should note in extreme detail as many of the following characteristics as possible: shade of mantle compared to all nearby adult gulls, especially the Western Gull; shapes of head and bill, including the development of the gonydeal angle and the overall height of the bill in relation to its length; color and shape of the gonydeal spot; color of the irides, legs, feet and especially eyelids; width, sharpness and distribution of head streaks, and if possible the pattern of white on the outer primaries, especially the size and location of mirrors and the extent of white or gray tongues on the inner webs.

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