The Morlan Method

Dichotomous Keys for Western North American Gull Identification

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The following dichotomous keys are designed to aid beginning and intermediate gull watchers. They will not resolve the identification of all gulls found on the West Coast. They are geared toward identification of our regularly occurring gull species from September through March and may not match features shown in spring and summer. Hybrid gulls, which are readily seen in some areas, are not addressed. Successful use of these keys first requires determination of the age of the bird. Some useful points to focus in aging gulls are given at the beginning of each key. Distinctive species, such as Bonaparte’s, Heermann’s and Sabine’s gulls and Black-legged Kittiwake are not included.

Molt Sequence in Gulls

Most gulls undergo a complete molt of feathers in late summer. During August and September, most gulls will be in molt and, thus, will show transitional plumages. However, the sequence is different for first year birds. A juvenal plumage (the first full set of real feathers) is acquired during July and August (soon after hatching). This plumage is normally held until November or even later. At this time, a slow and incomplete body molt takes place which may be interrupted, briefly, around January, or may continue right through March. Thus, first winter birds are nearly always in an unstable, or transitional, plumage the whole winter!

Birds at other than first year individuals are in a stable winter plumage from October through February. During March and April, they undergo a partial molt which includes the wings and tail.

Only the Western Gull breeds along the California coast, but individuals of other species are often found summering. These are non-breeding birds. They are often in winter plumage throughout the summer, thus skipping the spring molt. On these birds, considerable fading takes place due to feather wear and they often become almost white. All useful plumage characters are lost and these birds are among the most confusing to identify. Many simply defy identification.

Plumages

Smaller gulls which have a three-year plumage sequence, skip the brown-backed first winter plumage seen in large gulls and go right into a gray-backed plumage for the first winter, which corresponds to the second winter plumage of the larger gulls. In these birds, the juvenal plumage is retained only through early October. Their first winter plumage is acquired rapidly by wear and a partial molt during September and October. After this partial molt, a stable first winter plumage is worn until the first complete molt, which often starts as early as February. Most individuals will be molting in March and April as shown on the chart.

For convenience, we often refer to gull plumages by their age, e.g., first winter, third spring, etc. However, it should be clear that a bird which has a second-year plumage is not necessarily two years old, etc. This is misleading and imprecise. The proper term should be "second winter" or some such phrase, denoting the actual intended plumage.

Also, it should be clear that not all gulls necessarily follow the molt sequence in order. Some large gulls may take five, six, or more years to mature fully and others may mature fully in three years. We cannot prove how old a given individual is by its plumage since some individuals take longer to reach maturity. In defining a plumage as "second winter", we are merely doing just that, defining a plumage. We do not mean to imply that the individual is actually is between one and two years of age, although this may be true in a majority of cases.
Adults

Glaucous Gull: Great care must be used in identifying any adult Glaucous Gull in California. This plumage is extremely rare with perhaps only three valid reports. Although adult Glaucous Gulls have snow white wing tips, the wing tips of other gulls can become abraded and bleached with wear, especially by late winter. Some individuals will show all white wing tips. Assess the feathers carefully for wear. Abraded feathers usually look in disarray and "uncombed." If you are convinced that the feathers are fresh, check the eye color. Adult Glaucous Gulls have pale eyes giving the effect of a "cold stare." The eyes of Glaucous-winged Gulls are brown. If the eye is light, check the size of your bird. It should be larger than any other gull around. If it fits all these criteria, make sure that the bare skin around the eye is yellow and you have your bird.

Thayer's Gull: Some adult Thayer’s are alleged to have gray rather than black wing tips. This is very rare. This rumor came about from confusion about the underside of the wingtip, which is gray on the Thayer's. The upperwingtips are black. In distinguishing adult Thayer’s from Herrings, note that the amount of black at the wingtip is much less extensive and the white spots are larger on Thayer’s. This may have the effect of a bird without any black on the wingtip in flight, like a Glaucous-winged Gull, but when the bird settles down, the black should be evident. Thayer’s average a slightly darker mantle color than Herrings, and also average shorter legs. The eye color is somewhat variable, but averages much darker on Thayer’s. Herrings always have very pale eyes. Thayer’s with light eyes will usually show some speckling of dark pigment in the iris, on close examination. There is also a useful difference in head shape. Although Thayer’s averages slightly smaller than Herring, the head is proportionally smaller and rounder. Herring Gulls have a larger, more sloping (forehead) profile compared to Thayer's and the very long bill of the Herring's looks even larger in comparison. The bill color is also different. The color of yellow is much paler on Thayer’s.

Western Gull: There is much unnecessary confusion about this species. Most field guides picture the very dark-mantled southern race, which occurs in Northern California only during the winter. The vast majority of our birds are a much lighter slate-gray. Beginners often misidentify Western Gulls as Herring Gulls because of the misrepresentation in the field guides. The underwings of the Western Gull are very distinctive with black on all primaries blending to dark gray on nearly all the secondaries. Thus, from underneath, one sees a pattern like that of a Swainson’s Hawk. No other regular gull shows this pattern. The head remains white on adult Western Gulls throughout the year. Adults of all the other species in this group are marked with brown or gray mottling, or streaks, on the head in winter.

Hybrids: Western Gulls and Glaucous-winged Gulls hybridize freely in some parts of coastal Washington. Some of these individuals winter in Northern California. In general, they show characteristics intermediate between the two species. Some have a wingtip pattern like that of a Thayer’s Gull, i.e., black on top and gray below. The mantle color also may be the color of a Thayer’s and the eye may be dark. On the upperwing, the black wingtip of Thayer’s is separated from the gray by a narrow band of white. In hybrids, this band is missing. Also, hybrids tend to be large-billed and large-headed in contrast to Thayer’s. Watch for Western Gulls with dusky head marks in winter. Flush them and check the underwing pattern. Usually, you will find the underwings much paler than normal Westerns. These are mostly hybrids.

Head Markings

Adult gulls have dark head markings during winter plumage, with the exception of Western Gull, which retains an all-white head. Dark, smudgy markings can be seen on the heads of Glaucous-winged, Herring, Thayer’s, California and Mew Gulls. Sometimes these markings appear dark enough to give the bird a black-headed appearance from a distance. A close check will reveal mottling and streaking quite unlike the distinctly hooded effect of small gulls in breeding plumage.

The head streaking of the Ring-billed Gull is quite distinctive. It is light gray and forms distinct sparse streaks on the head and nape rather than dark smudges as in other gulls. This character is also present in immature Ring-billed Gulls.

Wing Tips

The dark wing pattern of the Western and the light gray wingtip of the Glaucous-winged Gull make them fairly easy to identify at a distance. The Mew Gull has very large white spots in the black wingtip. In addition, the long, narrow wings appear placed far-forward on the body and the head appears very small. It also has much a lighter flight style than the broader-winged, larger gulls.

Herring and Thayer’s Gulls may be picked out in flight by experienced observers. A large, light-mantled gull with strongly contrasting black wingtips, with relatively small mirrors, which show through the wingtip, will be a Herring. Thayer’s will look similar but have larger white spots in an even smaller black tip and no contrast on the underwing. Thayer’s will appear slightly smaller, rounder-headed, and slightly darker-mantled.

Ring-billed and California Gulls are smaller than Herring and Thayer’s but have a larger black area at the wingtip with variable amounts of white spotting. Try to distinguish them at a distance by the pale mantle color on a Ring-billed, which is like Herring Gull, and the much darker mantle on a California, which is between the Western and Mew Gulls. Birds flying overhead are virtually indistinguishable.
Adult Gulls

Adult gull plumage is defined by a white head and body (some streaking on head and neck of most species during winter), a clean white tail, gray wings without brown color, and a cleanly marked bill (no smudging).

Notes:
1. Glaucous Gull: rare; largest species on this page.
2. Glaucous-winged Gull: large gull; mantle color similar to wingtip color; dark eyes.
3. Thayer’s Gull: large gull; undersides of wingtips gray, not white; rounded head and gentle look.
5. Mew Gull: smallest gull listed on this page.
6. Ring-billed Gull: small gull; pale eyes and mantle; clean black ring at tip of bill.
7. Western Gull: large gull; generally lacks streaking on head during winter; fairly light eyes.
8. Herring Gull: large gull; almost white-yellow eyes and fierce look on face.
**All Brown or Mottled Brown Gulls**

This plumage is characteristic of most first winter gulls. See the “Gray Backs and Brown Wings” key for first winter Ring-billed and Mew Gulls.

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**Notes:**

1. Glaucous Gull: rare; largest species on this page; appears very white at this age, which is the most likely age of the species to be found in California; bill has sharply demarcated black tip on outer one third of length.

2. Glaucous-winged Gull: large gull; body light tan in early winter, becoming paler by late winter (don’t confuse with rare Glaucous Gull; compare bill color)

3. Thayer’s Gull: large gull; tone of leg color is uniquely pink among this group of first year gulls. Some have black-tipped bills contrasting with pink base. Bill is more curved than Western’s. Mottling on tail.

4. California Gull: medium sized gull; body distinctively cinnamon-colored in fresh plumage of summer and early fall, becoming duller brown late fall; bill size and coloration unique among this group of first year gulls.

5. Western Gull: large gull; difficult to distinguish from Herring Gull at this age. Top of bill curves down about 2/3 of the distance to tip, compared to Thayer’s.

6. Herring Gull: large gull; difficult to distinguish from Western Gull at this age. Bill often becoming pale at the base by mid-winter. Mottling on tail.

Small gulls, two- and three-year species, do not have this winter plumage.
Gray Backs and Brown Wings

This pattern shows well on second winter, large gulls and first winter, small gulls. Although the wing coverts are brown, the rest of the upperwing may have gray feathers in varying amounts. In the Ring-billed Gull, you will see a prominent brown bar across the wing with the rest of the wing gray.

Typical Glaucous Gulls should show light gray feathers on the back in this plumage, but many books show them as all white. Any gull which is really all white is probably not a Glaucous Gull. When seen closely, true Glaucous Gulls show light brown, fine marbling on the wing and tail, and on the coverts and the body. In first-year birds, the back is also marbled slightly with brown, but in this plumage, the back should show pale gray feathers, and many individuals do show this. Any gull which is truly all white should be considered an albino or just a very bleached-out bird.

First-year Glaucous Gulls vary in the intensity of the brown marbling on the body and, in many individuals which appear all white at a distance but which show the light brown marbling up close, are, in fact, all first-year birds. Reliable reports of Glaucous Gulls with gray backs seem lacking for our area, and most records of alleged second-year birds are based on field guides pictures of all white-backed birds. It has been suggested that this white-backed plumage is the character of second-year birds, and that gray-backed birds are third-year. This species may have a five-year molt sequence. Both first and second year Glaucous Gulls have a distinctly black-tipped bill. Be cautious in using this mark alone to distinguish them from Glaucous-winged Gulls. Second winter Glaucous-winged Gulls often have a black-tipped bill, but they can be distinguished from the rare Glaucous Gull by their gray back. Since some Glaucous Gulls may be gray-backed in the second year, the shape of the bird is more important. Glaucous Gulls are much chunkier looking with broader wings. Their larger size may be useful when direct comparison is available.

First winter Mew Gulls are quite distinct with a gray-brown, uniform coloration over their whole body. In flight, they often seem to have pale wingtips and resemble a miniature version of a second winter Thayer's Gull. The Thayer's lacks the uniform coloration of the body like the Mew Gull, and the Mew Gull can always be recognized by its dainty bill, small head and very small size.
Gulls with Gray Backs and Brown Wings

This plumage includes first winter Ring-billed and Mew Gulls, and second winter large and medium-sized gulls.
**Sub-Adults (Like an Adult Gull but...)**

This term refers to the winter plumages before the bird becomes an adult. This could be either second or third winter depending on the time necessary to reach maturity.

These plumages key out very close to the way adults key out, since they have their distinctive eye and leg colors by this plumage. They will also show the gray mantle and the color will aid greatly in the identification once the observer becomes proficient at distinguishing shades of gray.

The birds will show some dark spotting near the tip of the tail feathers and there will usually be a dark mark near the tip of the bill. If the species has a red spot on the lower mandible as an adult, this may or may not be present in sub-adults. Thus, many individuals show a combination of a dark bill tip and a reddish spot. This combination is usually mentioned as a characteristic of adult California Gulls. However, be sure the bird is an adult before attempting to use this mark. Some adults of any species may show some dusky marks on the bill, so the mark is not entirely diagnostic, even for adult California Gulls.

The wingtip is often black in this plumage, although some species, particularly the Ring-billed Gull, do show some, and occasionally, more white spots in the wingtip at this age. Those birds with all-black wingtips are often confused for Kittiwakes by beginners, because the field guides emphasize the "dipped in ink" wingtips of this species. Remember that all Kittiwakes in California show a dark nuchal collar. This mark may be faint or absent in breeding-plumaged birds, but this plumage is not normally seen in California. Also, the black wingtip of the Kittiwake is very small, and from a distance, may not be visible at all. Kittiwakes have a peculiarly deep wingbeat which experienced observers will rely on more than plumage when identifying them at a distance.

Western Gulls still have the distinctive underwing pattern, and Thayer’s Gulls will show pale wingtips below and blackish wingtips above. Glaucous-winged Gulls, with their pale wingtips are fairly obvious in this plumage. Mew and Ring-billed Gulls usually show one white mirror in this plumage. Herring Gulls will show a fairly small area of black on the wingtip and a very light mantle. Ring-billeds will show light gray streaking on the head. Mew Gulls will show a much darker mantle and the dainty head and bill are good clues in any plumage.
Like an Adult Gull but...

Gulls that appear almost adult-like in plumage, but have one or more of the following features:

- dusky on tip of bill,
- wingtips without white spots,
- dusky on tip of tail,
- some brown on primary coverts

This plumage includes second-winter Ring-billed and Mew Gulls, and third-winter large- and medium-sized gulls.