Stealth Gull: Herring × Glaucouswinged Gull Hybrids in the North American Interior

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There may be an imposter in the next flock of gulls you look at. You might think it an odd Herring Gull, or be happy to have found a Thayer's Gull, or thrilled to be looking at a Glaucous-winged Gull. Yet, in the end, it may well be none of these. It might be a Glaucous-winged × Herring Gull hybrid.

Glaucous-winged Gulls and Herring Gulls have been known to miscegenate in south-coastal Alaska for quite some time (Williamson and Peyton 1963). However, the wintering range of Herring × Glaucous-winged Gulls seems to have been largely unrecognized, or ignored, until the late 1970s, when hybrids were noted as occurring as far south as southern California (Garrett and Dunn 1981).

Breeding Range

Patten (1980) provides the only extensive evaluation of the Herring × Glaucous-winged Gull hybridization zone. This region is approximately 480 km long, stretching from Glacier Bay to Cook Inlet in Alaska, and ranging from 30-160 km inland (Williamson and Peyton 1963). Preferred sites show mixed freshwater and maritime influences (Patten 1980). In the center of this zone, breeding colonies consist of more hybrids than "pure" birds, and hybrid fitness is equal to that of either parent species (Patten 1980). Patten (1980) suggested that man-made food sources (e.g., garbage dumps and offal from fisheries) contributed to the extent of hybridization. Therefore the size of the hybridization zone, or the extent of cross-breeding, may have changed significantly since 1980, but no further extensive studies seem to have taken place (T. Tobish, S. Heinl pers. comm.). Patten (1980) suggested that the hybrid zone might be larger than his study indicated, and this seems borne out by a record of a mixed pair from British Columbia's interior (Merilees 1974).

Non-breeding Range

The Herring × Glaucous-winged Gull winter range extends along the Pacific Coast from southeast Alaska (Heinl 1997, Heinl and Piston 2009) to northern Baja California. However, this topic engendered mostly cursory attention until the late 1990s. Heinl (1997) found that most of the Herring-type gulls during winter in Ketchikan, Alaska, showed signs of hybridization with Glaucous-winged Gull, and that hybrids were present there from early October through March. In February 2005, a careful examination of 1500–2000 large gulls in Renton, King County, Washington revealed that apparent hybrids constituted 25% of the flock, including 10% Herring × Glaucous-winged Gulls, 10% Glaucous-winged × Western Gulls, and another 5% that defied labeling (Mlodinow et al. 2005). During late October 2011, approximately 3% of 1000 large gulls at the mouth of the Elwha River on Washington's Olympic Peninsula were judged to be Herring × Glaucous-winged Gulls (S. Mlodinow, pers. obs.) Along the central California coast, recent observations revealed that up to 12% of migrant Herring/Glaucous-winged-type gulls during late January and February displayed hybrid characteristics (Howell and Dunn 2007).

That this cross occasionally wanders into the interior was first noted in the Salton Sink during the late 1970s and 1980s (Patten et al. 1994). However, Herring × Glaucous-winged Gull hybrids were not detected in eastern Oregon or eastern Washington until December 2004, when one was found on the Columbia River near Cold Springs, Oregon (Mlodinow et al. 2005). Subsequent records on eBird suggest that these hybrids may be annual east to the Okanogan Valley of British Columbia and Washington and the Columbia Basin of Washington and Oregon.

North America's Interior

What about the North American interior? The first record from an interior state or province is of a bird photographed near Lafayette, Boulder County, Colorado, 13-30 January 2004; at the time, the identification was rather tentative (Wood and Faulkner 2004), but now seems rather apparent (see Fig. 3). Since then, there have been approximately thirteen records east of Pacific Coast states, seven from the winter of 2011–2012:

- First cycle, Logan River Wetlands, Cache County, Utah, 19 October 2008 (photo, Ryan O'Donnell, pers. comm., eBird);
- Second cycle, Winthrop, Lake County, Illinois, 2 January 2010 (photo, M. Retter, pers. comm.);
- First cycle, Anthem Ponds, Broomfield County, Colorado, 21 February 2010 (Semo et al. 2010, Fig. 1);
- 4) First cycle, Racine, Racine County, Wisconsin, 28 February 2010 (photo, A. Ayyash, pers. comm.);
- 5) Adult, Carlyle Lake Wildlife Management Area, Clinton County, Illinois, 2 February 2011 (photo, D. Kassebaum, pers. comm.);

- 6) First cycle, Drake Lake, Severance, Weld County, Colorado, 6-14 April 2011 (Leukering and Schmoker 2011, Fig. 2)
- First cycle, Strike Wildlife Management Area, Owyhee County, Idaho, 10 December 2011 (description, Heidi Ware, Jay Carlisle, pers. comm., eBird);
- 8) Second cycle, Siena Pond, Broomfield County, Colorado, 14 January 2012 (Fig. 4);
- 9) Adult, McIntosh Reservoir, Boulder County, Colorado, 19 January 2012 (description, Bryan Guarente, pers. comm.);
- 10) Second cycle, Anthem Ponds, Broomfield County, Colorado, 20 February 2012 (photo, Bill Schmoker, pers. comm., eBird);
- 11) First cycle, Lindon, Utah, 10 February 2012 (photo, Jeff Cooper, pers. comm.);
- 12) Second cycle, Prewitt Reservoir, Washington County, Colorado, 3 March 2012 (photo, Glenn Walbek, pers. comm.);
- 13) Two first-cycle birds, Prewitt Reservoir, Washington County, 11–17 March 2012 (photo, S. Mlodinow, G. Walbek, eBird).

This recent spate of records seems likely due, at least in part, to increased observer effort and awareness.

Identification

Currently, the "problem" in Colorado and other interior states and provinces is that some Herring × Glaucous-winged Gulls are likely being identified as other species or hybrids, not vice versa. What could a Herring × Glaucous-winged Gull be mistaken for? Based on my experience, a Herring × Glaucous-winged Gull is most likely to be misidentified as a Glaucous-winged Gull, Thayer's Gull, Glaucous-winged × Western Gull, or Herring Gull, probably in that order. To my eye, most Herring × Glaucous-winged Gulls look like hefty Thayer's Gulls, no matter what their age. Also, Thayer's Gulls during their first winter tend to have very crisply plumaged wings and back, whereas Herring × Glaucous-winged Gulls of the same age tend to have rather smudgy plumage in these areas. I've found four of these hybrids in Colorado, identifying three as a Thayer's Gull at first glance. The other bird caused me to ponder Glaucous-winged Gull initially. That being said, the phenotypic range of these hybrids spans that of both parental types (Pattern 1980), meaning that a Herring × Glaucous-winged might look very much like either parent. Glaucous-winged × Western Gulls can also resemble Herring × Glaucous-winged Gulls, as both hybrids tend to look like Glaucous-winged Gulls with atypically dark wingtips. Glaucous-winged × Western Gulls, however, tend to be rather large birds with large bills when compared with Herring × Glaucous-winged Gulls, and they are often darker with more extensive dark on the wingtips. Some overlap, however, does exist, leaving some birds unidentifiable.

For a more detailed discussion of identification, it would be hard to match that in Howell and Dunn's *Gulls of the Americas* (2007). Instead, I will use photos of Glaucous-winged × Herring Gulls (mostly from Colorado) to elucidate key points. All photos are from Colorado, unless noted otherwise. Figs. 1a, 1b, 2a, and 2b appear on p. 202; Figs. 3, 4, 5, and 6 appear on p. 203; and Figs. 7, 8, and 9 appear on the back cover.

Figure 1a: First-cycle Herring × Glaucous-winged Gull, Anthem Ponds, Broomfield County, on 21 February 2010. This bird has a definite Thayer's Gull "jizz" to it, but the plumage is rather like that of a Glaucous-winged Gull with darker-than-normal folded primaries. Note that the bill is somewhat thick for a Thayer's Gull but smallish for a Glaucous-winged. The smudgy quality to the wing coverts and the moderately extensive presence of second-generation (gray) feathers on the bird's back are Glaucous-winged Gull characters. Most first-cycle Thayer's Gulls, even in late February, would have few, if any, gray back feathers, and most would have more patterned wing coverts. A Herring Gull should have far darker wingtips and be more distinctly marked on the wing coverts. A Glaucous-winged × Western Gull would sport a heftier bill and, mostly likely, a darker back. Photograph by Steven G. Mlodinow.

Figure 1b: Same bird in flight. The primary tips are a bit dark for Glaucous-winged Gull, and the bill appears a bit narrow for that species. On the other hand, this bird seems rather barrel-chested and broad-winged for a Thayer's Gull. The primary pattern would be atypical for Thayer's Gull, with the dark brown rather concentrated at the feather tips. Photograph by Steven G. Mlodinow.

Figure 2a: First-cycle Herring × Glaucous-winged Gull at Drake Lake, Weld County, 6 April 2011. In this photo, this gull looks very much like one of those worn spring Thayer's Gulls with somewhat faded wingtips. The bill appears thin enough for Thayer's Gull as well. A hint that it is something else comes from the rather short wings, which barely protrude past the tail. Photograph by Steven G. Mlodinow.

Figure 2b: The same bird at Drake Lake on 8 April 2011. In this photo, the bill appears too bulky to be that of a Thayer's Gull, and the body is rather stout for that species. The extent of dark on the wingtip is beyond what one would see in a Glaucous-winged Gull. A Glaucous-winged × Western Gull would typically be larger-billed, especially when figure 2a is taken into consideration. Most are darker bodied as well. Photograph by Steven G. Mlodinow.



Fig. 1a: First-cycle Herring × Glaucous-winged Gull, Anthem Ponds, Broomfield County, 21 Feb 2010. Photo by Steven G. Mlodinow



Fig. 1b: The bird from Fig. 1a in flight. Photo by Steven G. Mlodinow



Fig. 2a: First-cycle Herring × Glaucous-winged Gull, Drake Lake, Weld County, 6 Apr 2011. Photo by Steven G. Mlodinow

Fig. 2b: The bird from Fig. 2a, same location, 8 Apr 2011. Photo by Steven G. Mlodinow





Fig. 3: Colorado's first Herring × Glaucous-winged Gull, Prince Lake #1, Boulder County, 13 Jan 2004. Photo by Bill Schmoker

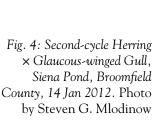






Fig. 5: Immature (second- or third-cycle) Herring × Glaucous-winged Gull, Ketchikan, Alaska, 20 February 2007. Photo by Steven C. Heinl

Fig. 6: First-cycle Herring × Glaucouswinged Gull, Ketchikan, Alaska, 12 February 2012. Photo by Steven C. Heinl



Figure 3: Colorado's first Herring × Glaucous-winged Gull, at Prince Lake #1, near Lafayette, Boulder County, photographed on 13 January 2004. If their ranges intersected, one could easily be forgiven for mistaking this bird for a Thayer's × Glaucous-winged Gull. The plumage is nearly that of a Glaucous-winged Gull, being smudgy and rather uniform. The structure is more befitting a Thayer's Gull, with a somewhat rounded, small-looking head and fairly delicate bill. However, a clue that this bird is neither comes from the rather pallid iris (not easily visible in this photo). Irides this color would be unusual in adults of either Glaucous-winged or Thayer's Gull and much more so in an immature. A combination of Herring Gull and Glaucous-winged Gull genes explains this bird's phenotype well. Photograph by Bill Schmoker.

Figure 4: Second-cycle Herring × Glaucous-winged Gull at Siena Pond, Broomfield County, 14 January 2012. This bird looks much like a short-winged Thayer's Gull with a pale eye (not easily detected in photo, but apparent during actual observation) or a short-winged Herring Gull with pale wingtips. Indeed, the wing length is rather typical for Glaucous-winged Gull, and in flight the extent of brown on the upper primaries was more limited than typical of Herring Gulls. A Glaucous-winged Gull, or Glaucous-winged × Western Gull, would have a larger bill, and Glaucous-winged a darker eye. Photograph by Steven G. Mlodinow.

Figure 5: Immature (second- or third-cycle) Herring × Glaucous-winged Gull, Ketchikan, Alaska, 20 February 2007. This bird has the heavy smudging on chest and upper belly of a Glaucous-winged Gull and a dark eye like that of Glaucous-winged, but the primaries are far too dark. The wingtips are somewhat like those of a Thayer's Gull, being brown (not blackish) with pale tips. However, the relatively short wings and massive bill would argue against Thayer's Gull. A dainty Glaucous-winged × Western Gull might look like this bird, but would typically be darker-backed and larger-headed; however, I am not certain that this hybrid cross can be eliminated with certainty from this one photo alone. Photograph by Steven C. Heinl.

Figure 6: First-cycle Herring × Glaucous-winged Gull, Ketchikan, Alaska, 12 February 2012. The coarsely speckled wing coverts and medium-brown primaries might suggest Thayer's Gull. However, the bird's stocky build and hefty bill eliminate that species. A Glaucous-winged × Western Gull would typically be darker-backed, and the wing coverts would not be so coarsely marked. Photograph by Steven C. Heinl.

Figure 7 (back cover, top): Second-cycle Herring × Glaucous-winged Gull at the Elwha River Mouth, Washington, 28 October

2011. This Herring × Glaucous-winged Gull has some Thayer's Gull-like aspects but is more similar to a Herring Gull. The most distinctive characters arguing against a pure Herring Gull are the rather limited secondary bar and the somewhat pale brown wingtips. Photograph by Steven G. Mlodinow.

Figure 8 (back cover, middle): Adult Herring × Glaucouswinged Gull at Elwha River Mouth, Washington, 28 October 2011. The wings of this bird, with their primaries still growing in, are quite suggestive of Thayer's Gull but do not resemble those of Herring or Glaucous-winged Gull. However, this bird's head looks like a blend of Herring and Glaucous-winged: The eye is like that of a Herring Gull, only a bit muddy in color, and the bill is rather sizable, like that of a Glaucous-winged. The body is large and bulky, unlike that of a Thayer's Gull. Glaucous-winged × Western Gull can be eliminated by the primary pattern and somewhat pallid mantle color. Photograph by Steven G. Mlodinow.

Figure 9 (back cover, bottom): First-cycle Thayer's Gull, Everett, Washington, 20 December 2010. Note how sharply marked this bird is, with medium warm-brown wing coverts and back feathers, all crisply edged in white. The wings are proportionately long and the bill slender. By comparison, a Herring × Glaucous-winged Gull would have smudgier upperparts, with shorter wings and a larger bill. Additionally, most hybrids would already have molted in some gray back feathers of "first-winter" plumage, whereas Thayer's Gulls often retain their juvenile back feathers (as this bird has) into January or February. Photograph by Steven G. Mlodinow.

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Fig. 7: Second-cycle Herring × Glaucous-winged Gull, Elwha River Mouth, Washington, 28 October 2011. Photos by Steven G. Mlodinow



Fig. 8: Adult Herring × Glaucouswinged Gull, Elwha River Mouth, Washington, 28 October 2011.



Fig. 9: First-cycle Thayer's Gull, Everett, Washington, 20 December 2010.

In the Scope: Glaucous-winged × Herring Gull Hybrids . . . 198