Birding Journal Barrow, Alaska: The Flight of Ross's Gulls



The view from the tip of Point Barrow, Alaska, during the peak of the Ross's Gull flight 8 October 2009 at about 1:30 p.m.: at least 500 Ross's Gulls were in view at one time, and observers estimated about 10,000 for the day (about 70 in this image). A first-cycle Glaucous Gull (subspecies barrovianus) rests on the beach.

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arrived at Barrow, Alaska on the evening of October 5. Denny Hodsdon picked me up at the airport and said he had seen about 25 Ross's Gulls earlier that day, a relief to hear. While I was mostly confident our timing was good—the Ross's Gull migration here usually begins in the latter half of September—I had a nagging worry that maybe they'd be late this year.

The next morning, we started birding at the old runway beyond the old U. S. Naval Arctic Research Laboratory (the main building is now Ilisagvik College). Several whales had been harvested and then butchered at this site. The carcasses were stored in dumpsters here before transport to Point Barrow. We figured this was the most likely location for an Ivory Gull to appear. As we started birding, we began to notice several flocks of Ross's Gulls flying fairly high, coming in from the Chukchi Sea and then flying east-northeastward across some of the inland lakes, presumably taking a shortcut to the Beaufort Sea. Most flocks had from 20 to 40 in-

dividuals, but one had about 100. By the end of the day, we had seen about 250.

This following day, we saw similar flocks overhead, though some Ross's Gulls were seen flying over the sea and following the coast-line as well, some fairly far offshore. One such flock, flying fairly quickly and low over the water, contained an adult Ivory Gull. A few Ross's also stopped briefly on the frozen lake next to the runway. Though the passage had not yet approached the mega-flights recorded in some years, we saw about 300 Ross's on October 7.

During my discussions with some of the local biologists, I learned that high winds bring the gulls close to shore, as these winds create breakers at the coast, and the gulls feed in the turbulent water. (The direction of the wind is apparently not critical, as wind from several directions can create breakers.) Up to this point, the weather had been mild.



The adult Ross's Gulls observed 6-9 October 2009 at Barrow showed relatively little variation in their plumages. The pink tint in the white areas of plumage varied among individuals but also with ambient lighting conditions: the heavily overcast conditions of 8 October gave many birds a deep rose-pink glow in all white areas of plumage, even in the head, the secondaries, and in the white shaft of the outermost primary (top row). There was also some variation in tail shape, with some showing the graduated tail shape depicted in the field guides (middle row), others showing markedly longer central rectrices and even undertail coverts (cf. image at upper left). Several individuals that appeared to be in definitive (adult) plumage showed a few dark tips to outer primaries (lower left) or dusky marks in the lesser upperwing coverts or alulas (lower right); such birds could well be second-cycle individuals, which are little known. All the birds we observed were in basic plumage; we saw very few adults with neck collars, a trait of alternate plumage, and those we did see had very thin, partial collars that did not connect across the throat.



Although there are very few records of first-cycle Ross's Gulls in the Lower 48 states, our group at Barrow observed several thousand, and among these there was some variation, mostly in the dorsal pattern. We saw none with strong traces of juvenal plumage, in which the back, sides of breast, and crown are rich brown in color. By October, all birds hatched that year have completed their partial preformative molt and are thus in formative plumage: the plumage of the head and back resembles that of the adult (top row). Compared to Little Gull, Ross's in any plumage shows a different head shape and a shorter, less pointed bill. First-cycle Ross's in formative plumage might resemble Little Gull from a distance, but Ross's wing pattern is bolder, more like that of a Sabine's Gull or a kittiwake, with strongly contrasting, bright white trailing edge to the wing (middle right), clearly visible from below and contrasting with a gray underwing (middle left), which is whitish in Little Gull of the same age. In first-cycle birds, the tips of inner rectrices are still blackish, which makes the graduated tail shape readily apparent, even at great distances (bottom row)—another distinction from first-cycle Little Gull, in which the tail is more square-shaped.

As luck would have it, we awoke to howling easterly winds and relatively large breakers on the morning of October 8. A few other birders had joined us this day, and as we were getting gas, a few flocks of Ross's Gulls could be seen flying along the shoreline in the predawn light. We raced down the road to get ahead of a flock so the new arrivals could get their lifer looks at the gulls, then proceeded back to our usual spot at the old runway. Some other birders and biologists also soon arrived.

Ross's Gulls began to pour by, flying right along the shoreline and feeding in the surf. Many were rocketing by in the high winds, making photography difficult. Some passed by no more than five feet above our heads. Over the next hour or so, my companions made three one-minute counts that indicated the gulls were passing at a rate over 7000 per hour. Of course, a more rigorous protocol should have been followed to obtain a more reliable estimate, but there were obviously thousands of Ross's Gulls. For several hours, they flew by us at seemingly the same rate.

Later in the morning, there seemed to be fewer gulls, but they may have just been more spread out. We made a trip to the point in the afternoon, and Ross's Gulls were still flying by the point in a continuous stream, though the point appeared to be a bottleneck. A group of about 500 were continuously in view, with apparently equal numbers flying into the west end and out of the east end of the flock. Given our counting methodology, we were not able to arrive at a reliable estimate of the number of gulls we saw that day, but it may well have been over 10,000, with a much higher proportion of first-cycle Ross's than we had seen in the previous two days.

The next day, winds had calmed again, and the gulls had resumed the behavior we witnessed during the earlier days of our visit, flying by at higher elevations in discrete flocks. Numbers may have been higher though, with about 200 seen in 20 minutes, but we departed that morning, so we don't know if that rate continued throughout the day. It had been a spectacular experience.

Researchers began to put together what was happening with Ross's Gulls at Point Barrow as early as 1970, though the first major flight there was seen by John Murdoch in 1881 (Densley 1999). A landmark paper by George Divoky and colleagues (1988) distilled what was then known about the flight, including at-sea records, results of aerial surveys, and data from seawatches at Point Barrow and vicinity in 1976, 1984, 1986, and 1987. Divoky and co-authors note that the flight begins in about mid-September, with Ross's Gulls moving from the Chukchi region toward Barrow and into the Beaufort Sea. The counts of eastbound birds topped 16,000 individuals for the 1984 season.

But the interesting part of this flight, which he found peaked between 29 September and 1 October in the mid-1980s, was that it was swiftly followed by a westbound flight, 14-19 October, during the study. Ross's Gulls descend upon the Beaufort Sea waters during this brief period each year, probably in order to feed on rich stocks of zooplankton here (Divoky 1984), though in some years, the birds are farther offshore and not seen in large numbers at Barrow. The wintering grounds of this enigmatic gull are not known but are thought to be at the edge of pack ice in the Bering Sea (Divoky et al. 1988).

Literature cited

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