Lake since the fall of 1982 through the present, 2008. (See Tables 1, 2 and 3.) This migratory pattern is basically true for all Illinois gull species aside from Laughing Gull, which nests along the coast to our east and south and tends to wander into Illinois throughout the late spring and hottest parts of the summer. Placing data for Laughing Gull into the correct season, as defined by this report, can be a bit arbitrary, but since its occurrence has been nearly annual at Carlyle since 1985, a data point for all but two of the seasons can be established. I've selected this method to determine per annum gull species at Carlyle because it relies on a single season of winter weather as the limiting factor, instead of a combination of two separate winters at the beginning and end of a calendar year.

The severity of the winter weather and especially the occurrence of ice greatly influence the diversity of the larger species of gulls. An ice shelf of some permanence will attract large numbers of gulls, and with the larger numbers comes greater diversity. In seasons with warmer weather, ice is at a minimum. The lack of ice poses two problems: Gulls are less concentrated at their roosts and harder to observe. The gulls have a much larger area over the lake in which to forage, resulting in fewer birds within an identifiable range. In seasons with colder weather, ice is the norm. If the lake completely freezes, nearly all the gulls will abandon and move either down river to the power plant at Baldwin or west to the locks and dams along the Mississippi River. The best combination for large numbers of gulls and greater diversity is to have the lake mostly frozen while retaining some pockets of open water in which the gulls can feed.

Open water will likely hold large numbers of wintering waterfowl, especially divers such as Common Goldeneye (*Bucephala clangula*) and Common Merganser (*Mergus merganser*). The large gulls are very opportunistic and swarm over the divers in an attempt to rob them of their fish as they pop to the surface. When looking for large gulls, I seek out rafts of goldeneye and mergansers.

The ducks, unless flushed by a passing boat, will remain with the school of fish on which they are feeding for hours at a time. This will also be true for the gulls. A raft of several hundred ducks will often attract a like number of gulls. Scoping patiently through the gulls can be quite rewarding. By this method I discovered a California Gull on 9 January 2000, another California Gull on 3 December 2005, and a Slaty-backed Gull on 16 December 2007. This method also works as a filter, because Ring-billed Gulls, which may represent up to 95 percent of the gulls present at the lake throughout the winter, are less likely to feed in this manner, and thus concentrates the Herring Gulls. In winter, it is with Herring Gulls that the rarer species are likely occurring, and any concentration or increase in Herring Gulls will promote the likelihood of finding a rarity.

The distribution of gulls throughout the state is dependent on large bodies of water. In terms of basics, gulls need food and a place to loaf and roost. Any large body of water that can supply large amounts of food with sufficient loafing and roost areas will attract large numbers of gulls. In terms of gull finding, access and proximity are essential. Carlyle Lake excels in this manner, as few areas around the lake cannot be accessed. and the most vital areas, the beach and the dam, provide excellent access. Of the 17 species of gull recorded at the lake, each has been observed either on the beach, from atop the dam,

or in the spillway where they feed. Another factor which makes Carlyle Lake an ideal place to look for gulls is that the main basin of the lake can be seen in its entirety from nearly any vantage point. Aside from the dam, the three best places to scope the lake are from Saddledam No. 2, Point 18 within South Shore State Park, and from the pavilion at the south end of Eldon Hazlet State Park. For these reasons, gulls which may be considered rare for other parts of the state can be found regularly, if not annually, at Carlyle. This is especially true for Sabine's Gull, which is almost a sure bet in September.

Gull numbers at Carlyle Lake peak three times a year: late fall, dominated by Ring-billed Gulls and Bonaparte's Gulls; late-winter, dominated by Ringbilled Gulls and Herring Gulls; and mid-spring, dominated by Ring-billed Gulls and Bonaparte's Gulls. Ringbilled Gull at seasonal peaks can exceed daily totals of 30,000 to 50,000 birds. During peak periods, Bonaparte's Gulls can exceed 5,000 to 8,000 birds in the fall (late October through early December), and 1,500 to 3,000 in the spring (late March through mid-April). Smaller numbers of Herring Gull are present at the lake fall through spring, but only reach significant concentrations of several hundred birds during periods of ice. Franklin's Gull may produce daily counts of several hundred birds briefly in October, but the other species of gull recorded at the lake occur in very low numbers and can be considered rare.



Glaucous-winged Gull at West Access Beach, Carlyle Lake, Clinton County. 8 September 2007. Photo by Travis A. Mahan.

The gulls of 2007/2008

Of the nine regularly occurring (above the mean) gull species at Carlyle Lake, only Glaucous Gull was missed for the 2007-08 season; however, its occurrence was expected given that the lake was mostly frozen much of the winter. Five unexpected species made gull watching very enjoyable this season: Glaucouswinged Gull (Sep 8 – Apr 12); Little Gull (Nov 22-27); Slaty-backed Gull (Dec 16-18); Iceland Gull (Dec 23 – Jan 21); and Mew Gull (Feb 23-24).

The weekend of the Glaucouswinged Gull (8-9 September) was