

was courting and appeared to start copulation.” Carpenter was not able to determine if true contact was made, but the entire “copulation lasted no more than two seconds, probably less than one second.”

From 14 June until about mid-July, many observers saw the Arctic Tern actively courting a Common Tern or perhaps several Common Terns. While on the sandy island, the Arctic brought a fish to the female Common Tern, gave it to her, and then pointed its bill, raised its tail and danced around the female. Other times chaos ensued, and several terns and some gulls took flight and disappeared either over Lake Michigan or on the other side (south) of the island (Fig. 2).



Figure 2. Arctic Tern (apparent male), left, offers a fish to a Common Tern (apparent female) at Great Lakes Naval Training Center Marina, Lake County. 23 June 2001. The Common Tern didn't take the fish and the Arctic finally ate it. But the next fish the Arctic brought, the Common took. Photo by Carolyn Fields.

Countless birders, biologists, and ornithologists visited this remarkable GLNTC marina island that held many ducks, gulls, shorebirds, and terns throughout the summer of 2001. They witnessed this courtship and breeding behavior of the Arctic and Common Tern throughout summer, and by mid July breeding and courtship behavior was almost nil. A major storm moved through the western Great Lakes region on August 2. The last day the Arctic Tern was observed was 31 July 2001.

Recently Common Terns have been successful breeding birds in northeastern Illinois (Dann 1999), just to the north of the GLNTC marina at several Waukegan colony locations such as the Commonwealth Edison property. Two summers ago the



Figure 3. Arctic Tern (in foreground) with Common behind. 23 June 2001. Great Lakes Naval Training Center Marina, Lake County. Photo by Carolyn Fields.

Waukegan colonies had been abandoned and tern breeding had shifted to the GLNTC marina island. Unfortunately, according to IDNR's Natural Heritage biologist, Brad Semel, no tern nests were successful during the summer of 2000 or 2001 due primarily to mammalian predation (primarily Norway Rats during the summer of 2001) of the nests at the marina. Although some 25 eggs or more were found of the Common Tern, at no time did Semel ever discover an Arctic or Common Tern coming off a nest or scrape area with a “pair-bonded” Common Tern. All Common Tern nests failed to produce any viable juveniles.

It is not without precedent that Arctic Terns have attempted to breed in the lower 48 states. There is a historical (and sometimes discounted) reference to the species breeding in Wisconsin (Robbins 1991) on Lake Koshkonong in Jefferson County in the late 1800s. Most recently Arctic Terns have attempted breeding in Montana, complete with scrapes and pipping eggs at Bowdoin National Wildlife Refuge from the summers of 1998-2000, though none of these breeding attempts produced viable juvenile Arctic Terns (Dinsmore and Jorgensen 2001).

In the future diligent *sterna* tern observers might look for the Arctic Tern attempting to breed elsewhere on the interior Great Lakes particularly among well-known or outpost tern colonies.

Notes on Identification

The literature often discusses the difficulty of separating the two sister species, Common and Arctic Tern (Olson and Larsson 1995). The notes, here, are an attempt to further help the tern observers learn identification characters from the summering 2001 Arctic Tern. One identification guide remarks that some observers often give up on distant tern identification of these two species and call the birds “Comm Terns” (Harris et al. 1996). For perhaps the first time ever in Illinois, observers got plenty of field identification experience with separating the two species from each other — though some of the “classic” field identification characters such as the smaller rounded head, short bill length, and short tarsus and longer tail than the Common Tern were not the most consistent reliable characters for identifying the Arctic Tern. For example, when the Arctic Tern was on the ground at a distance the structural characteristics of this species were not always strikingly obvious. When the Arctic Tern was active and excited during courtship it often stood as tall and erect as possible to impress a mate. However, when the Arctic Tern was still and on even ground with the Common Tern the legs were distinctly shorter (Fig. 3). The bill was often described as being about the same length as a Common Tern. In fact, there is overlap in the two species' bill lengths (Olson