

# COMPETITION BETWEEN AMERICAN COOTS AND FRANKLIN'S GULLS FOR NEST SITES AND EGG PREDATION BY THE COOTS

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FRANKLIN'S Gull (*Larus pipixcan*) is the only gull that nests exclusively in marshes. It is colonial, and often changes colony sites from year to year. Franklin's Gulls build semi-floating nests in the cattail (*Typha* sp.) marshes of the northern prairies of North America. I studied the breeding adaptations of the Franklin's Gull to a marsh habitat from 1968 to 1971 at Agassiz National Wildlife Refuge in northwestern Minnesota. Although there are many other species of birds that regularly nest in the gull colony, Franklin's Gulls selectively defended their nests against the American Coot (*Fulica americana*). In this paper I will describe the interactions between these two species. Descriptions of coot displays are from Gullion (1952), those of Franklin's Gull are from Moynihan (1958).

Coots were attacked by gulls throughout the season. Competition between coots and gulls for nest sites was intense, and frequent battles ensued. Disputed sites usually consisted of a few bent over cattail flags. Franklin's Gulls establish territories by standing on cattails in one area of the marsh and defending it against all other gulls. During this period coots were frequently in the area using some of these same sites as loafing and preening areas. The incumbent gull usually flew before an approaching coot reached its station. The coot swam in the normal posture until it saw the gulls on the site. The coot then swam toward the station in the "patrolling" posture. Usually this was sufficient to cause the gull to fly. However, on some occasions, the coot actually "charged" the gull. After repeated encounters gulls typically abandoned the stations, but in two of 19 cases gulls successfully defended their chosen sites and subsequently built nests there.

I found the first coot nest in the gull colony area on 4 May 1969 (2 eggs) at about the time that the gulls began nest construction. New coot nests were initiated in the colony area until at least 6 July when I stopped searching for nests. Incubating gulls always "gakkered" at coots swimming within 4 meters of their nests. Usually gulls did not nest close to coot nests although they did nest close to nests of ducks (minimum distance of one meter), Black-crowned Night Herons (*Nycticorax nycticorax*) (1.2 meters) and Western Grebes (*Aechmophorus occidentalis*) (2.7 meters).

Ryder (1959) studied the interspecific behavior of the American Coot in Utah and found that they threatened or pursued 16 species of birds, one fish, one reptile, and two mammals. Diving ducks primarily competed for feeding

areas, and nesting (and brooding) platforms, while dabbling duck conflicts concerned loafing sites and feeding areas. Ryder believed that the coot's aggressiveness did not have an adverse effect on duck nesting because predators were kept away by the coot. Competition for nesting sites (Sooter, 1945) and the aggressive nature of coots (Gullion, 1953; Fredrickson, 1970) were observed in other studies.

From my blind on 25 May 1971, I watched a coot eat three gull eggs. A gull stood on its nest and gakked at a coot swimming 4 meters away. The coot assumed a patrol posture until it was 2 meters away and then charged the gull. The gull stood facing the coot and continued to gakker. The gull then attacked the coot on the water by pecking and flapping its wings at the intruder. Both birds were fighting and pecking at each other. The coot maintained its balance but the gull appeared to be pushed under the water several times. The fighting sequence lasted two and a half minutes before the gull flew. The coot walked up on the nest platform, pecked at and ate the contents of all three eggs, and departed while the gull continued to swoop at it from above. A similar observation was made on 6 June over a half mile from the first blind, making it unlikely that the same individual coot was involved. Elsewhere in the colony I located 19 gull nests containing pecked eggs in an area with a coot's nest in the center.

J. T. Lokemoen (pers. comm.) made the following observation on 16 May 1961 near Charlo, Montana. An adult coot was perched on top of cattails nearly one meter above the water surface in a semi-permanent pothole with a cattail fringe. The coot was feeding on the contents of a Red-winged Blackbird's (*Agelaius phoeniceus*) nest while several adult blackbirds attacked the coot. Jerome Stoudt (pers. comm.) reported seeing a coot sitting on a Pied-billed Grebe (*Podilymbus podiceps*) nest pecking at the eggs. Upon closer observation he found all the eggs open and most of the contents gone from one or two of the eggs. This observation was made in 1969 or 1970 in Minnedose, Manitoba.

I was unable to find any reference in the literature to the American Coot eating eggs of other species. Bent (1926) considered the species omnivorous. The European Coot is known to eat the eggs of the Black-headed Gull (Densley, 1966).

#### SUMMARY

There is competition between Franklin's Gulls and American Coots for nest sites, each species defending its nesting site against the other species. Coots were observed to be aggressive towards Franklin's Gulls throughout the breeding season. On two occasions coots were observed to eat the eggs of Franklin's Gulls and 19 nests in an area centered on a coot's nest contained pecked eggs.

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NORTH AMERICAN HAWK MIGRATION CONFERENCE

SYRACUSE, NEW YORK, 19-21 APRIL 1974

Valuable research on hawk migration has been done by many individuals and organizations over the past 40 years, but little work has so far been done to correlate these studies. The purpose of the North American Hawk Migration Conference, therefore, is to gather under one roof hawkwatchers from all over eastern North America—from the edge of the Great Plains at longitude 95° east to the Atlantic coast, and from Manitoba to the Gulf of Mexico—to exchange observations on hawk migration, to set standards for record-keeping, and to agree on ways of sharing and collating information on a continuing basis.

The conference will be held at the Holiday Inn north of Syracuse with registration in the evening of Thursday 18 April. Further details about transportation and accommodation can be obtained from the Host Committee Chairman: Dorothy W. Crumb, 3983 Gates Road North, Jamesville, New York 13078.