



**STATUS: HIGH
CONSERVATION
PRIORITY IN IOWA**

Common Moorhen *Gallinula chloropus*

Introduction

Widespread in the Americas, with a striking appearance and a variety of loud and unusual calls, the Common Moorhen is a rail the size of a small duck, with short tail and wings, long toes, and (in the adult) a short, bright-red-and-yellow bill. Sexes are similar in plumage. This species is ecologically and behaviorally intermediate between the American Coot and the rails that are found in Iowa.

Several reports in the early 1900s indicated that this species was found across Iowa in suitable habitat, but was not common. And other reports from the 1930s indicated that it was a common to very common nesting species in the Northwest quadrant of the state. However, a serious decline has occurred. Moorhens were observed on only 2 of 40 selected Iowa marshes surveyed statewide in 1980; and none were seen on any of 30 wetlands that were surveyed in 1983 and again in 1984; nor have any been seen in several recent studies of restored wetlands in northern Iowa. Today the Common Moorhen is definitely not common in Iowa. It is now listed as one of our species of high conservation priority.

Closely associated with wetlands and other aquatic areas where submerged or floating vegetation are interspersed with emergent or shoreline vegetation, this species forages for plant materials and macroinvertebrates on the water surface, among submerged plants, and in shoreline and upland vegetation. Its diet and foraging modes are diverse.

Although tolerant of urban and agricultural habitats, pollution and alteration of wetlands constitute potential threats to this bird.



The Common Moorhen's striking appearance, loud and varied calls and "tameness" in many situations have attracted popular attention.

Habitat Preferences

Common Moorhens are an adaptable species and have been successful in many different habitats on 5 different continents. It is less bold than its relative the American Coot, and spends more time hiding in thick wetland vegetation. It prefers freshwater wetlands with some open water, as well as weedy ponds.

In Iowa and other northern portions of its U.S. range, moorhens breeds principally in permanently flooded deep wetlands, or marshes where robust emergent grass-like plants about 1 to 4 meters tall are interspersed with pools and channels that have floating-leaved and submerged plants, or with mudflats.

Feeding Habits

Moorhens are omnivorous. Major food items include leaves, stems and seeds of various aquatic plants, and fruits and berries of terrestrial plants. Animal matter consumed includes: insects, spiders, earthworms, snails and other mollusks, tadpoles, and other prey. This species even eats carrion and the eggs of other birds.

Foraging is done while swimming, walking on land, or making its way through dense wetland vegetation. It may dip its head underwater to feed, and also upends (with tail up, and head beneath the water surface), and sometimes it dives for food.

Breeding Biology

Moorhens arrive in Iowa in late April or early May. In courtship, male Common Moorhens chase females on land where both stop, bow deeply, and preen each other's feathers. Other courtship displays involve lowering head and raising tail, exposing

white patches of feathers under the tail. Moorhens seem to be monogamous.

Nests are usually constructed on a mound of vegetation within stands of emergent vegetation such as cattails or bulrush, and are over water. But nests are sometimes on land, or even in a shrub that's near water. The nest is built by both sexes and is essentially a solidly constructed platform shaped like a wide, shallow cup, and often has a ramp of similar vegetated material leading down to the water. Other platforms constructed nearby may be used for resting or brooding young.

Eggs are most often 8 to 11, but can vary from 5 to 13. Incubation is for 19 to 22 days, and is done by both parents. Shortly after hatching the young can swim quite well. The young are fed by both parents and sometimes by older siblings from earlier broods of that year. They can find most of their own food by 3 weeks of age, but still are fed by parents until at least 6 weeks of age. Flight is possible at 40 to 50 days of age. Two broods often are raised in one year, and rarely 3 broods are raised in a single breeding season.

Concerns and Limiting Factors

While wetlands were disappearing, were fragmented, or were degraded by human activities across the landscape, Common Moorhens have declined. As with so many other IBA Criteria Species, the correct habitat quantity and quality is what determines whether or not Common Moorhens do quite well, or do very poorly.

Some of the other concerns related to moorhen populations include but are not limited to the following: rising mercury levels within aquatic ecosystems; build-up in the environment of dieldrin, and various other formulations of biocides; deaths from striking television towers and other obstructions during migrations or other flights; human disturbance at nesting or

feeding sites; and predation from domestic cats, dogs and rats.

Habitat Management Recommendations

As a species declining at a rate that made it a species of high conservation priority in Iowa, Common Moorhens obviously need help from human beings to sustain, or to increase their populations within our state. While providing an abundance of the correct forms of wetland habitat is a key step, and more can be learned about the necessary practices in the wetland management section of Part 3 of this project, other questions are yet to be answered.

More field research is needed in the United States and Canada to determine if the many aspects of breeding and behavior described in Old World studies are similar in New World populations. The reasons for moorhen rarity or declines in the Midwest need elucidation. Effects of chemical contaminants on moorhens urgently need study, as contamination has harmed populations of many other waterbirds. Potential impacts of predators, especially increasing species such as raccoon, domestic cats, and domestic dogs, deserve a careful study. Better knowledge of population status and trends requires development of simple, accurate survey methods, and this will require refined understanding of the functions of vocalizations and other aspects of social behavior. And there are many other aspects of moorhen biology and ecology that are quite deserving of careful analysis.

Although the moorhen continues to persist over most of its original range, it is uncommon or rare over most other areas. Unfortunately, we still know little about the basic habitat needs of Common Moorhens, and until such information is readily available, it will be most difficult to try to manage moorhen populations.