SPECIES PROFILE

Common Moorhen

Gallinula chloropus

Federal Listing: Not listed
State Listing: Not listed
Global Rank: G5
State Rank: S2
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Element 1: Distribution and Habitat

1.1 Habitat Description

The common moorhen is a member of the secretive rail family (Rallidae). In the northern United States, moorhens require permanently flooded freshwater or brackish shallow ponds or deep marshes. Common moorhens frequent cattail (*Typha* spp.) marshes; they prefer robust, emergent, tall grass-like vegetation interspersed with pools and channels containing leafy plants (Bannor and Kiviat 2002). Moorhens eat leaves and stems of aquatic plants, as well as smaller amounts of grasses, herbs, seeds and berries, and some animals such as snails, insects, and worms (DeGraaf and Yamasaki 2001). Young moorhens will often eat dragonfly and mayfly nymphs (Hebert and Elkins 1994).

Moorhens may use altered, artificial, agricultural, or urban wetland habitats, including small ponds and sewage lagoons, and they commonly forage on lawns, fields, and golf courses near water (Bannor and Kiviat 2002). Nests are usually found in emergent vegetation, occasionally in shrubs such as willow (*Salix* spp.) or alder (*Alnus* spp). Water depth surrounding nests is usually 0.3 to 0.91m (1 to 3 ft deep). Nests are well concealed by overhanging wetland vegetation (DeGraaf and Yamasaki 2001).

1.2 Justification

Regional declines in moorhen populations have been attributed to loss or degradation of emergent wetland habitats. The common moorhen appears to have extended its range northward in the last century (Bannor and Kiviat 2002) but is thought to be less abundant than in the early 1900s due to the filling of wetlands (Degraaf and Yamasaki 2001).

Invasive, non-native plant species threaten cattail-dominated wetlands and increase the number of subsidized predators such as raccoons (*Procyon lotor*). These threats may be highest in southern New Hampshire, where development is most severe. For example, replacement of cattail by purple loosestrife (*Lythrum salicaria*) may have contributed to a decline in moorhens at Montezuma National Wildlife Refuge, New York (Sibley 1988 in Bannor and Kiviat 2002). The introduction of predatory game fish, such as the largemouth bass (*Micropterus salmoides*), to New Hampshire may further limit range expansion of the common moorhen. Bell and Cordes (1977, in Bannor and Kiviat 2002) collected 5 largemouth bass in Louisiana containing moorhen chicks.

1.3 Protection and Regulatory Status

- Migratory Bird Treaty Act (1918)
- See Marsh and Shrub Wetlands habitat profile for regulations regarding wetland impacts.

1.4 Population and Habitat Distribution

The North American breeding range extends from southern Maine to Florida, from the west to southern Minnesota and eastern Texas, and from California to southern New Mexico and south along both Mexican coasts. Wintering populations migrate to the southeastern and southwestern United States, with the largest concentrations in Florida (Hebert and Elkins 1994, Bannor and Kiviat 2002).

In New England, the common moorhen is a rare to uncommon local breeder and migrant (DeGraaf

and Yamasaki 2001). It is listed as a Species of Special Concern in Massachusetts (Massachusetts Division of Fisheries and Wildlife 2003) and Endangered in Connecticut (Connecticut Department of Environmental Protection 2004). The breeding population of Massachusetts is estimated between 11 and 20 pairs (Massachusetts Division of Fisheries and Wildlife 2005). Common moorhens have always been thought to be rare and local in Vermont (Environmental Protection Agency 2005).

Common moorhens are rare in New Hampshire and are near the northern edge of the breeding range. The first confirmed nesting occurred in July 1960, with 2 adults and at least 6 young observed on a small pond in Portsmouth, which is no longer considered suitable (Hebert and Elkins 1994). There are New Hampshire breeding records for the towns of Concord, Barrington, Rochester, and Nottingham, as well as a 1998 sighting of an immature moorhen at the Exeter Wastewater Treatment plant. Multiple moorhens have been seen in Rye, Exeter and Orford, whereas single observations in the northern towns of Haverhill, Jefferson, Errol, and Dummer need further documentation to confirm breeding. Single observations have also been recorded in marshes in Hampton Falls, Durham, Newington, Marlow, Hebron, and Holderness (New Hampshire Wildlife Sightings Database 2005, Hebert and Elkins 1994).

1.5 Town Distribution Map

1.6 Habitat Map

See habitat map for Marsh and Shrub Wetlands.

1.7 Sources of Information

NatureServe (2005) was used for status and ranking information. New Hampshire Wildlife Sighting (2005), New Hampshire Heritage Bureau databases (2005), and Hebert and Elkins (1994) were the primary sources of locality records. Habitat and life history information was taken from published literature, including Foss (1994).

1.8 Extent and Quality of Data

The distribution of common moorhen breeding locations in New Hampshire appears to be limited to a few suitable cattail marshes or wastewater treatment facilities in the southeast part of the state. Recent distribution data are largely the result of records submitted to the New Hampshire Wildlife Sightings web page from New Hampshire Bird Records collected and reviewed by NHA. Although common moorhen records are few in the state, submitted reports are carefully reviewed before they are accepted, resulting in high-quality records.

1.9 Distribution Research

Systematic surveys are needed to provide more information regarding distribution, condition, and habitat requirements of the species. NHA volunteers should be recruited to identify common moorhen breeding locations. They should begin around the third week of May, and should concentrate particularly on those areas where breeding is suspected but not confirmed (e.g., Pontook Reservoir in Dummer, Reed Marsh in Orford, and Eel Pond in Rye). Common moorhen, and other uncommon, elusive wetland birds such as the Virginia rail (*Rallus limicola*) and Sora (*Porzana Carolina*) should be incorporated into habitat inventories and management and restoration efforts.

Element 3: Species Threat Assessment

Wetland loss and degradation, including shoreline modification and alteration of vegetated edges, are the greatest threats to common moorhen. See threats in Marsh and Shrub Wetland habitat profile.

Element 4: Conservation Actions

Maintaining natural, tall, grass-like emergent vegetation, especially cattail, at the borders of ponds and wetlands. See Marsh and Shrub Wetland habitat type for relevant conservation strategies.

Element 5: References

5.1 Literature

Bannor, B.K., and E. Kiviat. 2002. Common moorhen (*Gallinula chloropus). In* The birds of North America, no. 685, A. Poole and F. Gill, editors. The Birds of North America, Inc., Philadelphia, Pennsylvania, USA.

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Connecticut Department of Environmental Protection Natural Diversity Database webpage 2004. Connecticut Department of Environmental Protection. Hartford, Connecticut. Available http://dep.state.ct.us/burnatr/wildlife/factshts/cmoorhen.htm. (Accessed 18 February 2005).

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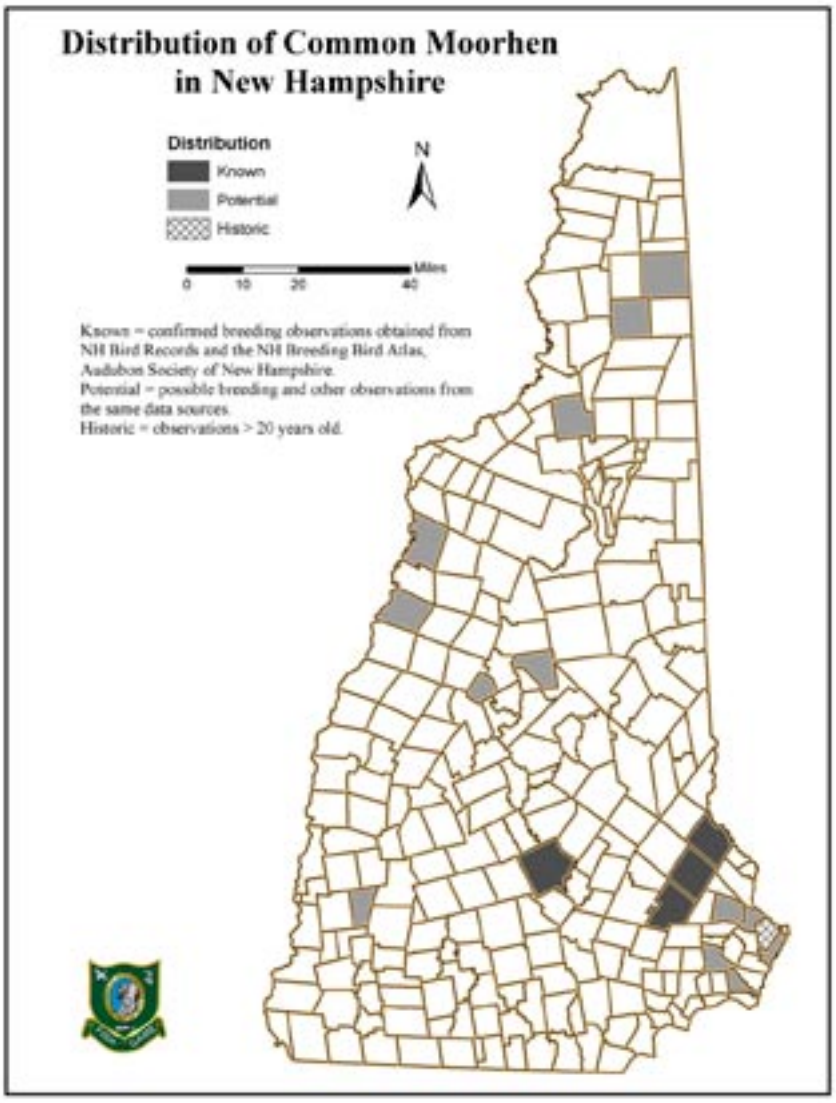
Massachusetts Natural Heritage Program webpage 2005. Massachusetts Rare and Endangered Wildlife. Division of Fisheries and Wildlife, Westborough, Massachusetts. Available http://www.mass.gov/dfwele/dfw/nhesp/nhfacts/galchl.pdf. (Accessed 18 February 2005).

NatureServe. 2005. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.2. NatureServe, Arlington, Virginia. Available http://www.natureserve.org/explorer. (Accessed: 15 February 2005).

5.2 Data Sources:

New Hampshire Natural Heritage Bureau. 2005. Database of Rare Species and Exemplary Natural Community Occurrences in New Hampshire. Department of Resources and Economic Development, Division of Forests and Lands. Concord, New Hampshire, USA.

Wildlife Sightings database. Maintained by the University of New Hampshire Complex Systems, Durham, New Hampshire, USA. (Accessed Feb. 15, 2005)


Distribution of Common Moorhen
in New Hampshire
Distribution
Known
Potential
Historic
N
Miles
0
10
20
40
Known = confirmed breeding observations obtained from NH Bird Records and the NH Breeding Bird Atlas, Audubon Society of New Hampshire.
Potential = possible breeding and other observations from the same data sources.
Historic = observations > 20 years old.