

King Rail Conservation Plan Executive Summary

The King Rail is a large rail found locally in freshwater wetlands throughout the eastern United States and southern Ontario, with the largest populations occurring along the Gulf Coast in Louisiana and Texas. Available data indicate steep population declines throughout its range, especially for migratory populations that breed in the Midwest and southern Ontario. The species is listed as a species of high concern by the North American Waterbird Conservation Plan, is federally endangered in Canada, and is classified as a species of greatest conservation need in 30 State Wildlife Action Plans. Due to the concern for the species, a King Rail Conservation Workshop was held in November 2006 to receive stakeholder input for developing a conservation action plan for the species.

The *King Rail Conservation Plan* summarizes current knowledge of the species' distribution, population trends, and life history as well as describes current threats, lists research and management needs, and outlines recommended conservation actions. The plan also contains a status assessment section that identifies important management areas in each state or province within the species range.



Noppadol Paothong, MO Dept. of Conservation

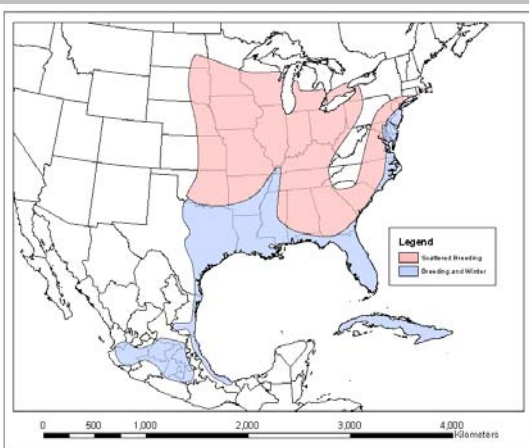
The major threats to the health of the species are:

- Loss of wetland habitat from a variety of sources including development, agriculture, and transportation.
- Decline in acreage being planted to rice in the southwestern part of its range and changes in rice farming methods.
- Other factors associated with decreased habitat quality in remaining wetlands (i.e., nutrient runoff, invasive species, increased predation in fragmented habitat, and saltwater intrusion into freshwater wetlands).

Little is known about King Rail habitat requirements, population size, and limiting factors. As such, research will play a vital role in the overall conservation of the species by assisting managers in targeting conservation actions and developing more explicit population objectives in the future. The general consensus at the November 2006 King Rail Workshop was that research and conservation actions should be conducted on a regional scale following the framework established by the North American Waterbird Management Plan (NAWBMP). The main NAWBMP regions in the King Rail range are the Southeast United States Region, the Upper Mississippi Valley and Great Lakes Region, and the Mid-Atlantic/New England/Maritimes Region.

High priority research actions recommended include:

- Develop and evaluate spatially explicit habitat suitability models for different regions of the King Rail range.
- Identify migration corridors and wintering areas for migratory populations of King Rail and assess harvest potential on these populations.
- Assess King Rail response rates using Continental Marsh Bird Monitoring callback survey protocols.
- Determine brood survival rates from hatching to fledging for different regions of the King Rail range.





High priority conservation actions recommended include:

- Develop outreach materials promoting and providing guidelines for the management and restoration of King Rail habitat.
- Hold regional workshops on habitat management and restoration techniques for public and private land managers in priority landscapes.
- Protect, restore, and manage habitats needed to support self-sustaining populations of King Rail on public and private lands in priority landscapes using the best available science.
- Increase communication with the rice industry, state farm agencies, and the U.S. Department of Agriculture to promote farming practices and programs that are beneficial to King Rail and other marshbirds.
- Identify partnership opportunities for protecting, restoring, and managing habitat for King Rail and other wetland dependent wildlife with similar habitat requirements.

Progress and Next Steps: To date, model development and evaluation projects, as recommended in the plan, have been funded for three regions (Midwest, the Gulf Coast of Texas/Louisiana, and coastal North Carolina/Virginia). The top five unfunded priorities are listed below, with an estimated cost of \$876,700 to complete the action items. Further, the plan calls for the development of a formalized working group that can evaluate future needs for the species as well as provide guidance for habitat conservation and population management.

Top Five Unfunded King Rail Priorities:

- 1) Determine wintering areas for migratory populations of King Rail from the Midwest. – estimated cost \$150,000 (*Objective 3.1 in Research and Monitoring Section of KIRA Plan*).
- 2) An Assessment of King Rail response rates to playback calls – estimated cost \$95,000 (*Objective 3.2 in Research and Monitoring Section of KIRA Plan*).
- 3) Develop and evaluate spatially explicit, expert-based models for other key regions within the King Rail range. (*Objectives 2.1 and 2.2 in Research and Monitoring Section of KIRA Plan*).
 - a) Peninsular Florida – estimated cost \$175,000
 - b) Middle Atlantic Coast (Delaware, Maryland, New Jersey) – estimated cost \$175,000.
- 4) Conduct regional brood survival studies in 3 locations throughout the species' range (Midwest, southwestern Louisiana/coastal Texas, and Middle Atlantic states) – estimated cost \$270,000 (\$90,000/site). (*Objective 3.3 in Research and Monitoring Section of KIRA Plan*).
- 5) Develop regional best management practice (BMP) booklets for managing King Rail Habitat including graphic design and printing costs for 2,000 booklets for each region. (*Objective 1.1 in Conservation and Management Section of KIRA Plan*).
 - a) Southeastern United States – estimated cost \$3,900
 - b) Middle Atlantic States – estimated cost \$3,900
 - c) Midwest – estimated cost \$3,900