Best Management Practices for Construction and Development Projects
Northern Harrier

Circus cyaneus

Common name • Northern Harrier
Scientific name • *Circus cyaneus*
Federal status • None
State status • Endangered

Purpose and Use

The information in this document is to be used to help avoid and minimize species impacts due to construction practices. It is not intended to be used as a guide to manage habitat for a given species. If that is the goal, please contact the Department of Conservation for habitat management information. Because every project and location differs, following the recommendations within this document does not ensure that impacts will not occur to the species and additional information might be required in certain instances. Following the recommendations within this document does not complete Endangered Species Act consultation that may be necessary for species listed under the federal Endangered Species Act; please contact the U.S. Fish and Wildlife Service for more information.

Ecology

In Missouri, Northern Harriers are a rare breeding species, arriving in March-April. They nest (often in loose colonies) fairly late in the season on dry ground in undisturbed marshes, prairies, and pastures, or on elevated ground in low shrubby vegetation, tall weeds, or reeds. Incubation lasts from 30-32 days, and young are fledged about 5 weeks later. Northern Harriers are also a common migrant in Missouri from February to May and again from September to November frequenting open fields, prairies, native grass plantings, and shallow marshes. They perch on the ground or on stumps or posts, and forage for small mammals, birds, large insects (especially grasshoppers), snakes, lizards, toads, frogs, and carrion (in winter) over open terrain where there is good ground cover.

Reasons for Decline

The number of Northern Harriers declined as a result of wetland drainage, conversion of native prairies to agriculture, reforestation of grasslands, and the untimely mowing or haying of grassland nesting areas. During the mid-1900s, Northern Harrier populations suffered great losses due to DDT pesticide-related egg shell thinning and losses of wetland nesting habitat. Northern Harriers have disappeared from many former nesting areas, especially in southern parts of their range. Surveys suggest that they are still declining in parts of North America.

Specific Recommendations

Northern Harriers benefit from restricting human use of breeding habitat, maintenance of habitat through prescribed burning and delayed mowing (not between March and July), avoidance or restriction of grazing, retention of crop residue, planting and maintenance of native grassland, and restoration or development of wetlands. As a ground-nesting species, they require new growth to conceal their nest location, which may explain the late nesting season.

- Project activity in potential Northern Harrier habitat should avoid disturbance of nest sites and should protect potential breeding habitat.
- Prairies and native grass plantings should be maintained whenever possible.
- Open areas such as pastures, cropland, native grass plantings, and marshes where Harriers nest should be managed in a way that maximizes open grasslands.
- Mowing earlier than August 1 should be avoided to reduce destruction of nests.
- If the project area contains suitable habitat following construction, managing for open grasslands, using prescribed burning, haying, or managed grazing if conditions allow, will limit encroachment of woody vegetation and help maintain habitat for the Northern Harrier.
- Use of insecticides and rodenticides in nesting areas should be minimized: Harriers can act as a natural, biological control of unwanted insects and rodents.

General Recommendations

Refer to Management Recommendations for Construction Projects Affecting Missouri Wetlands.

If your project involves the use of Federal Highway Administration transportation funds, these recommendations may not fulfill all contract requirements. Please contact the Missouri Department of Transportation at 573-526-4778 or www.modot.mo.gov/ehp/index.htm for additional information on recommendations.

Information Contacts

For further information regarding construction projects in wetlands, contact:

For species information:

Missouri Department of Conservation
Resource Science Division

P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573/751-4115

For species information and Endangered Species Act Coordination:

U.S. Fish and Wildlife Service
Ecological Services
101 Park Deville Drive, Suite A
Columbia, MO 65203-0007
Telephone: 573/234-2132

For Clean Water Act Coordination:

Missouri Department of Natural Resources
Water Protection Program
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/751-1300, 800/361-4827

U.S. Army Corps of Engineers
Regulatory Branch
700 Federal Building
Kansas City, MO 64106-2896
Telephone: 816/983-3990

U.S. Environmental Protection Agency
Water, Wetlands, and Pesticides Division
901 North 5th Street
Kansas City, KS 66101
Telephone: 913/551-7307

Disclaimer

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from state and federal agencies, contractors and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat. Compliance with these Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal laws such as the Clean Water Act and the Endangered Species Act, and state or local laws need to be considered for construction and development projects, and require permits and/or consultation with the appropriate agency. Following the recommendations provided in this document will help reduce and avoid project impacts to the species, but impacts may still occur. Please contact the appropriate agency for further coordination and to complete compliance requirements.