Best Management Practices for Construction and Development Projects Blanding's Turtle

Emydoidea blandingii

Common name • Blanding's Turtle
Scientific name • *Emydoidea blandingii*
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 as a guide to manage habitat for a given species. Please contact the Department of Conservation if habitat management information is needed. Because every project and location differ, following the recommendations in this document does not guarantee impacts will not occur to the species and additional information may be required in certain instances. Following the recommendations in 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

Blanding's Turtles occur in many states in the Midwest and into southern Ontario. There are also isolated populations in Massachusetts and New Hampshire. In Missouri, they inhabit wetland areas in the northeastern and northwestern corners of the state. Blanding's Turtles are semi-aquatic and spend time in marshes, water holes, sloughs, streams, and ponds with relatively dense vegetation. They also may be found in grasslands. They are active from late March to late October and overwinter in mud at the bottom of marshes or ponds. This species is known to travel considerable distance (up to 2 miles) between wetlands and to locate egg nesting sites. Courtship and mating mainly take place in April and early June. Females lay 6-15 eggs, typically in June, in sandy, well-drained soil that is well exposed to sunlight. Young typically hatch in September. Blanding's Turtles eat crayfish, snails, aquatic larvae of insects, some terrestrial insects, and frogs.

Reasons for Decline

It is likely that Blanding's Turtles were never more widespread in Missouri than they are currently. However, destruction and alteration of wetlands and swamps for agriculture and urbanization projects has eliminated habitat for these turtles and limited their existing range. Degradation of remaining habitat because of non-point source pollution continues to threaten the status of the Blanding's Turtle in Missouri and nest predation is extensive. This species is also sensitive to habitat alteration such as cultivation to the water's edge and use of herbicides.

Specific Recommendations

Protection and restoration of wetlands is critical for the survival of many species, including the Blanding's Turtle. Due to the year-round requirement these animals have on wetlands, impacts on these areas within the range of this species should be minimized.

- Avoid removing or destroying unique habitat features, such as downed trees, that provide habitat for the Blanding's Turtle.
- Erosion and sediment controls should be implemented, maintained, and monitored for the duration of the project.
- Disposal of wastes and garbage should be done in designated areas far from wetlands.
- Avoid altering water levels in wetlands where Blanding's Turtles are present.
- Draining or destroying known wetlands should be avoided.
- Turtle tunnels under roadways may help this species carry out reproductive activities or fencing barriers may be necessary to discourage use of roadways.
- Maintain both temporary and permanent wetlands and provide basking sites.
- At sites occupied by the turtle, activities (i.e., mowing, disking, burning, etc.) should be conducted during the inactive season between early November and late March.
- If application of pesticides, herbicides, and fertilizers in or near seasonal wetlands is necessary, carefully follow all label directions and consider application of more wildlife and wetland friendly herbicides and pesticides.
- Use of net-like mesh fabrics (plastics, nylon, twine, etc.) for erosion control should be avoided due to entrapment and entanglement hazards.

General Recommendations

Refer to Refer to *Best Management Practices for Construction and Development Projects Affecting Missouri Rivers and Streams.*

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 the Missouri

Department of Transportation Environmental Studies webpage for additional information on recommendations.

Information Contacts

For further information regarding regulations for development in rivers and streams, contact:

For species information:

Missouri Department of Conservation
Science Branch
P.O. Box 180
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: 816-389-3990

U.S. Environmental Protection Agency
EPA Region 7 Water Division
11201 Renner Boulevard
Lenexa, KS 66219
Telephone: 913-551-7977

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 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. 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.