

Western Fox Snake

Elaphe vulpina vulpina

Best Management Practices

Missouri Department of
Conservation

Common name ▪ Western Fox Snake
Scientific name ▪ *Elaphe vulpina vulpina*
State status ▪ Endangered
Federal status ▪ None

Ecology

Western fox snakes occur in northern Missouri, eastern Nebraska, southeastern South Dakota east to northern Michigan and northwestern Indiana. In Missouri, they have been found in cultivated fields, along wooded stream valleys and in natural prairies that adjoin marshes. Western fox snakes are active between early April and late October and overwinter in dens under brush piles or mammal burrows. Mating begins in April, and females lay 6-29 eggs under logs or leaf litter in May or June. Young hatch in August or September. Western fox snakes typically grow between 36-54 inches long. These snakes are constrictors, and they prey mainly on rodents, but also on birds, arthropods, and other small mammals. When threatened, they may coil, vibrate their tails and strike, but are non-venomous and harmless to humans.

Reasons for Decline

At one time, it was presumed that western fox snakes occurred throughout Missouri north of the Missouri River. Now, they are known only from several sites within the

state, especially wetlands adjacent to the Mississippi River and Missouri River in northeastern and northwestern Missouri. Their decline may be due to a combination of factors, including human persecution, draining of wetland and destruction of natural prairies for agriculture and urbanization projects.

Recommendations

As do many reptiles, western fox snakes play an important role in the food chain. They are a natural means of controlling populations of rodents that could damage crops and other vegetation.



Beneficial Practices

- Disposal of wastes and garbage should be done in designated areas far from wetlands.
- Maintain streamside vegetation, riparian habitats, brushpiles, and natural vegetation.
- Develop and maintain shallow water habitat such as water holes, ponds, potholes, etc.
- Disking should not be performed in designated habitat or disk only in currently managed impoundments.
- Prescribed burning or mowing of no more than 90% of designated habitat while fox snakes are inactive between November 1 and March 31, 10% of the habitat should be

maintained to provide cover for emerging animals.

Adverse Practices

- Removing or destroying unique habitat features, such as downed trees, logs and brush piles that provide habitat for the western fox snake or their prey.
- Draining or destroying known wetland habitat.
- Altering water levels in wetlands where western fox snakes are present.
- Uncontrolled grazing of livestock
- Applying herbicides, and insecticides where possible.
- Burning of all designated habitat at one time while they are active (April 1 – October 31), especially during spring emergence (April and May).
- Mowing in designated habitat when fox snakes are active (April 1 thru October 31).
- Disking in designated habitat.

Information Contacts

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

Missouri Department of Conservation
Policy Coordination Section
P.O. Box 180
2901 W. Truman Blvd
Jefferson City, MO 65102-0180
Telephone: 573/751-4115

Missouri Department of Natural Resources
Division of Environmental Quality
P.O. Box 176
Jefferson City, MO 65102-0176
Telephone: 573/526-3315

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: 973/551-7307

U.S. Fish and Wildlife Service
Ecological Services Field Office
101 Park DeVillie Dr., Suite A
Columbia, MO 65203
Telephone: 573/234-2132

Legal Issues

These Best Management Practices were prepared by the Missouri Department of Conservation with assistance from other state agencies, contractors, and others to provide guidance to those people who wish to voluntarily act to protect wildlife and habitat.

Compliance with Best Management Practices is not required by the Missouri wildlife and forestry law nor by any regulation of the Missouri Conservation Commission. Other federal, state or local laws may affect construction practices.

“State Endangered Status” is determined by the Missouri Conservation Commission under constitutional authority, and specific requirements for impacts to such species are expressed in the Missouri Wildlife Code, rule 3CSR10-4.111.