

The Wildlife Crossing

A FWS newsletter to facilitate collaboration between the Michigan Ecological Services Field Office and Michigan's transportation agencies

Designation of Critical Habitat for Rayed Bean and Snuffbox Mussel



On April 27, 2026, FWS released a final rule designating critical habitat for snuffbox and rayed bean mussels. The rayed bean is a small mussel, measuring only about 1.5 inches and lives up to 15 years. Historically found in at least 115 streams, rivers, and other water bodies, its range has sharply declined to 37 streams. In Michigan, approximately 59 river miles in 5 units were designated as critical habitat for the rayed bean: in the Black River, Mill Creek, Pine River, and Belle River in St. Clair County; the River Raisin in Lenawee County; and the Clinton River in Oakland County. Snuffbox mussels are small, reaching less than 3 inches in length and living up to 20 years. Historically, they inhabited more than 210 streams, rivers, and other waterways, but now only occupy 85. In Michigan, approximately 65 river miles in 3 units were designated as critical habitat for the snuffbox: in the Grand River and Flat River in Kent and Ionia Counties; Clinton River in Oakland County; and Huron River in Livingston County. This critical habitat now needs to be considered in the evaluation of the effects of federal actions as part of the Section 7 consultation process, but does not result in additional protections outside of the consultation process. This critical habitat does not affect transportation projects that are not funded, authorized, or carried out by a federal agency.

What to do if your project will have unavoidable impacts to protected migratory birds

The Migratory Bird Treaty Act prohibits the take (including killing, capture, and transport) of protected migratory bird species without prior authorization by the FWS. In some cases, transportation projects may be unable to avoid impacting protected migratory birds during their work, such as when you must remove a tree that contains a bird nest or when exclusionary measures fail and swallows nest on a bridge that is being replaced. In these cases, FWS can issue Federal Migratory Bird Depredation Permits to individuals and entities for lethal take of migratory birds. To obtain a depredation permit, your first step should be to contact USDA Wildlife Services for technical assistance. In Michigan, this contact is mi.goose.permits@usda.gov or 517-336-1928. If a permit is justified, a USDA biologist will then issue you a WS Form 37. You can then submit a Migratory Bird Depredation Permit Application and the completed WS Form 37 to the FWS Migratory Bird Program. If you have questions about this process, you can contact the FWS Migratory Bird Program at migratorybirdpermits@fws.gov. You should also make sure to coordinate with Michigan DNR to determine if a state permit is necessary. If recommended by USFWS, USDA Wildlife Services, or DNR, you may also want to consider contacting a licensed wildlife rehabilitator if it is possible to salvage eggs or nestlings.



Common Conservation Measures

Some federally listed species are more commonly found throughout Michigan or are more likely to have their habitat overlap with transportation infrastructure. When this is the case, you are more likely to need to incorporate conservation measures for these species into project planning to ensure the project is not likely to adversely affect these listed species. Conservation measures are specific actions undertaken by the action agency to avoid, minimize, or mitigate for impacts to listed species. Knowing what common conservation measures may be required for Endangered Species Act compliance can help with project planning efforts. Some of the most common conservation measures that may need to be implemented for transportation projects are outlined below:

Federally Listed Bats

- Clear trees in a narrow linear corridor less than 1,000 ft wide to avoid impacting landscape connectivity
- Conduct structure assessments on suitable bridges from May 15 – August 15 in the southern 3rd county tier of Michigan. A Survey 123 form is available for submitting data in Michigan.
- When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights. Direct temporary lighting away from suitable listed bat habitat during the active season.
- Avoid potential drift of insecticides, fungicides, or rodenticides into forested habitats.
- Adhere to seasonal tree clearing restrictions. Recommended dates vary by location, check the MI dkey or page 52 of the Standing Analysis.

Mussels

- Avoid direct and indirect impacts to group 3 streams, the areas where federally listed mussels are known or modeled to occur (check the MI dkey or Michigan Mussel Mapper).
- If impacts to group 3 streams are necessary, contact our office early to begin coordination as surveys or relocation may be necessary.

Eastern Massasauga Rattlesnake (EMR)

- Use wildlife safe erosion control.
- Watch MDNR “60-Second Snakes: The Eastern Massasauga Rattlesnake” video or review the EMR factsheet.
- Revegetate disturbed areas with natural vegetation.
- Ensure equipment, vehicles, and fill are free from invasive species.
- Clean clothing, personal protective equipment, equipment, and vehicles to prevent the spread of snake fungal disease to locations where it has not previously been detected.
- Equipment, hazardous chemicals, and material staging areas should not occur within 100 ft of suitable habitat or potential hibernacula.
- Do not disturb potential hibernacula (crayfish burrows, small mammal burrow, tree root structures).
- Use exclusionary fencing during the active season.
- Limit speeds when working in EMR habitat.
- Do not significantly alter hydrology (> 6 inches) during the inactive season.
- Do not create a new or increased permanent barrier to snake movement.
- Remove vegetation during the inactive season using low impact methods.

