

2025 South Dakota Field Office Conservation and Consultation Guidance¹

The U.S. Fish and Wildlife Service (the Service), South Dakota Field Office (SDFO) have developed these conservation recommendations to provide options to avoid impacts to species protected under the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 et seq.) (ESA), as well as other trust wildlife resources. We encourage project proponents contact us on specific project level effects as there is flexibility on how these measures may be applied, and these general recommendations are not a substitute for consultation requirements under Section 7 of the ESA. For more information, contact us at southdakotafieldoffice@fws.gov or (605) 224-8693

Species/ Type	Recommended Avoidance Area	Conservation Recommendations	Period of Concern
American Burying Beetle (ABB)	Avoid soil compaction and disturbance in areas with sandy-loam soils in Tripp, Todd, Bennet, Oglala Sioux and Gregory Counties	Conduct ground surveys if surface disturbance for projects with ground disturbance, surveys for the ABB should be conducted and any results reported to this office	June 1 - August 31 (Survey Window)
Bald Eagle	660 ft if the activity visible from nest OR 330 ft if visual screen	Aerial survey recommended in the spring, before leaf-out	Jan 15 to Aug 31
Black-footed Ferret	Prairie dog towns within occupied range.	Avoid habitat disturbance within ferret reintroduction sites	Active year-round
Dakota skipper	250m – 500m from suitable habitat	Field surveys are recommended to identify habitat if projects are in native grasslands.	June 10 – July 25
Golden Eagle	1 mile buffer	Aerial survey recommended in the spring, before leaf-out	Jan 1 – August 31
Grassland Ground- nesting birds		Avoid haying grasslands prior to July 15	May 1 – July 15
Higgins Eye Pearly Mussel	Missouri River below Gavin's point dam	Avoid instream disturbances near known locations	
Leedy's Roseroot	Black Elk Wilderness Area	Avoid habitat during proposed development or management	
Northern Long Eared Bat (NLEB)		Most activities conducted during the inactive period and outside of a 0.25 mile buffer around hibernacula are unlikely to directly impact bats	See Table 1
Piping plover	0.5 mile buffer around occupied habitat during the nesting season	Avoid impacts to suitable habitat during the nesting season	April 15 – Aug. 15

¹ **Suggested Citation:** USFWS. 2025. USFWS SDFO Conservation Recommendations. U.S. Fish and Wildlife Service - South Dakota Ecological Services Field Office. Pierre, SD. Version 04/14/2026.

Species/ Type	Recommended Avoidance Area	Conservation Recommendations	Period of Concern
Pallid sturgeon	Missouri River below Fort Randall Dam and Missouri River below Gavins Point Dam	Avoid impacts during the migration and Spawning period	March 1 – June 30
Rufa Red knot	Migratory both spring and fall throughout South Dakota	Avoid similar habitats to those used by piping plover	Spring and Fall Migration
Scaleshell Mussel	Missouri River below Gavins Point Dam	Avoid instream disturbances in known locations	
Topeka Shiner	Documented streams in Eastern South Dakota	Avoid impacts to occupied streams during spawning season	May 15 – July 31
Western Prairie Fringed Orchid			Bloom Period
Whooping Crane	1.2 mile no-activity zone when present	See species specific section for project specific recommendations	March 15 – May 15 Sept. 10 – Nov. 15

Information for Planning and Consultation Tool

The Information for Planning and Consultation (IPaC) tool was designed to streamline ESA consultations and compliance, please consider using the Information for Planning and Consultation (IPaC) tool (<http://ecos.fws.gov/ipac>) to determine:

- 1) If listed species or critical habitat may be present within an action area
- 2) If the project and associated actions are likely to affect listed species
- 3) Provide minimization measures to ensure the recovery of species affected.

To learn how to use IPaC, the Service has a beta version that is intended for new users to test out the tool, along with links to helpful video demonstrations (<https://ipacb.ecosphere.fws.gov/>). Additionally, the SDFO website (<https://www.fws.gov/office/south-dakota-ecological-services>) contains guidance for the on-line project review process for projects located in South Dakota.

Consultation Guidance

Under section 7(a)(2) of the ESA, if a Federal agency authorizes, funds, or carries out a proposed action, the responsible Federal agency, or its delegated agent, is required to evaluate whether the action “may affect” listed species or critical habitat. The following bullets lay out next steps for Federal action agencies based on their effect determinations made to listed species or critical habitat from proposed actions.

- If a “*no effect*” determination is made for listed species or critical habitat, the responsibility for the “no effect” determination remains with the Federal action agency and no further consultation with the Service is necessary. The Service recommends retaining documentation of the determination in the decisional records for the action.
- If a “*may affect, not likely to adversely affect*” determination is made for listed species or critical habitat the responsible Federal action agency should reach out to the SDFO for written concurrence. For projects using determination keys, see the guidance below.
- If a “*may affect, is likely to adversely affect*” determination is made for listed species or critical habitat, the responsible Federal action agency shall request formal section 7 consultation with the SDFO.

Determination Keys

Determination keys are logic-based questions to help provide consistent effects analyses for standard project reviews. They are intended to provide a streamlined consultation process. When using determination keys in IPaC, there may be several to select during the screening process:

- **Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key:** Specific to these two bat species, this range-wide key covers project types that may occur within the range of these species but does not include transportation projects. If these species are present in the project area, this key will need to be completed in addition to the statewide key.
- **FHWA, FRA, FTA Programmatic Consultation for Transportation Projects affecting IBAT, NLEB, or TCB:** Similar to the range wide Northern long-eared bat dkey, this key covers all transportation related projects analyzed within the programmatic consultation for projects authorized by the Federal Highway Administration, Federal Railroad Administration, and Federal Transit Administration. If the Northern long-eared

bat is present within a project area and meets this project type, this key will need to be completed in addition to the statewide key.

- **American Burying Beetle Consultation and 4(d) Rule Consistency:** Specific to the American Burying Beetle, this key is designed to determine if the proposed action is consistent with activities excepted from prohibited take, as defined in the October 15, 2020 4(d) rule.

After completing a determination key, the resulting letter may be labeled as either a 1) Concurrence, 2) “May Affect” or MA Consistency, or 3) Consistency/Technical Assistance.

- 1) When a project using an IPaC determination key generates a **Concurrence letter**, this indicates your project activities were consistent with the analysis and no additional consultation for that project is needed unless one or more of the following occurs:
 - a) The scope, timing, duration, or location of the proposed project changes.
 - b) New information reveals the action may affect listed species or designated critical habitat.
 - c) A new species is listed, or critical habitat designated
- 2) When a project receives a **“May Affect” or MA Consistency letter** that does not further distinguish to “is likely to adversely affect” (LAA) or “not likely to adversely affect” (NLAA), this indicates the project includes additional complexities that are not covered by the analysis and consultation with the SDFO is needed. To complete consultation, contact the SDFO at SouthDakotaFieldOffice@fws.gov and include with your email the IPaC Project number, a shapefile of the Action Area, the generated “May Affect” letter, and we can assist with processing the consultation request.
- 3) When a project receives a **Consistency/Technical Assistance² letter** it could indicate either:
 - a) All effect determinations made for indicated project activities were “no effect” or
 - b) The user has indicated they are not the federal action agency nor are they a designated non-federal representative for the lead federal action agency on the project.
 - i) If the Consistency/Technical Assistance letter is due to:
 - (1) All effect determinations for the indicated project activities being “no effect”, this letter is only being produced for federal action agency record keeping purposes. The responsibility for the “no effect” determination(s) remains with the Federal action agency and no further consultation with the Service is necessary.
 - (2) The user indicates they are not a federal action agency nor are they a designated non-federal representative for the lead federal action agency, consultation with the Service is not complete. The federal action agency or its designated non-federal representative will need to log into IPaC using their agency email account and *Search by record locator* – the produced Consistency/Technical Assistance letter will have the record locator number to search for the specific project. Once the federal action agency or its designated non-federal representative certify the letter, it will produce a Concurrence letter (so long as the project activities meet the scope of the

² The title of this letter varies between determination keys. Some producing this letter type refer to it as a consistency letter, while other determination keys may refer to it as a technical assistance letter.

determination key analysis), meeting the ESA consultation requirement for the project.

Black Footed Ferret (E)

The black-footed ferret (*Mustela nigripes*) is a medium-sized mustelid typically weighing 1.4–2.5 pounds and measuring 19–24 inches in total length, including a 5-to-6-inch tail. It is a slender animal, with black feet, a black face mask, and a black-tipped tail. Despite significant recovery successes, it remains one of the most endangered mammals in North America. The primary reasons for why the species remains at risk are the same that nearly caused the animal's extinction: disease, loss of habitat, and related declines in prey (USFWS 2019).

Conservation Recommendations:

- Avoid disturbance to prairie dog towns where black footed ferrets are present. Disturbance is defined as soil disturbance, chemical application, mammal trapping, trapping, poisoning, etc.
- Avoid night-time lighting or noise adjacent to prairie dog towns where the species is present.

Additional Information

- USFWS 2025b. Black-footed ferret (*Mustela nigripes*). Available online at: <https://ecos.fws.gov/ecp/species/6953>. Accessed July 2025.
 - The official page for this species, this website provides species information, interactive range maps, and other resources to aid in consultations.
- USFWS 2019. Species Status Assessment Report for the Black-Footed Ferret (*Mustela nigripes*). Available online at: <https://iris.fws.gov/APPS/ServCat/DownloadFile/169265>. Accessed July 2025.

Dakota Skipper (T)

The Dakota skipper (*Hesperia dacotae*) butterfly occupies remnant native prairie throughout South Dakota and can be identified when adults are in flight from approximately June 10 – July 25. A range wide survey protocol was developed in 2024 to define suitable habitat and protocols for conducting surveys (USFWS 2024a). A model has also been developed by the USFWS Habitat and Population Evaluation Team (HAPET) that helps project proponents identify, at the desktop scale, if suitable habitat may be present in a particular area (Barnes KW and Others 2023).

Conservation Recommendations:

- If suitable habitat, defined generally as intact native grassland identified during a field evaluation, is present within a particular project area, our general recommendation for reducing effects would be to maintain a 250-meter buffer between a project and suitable Dakota skipper habitat and a 500-meter buffer from occupied suitable habitat and/or designated critical habitat. A more detailed definition of suitable habitat is present in the 2024 survey protocol (USFWS 2024a).

Additional Information

- USFWS 2025c. Dakota Skipper. <https://www.fws.gov/species/dakota-skipper-hesperia-dacotae>. Accessed March 2025.
 - The official page for this species, this website provides species information, interactive range maps, and other resources to aid in consultations.
- USFWS 2024a. 2024 Dakota Skipper (*Hesperia dacotae*) Survey Protocol, Midwest and Mountain Prairie Regions. Available online at: <https://www.fws.gov/sites/default/files/documents/2024-05/2024-usfws-dakota-skipper-survey-protocol.pdf>. Accessed March 2025.
 - This survey protocol can be used to guide mapping suitable habitat, conducting occupancy surveys, and determining when a site may be absent.
- Barnes KW and Others. 2023. Dakota Skipper Habitat Suitability Model. Accessible online at: <https://iris.fws.gov/APPS/ServCat/Reference/Profile/159874> HAPET. Bismarck, ND.
 - Used in concert with the official species range present in IPAC, this tool can be used to help refine where probability of suitable habitat may be present on the landscape.

Leedy's Roseroot (T)

Leedy's roseroot (*Rhodiola integrifolia leedyi*) is a perennial member of the stonecrop (orpine) family. Plants in this family, which includes the common jade plant, have waxy leaves that enable them to tolerate periods of water stress. It is a cliffside wildflower, found today in only seven locations in three widely separated states - Minnesota, New York and South Dakota. A single population in South Dakota was confirmed in 2015 and still exists today. The population occurs in the Black Elk Wilderness area of the Black Hills National Forest approximately 7,000 feet above sea level. It is fairly difficult to access and away from areas of recreational use.

Conservation Recommendations:

- Avoid conducting activities within or near occupied locations and contact the USFWS ESFO if doing work uphill of occupied habitat

Additional Information

- USFWS 2025d. Leedy's Roseroot. Available online at: <https://www.fws.gov/species/leedys-roseroot-rhodiola-integrifolia-ssp-leedyi>. Accessed July 2025.
 - The official page for this species, this website provides species information, interactive range maps, and other resources to aid in consultations.

Northern Long-Eared Bat (E)

The Northern long-eared bat (*Myotis septentrionalis*; NLEB) can be found throughout South Dakota in mixed coniferous forests, cottonwood floodplains, caves, and abandoned mines. Northern long-eared bats roost singly or in colonies underneath bark, in cavities, cracks, or crevices of live, dead or dying trees or snags. Habitat use varies based on life history and seasonal changes. Key definitions when assessing bat habitat and life history include:

- **Habitat**

- **Suitable summer habitat** includes forests, woodlots, fencerows, riparian areas along streams and rivers, and other wooded corridors.
- **Suitable roost trees** are live, dead or dying trees or snags ≥ 3 inches diameter at breast height (DBH) that have exfoliating bark, cracks, crevices, and/or cavities. Individual trees with roost characteristics within 1,000 ft of other forest or wooded habitats may also be suitable.
- **Hibernacula**, or winter roost habitat, provide a stable microclimate of cool temperatures (32-48F), high humidity (90%), and minimal air movement. Hibernacula have been documented in caves and mines in the Black Hills of South Dakota. There is potential that other locations serve as hibernacula in South Dakota that have not yet been identified, such as limestone cliffs along the Missouri River..
- **Maternity roosts** are groups of pregnant and/or lactating females (30-50 individuals or fewer) and their young roosting in trees, or less commonly in human-made structures. Reproductive female bats will return annually to a roost tree that continues to provide proper shelter and microclimate, which is influenced by the surrounding forested habitat.
- **Life History (Table 1).**
 - The **pup season** is the timeframe during late pregnancy and when most young are born until they can fly and forage independently, which usually lasts for about three weeks.
 - **Fall swarming** occurs when individuals gather around and within a 5-mile radius of hibernacula openings. This increase in activity occurs when temperatures consistently drop below 40°F and when the amount of daylight decreases.
 - **Spring staging** occurs as temperatures increase, and individuals gradually rouse from hibernation, feed on insects, and prepare to migrate to summer habitat. Bats roost near (~ 5 miles) hibernacula openings or will return underground and enter short bouts of daily torpor.

Table 1. Seasonal Bat Activity Periods (from USFWS Bat Summer Survey Guidelines)

	Inactive Period	Active Period			
South Dakota	Hibernation	Spring Staging	Summer Occupancy	Pup Season	Fall Swarming
Plains	Nov 1 – April 14	Apr 15 – May 14	Apr 15 – Sept 30	June 1 – Aug 15	Aug 16 – Oct 31
Black Hills	Oct 1 -April 30	May 1-June 1	May 1-Aug 31	June 15-Aug 31	Aug 16 – Sept 30

To determine if your project may affect NLEB, please review the ***Recommended Approach for Development Projects*** in the Service’s [*Northern Long-eared Bat and Tricolored Bat Voluntary Environmental Review Process for Development Projects, Version 1.1*](#), dated April 15, 2025. This document is intended for projects including but not limited to infrastructure development that results in the conversion or permanent removal of NLEB habitat.

Conservation Recommendations:

- Most activities conducted during the inactive period and outside of a 0.25-mile buffer around hibernacula are unlikely to directly impact bats.
- Roost Trees
 - During the pup season, avoid removing known roost trees and suitable roost trees within a 0.25-mile of a documented roost. Activities within this 0.25-mile should be conducted during the inactive period.
- Hibernacula
 - Avoid entering bat hibernacula during the inactive period (hibernation).
 - Avoid completely or partially blocking hibernacula opening(s) or making other changes that would affect airflow, sun exposure, humidity, or ground water flow within the hibernacula. This includes maintaining the vegetation and any other structures immediately surrounding hibernacula opening(s).
 - Maintain a 0.25-mile buffer around hibernaculum opening(s) year-round. Limited exceptions include activities that are not anticipated to impact bats or hibernacula, would aid in conservation of these bats, and/or would enhance their long-term use of hibernacula or the surrounding habitat.
 - Conduct prescribed fire during the inactive period (Table 1) using low to moderate intensity burns and under environmental conditions the prevent smoke from entering hibernacula. If this is not possible, conduct prescribed fire outside of the pup season using low to moderate intensity burns to minimize direct impacts to individual bats.
 - Avoid disposal of woody vegetation or spoil (e.g., soil, rock, etc.) within 500 feet of known or assumed bat hibernacula opening(s) and associated sinkholes, fissures, or other karst features.
 - Comply with all cave and mine closures, advisories, and regulations
 - USDA USFS, 2024. Cave Closure and Restrictions. Available at: https://www.fs.usda.gov/sites/nfs/files/r02/publication/alerts/R02_2024_02_Cave_Closures_and_Restrictions.pdf. Accessed July 2025.
- Spring Staging and Fall Swarming
 - Avoid removing suitable roost trees within a 5-mile radius of known or assumed bat hibernacula during spring staging and fall swarming.
- Bridges
 - When bridge and/or culvert repair, retrofit, or rehabilitation work is anticipated to occur during the active period, we recommend conducting surveys to determine bat use following the Service's standard protocols (USFWS 2024b). If the structure has evidence of use, notify the SDFO of findings and we will assist with coordinating next steps.
- Habitat Management
 - Manage forests to ensure a continual supply of snags and other suitable roost trees.
 - Minimize use of herbicides and pesticides. If application is necessary, spot treatment is preferred over aerial application.

- Evaluate the use of outdoor lighting during the active period and seek to minimize light pollution by angling lights downward or via other light minimization or avoidance measures.
- Water
 - Avoid filling, channelizing, or degrading streams, wetlands, and other water sources.
 - Protect potential recharge areas of cave streams and other karst features that are hydrologically connected to known or assumed hibernacula.
 - Implement sediment and erosion control measures, ensure restoration of pre-existing topographic contours after ground disturbance, and restore native vegetation where possible.
 - Set back equipment servicing and maintenance areas at least 300 feet from stream beds, sinkholes, fissures, or areas draining into sinkholes, fissures, or other karst or mine features.
 - Avoid delivery of chemical retardant, foam, or additives to surface waters.
 - Avoid backflushing pumps and charged hoses into live streams and lakes

Additional Information

- USFWS 2024b. Range-wide Indiana Bat and Northern Long-eared Bat Survey Guidelines. U.S. Fish and Wildlife Service, Region 3, Bloomington, MN. 95 pp. <https://www.fws.gov/media/range-wide-indiana-bat-and-northern-long-eared-bat-survey-guidelines>. Accessed March 2025.
 - The Survey Guidelines are annually reviewed and updated by the Service in March; ensure you are using the most up to date version when planning voluntary presence/probable absence surveys.
- USFWS 2025e. Northern Long-eared Bat. <https://www.fws.gov/species/northern-long-eared-bat-myotis-septentrionalis>. Accessed March 2025.
 - The Service released final tools and guidance to replace the species specific 4 (d) rule regulations on October 23, 2024, found at the above link. These resources are updated as new information become available. Please check this link periodically to ensure the most recent guidance is used.
 - “Species List Area” is mapped based on known NLEB occurrences and modeled likelihood occurrence of species presence. This area is used in IPaC when generating Official Species List. The “Species List Area” (also sometimes referred to as “AOI”, “Current Range”, “Consultation Range”, or “Legal Range”) can be found at the link above.
- USFWS 2025f. Land-based Wind Energy Voluntary Avoidance Guidance for the Northern Long-eared Bat. <https://www.fws.gov/library/collections/land-based-wind-energy-voluntary-avoidance-guidance-northern-long-eared-bat>.
 - The NLEB Range for wind energy projects is different from the “Species List Area”.
- USFWS 2025g. Northern Long-eared Bat and Tricolored Bat Voluntary Environmental Review Process for Development Project. April 15, 2025. https://www.fws.gov/sites/default/files/documents/2025-04/nleb_tcb_consultation_guidance_version-1.1_final_.pdf. Accessed July 2025.

- If you have evaluated your project through the *Northern Long-eared Bat and Tricolored Bat Range-wide Determination Key* (NLEB/TCB) using IPaC and received a “May Affect” determination letter, this indicates your project includes some additional complexities that the NLEB/TCB determination key does not cover and additional consultation is needed. To complete the consultation process, please contact the SDFO at SouthDakotaFieldOffice@fws.gov and include with your email the IPaC Project number, a shapefile of the Action Area, the generated “May Affect” letter, and any other pertinent information that will assist the consultation.
 - See the IPaC section for more information regarding the use of IPaC and determination keys.

Pallid Sturgeon (E)

In South Dakota, the pallid sturgeon (*Scaphirhynchus albus*) is known to use habitat in the Missouri River below Fort Randall Dam to Gavins Point dam and below Gavins Point Dam. Projects that directly affect these water resources may result in effects to this species.

Conservation Recommendations:

- To the extent practicable, avoid in-stream work in the Missouri River locations referenced above from **March 1st-June 30th** during the migration and spawning season. If in-stream work is needed during these times, please coordinate with the SDFO to reduce effects to the species.
 - Spawning dates vary from year to year and state to state depending on water temperatures, dam releases, and other environmental and climatic influences; dates recommended for South Dakota may differ from adjacent states.
- For general water intakes, we recommend:
 - Designing facilities to have intake velocities less than 0.50 feet per second (fps)
 - Using intake screens sized to have a maximum mesh opening of ¼ inch
 - Using a Johnson (or Johnson Type) screen/intake if feasible.
- Construction activities within and upstream of designated segments should be designed to prevent streambank erosion and should not otherwise impact the stream channel/bank. Minimize disturbance to ground cover and vegetation within riparian areas by utilizing existing disturbed areas such as roads, trails, etc.
- A spill kit of appropriate capacity should be immediately available at all times when operating equipment near water.
- If riparian areas have been affected by flooding, restrict livestock grazing of vegetation, especially cottonwood stands, until successful regeneration of this vegetation occurs.

Additional Information:

- USFWS 2025h. Pallid Sturgeon. <https://www.fws.gov/species/pallid-sturgeon-scaphirhynchus-albus>. Accessed March 2025.
 - The official page for this species, this website provides species information, interactive range maps, and other resources to aid in consultations.

Piping Plover (T)

The piping plover (*Charadrius melodus*) is a small shorebird that can be found on open beaches, alkali flats, and sandy areas along major rivers and wetlands in the northern Great Plains.

Nesting habitat consists primarily of shorelines of alkali wetlands, shorelines of reservoirs, and unvegetated interior sandbars. Critical habitat has been designated for the piping plover along shorelines and islands of the Missouri River, including some reservoirs, along with some alkali lakes in the prairie pothole region. Piping plovers usually begin breeding in April or May, lay eggs in May, hatch in June and begin winter migration in July to September.

Conservation Recommendations:

- During the piping plover nesting season from **April 15-August 15**, avoid direct effects to nesting habitat, which includes sand and gravel beaches, alkali flats, gravel shorelines, and river sandbars.
- If effects to suitable piping plover habitat are proposed during the nesting season, surveys are recommended to determine species presence. We recommend the following when conducting surveys:
 - If suitable habitat is present, conduct presence surveys for piping plovers within a 0.5-mile radius of the proposed project in suitable habitat.
 - Surveys should be conducted by a qualified biologist daily, starting seven (7) days prior to construction activities.
 - Conduct surveys primarily in the morning when there is adequate light to detect and identify birds. From a good vantage point, survey areas using a binoculars or spotting scope for a minimum of 20 minutes in each 0.5-mile direction. Monitoring from several different viewing areas may need to occur, moving areas until the entire 0.5-mile radius is surveyed. Focus specifically for bird movements along sandbars in the middle of the channel, along the shoreline, and on recently formed floodplain sand deposits.
 - If no birds are observed, project activities can commence with no additional surveys.
 - If birds are present foraging or nesting, contact us for recommendations to avoid effects to the species.
- If at any time, an active nest, chick or adult bird is observed within 0.5 miles of the project:
 - Do not attempt to disturb or remove the birds or nests.
 - Do not start or continue construction activity within 0.5 miles of the adult, chick, or nest until piping plovers or their nests are no longer present within 0.5 miles of the project, or it is determined by the USFWS that there is no risk for disturbance.

Additional Information:

- USFWS 2025i. Piping Plover. <https://www.fws.gov/species/piping-plover-charadrius-melodus> Accessed March 2025.
 - The official page for this species, this website provides species information, interactive range maps, and other resources to aid in consultations.

Rufa Red Knot (T)

The rufa red knot (*Calidris canutus rufa*) is a rare migrant that occasionally uses stopover habitat in South Dakota during its long-distance migration. This species has been documented in various aquatic habitats in South Dakota, from the Missouri River to prairie pothole wetlands.

Conservation Recommendations:

- If a rufa red knot is sighted within one mile of the action area during project activities, the USFWS should be contacted at 701-250-4481 or SouthDakotaFieldOffice@fws.gov. In coordination with the USFWS, work may resume after the bird(s) leave the area.

Additional Information

- USFWS 2025j. Rufa Red Knot. <https://www.fws.gov/species/rufa-red-knot-calidris-canutus-rufa>. Accessed March 2025.
 - The official page for this species, this website provides species information, interactive range maps, and other resources to aid in consultations.

Scaleshell Mussel (E) and Higgins Eye Mussel (E)

Both the Scaleshell (*Leptodea leptodon*) and Higgins eye mussels (*Lampsilis higginsii*) inhabit similar habitat within the Missouri River, recognized from Gavin's Point Dam down to Ponca, Nebraska (Cedar & Dixon Counties in Nebraska and Clay, Union, and Yankton Counties in South Dakota). Within this reach, habitats would include stable riffles and runs with gravel and mud substrate and moderate current velocity. These mussels require good water quality and are usually found where diversity of other mussel species exist. Only the shells of these species have been found; no populations are currently known to exist in South Dakota. They are considered extirpated, although, remain protected wherever found.

Conservation Recommendations:

- All outlets, bank disturbance, and/or in stream work should be designed to avoid or minimize sedimentation and stream bank erosion and should not otherwise impact steam channel/ bank form and function.
- If in river/stream work is anticipated, a presence/absence survey should be completed by a qualified biologist in the wetted channel after early coordination with the Service. Qualification of the surveyor, methods of survey, and results should be provided to the SDFO during coordination.
- Any barges or equipment that will be used in the water should be inspected and decontaminate of invasive species prior to use.
- All construction and debris should be captured and/or contained from entering suitable habitat.
- Avoid direct discharge or any materials (i.e., water, chemical, or spoil) that can negatively impact water quality below baseline.

Additional Information:

- USFWS 2025k. Scaleshell. Accessible at: <https://www.fws.gov/species/scaleshell-leptodea-leptodon>. Accessed August 2025

- USFWS 2025l. Higgin’s Eye. Accessible at: <https://www.fws.gov/species/higgins-eye-lampsilis-higginsii>. Accessed August 2025.

Topeka Shiner (E)

The Topeka Shiner (*Notropis topeka*) is a small fish known to occupy numerous small streams within eastern South Dakota, and are concentrated within the Big Sioux, Vermillion, and James River watersheds. Survey efforts continue to reveal additional inhabited streams.

Conservation Recommendations:

- Implement and maintain comprehensive and effective sediment/erosion controls to the greatest extent possible during and after actions that may impact Topeka shiner streams. Sediment/erosion control measures reduce the risk of additional sediment input to Topeka shiner streams during construction, and similar post-construction measures ensure vulnerable work sites are protected from erosion. Silt fences, silt curtains, geotextile fabrics, and immediate post-construction vegetation seedings are examples of methods address the risk of further degradation. Monitoring and maintenance of these measures may be needed to ensure continued effectiveness, with the goal of keeping sediments from entering the stream system.
- Avoid practices that may directly damage instream habitat. In addition to sedimentation and erosion concerns, some instream activities such as driving machinery through streams, excavating streambed materials, channelizing streams, adding fill to streams, and similar direct habitat impacts can negatively affect Topeka shiners. These practices should be avoided. However, it is beneficial to excavate streambed materials to install culverts below grade to facilitate fish passage (see recommendation below). In those situations, sediment and erosion control measures mentioned above should be installed to prevent further downstream sedimentation.
- Whenever possible, install adequately sized stream-crossing structures and repair existing damaged structures in a manner that will not inhibit long-term fish passage. Topeka shiners have a small body size (usually under 3”) and are not strong swimmers. Corrugated metal pipes have the potential to become perched above the stream, blocking Topeka shiner passage and excluding the fish from miles of otherwise suitable habitat. Other factors such as riprap installed in the streambed or high-water velocity through undersized pipes can have the same barrier effect. Installing structures greater than the bank full width, and countersinking culverts below the streambed are recommended measures. Analysis of instream morphology may be needed on a case-by-case basis to determine the appropriate countersink depth to preclude structure perching. For many culverts/watersheds, 12” or more countersunk depth may be necessary. If temporary restrictions require that undersized structures be installed above-grade or at-grade level, we recommend revisiting these structures once the temporary restriction has passed and replacing inadequate structures with appropriately designed/placed structures to facilitate fish passage. This will also reduce the risk of future flood damages to structures and subsequent repair/replacement costs.

Additional Information:

- USFWS 2025m. Topeka Shiner. <https://www.fws.gov/species/topeka-shiner-notropis-topeka>. Accessed August 2025.
 - The official page for this species, this website provides species information, interactive range maps, and other resources to aid in consultations.

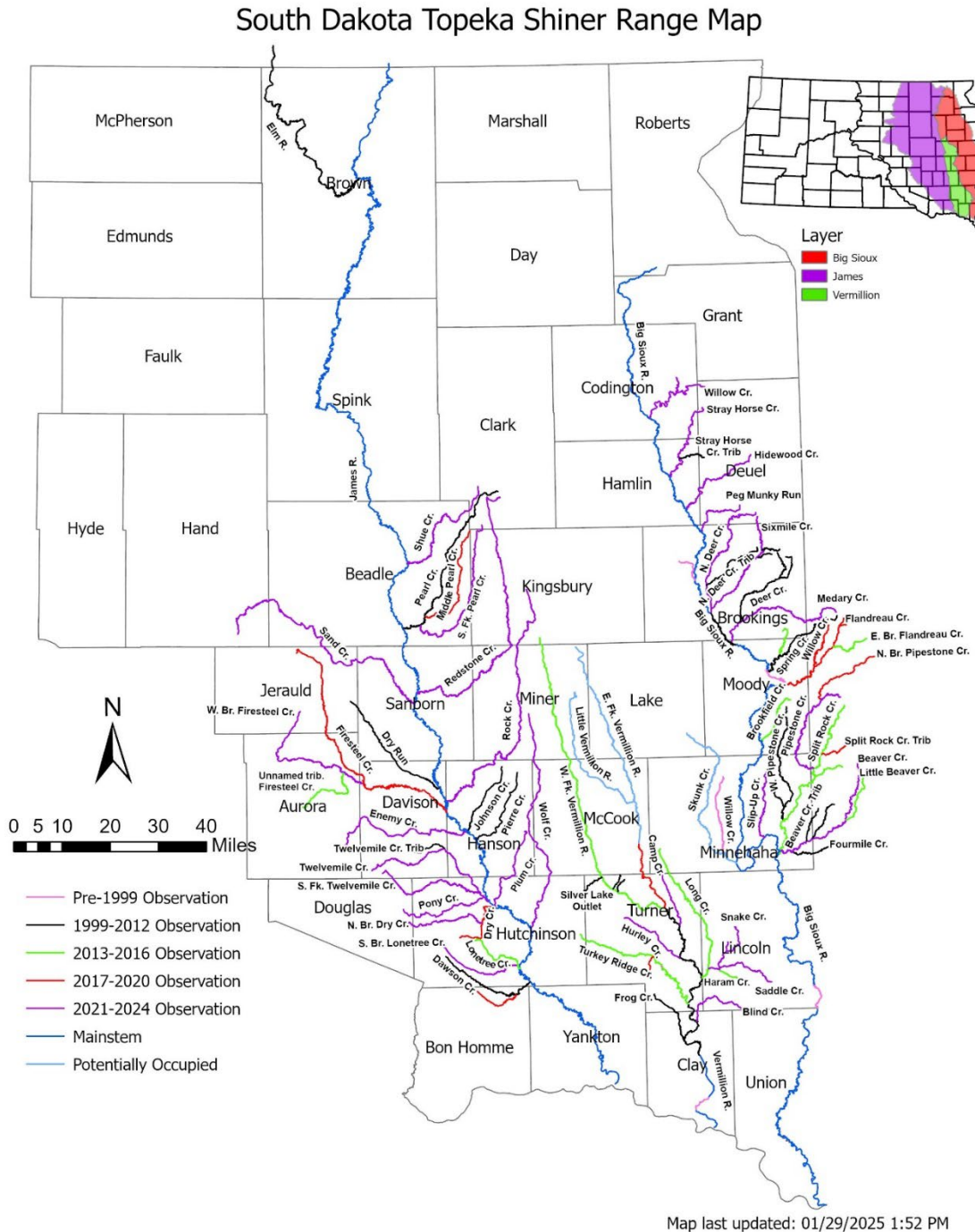


Figure 1. Topeka Shiner Range Map in South Dakota

Western Prairie Fringed Orchid (T)

The western prairie fringed orchid (*Platanthera praeclara*, WPFO) is known to occur on in southeast South Dakota in Ransom and Richland counties or near the Sheyenne National Grasslands in South Dakota. Activities involving herbicide application, water drainage, water/wetland alteration, breaking native prairie, or burning, may have adverse effects to this species.

Conservation Recommendations:

- Noxious weeds at WPFO sites should be controlled, but herbicide use at WPFO sites should be limited to spot spraying, especially during summer. Avoid insecticide use that could harm pollinators of the orchid.
- Mowing, haying, brush cutting, etc. should be avoided to the extent possible if it overlaps with the orchid's growing season (late spring through the end of July) and in the spring it should not be cut too close to the ground.
- Fire and grazing with goats and sheep should also be avoided to the extent possible if it overlaps with the growing season, although fire may be more restrictive. Studies by the Minnesota Department of Natural Resources indicate fire can damage the plant as soon as it emerges and is more than a few inches tall (as early as April), but damage is less in the fall (mid-September or after) since the chances of damaging seed capsules that have not properly dispersed is low.
- Maintain grassland habitats to promote recovery of this species.

Additional Information

- USFWS 2025n. Western Prairie Fringed Orchid. <https://www.fws.gov/species/western-prairie-fringed-orchid-platanthera-praeclara>. Accessed March 2025.
 - The official page for this species, this website provides species information, interactive range maps, and other resources to aid in consultations.

Whooping Crane (E)

The endangered whooping crane (*Grus americana*) migrates through South Dakota during the spring and fall, which occurs from approximately **March 15-May 15**, and **September 10-November 15**. If project activities were to occur during this timeframe and whooping cranes were to occupy the area within 1 mile of construction or other activity, then the activity could cause whooping cranes to be disturbed and leave the area. If this were to occur, it would most likely occur first thing in the morning, as whooping cranes overnight in one area before continuing the next morning. Disturbance, such as flushing the cranes, stresses them at critical times of the year, including migration.

Whooping crane strikes of electrical utility lines have been cited as a cause for mortality, and indirect effects from energetic losses due to avoidance around renewable energy projects may also occur. For these reasons, we recommend project proponents consider implementing specific conservation measures to avoid impacts to this species.

Conservation Recommendations:

- If a whooping crane is sighted within 1.2 miles of the action area for projects with a Federal nexus, the USFWS should be contacted at 701-250-4481 or SouthDakotaFieldOffice@fws.gov
- Within a 1.2 miles (2 km) buffer from proposed new construction of overhead utility lines and a 5 km buffer from a wind turbine center point, quantify potential impacts to habitat using the whooping crane habitat suitability model developed by Niemuth et al. 2018 (link for geospatial dataset available below in “Additional Resources”).
- For all new, replaced, or upgraded utility lines within 1.2 miles (2 km) of potentially suitable habitat, we recommend marking the lines and maintain markers for the life of the project to ensure effectiveness to reduce the potential for strikes and possible mortality.

Additional Resources:

- Niemuth et al 2018. Whooping Crane Migration through North Dakota and South Dakota. Geospatial Dataset. North Dakota, South Dakota. <https://ecos.fws.gov/ServCat/Reference/Profile/148840>. Accessed March 2025.
- Ellis KS, Pearse AT, Brandt DA, Bidwell MT, Harrell W, Butler MJ and Post van der Burg M. 2022. Balancing future renewable energy infrastructure siting and associated habitat loss for migrating whooping cranes. Front. Ecol. Evol. 10:931260. doi: 10.3389/fevo.2022.931260 <https://www.frontiersin.org/journals/ecology-and-evolution/articles/10.3389/fevo.2022.931260/full>. Accessed March 2025.
- Niemuth, ND, Ryba AJ, Pearse AT, Kvas SM, Brandt DA, Wangler B, Austin JE, and Carlisle MJ. 2018. Opportunistically collected data reveal habitat selection by migrating Whooping Cranes in the U.S. Northern Plains, The Condor, 120(2), 343–356, <https://doi.org/10.1650/CONDOR-17-80.1>. Accessed March 2025.

Bald and Golden Eagle Protection Act (BGEPA)

The [Bald and Golden Eagle Protection Act](#) protects bald or golden eagles, including their parts, nests, or eggs, from “take” unless a permit is obtained from the Service. If a bald or golden eagle is present near a proposed project, the 2024 eagle permit revisions (89 FR 9920; Feb. 12, 2024), as allowed under BGEPA, are intended to increase the efficiency and effectiveness of permitting, facilitate and improve compliance, and increase the conservation benefit for eagles for activities that are otherwise lawful. They include a new system of general permits in addition to the specific-permit situations the Service has authorized in the past. These general permits are designed for situations with low risks to eagles and are an alternative approach to authorize certain energy generation projects, power-line infrastructure, activities that may disturb breeding bald eagles, and bald eagle nest take. The Service will continue to review specific permits for situations that have high or uncertain risks to eagles, thus meeting the preservation standard for eagles.

BGEPA defines “**take**” as “pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.”

“**Disturb**” is defined as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”

Unlike bald eagles, whose numbers have increased in recent years, golden eagle populations appear to be slightly decreasing. These declines may be due to several factors, including susceptibility to some human disturbances, especially during breeding. We recommend that your analysis consider possible effects to golden eagles if there is a nest within 1 mile of your project.

Conservation Recommendations:

- For bald eagles, reduce disturbance by maintaining a 660-foot buffer between the activity and any active nest if no landscape buffer exists OR maintain a minimum 330-foot buffer between the activity and the active nest if a visual buffer is present (i.e. tree screen, or other landscape feature).
- For golden eagles, maintain a 1.0-mile buffer between the activity and any active nest.
- Avoid removal or destruction of occupied or unoccupied nest.

Additional Information

- U.S. Fish and Wildlife Service (USFWS). 2025o. Bald and Golden Eagle Protection Act. Accessible at <https://www.fws.gov/law/bald-and-golden-eagle-protection-act>. Accessed March 2025.
- USFWS 2025p. Eagle Management. Accessible at: <https://www.fws.gov/program/eagle-management>. Accessed March 2025.
- USFWS 2024c. Specific Permit Tier 1 Standard Conditions. Accessible at: <https://www.fws.gov/media/specific-permit-tier-1-standard-conditions-wind-energy>. Accessed July 2025.
- USFWS 2007. National Bald Eagle Management Guidelines. Available at: https://www.fws.gov/sites/default/files/documents/national-bald-eagle-management-guidelines_0.pdf. Accessed March 2025.
- Migratory Bird Program Eagle Depredation Permit for Hazing Activities Memo. Accessible at: <https://www.fws.gov/media/migratory-bird-program-eagle-hazar-and-harass-letter>

Migratory Bird Treaty Act (MBTA)

The [Migratory Bird Treaty Act](#) protects migratory birds from killing, capturing, selling, trading, and transport without prior authorization. In South Dakota, migratory birds are typically most vulnerable to development activities during the nesting season (May 1 – July 15). For projects that may impact migratory birds or if further information is needed, please contact our office for further guidance.

Additional Resources:

- USFWS 2025q. Migratory Bird Treaty Act of 1918. <https://www.fws.gov/birds/policies-and-regulations/laws-legislations/migratory-bird-treaty-act.php>. Accessed April 2025.
 - This resource includes a complete list of species that are covered as well as not covered under MBTA.
- USFWS 2025r. U.S. Fish and Wildlife Service ePermits. <https://fwsepermits.servicenowservices.com/fws>. Accessed April 2025.
- Avoiding and Minimizing Impacts to Migratory Birds, Best Practices by Industry: <https://www.fws.gov/node/5233941>
- USFWS 2018b. Region 6 Nest Destruction Memo: <https://www.fws.gov/media/usfws-region-6-nest-destruction-memo-dated-june-2018>

U.S. Fish and Wildlife Service Easement Interests

The Service may hold wetland or grassland easements within project areas that overlap within defined acquisition areas for each wetland management district; in South Dakota, these areas are concentrated in the prairie pothole region through the central portion of South Dakota. If there are specific questions related to management or easement terms, please contact the local Wetland Management Districts (WMDs) that administers the easement, with general numbers provided in the map below. If you are unsure of the local contact, please contact us and we can direct you to the responsible individual.

Additional Resources:

- USFWS 2025s. National Wildlife Refuge System and Fish Hatcheries, FWS National Realty Tracts and Acquisition Boundaries.
<https://experience.arcgis.com/experience/17640b43745d4b44b53fc8f57dc28ed7?org=fws>
 Accessed March 2025.

