

## APPENDIX B

### AMPHIBIAN AND REPTILE SGCN SPECIES ACCOUNTS

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Amphibian and Reptile SGCN and SGIN categories.

Common Name	Species of Greatest Conservation Need			Species of Greatest Information Need			
	SGCN a. Regionally or globally imperiled	SGCN b. At-risk or declining, ND important	SGCN c. At-risk, expert review	SGIN d. Scientific knowledge deficient	SGIN e. Potentially stable in ND, declining in range	SGIN f. Potentially stable but life history trait vulnerability	SGIN g. Declining, ND significance uncertain
American Toad			X				
Northern Prairie Skink			X				
Plains Hog-nosed Snake			X				
Plains Spadefoot			X				
Smooth Green Snake			X				
Snapping Turtle			X				
Common Gartersnake						X	
Common Mudpuppy				X			
Cope's Gray Treefrog				X			
Eastern Gray Treefrog				X			
False Map Turtle						X	
Plains Gartersnake						X	
Red-bellied Snake						X	
Sagebrush Lizard						X	
Short-horned Lizard						X	
Smooth Softshell						X	
Spiny Softshell						X	
Wood Frog						X	

## American Toad *Anaxyrus americanus*

Description/Identification: Color varies from brown to brick red or olive green. A light stripe may be found along the middle of the back. No bump present on their snout. Easily mistaken with the Canadian toad.

Status: Year-round resident.

Reason for SGCN Designation: Becoming increasingly rare in the state. Recent surveys have not recorded this species. Potential to hybridize with the Canadian Toad. Identified as a regional Watchlist species by the Midwest Association of Fish and Wildlife Agencies.

Habitat: Considered a forest obligate species but can be found in most moist environments where plentiful insects, worms and snails are found for food.

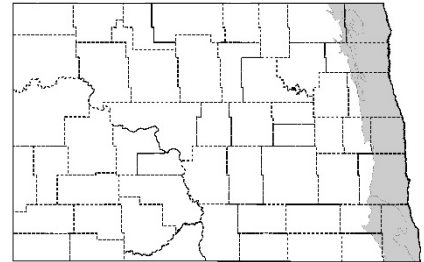
Threats: Ephemeral wetlands in which the species naturally breed are at risk of destruction and/or degradation. However, they may be tolerant of a broad range of habitats, even laying eggs in non-native sites such as ditches or flooded agricultural fields. Forest habitat fragmentation. Use of pesticides and herbicides may impact populations locally. Disease such as ranavirus and chytrid fungus may be very detrimental to amphibian populations. Hybridization with Canadian toads.

### Research and Monitoring:

- Currently research to evaluate their population on state Wildlife Management Areas in their range is on-going.
- Currently no dedicated monitoring is taking place. Possible monitoring options could include the general public through an application like Herpmapper, the NDGFD incidental reporting system, or national monitoring initiatives such as PARC. Monitoring should be directed at all herptile species.

### Management Recommendations:

- Protect ephemeral wetland habitats from drainage or filling.
- Avoid artificially extending the naturally short hydroperiods of wetlands in arid regions of the state.
- Avoid creating permanent water sources in areas where they are naturally lacking (e.g. southwestern North Dakota). In arid regions of the state, restore the natural hydroperiods of wetlands that have been altered to create permanent water sources.
- Encourage the use of alternative water sources for livestock in arid regions of the state.
- Encourage the restoration of grassland habitats that were converted to stock ponds or dugouts.



American Toad potential range. Photo Credit: Don Becker

## Northern Prairie Skink *Plestiodon septentrionalis*

**Description/Identification:** Length 5-8". Light gray-brown with several dark bands extending the length of the body. The belly is pale blue-gray.

**Status:** Year-round resident.

**Reason for SGCN Designation:** Listed as Imperiled in Manitoba by NatureServe. This species has a rather small range in North America, limited to patchy segments of North Dakota, South Dakota, Minnesota, Wisconsin, Iowa, Nebraska, and Kansas. Little is known of this species in North Dakota.

**Habitat:** Prairie skinks use open areas with grassy hillsides of soft soil and small, flat rocks. Burrow under stones or other objects on the ground. The largest population most likely occurs in the southeastern grasslands of North Dakota, although records have come from the northern part of the state. Focus areas where this species occurs include the Sand Deltas and Beach Ridges. Diet consists of crickets, grasshoppers, beetles, caterpillars, spiders, and other small arthropods.

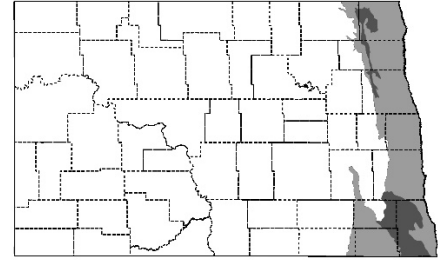
**Threats:** Fragile sand delta habitat is at risk of destruction and/or degradation. The fragmentation of suitable habitat may hinder interconnectivity of populations, as movement of individual skinks is usually less than 100 meters. It is unknown what effect pesticides, development, and other disturbance has on populations of prairie skinks.

### Research and Monitoring:

- North Dakota State has surveyed eastern ND Wildlife Management Areas for Herptiles and their habitats from 2014-2016 and 2019-2021.
- Currently no dedicated monitoring is taking place. Possible monitoring options could include the general public through an application like Herpmapper, the NDGFD incidental reporting system, or national monitoring initiatives such as PARC. Monitoring should be directed at all herptile species.

### Management Recommendations:

- Manage grasslands for multiple successional stages.
- Prevent overgrowth by shrubs and trees to maintain openness in sandy grassland habitats.
- Restrict off-road vehicle use to preselected, less sensitive/lower quality areas.



Northern Prairie Skink primary (dark gray) and secondary (light gray) range. Photo Credit: Don Becker

## Plains Hog-nosed Snake *Heterodon nasicus*

Description/Identification: L 15-39". Tan to yellowish-gray with dark blotches and a black belly with yellow or whitish squares. A unique upturned nose with keel on top sets this snake apart from the prairie rattlesnake.

Status: Year-round resident.

Reason for SGCN Designation: Identified as a Regional Species of Greatest Conservation Need by the Midwest Association of Fish and Wildlife Agencies.

Habitat: Prefer dry, sandy, or gravelly areas in grassland, open sand prairies, or sand dunes. Sometimes mixed forest habitats and cropland may be used. Burrow into the loose soil or may use mammal burrows for cover, but will not use artificial cover as much as other snakes. Primarily feeds on amphibians, lizards, snakes, reptile eggs, and small mammals.

Threats: Dry grasslands preferred by hog-nosed snakes are fragile habitats and may be easily degraded or destroyed.

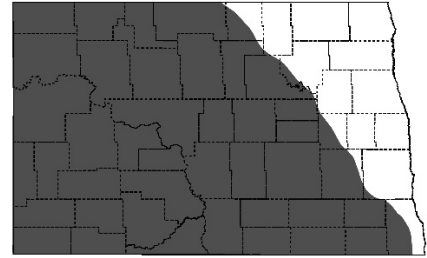
Hog-nosed snakes may be intentionally killed if mistaken for a rattlesnake. It is unknown how pesticides, development, and other disturbance affect hog-nosed snakes.

### Research and Monitoring:

- North Dakota State has surveyed eastern ND Wildlife Management Areas for Herptiles and their habitats from 2014-2016 and 2019-2021.
- Currently no dedicated monitoring is taking place. Possible monitoring options could include the general public through an application like Herpmapper, the NDGFD incidental reporting system, or national monitoring initiatives such as PARC. Monitoring should be directed at all herptile species.

### Management Recommendations:

- Prevent overgrowth by shrubs and trees to maintain openness in grassland habitats.
- Restrict off-road vehicle use to preselected, less sensitive/lower quality areas.



Plains Hog-nosed Snake primary range. Photo Credit: Don Becker

## Plains Spadefoot *Spea bombifrons*

**Description/Identification:** L 1 ½ -2". Smooth grayish or brown skin with small red or orange tipped warts. A cat-like eye, pronounced boss between eyes, and short, rounded, wedge-shaped spade characterize this toad.

**Status:** Year-round resident.

**Reason for SGCN Designation:** Vulnerable throughout much of its northern range, including Montana. Its geographic range overlaps much of the Great Plains, perhaps one of the more vulnerable ecosystems in North America.

**Habitat:** Rather dry, open grasslands with sandy or otherwise loose soil are preferred. Typically avoid river bottoms and woodlands. Burrow into the ground until damp soil is reached, sometimes more than 2 feet. Emerge from the ground when heavy rains occur, creating small pools of water used for breeding. Temporary wetlands without heavy vegetation such as those found in agricultural fields are easily flooded and may provide tolerable spadefoot breeding habitat. Adults forage on small terrestrial arthropods/amphipods, snails, earthworms, centipedes; while tadpoles are both omnivorous and carnivorous, feeding on suspended matter, organic debris, algae, plant tissue, aquatic invertebrates and other amphibian larvae.

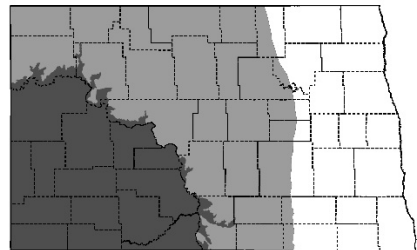
**Threats:** Ephemeral wetlands in which the species naturally breed are at risk of destruction and/or degradation. However, they may be tolerant of a broad range of habitats, even laying eggs in non-native sites such as ditches or flooded agricultural fields. Prairie habitat fragmentation may hinder movements. Use of pesticides and herbicides may impact populations locally. Disease such as ranavirus and chytrid fungus may be very detrimental to amphibian populations.

### Research and Monitoring:

- North Dakota State has surveyed eastern ND Wildlife Management Areas for Herptiles and their habitats from 2014-2016 and 2019-2021.
- Currently no dedicated monitoring is taking place. Possible monitoring options could include the general public through an application like Herpmapper, the NDGFD incidental reporting system, or national monitoring initiatives such as PARC. Monitoring should be directed at all herptile species.

### Management Recommendations:

- Protect ephemeral wetland habitats from drainage or filling.
- Avoid artificially extending the naturally short hydroperiods of wetlands in arid regions of the state.
- Avoid creating permanent water sources in areas where they are naturally lacking (e.g. southwestern North Dakota). In arid regions of the state, restore the natural hydroperiods of wetlands that have been altered to create permanent water sources.
- Encourage the use of alternative water sources for livestock in arid regions of the state.
- Encourage the restoration of grassland habitats that were converted to stock ponds or dugouts.



Plains Spadefoot primary (dark gray) and secondary (light gray) range. Photo Credit: NDGF

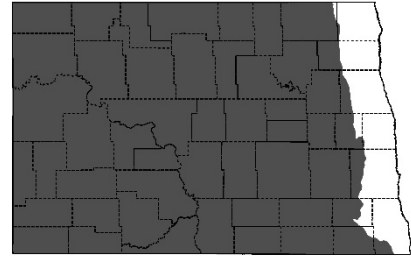
## Smooth Green Snake *Opheodrys vernalis*

Description/Identification: L 12-22". A fast moving and inconspicuous snake, it is bright green above and white to pale yellow below.

Status: Year-round resident

Reason for SGCN Designation: Identified as a Regional SGCN by the Midwest Association of Fish and Wildlife Agencies. Further evaluation is needed in ND.

Habitat: Smooth Green Snakes are found in grazed or ungrazed grassland, particularly the uplands of hills where grass is shorter. Moist meadows, native prairies, and occasionally woodland clearings are also used. It is rarely seen, other than in very short grass or perhaps crossing a road. Smooth Green Snakes hibernate in burrows, rock crevices, road embankments, and ant mounds. Prey primarily consists of invertebrates, including ants, maggots, grasshoppers, crickets, beetles, grubs, spiders, centipedes, millipedes, slugs, snails, salamanders, and small crayfish.



Smooth Green Snake primary range. Photo Credit: NDGF

Threats: Destruction and/or degradation of grassland habitat. It is unknown what effect pesticides, development, and other disturbance has on populations.

### Research and Monitoring:

- North Dakota State has surveyed eastern ND Wildlife Management Areas for Herptiles and their habitats from 2014-2016 and 2019-2021.
- Currently no dedicated monitoring is taking place. Possible monitoring options could include the general public through an application like Herpmapper, the NDGFD incidental reporting system, or national monitoring initiatives such as PARC. Monitoring should be directed at all herptile species.

### Management Recommendations:

- Maintain the open nature of habitat.
- Protect wetlands within grasslands and control livestock access.
- Avoid excessive grazing and off-road vehicle use.
- Leave logs, snags, and other woody debris on site, and replace if removed.



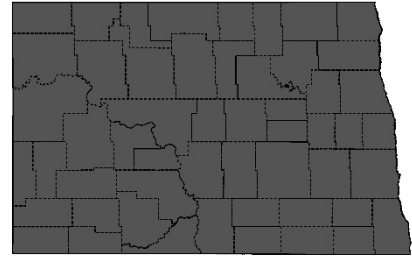
## Snapping Turtle *Chelydra serpentina*

**Description/Identification:** L 8-30", 65lbs. Brown to gray turtle with undersides of light tan or gray. Snapping Turtles have a large head, hooked jaw, muscular limbs, webbed feet with long claws and a long, robust tail. Carapace often covered with green algae.

**Status:** Year-round resident.

**Reason for SGCN Designation:** Identified as a Regional SGCN by the Midwest Association of Fish and Wildlife Agencies. Among a list of turtle species vulnerable to turtle trade within the Midwest.

**Habitat:** Warm water in permanent lakes or rivers with a muddy bottom and plenty of aquatic vegetation. Snapping Turtles are found statewide. Recent work indicates that they prefer water bodies that are flowing or have access to flowing water. Snapping turtles are known to eat fish, amphibians, reptiles, aquatic birds, small mammals, invertebrates, various plants and algae, and carrion.



Snapping Turtle primary range. Photo Credit: NDGF

**Threats:** The loss or lack of aquatic vegetation, stumps, logs, and other debris could affect this species. Illegal take of snapping turtles. Road mortality may contribute to the decline. Contaminants have been linked to population decline or abnormal development in some areas. Snapping Turtles are sometimes deliberately killed because of perceived danger.

### Research and Monitoring:

- North Dakota State has surveyed eastern ND Wildlife Management Areas for Herptiles and their habitats from 2014-2016 and 2019-2021.
- Currently no dedicated monitoring is taking place. Possible monitoring options could include the general public through an application like Herpmapper, the NDGFD incidental reporting system, or national monitoring initiatives such as PARC. Monitoring should be directed at all herptile species.

### Management Recommendations:

- Develop a management plan for Snapping Turtles.
- Identify and protect nesting and over-wintering sites.
- Avoid clearing or replacing natural vegetation along wetland edges, providing at least 50-75 feet of undisturbed habitat to protect water quality and prevent erosion.
- Maintain the natural water level and fluctuations of wetlands.
- Leave logs, snags, and other woody debris on site and replace if removed.
- Erosion control structures such as retaining walls or rip-rap will limit or prevent access to the shoreline and adjacent habitat.
- Do not alter natural river undulations, backwater areas, or sand and gravel bars.
- When possible, keep cattle out of streams to reduce impacts on water quality and the streambed.
- Develop information to educate the public on the importance of Snapping Turtles.