



ENDANGERED SPECIES

ANNOTATED LIST

Endangered, Threatened, and Selected Rare Animals of South Dakota

Most information in this annotated list is extracted from *The Fragile Legacy*, a S.D. Dept. of Game, Fish and Parks publication written by Diane Ashton and Eileen Dowd. Information for some species has been taken from *Natural Source* fact sheets included in this chapter. Species are listed alphabetically within each taxonomic group. An * asterisk indicates that the species will be covered in greater detail in a *Natural Source* fact sheet. For distribution maps, more detailed information, and color pictures of the species, please refer to *The Fragile Legacy* that can be found in your school library or borrowed from the S.D. State Library.

Vertebrates: Mammals

*Black-footed Ferret

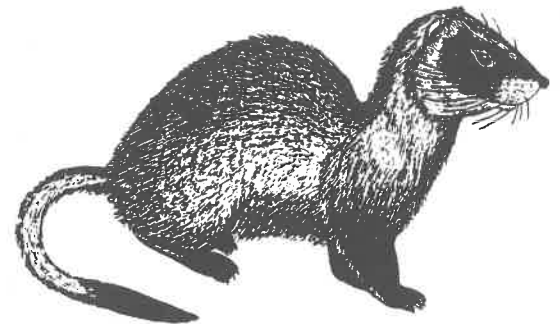
(*Mustela nigripes*)

Status: Federal Endangered; State Endangered.

Habitat: Open grasslands with prairie dogs.

Habits: This 18 inch (46 cm) long member of the weasel family is a secretive and nocturnal (active at night) predator of prairie dogs.

Conservation Measures: Black-footed ferrets were thought to be extinct until a small population was discovered in Mellette County in 1964. The Mellette ferrets did not survive, and no known wild populations are living in South Dakota. Discussions are underway concerning a reintroduction of the species to the Badlands National Park using captive-raised individuals from a Meeteetse, Wyoming population.



Black Bear

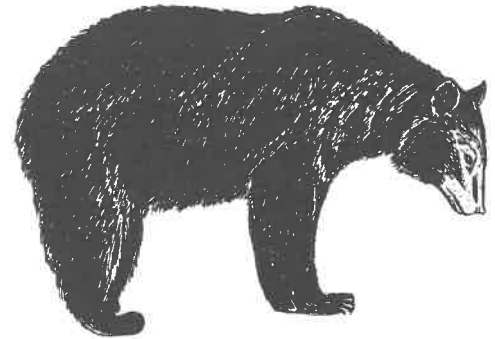
(*Ursus americanus*)

Status: State Threatened.

Habitat: Remote areas of mixed deciduous, coniferous forest.

Habits: This large mammal is omnivorous, feeding on berries, acorns and leaves, as well as preying on deer and livestock. Bears are active in the day during warmer months but spend winters in dens.

Conservation Measures: Bears were hunted out of many areas because they were viewed as dangerous predators. Today many people believe bear populations should be protected in certain habitats. Their breeding status in South Dakota is uncertain, although they have been sighted in Custer County in the Black Hills.



*Fringe-tailed Myotis

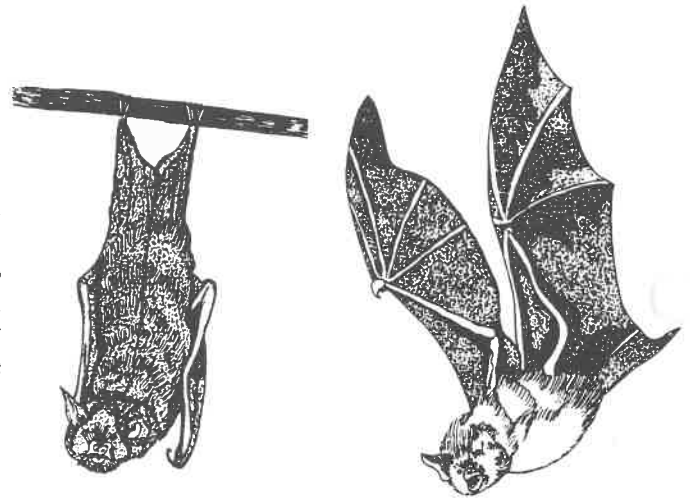
(*Myotis thysanodes pahasapensis*)

Status: Rare; Candidate for Federal Listing.

Habitat: Caves in the southern Black Hills.

Habits: These bats roost during the day in caves, mines and buildings, and are active at night from April through September when they feed on insects. They hibernate during the winter months.

Conservation Measures: In South Dakota, this subspecies of bat is only known from 3 counties in the Black Hills. Many bats are needlessly killed by people who fear them or do not understand the bats' ecological value.



Marten

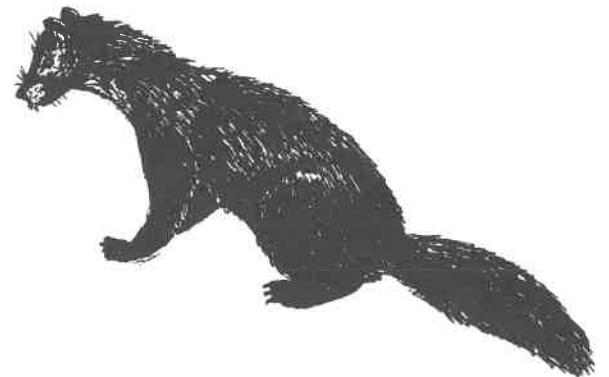
(*Martes americana*)

Status: Rare.

Habitat: Dense forest.

Habits: Martens are secretive mammals that are rarely seen even though they are active on the ground as well as in trees. They are mostly carnivorous and will feed on a wide variety of prey, including mice, squirrels, rabbits, birds, and insects.

Conservation Measures: Marten populations have declined because they are trapped for their dense fur and because of habitat loss due to timbering. In 1980 and 1981, martens were reintroduced into Lawrence County and have successfully reproduced in the wild. Protection of certain areas from trapping and logging may be required for long-term survival of the species in the Black Hills.



*Mountain Lion

(*Felis concolor*)

Status: State Threatened.

Habitat: Remote mountainous areas.

Habits: Mountain lions are active during the day time throughout the year. They are large predators that hunt a wide variety of animals, but deer constitute the major part of their diet. People are more likely to see evidence of the lions, such as scratches high on tree trunks or large tracks in the dirt, than the cats themselves.

Conservation Measures: This large predator is feared by many because of its strength, its reputation for killing livestock, and its need for large territories. Today, mountain lions in South Dakota are usually restricted to the Badlands and the Black Hills.



River Otter

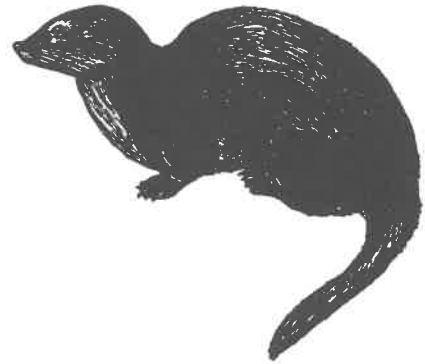
(*Lutra canadensis*)

Status: State Threatened.

Habitat: Rivers, ponds and lakes in wooded areas.

Habits: The otter's ability to see well underwater and its stiff whiskers help it locate aquatic prey such as fish, frogs, crayfish, and turtles. Otters are active at night, throughout the year.

Conservation Measures: South Dakota river otters suffered losses due to trapping and hunting. Their populations declined when rivers were channelized and when the vegetation along the waterways was cleared. The historical records for this species in South Dakota are from Hughes County along the Missouri River. There has been a recent report of a sighting for this species in the Black Hills according to the S.D. Department of Game, Fish and Parks.



Swift Fox

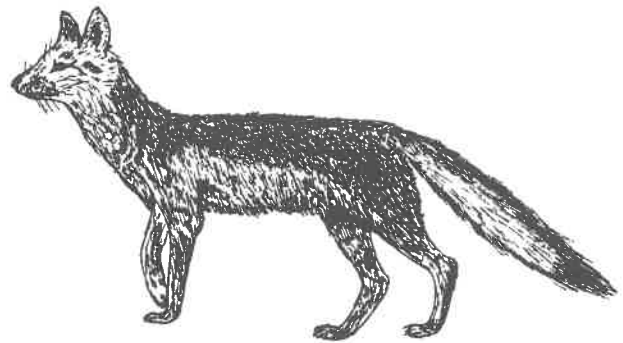
(*Vulpes velox*)

Status: State Threatened; Candidate for Federal Listing.

Habitat: Short to mid-grass open prairies.

Habits: This species is a nocturnal predator that uses dens throughout the year. Swift foxes prey on small mammals and birds, eat berries and leaves, and feed on carrion.

Conservation Measures: The swift fox was once known throughout South Dakota, but today is mostly restricted to the southwest part of the state. Because the species both eats prairie dogs and uses their tunnels as den sites, protection of the prairie dog ecosystem will also benefit the swift fox.



Vertebrates: Birds

Baird's Sparrow

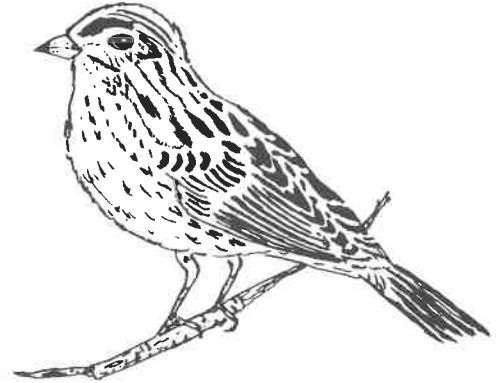
(*Ammodramus bairdii*)

Status: Rare; Candidate for Federal Listing.

Habitat: Wet meadows, mixed grass and tall grass prairies.

Habits: This species is only in South Dakota during the summer breeding season. It builds grass nests close to the ground. Baird's sparrows eat small insects and seeds.

Conservation Measures: Loss of habitat due to farming and wetland drainage threaten this species.



*Bald Eagle

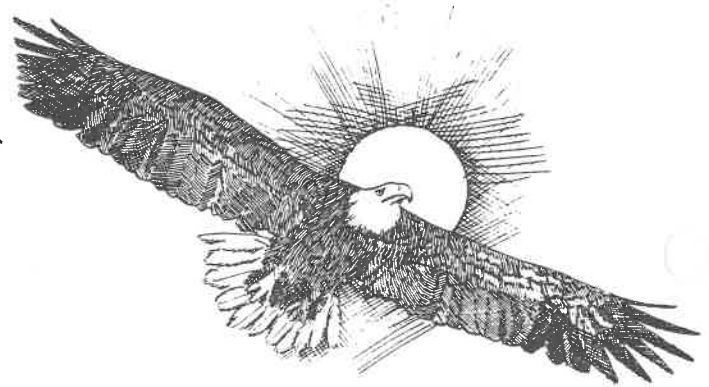
(*Haliaeetus leucocephalus*)

Status: Federal Endangered; State Endangered.

Habitat: Near large waterways with trees.

Habits: This majestic bird is mainly a scavenger of dead and dying fish. During the winter, eagles roost together in large trees. The species makes nests from 10 to 150 feet above the ground in large trees and on man-made structures.

Conservation Measures: Bald eagle populations suffered great losses due to the use of DDT, but the species has rebounded since the pesticide was banned in the United States and intensive recovery efforts were undertaken by state and federal agencies.



*Eskimo Curlew

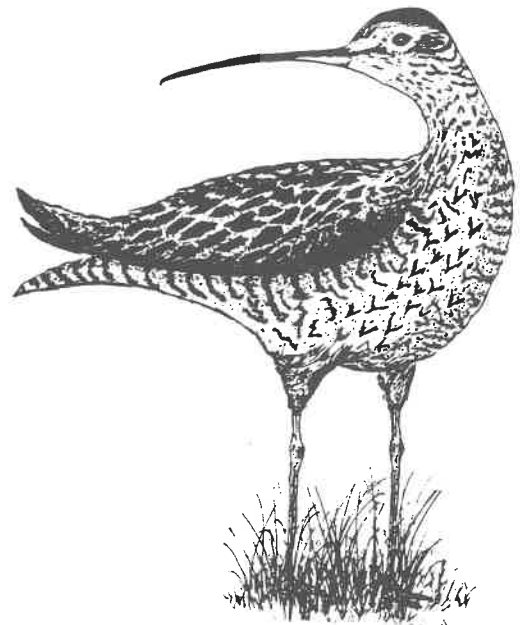
(*Numenius borealis*)

Status: Federal Endangered; State Endangered.

Habitat: Marshes, mud flats, grasslands and pastures

Habits: Eskimo curlews were seen in South Dakota only during spring and fall migrations. They feed mostly on insects.

Conservation Measures: Although this species once filled prairie skies during migration, Eskimo curlews now are nearly extinct. Hunting and habitat loss are probably the major causes of the species' decline.



***Interior Least Tern**

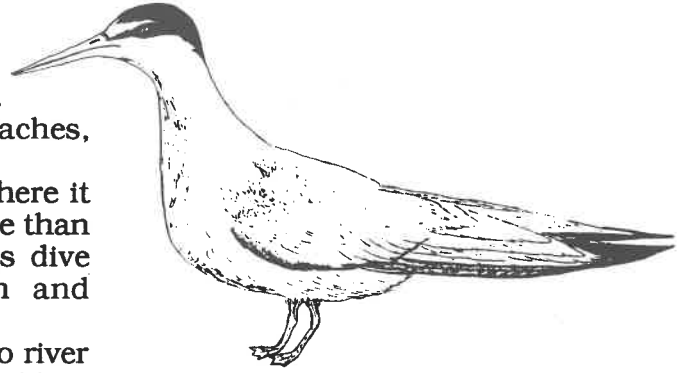
(*Sterna antillarum athalassos*)

Status: Federal Endangered; State Endangered.

Habitat: Barren sandbars, gravel or sand beaches, and mud flats.

Habits: This shorebird breeds on sand bars where it makes an inconspicuous nest that is no more than an indentation in the ground. These terns dive into shallow water to catch small fish and crustaceans.

Conservation Measures: Significant changes to river systems due to channelization and dam building have caused the populations of this species to decline. Water level fluctuation and disturbance by people and predators are also serious problems for the birds.



Osprey

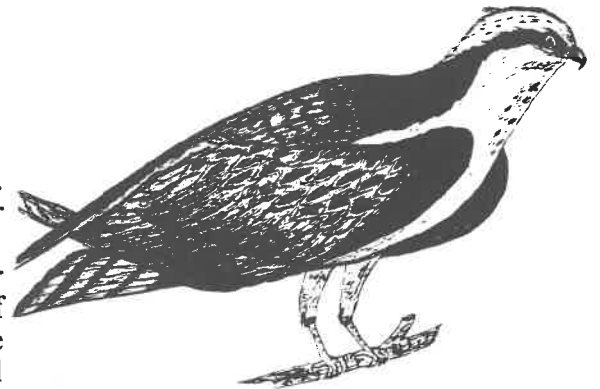
(*Pandion haliaetus*)

Status: State Threatened.

Habitat: lakes, large rivers and coastal bays.

Habits: Osprey nest on tops of large trees or on cliffs. They feed on fish they grab with their talons after spectacular dives into the water.

Conservation Measures: Osprey, along with other large birds of prey, suffered losses from the use of DDT. The population has rebounded since the banning of the pesticide in the United States and intensive recovery efforts were undertaken by state and federal agencies. The first modern nesting of this species in South Dakota was recorded in 1991.



***Peregrine Falcon**

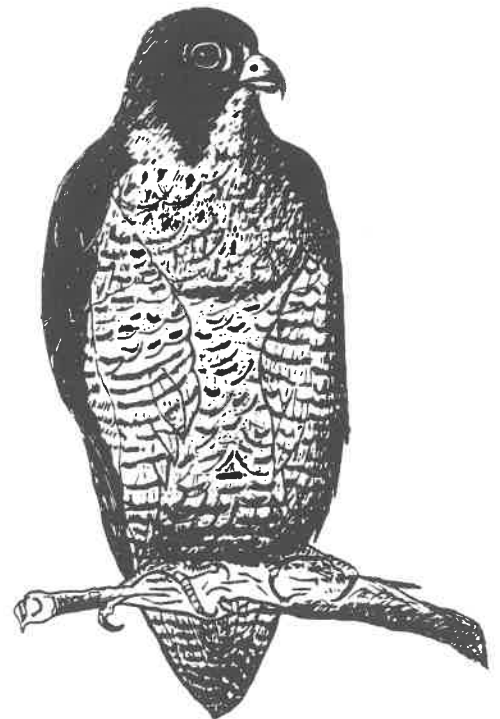
(*Falco peregrinus*)

Status: Federal Endangered; State Endangered.

Habitat: Along larger bodies of water, and prairies.

Habits: This predator can be seen in South Dakota during migration. It feeds on birds as large as waterfowl and on small mammals. They make their nests on rocky cliffs.

Conservation Measures: Peregrine falcons, along with other large birds of prey were adversely affected by the use of DDT. Populations have rebounded since the banning of the pesticide. The species can occasionally be seen today in South Dakota during migration.



*Piping Plover

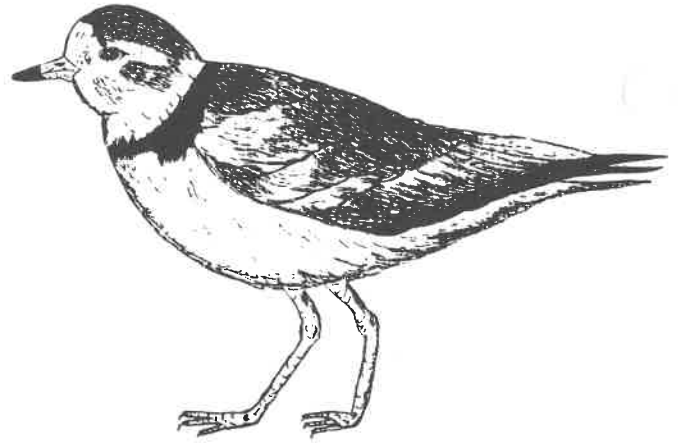
(*Charadrius melodus*)

Status: Federal Threatened; State Threatened.

Habitat: Sand bars and sand and gravel beaches with short, sparse vegetation.

Habits: Pebble-lined depressions in the ground serve as nests for piping plovers. The birds feed on small insects and molluscs that they find along the water's edge.

Conservation Measures: Channelization and damming of rivers have destroyed nesting habitat of this species. Disturbance of nesting sites by people is also a problem. In 1992, about 300 piping plovers nested along the Missouri River in South Dakota.



*Whooping Crane

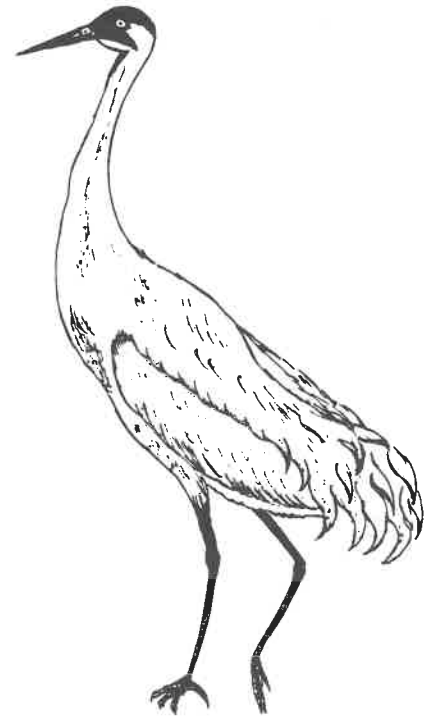
(*Grus americana*)

Status: Federal Endangered; State Endangered.

Habitat: Freshwater marshes, wet prairies, shallow wetlands.

Habits: This tall white bird is named for its unique, trumpet-like call. The species eats both small wetland animals and plants.

Conservation Measures: This species nearly became extinct, but the population has recovered somewhat in recent years as a result of intensive management and protection of its breeding and wintering habitats. Whooping cranes can be seen in South Dakota during spring and fall migrations.



Vertebrates: Reptiles

Blanding's Turtle

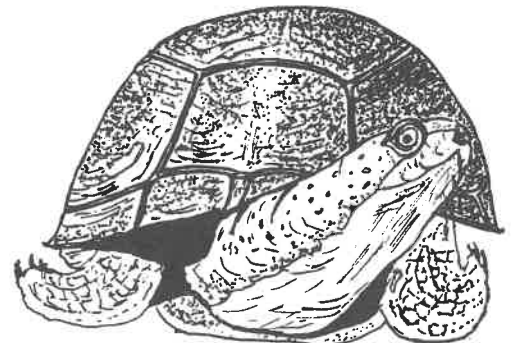
(*Emydoidea blandingii*)

Status: State Threatened.

Habitat: Shallow water of marshes and ponds.

Habits: Blanding's turtles can be seen basking in the sun on logs or muskrat houses. They spend the winter in the mud underwater and have been sighted swimming under the ice. As with all turtles, they nest on land.

Conservation Measures: Once widely distributed, the species is now found only in a few Midwest states. Shallow water habitat suitable for this species has been lost due to channelization of rivers and draining of wetlands. There is one recent record of this species from the Big Sioux River in Sioux Falls.



Eastern Hognose Snake

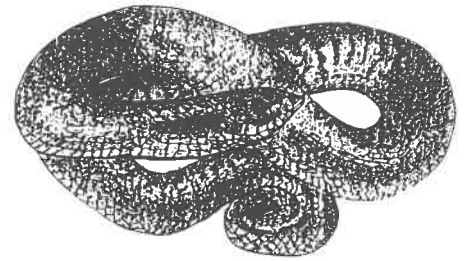
(*Heterodon platirhinos*)

Status: State Threatened.

Habitat: Sandy areas in prairies, woodlands, and flood plains.

Habits: This burrowing snake is harmless in spite of its aggressive, hissing displays which may be followed by feigning of death, all part of its defensive behavior. Its primary food is toads but, it also eats frogs, mice and insects. It is active between April and November.

Conservation Measures: In South Dakota this species only exists in sandy areas along the Missouri River in the southeast. This habitat has been lost or disturbed by upstream dams, commercial development, and recreation.



False Map Turtle

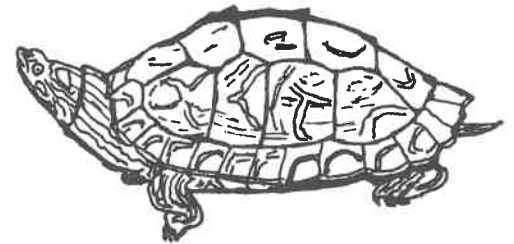
(*Graptemys pseudogeographica*)

Status: State Threatened.

Habitat: Slow moving rivers, sloughs, and lakes with vegetation.

Habits: This wary species is active from April through October. The turtles over winter in muskrat dens or in underwater mud. They eat a variety of foods including insects, molluscs, dead fish, and aquatic plants.

Conservation Measures: This species occurs in South Dakota along the Missouri River and may in fact be more numerous than current records show. Studies are needed to accurately determine its status.



Lined Snake

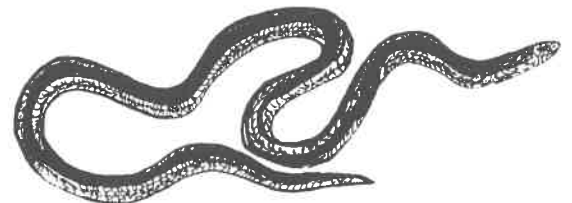
(*Tropidoclonion lineatum*)

Status: State Threatened.

Habitat: Various; prairie, woodland, and residential.

Habits: This is a nocturnal species that releases a smelly musk secretion when caught. Earthworms are its primary food.

Conservation Measures: In South Dakota, this species is known from 3 southeastern counties.



Northern Redbelly Snake

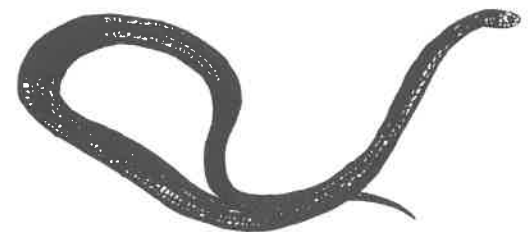
(*Storeria occipitomaculata occipitomaculata*)

Status: State Threatened.

Habitat: Moist woodlands.

Habits: This small snake eats soft-bodied insects, worms, and slugs. The species gives birth to live young, and is active only during the warmer months.

Conservation Measures: This species is shy and harmless and in South Dakota there is little



suitable habitat for it. It is often mistakenly killed because it resembles a young copperhead, a venomous snake species.

***Short-horned Lizard**

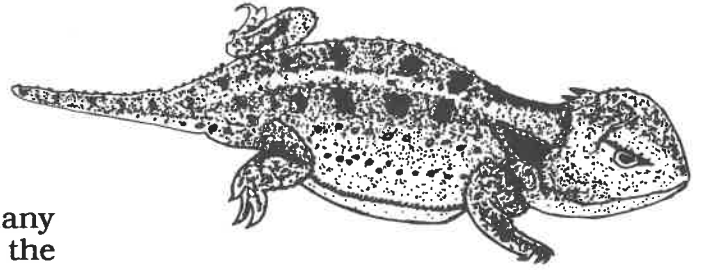
(Phrynosoma douglassii)

Status: Rare.

Habitat: Semi-arid, short grass prairie.

Habits: This intimidating looking lizard eats many species of small invertebrates. It is active in the daytime from spring through the fall, but burrows underground during cold weather.

Conservation Measures: Studies are needed to accurately determine the status of short-horned lizards in South Dakota.



***Spiny Softshell**

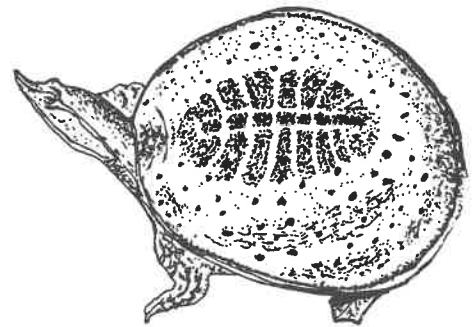
(Apalone spinifera)

Status: State Threatened.

Habitat: Various freshwater habitats with muddy or soft, sandy bottoms and vegetation.

Habits: This turtle species is only active during the warmer months. In winter, it burrows beneath the sand or mud in the bottom of the pond or river. These turtles eat a wide variety of vertebrate and invertebrate aquatic animals.

Conservation Measures: Studies are needed to determine if this species is threatened by loss of natural river habitat in South Dakota.



Vertebrates: Fishes

Banded Killifish

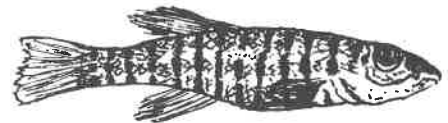
(Fundulus diaphanus)

Status: State Endangered.

Habitat: Various quiet freshwater habitats with or without vegetation.

Habits: Lives in small schools feeding on small aquatic insects and crustaceans.

Conservation Measures: Wetland drainage has reduced habitat for this species, resulting in population decline.



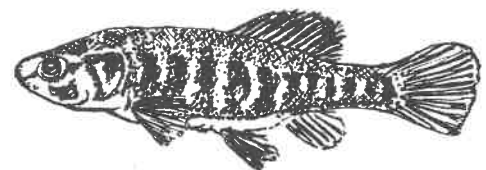
Central Mudminnow

(Umbra limi)

Status: State Endangered.

Habitat: Heavily vegetated small creek pools.

Habits: This species is a bottom feeder that eats aquatic insects, snails, and crustaceans. This species tolerates harsh conditions such as low oxygen levels and high temperatures.



Conservation Measures: Wetland habitats for this species have been reduced by drainage or alteration.

Finescale Dace

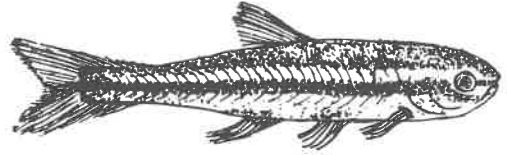
(Phoxinus neogaeus)

Status: State Threatened.

Habitat: Bog ponds, streams and lakes.

Habits: This small species feeds on insects, crustaceans, and plankton.

Conservation Measures: This species is threatened in South Dakota due to lack of suitable habitat.



Longnose Sucker

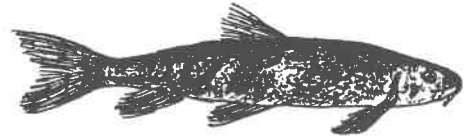
(Catostomus catostomus)

Status: State Threatened.

Habitat: Cool, spring-fed creeks.

Habits: This is a late maturing species that can reach 1.5 feet (46 cm.) in length. It is a bottom feeder that eats insect larvae, snails and crustaceans.

Conservation Measures: Logging, mining or other activities that could affect stream water quality may negatively impact this species.



Northern Redbelly Dace

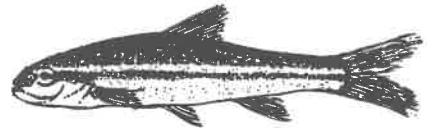
(Phoxinus eos)

Status: State Threatened.

Habitat: Spring-fed streams.

Habits: This small, yellow-finned species feeds on algae and zooplankton.

Conservation Measures: Any activities that threaten spring-fed streams will adversely affect this species.



***Paddlefish**

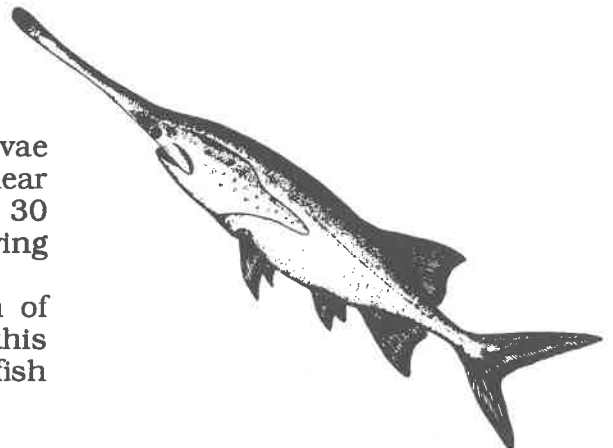
(Polyodon spathula)

Status: Rare; Candidate for Federal Listing.

Habitat: Quiet, slow-moving freshwater.

Habits: This large, filter-feeder strains insect larvae and zooplankton from the water as it swims near the surface. This species can live more than 30 years. Adults require gravel bars in free-flowing rivers for spawning.

Conservation Measures: Loss and interruption of habitat due to damming of rivers threaten this species. South Dakota has a successful paddlefish artificial propagation program.



***Pallid Sturgeon**

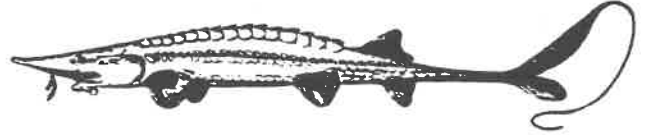
(*Scaphirhynchus albus*)

Status: Federal Endangered; State Endangered.

Habitat: Large rivers with strong current and firm, sandy bottoms.

Habits: This bizarre looking fish is a bottom dweller that feeds on small fishes and aquatic insects.

Conservation Measures: The normal habitat for this species in the Missouri River has been greatly altered by dam construction. The dramatic habitat changes that have occurred threaten the species' survival. The habits of this species are not well understood. Research on pallid sturgeon is being conducted in South Dakota.



Pearl Dace

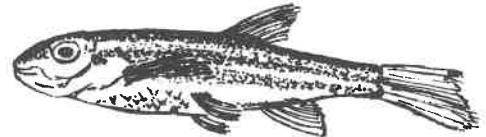
(*Semotilus margarita*)

Status: State Endangered.

Habitat: Cool, clear streams, ponds, lakes.

Habits: This species lives in gravel or sand-bottomed clear water where it feeds on small invertebrates and algae.

Conservation Measures: Since so little ideal habitat for this species exists in South Dakota, biologists recommend that the acceptable habitat be identified and protected.



Plains Topminnow

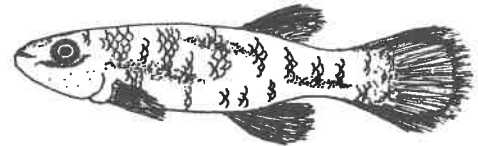
(*Fundulus sciadicus*)

Status: State Threatened; Candidate for Federal Listing.

Habitat: Clear, slow-moving streams with vegetation.

Habits: These topminnows swim singly or in schools near the water's surface. Little is known about its feeding behavior.

Conservation Measures: Because this species may be an indicator of water quality, its populations should be monitored for changes.



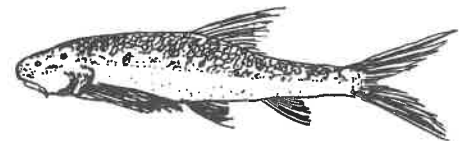
Sicklefin Chub

(*Hybopsis meeki*)

Status: State Threatened; Candidate for Federal Listing.

Habitat: Main channel of turbid rivers with strong current.

Habits: The biology of this species is poorly understood. Scientists believe it spawns in the spring and feeds near the bottom of the river.



Conservation Measures: This species' population has been reduced due to the dam construction along the Missouri River.

Sturgeon Chub

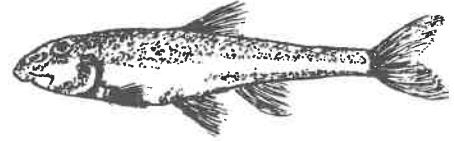
(Hybopsis gelida)

Status: State Threatened; Candidate for Federal Listing.

Habitat: Swift current areas of large, silty rivers.

Habits: The biology of this species is not well understood. Biologists suspect it is a bottom-dweller that feeds on invertebrates.

Conservation Measures: As with the sicklefin chub, this species has been adversely affected by the dam construction along the Missouri River.



Trout-perch

(Percopsis omiscomaycus)

Status: State Threatened.

Habitat: Lakes and turbid streams.

Habits: This small, silvery fish feeds nocturnally in shallow water and spends daylight hours hidden in deeper water or in underwater debris. The species eats insect larvae and small crustaceans such as amphipods.

Conservation Measures: Records of this species in South Dakota are restricted to the eastern part of the state. The species may have been more abundant before wetlands were modified.



Invertebrates: Insects

***American Burying Beetle**

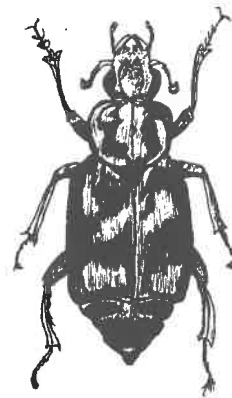
(Nicrophorus americanus)

Status: Federal Endangered.

Habitat: Woodlands, grasslands with sufficient ground litter and topsoil for beetles to bury carrion.

Habits: These insects are active at night when they search for dead animals. The carrion is prepared into balls, covered with a secretion to promote decay, and then buried. The beetle eggs are laid next to the carrion balls. Both parents care for their young, a trait uncommon in insects.

Conservation Measures: Biologists are unsure why these insects are rare. Their secretive, nocturnal behavior makes them difficult to study. No burying beetles have been reported in South Dakota since the 1940's.



***Dakota Skipper Butterfly**

(Hesperia dacotae)

Status: Rare; Candidate for Federal Listing.

Habitat: Dry to moist tall grass prairies.

Habits: The adult butterfly feeds on nectar from flowers such as fleabanes and purple coneflowers. The caterpillars prefer grasses such as little bluestem.

Conservation Measures: Present populations of this species are known only from Minnesota and the Dakotas. Overgrazing of this species' habitat can make the habitat unsuitable for the butterfly. Agricultural development has affected the distribution of this species.



***Regal Fritillary Butterfly**

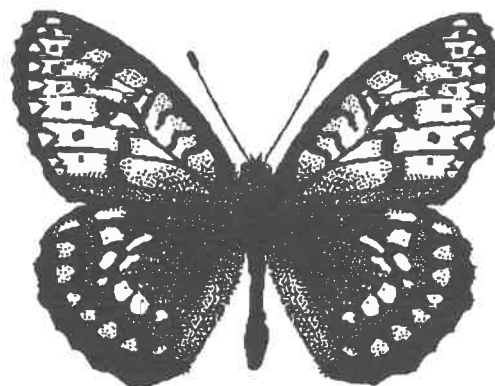
(Speyeria idalia)

Status: Rare; Candidate for Federal Listing.

Habitat: Wet meadows and tall grass prairie.

Habits: Adults feed on nectar from milkweed and thistles, and are active during daylight hours. The caterpillar stage is nocturnal and feeds on violets.

Conservation Measures: Population decline is primarily due to conversion of tall grass prairie to cropland. Large areas of native prairie with abundant wildflowers are necessary to protect this species.



***Tawny Crescent Butterfly**

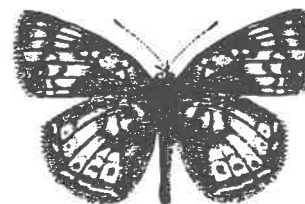
(Phyciodes batesii)

Status: Rare; Candidate for Federal Listing.

Habitat: Moist meadows and stream bottoms near forests in the Black Hills.

Habits: Adults take nectar from composite flowers. Caterpillars feed in groups on asters.

Conservation Measures: Overgrazing by livestock, road construction and surface mining along stream bottoms are all threats to this species.



Resources for Teachers

- Earthbeat 3: Preserving Endangered Species*, a video by Intellimation, Santa Barbara, CA, grades 9-12.
- Endangered Animals*, a Ranger Rick picture book by National Wildlife Federation, Washington, D.C., grades K-8.
- Endangered: An Adventure Game*, a board game from Music For Little People, Redway, CA, grades 4-12.
- Endangered Species*, an activity book in the Nature Scope series by the National Wildlife Federation, Washington, D.C., grades K-6.
- Endangered Species Coloring Book*, from the Environmental Protection Agency. Xerox copies available from NSU CUEST Center, grades K-4.
- Endangered Specied Databases*, a computer database program from Sunburst Communications, Pleasantville, N.Y., grades 4-12.
- Endangered Species Issues Pac*, activities and information for students from National Institute for Urban Wildlife, Columbia, MD, grades 2-6.
- Endangered Species of North America*, an expensive reference book appropriate for libraries by World Wildlife Fund. Beachum Publishing, Washington, D.C., grades 6-adult.
- Endangered Species: The Survival Game.*, a board game from Cornell Lab of Ornithology, Ithaca, N.Y., grades 4-adult.
- Fragile Legacy: Endangered, Threatened, and Rare Animals of South Dakota*, a book with color illustrations by Diane Ashton and Eileen Dowd, S.D. Department of Game, Fish and Parks, Pierre SD. Copies should be in each school library in the state., grades 4-adult.
- Protecting Endangered Species*, a video from National Geographic Society, Washington, D.C., grades 4-9.
- Wildlife Trade Education Kit*, a slide show on illegal wildlife trade from World Wildlife Fund, Washington, D.C., grades 3-12.

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