

# KANSAS

## Threatened & Endangered Species

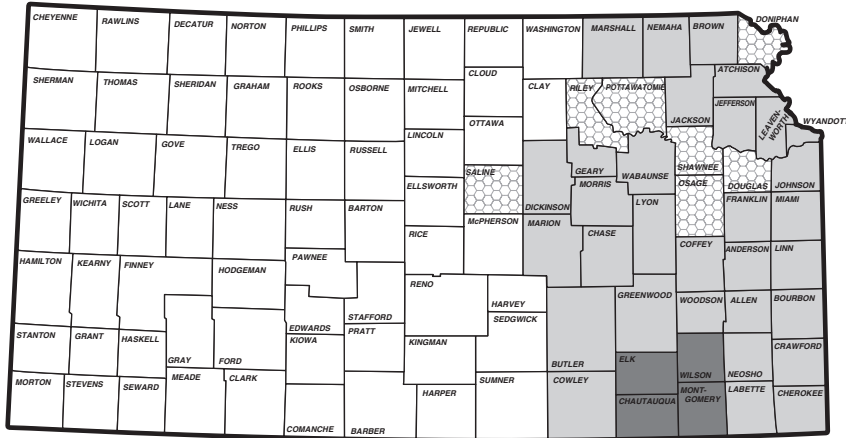
**A COMPREHENSIVE GUIDE TO SPECIES LISTED OR CONSIDERED  
FOR LISTING AS THREATENED OR ENDANGERED IN KANSAS BY THE  
STATE AND FEDERAL GOVERNMENT.**

**INCLUDES SPECIES DESCRIPTION, RANGE MAP, AND HABITAT DESIGNATION.**

# AMERICAN BURYING BEETLE

*Nicrophorus americanus*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** Endangered

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This beetle is shiny black with the elytra (wing covers) having two orange-red markings. The most diagnostic feature of this beetle is the large orange-red markings on the raised portion of the pronotum. The species is up to 1.5 inches long.

Historically, Kansas records exist in the eastern one-third of the state. The American Burying Beetles have been frequently found in upland grasslands or near the edge of grassland/forest. Sandy/clay loam soils and food (carrion) availability are also important. The species appears to prefer loose soil in which carrion can be easily buried. Since 1996, populations were found in four southeast counties in Kansas.

## SPECIES PROTECTION AND CRITICAL HABITATS

American Burying Beetles are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements. Sponsors of projects impacting American Burying Beetle habitats must also contact the Endangered Species Office, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

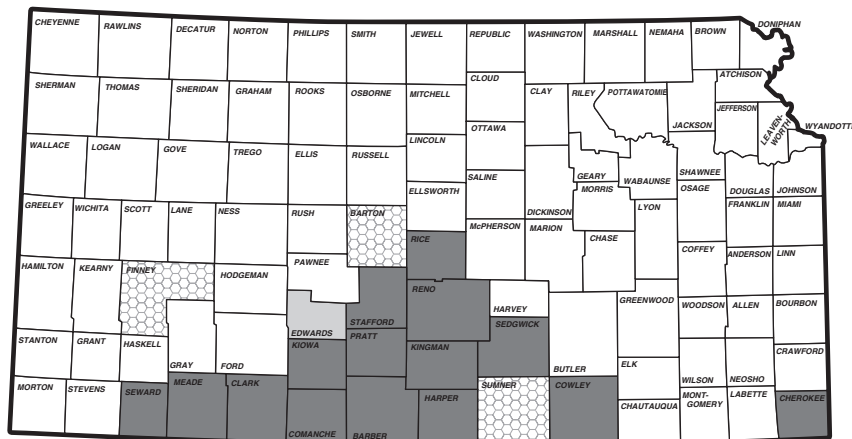
## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, Elk, Wilson, Montgomery, and Chatauqua counties are designated suitable critical habitat for the American Burying Beetle.

# ARKANSAS DARTER

*Etheostoma cragini*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** Candidate

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

Reaching a maximum size of 2.5 inches, the Arkansas Darter is a stout-bodied member of the perch family. They are olivaceous brown above and yellowish white below with six to nine indistinct dusky saddles over the back. During spawning, males are a colorful orange along their lower abdomen.

Arkansas Darters prefer shallow, clear, spring-fed tributary and headwater streams having sand or sandy-gravel substrates. The fish are almost invariably associated with vegetative cover in spring-fed channels and generally are found in near-shore areas away from swift currents. Because of its specialized habitat requirements, this darter is localized within its range but may be quite common where it does occur.

Viable populations of Arkansas Darters are currently known only in suitable streams south of the Arkansas River in southcentral Kansas and in Spring River drainage in Cherokee County. The darter's range extends into eastern Colorado, southwestern Missouri, northeastern Arkansas and northcentral Oklahoma where local populations occur. Kansas constitutes the Arkansas Darter's primary range.

## SPECIES PROTECTION AND CRITICAL HABITATS

Arkansas Darters are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

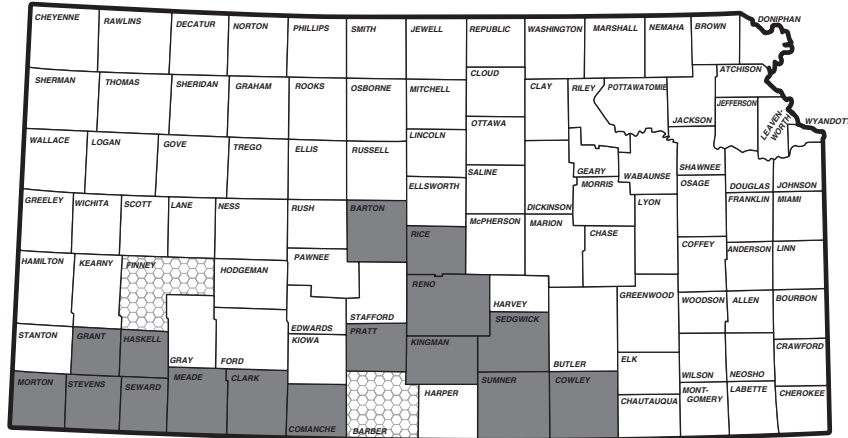
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Arkansas Darter:

- (1) The main stem of the North Fork Ninescah River on the Stafford/Reno County line (Sec. 31-T24S-R10W) to its confluence with South Fork Ninescah River in Sedgwick County (Sec. 36-T28S-R4W).
- (2) The main stem of the South Fork Ninescah River on the Sedgwick/Kingman County line (Sec. 19-T28S-R4W) to the confluence with the North Fork Ninescah River (Sec. 36-T28S-R4W) in Sedgwick County.
- (3) That reach of the main stem Spring River from the Kansas-Missouri border (Sec. 1-T33S-R25E) to where it crosses SE Lostine Road (Sec. 3-T34S-R25E).
- (4) Numerous perennial spring-fed reaches of named and unnamed streams south of the Arkansas River within Barber, Clark, Comanche, Cowley, Harper, Kingman, Kiowa, Meade, Pratt, Reno, Rice, Sedgwick, Seward and Stafford counties. Contact the Department's Environmental Services Section for further information.

# ARKANSAS RIVER SHINER

*Notropis girardi*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** Threatened

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This small (usually less than 2 inches) shiner is straw-colored with silvery sides. Scattered brown flecks occur on its sides behind the head. The anal fin has 8 rays compared to 7 on other shiner species found in the same habitat.

The Arkansas River Shiner formerly occurred throughout the Arkansas River main stem and in that river's major right bank tributary basins. The fish is extremely dependent upon flood flows from June through August to successfully spawn. Declining streamflows have now restricted its probable range in Kansas to a few stream reaches within the Lower Arkansas, Salt Fork Arkansas and Cimarron basins. The fish occurs in the upper reaches of the Cimarron River only during high streamflow events.

## SPECIES PROTECTION AND CRITICAL HABITATS

Arkansas River Shiners are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

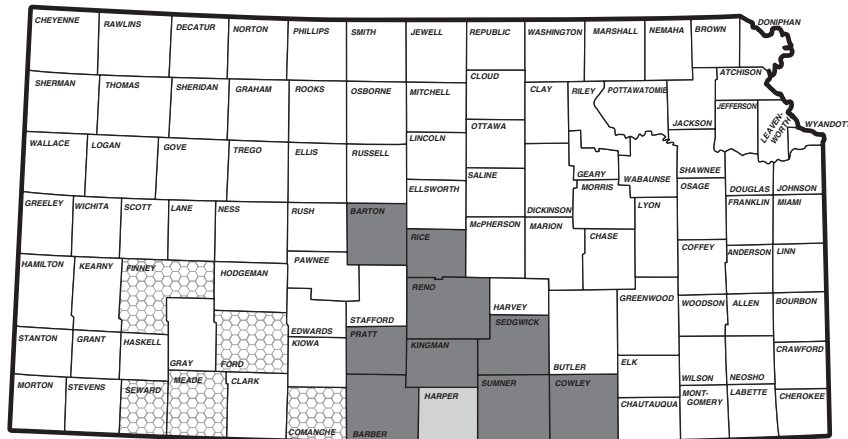
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Arkansas River Shiners:

- (1) All reaches of the main stem Cimarron River located within the state.
- (2) The main stem Arkansas River from the U.S. Highway 281 crossing Sec. 33, T19S, R13W, Barton County to the Kansas-Oklahoma border in Sec. 18, T35S, R5E, Cowley County.
- (3) The main stem South Fork Ninescah River and main stem Ninescah from the Pratt County Lake in Sec. 7, T28S, R12W, Pratt County to the Ninescah-Arkansas confluence in Sec. 35, T31S, R2E, Sumner County.

# ARKANSAS RIVER SPECKLED CHUB

*Macrhybopsis tetranema*

## RANGE MAP

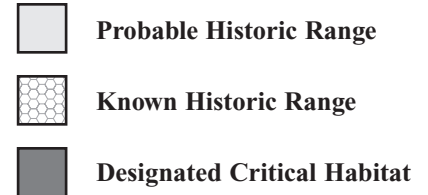


## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY



## SPECIES DESCRIPTION

This small (2 3/4 inches) chub has a slender, nearly transparent body with small dark dots scattered on its back. The fish's mouth is small and ventral with four prominent barbels.

This species prefers shallow channels of permanently flowing streams where currents flow over clean fine sand. It avoids calm waters and silted stream bottoms. This fish is found in the lower Arkansas River and its major tributaries.

The species of chub found in the Arkansas River basin formerly occurred as far west as Holcomb in both the Arkansas River main stem and the lower reaches of the river's larger tributaries. Due to dewatering of western Kansas streams, the fish is now restricted to the lower portions of the river's basin in Kansas.

## SPECIES PROTECTION AND CRITICAL HABITATS

Arkansas River Speckled Chubs within the Arkansas River basin are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

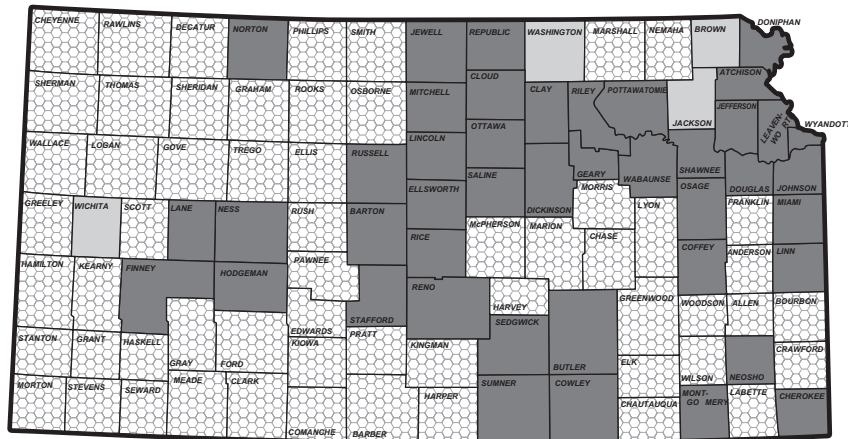
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Arkansas River Speckled Chubs:

- (1) The main stem Arkansas River from the U.S. 281 crossing in Sec. 33, T19S, R13W, Barton County, to the Kansas-Oklahoma border in Sec. 18, T35S, R5E, Cowley County.
- (2) The main stem Medicine Lodge River from the point it enters Barber County at Sec. 18, T30S, R15W, to the Kansas-Oklahoma border in Sec. 13, T35S, R10W.
- (3) The main stem North Fork Ninescah River from Cheney Reservoir Dam in Sec. 6, T27S, R3W, Sedgwick County to its confluence with the South Fork Ninescah in Sec. 36, T28S, R4W, Sedgwick County.
- (4) The main stem South Fork Ninescah River from the Pratt County Lake in Sec. 7, T28S, R12W to its confluence with the North Fork Ninescah in Sec. 36, T28S, R4W, Sedgwick County.
- (5) The main stem Ninescah River from its origin in Sec. 36, T28S, R4W, Sedgwick County to its confluence with the Arkansas River in Sec. 25, T31S, R2E, Sumner County.

# BALD EAGLE

## *Haliaeetus leucocephalus*

### RANGE MAP

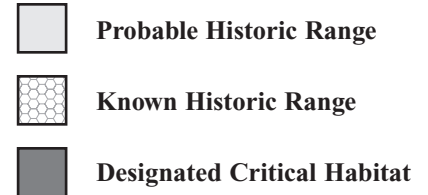


### STATUS

**KANSAS:** Threatened

**FEDERAL:** Threatened

### MAP KEY



### SPECIES DESCRIPTION

The Bald Eagle, our national bird, has a wing-spread of 6-8 ft. The head and tail of adult birds are white, the bill and eyes yellow, and wings and body are dark brown. Immature birds are dark with whitish washes at the base of their wing primaries. As immatures approach adulthood (4-5 years), increasing white blotching is evident on their head and tail.

Bald Eagles are regular winter residents in Kansas. Although they may occur in any county, wintering eagles tend to concentrate around large impoundments, marshes, and rivers where fish, waterfowl, or other food supplies are abundant. Nearby stands of trees containing some tall mature trees having stout horizontal limbs and open branching patterns are important as roosts and resting perches. During the late 1980s, Bald Eagle nesting was recorded in the state and has resulted in an increasing nesting population.

### SPECIES PROTECTION AND CRITICAL HABITATS

Bald Eagles are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements. Sponsors of projects impacting Bald Eagle habitats must also contact the Endangered Species Office, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

### DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Bald Eagles:


All listed stream corridors have outermost boundaries that are along a line 100 yards landward from the stream's ordinary high water mark on each bank.

(1) All lands and waters within a corridor along the main stem of the Big Blue River from Tuttle Creek Dam in Sec. 24-T9S-R7E, Riley County, to its confluence with the Kansas River in Sec. 16-T9S-R8E, Riley County.

(2) All lands and waters within a corridor along the main stem of the Republican River from the Kansas/Nebraska border in Jewell County (Sec. 5-T1S-R6W) to the confluence with the Kansas River on Fort Riley in Geary County.

(3) All lands and waters within a corridor along the main stem of the Kansas River from the confluence of the Smoky Hill River and Republican River on Fort Riley in Geary County to the confluence of the Missouri River in Kansas City, Wyandotte County.

(4) All Kansas land and waters within a corridor along the main stem of the Missouri River from the confluence of the Kansas River at Kansas City, Wyandotte County to the Kansas/Nebraska border in Sec. 5-T1S-R19E, Doniphan County.



(5) All lands and waters within a corridor along the main stem of the Arkansas River from the US 281 corridor in Section 33-T19S-R13W to the Kansas/Oklahoma border at Sec. 18-T35S-R5E, Cowley County.

(6) All lands and waters within those portions of Finney, Hodgeman, Lane and Ness Counties bounded on the east by US-283, on the north by K-96, on the west by K-23, and on the south by K-156.

(7) All Kansas lands and waters within a corridor along the main stem of the Smoky Hill River from its point of entry into Russell County (Sec. 19-T15S-R15W) to its confluence with the Republican and Kansas River on Fort Riley in Geary County.

(8) All Kansas lands and waters within a corridor along the main stem of the Saline River from below the dam at Wilson Reservoir (Sec. 36-T12S-11W) to the confluence of the Smoky Hill River in Saline County (Sec. 2-T14S-R2W).

(9) All Kansas lands and waters within a corridor along the main stem of the Solomon River below the dam at Glen Elder Reservoir (Sec. 27-T6S-R9W) to the confluence of the Smoky Hill River in Saline County (Sec. 24-T13S-R1W).

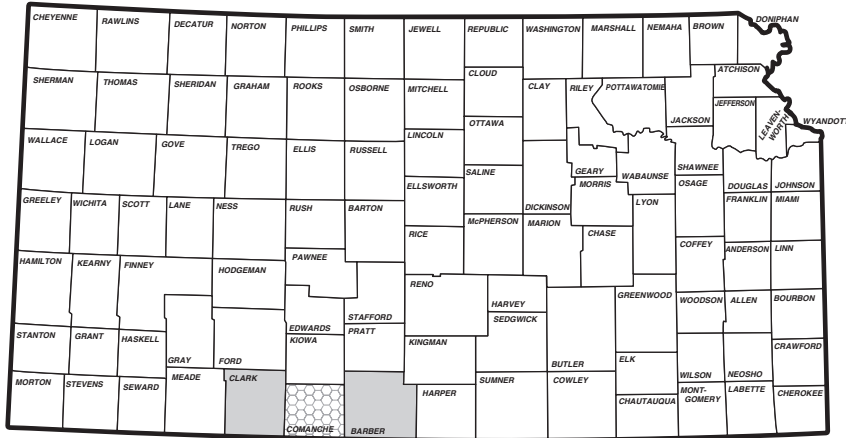
(10) All lands and waters that lie within 5 air miles of public lands on the following areas: Marais des Cygnes Wildlife Area (Linn Co.), Neosho Wildlife Area (Neosho Co.), Hillsdale Reservoir (Miami Co.), Clinton Reservoir (Douglas Co.), Perry Reservoir (Jefferson Co.), Pomona Reservoir (Osage Co.), John Redmond Reservoir (Coffey Co.), El Dorado Reservoir (Butler Co.), Tuttle Creek Reservoir (Riley Co.), Milford Reservoir (Clay Co.), Glen Elder Reservoir (Mitchell Co.), Keith Sebelius Reservoir (Norton Co.), Wilson Reservoir (Russell Co.), Cheyenne Bottoms (Barton Co.), Quivira National Wildlife Refuge (Stafford Co.), and Cheney Reservoir (Reno Co.).

The U.S. Fish and Wildlife Service also has authority to designate areas of critical habitat for federally listed endangered species, but has not done so for Bald Eagles in Kansas.

# BLACK-CAPPED VIREO

*Vireo atricapilla*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** Endangered

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Black-capped Vireo is about 5 inches long. Males have olive green backs, white undersides, and faintly yellowish green flanks. The upper half of the head is black with white lores and partial eye-ring giving the appearance of white spectacles. The eye is brownish red and the bill black. Females are duller colored with a more gray head and the underside washed with greenish yellow.

Historical nesting records are known only from Comanche County, however, the bird likely nested in suitable habitat throughout the Red (Gyp) Hills region in southcentral Kansas. Preferred habitat is low dense tree-shrub growth in ravines in native prairie. Although sight records from Harvey and Rice counties are documented, there have been no records of the bird in the state since 1953. Its current probable range is limited to Barber, Clark, and Comanche counties. Occurrences outside of that three-county area would be considered accidental.

## SPECIES PROTECTION AND CRITICAL HABITATS

Black-capped Vireos are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements. Sponsors of projects impacting Black-capped Vireo habitats must also contact the Endangered Species Specialist, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife.

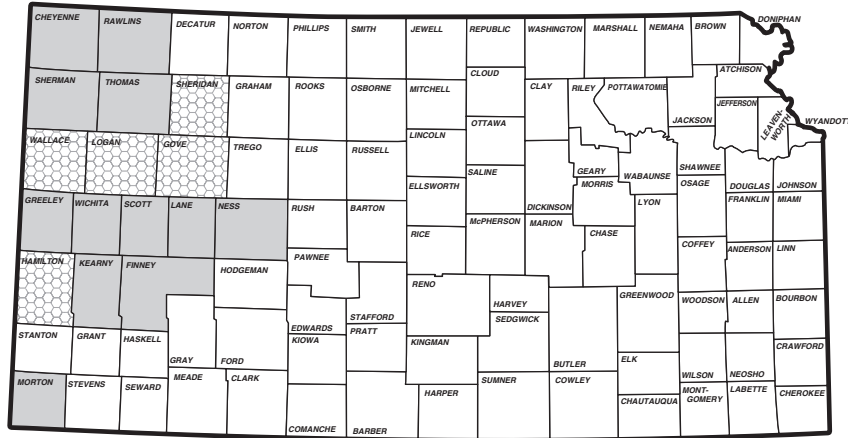
Black-capped Vireos are most likely to occur as summer visitors or residents in southcentral counties. At present, no specific locations have been designated critical.

The U.S. Fish and Wildlife Service also has authority to designate areas of critical habitat for federally listed endangered species, but has not done so for Black-capped Vireos in Kansas.

# BLACK-FOOTED FERRET

*Mustela nigripes*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** Endangered

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

Black-footed Ferrets have a pale buff background color becoming nearly white on the face, throat, and ventral half of the body. The top of the head and saddle area of the back are brown. There is a black mask across the eyes and the feet, while the legs and terminal fourth of the tail are black to blackish brown.

Ferrets are totally dependent upon prairie dog burrows for cover and upon prairie dogs and other small mammals for food. Black-footed Ferrets once ranged over approximately the western 2/3 of Kansas in association with black-tailed prairie dogs. Extensive conversion of rangeland to cropland plus widespread poisoning of prairie dogs have destroyed most of the state's ferret habitat. There remains some larger areas of short-grass prairie in western Kansas that may still have isolated prairie dog towns capable of supporting Black-footed Ferrets.

The last confirmed record of a live ferret in Kansas was in Sheridan County in December, 1957.

## SPECIES PROTECTION AND CRITICAL HABITATS

Black-footed Ferrets are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time a project is proposed that will impact the species' preferred habitat within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements. Sponsors of projects impacting Black-footed Ferret habitat must also notify the Endangered Species Specialist, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife.

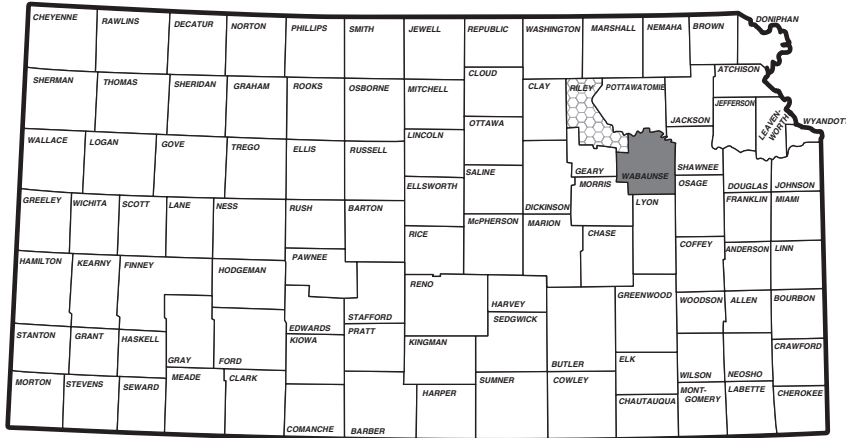
Since there has been no confirmed record of a live wild ferret in Kansas since 1957, it is unknown if any sustaining ferret populations still exist in the state. The U.S. Fish & Wildlife Service and Kansas Department of Wildlife and Parks has a continuing program of investigation of ferret reports. To date, there are no designated areas of critical ferret habitat in Kansas.

The U.S. Fish and Wildlife Service also has authority to designate areas of critical habitat for federally listed endangered species, but has not done so for Black-footed Ferret in Kansas.

# BLACKSIDE DARTER

*Percina maculata*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This darter has green and gray sides with 6 to 8 large oblong dark blotches. Snout is short and mouth is terminal. Gills form a narrow V-notch on throat. Maximum length is 3.5 inches.

This species inhabits cool, clear, medium-sized streams where it occupies shallow pools having moderate current and bottoms of clean gravel. Spawns in gravel pools greater than one foot deep. This darter is found only in Mill Creek in Wabaunsee County.

## SPECIES PROTECTION AND CRITICAL HABITATS

Blackside Darters are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

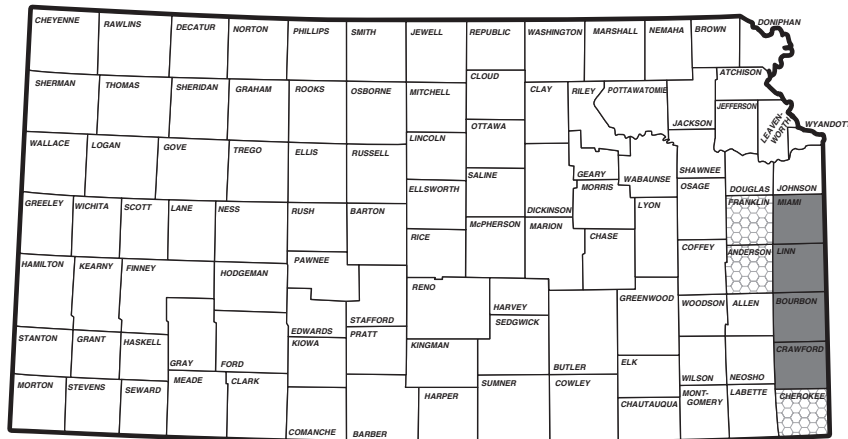
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Blackside Darters.

- (1) The main stem of Mill Creek in Wabaunsee County from I-70 (Sec. 27-T11S-R11E) to K-99 (Sec. 26-T13S-R10E).
- (2) The West Branch Mill Creek in Wabaunsee County from Highway 99 (Sec. 15-T12S-R10E) upstream to Sec. 31-T12S-R10E.

# BROADHEAD SKINK

*Eumeces laticeps*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This lizard has flat, smooth scales, five yellow stripes on back and sides, two yellow stripes on the head and the sixth scale back from the nose (upper lip) extending to the edge of the eye. As with the Five-lined Skink (*E. fasciatus*), this species exhibits different colors at various stages of adult life. Young adults are black with yellow stripes and have a bright blue tail. Older females are brownish, the yellow stripes may fade to brown or gray, and the blue tail becomes gray. Older males are uniform olive or tan, and lack stripes. Male Broadhead Skinks are larger than females and develop an orange-red head during breeding. Broadhead and Five-lined Skinks are extremely difficult to tell apart.

Broadhead Skinks prefer mature oak woodlands having dead and decaying timber where it depends on tree cavities, especially in standing dead trees, for nesting. Large deciduous trees, downed logs, rock outcrops and brushpiles in or near woodlands are also used as protective cover. It is intolerant of intensive lumbering and woodland grazing.

## SPECIES PROTECTION AND CRITICAL HABITATS

Broadhead Skinks are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the preferred habitats within the probable range of Broadhead Skinks, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Broadhead Skinks:

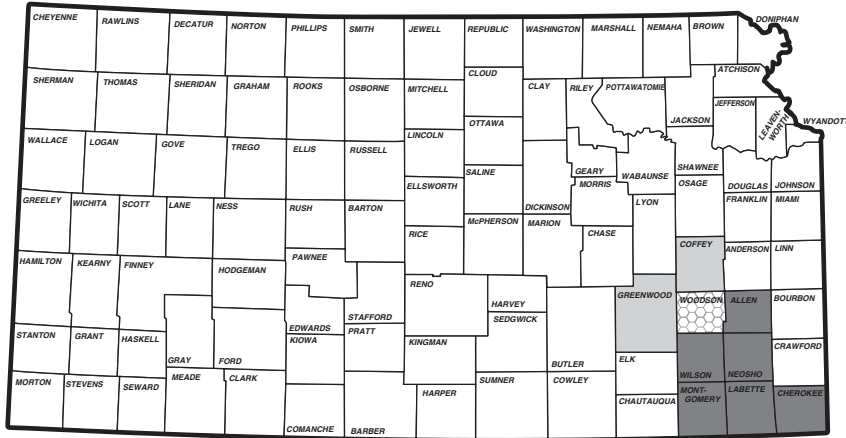
All stands of mature oak woodland in Bourbon, Crawford, Linn, and Miami counties.

Stands of suitable timber anywhere within the skink's probable range may, upon field investigation, also be found to be essential for conservation of the species.

# BUTTERFLY MUSSEL

*Ellipsaria lineolata*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This freshwater mussel is triangular in shape with a moderately thick shell that is compressed. External shell color is yellow to tan and covered with dark rays composed of dots, dashes and chevrons. Maximum length is approximately 5 inches.

This species is an obligate riverine mussel preferring clean water with good current over gravel substrate. Its historic range included the Neosho, Spring, Fall and Verdigris Rivers. Scattered individuals have recently been documented in the Verdigris and Neosho Rivers, but distribution and numbers have been significantly reduced.

## SPECIES PROTECTION AND CRITICAL HABITATS

Butterfly Mussels are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

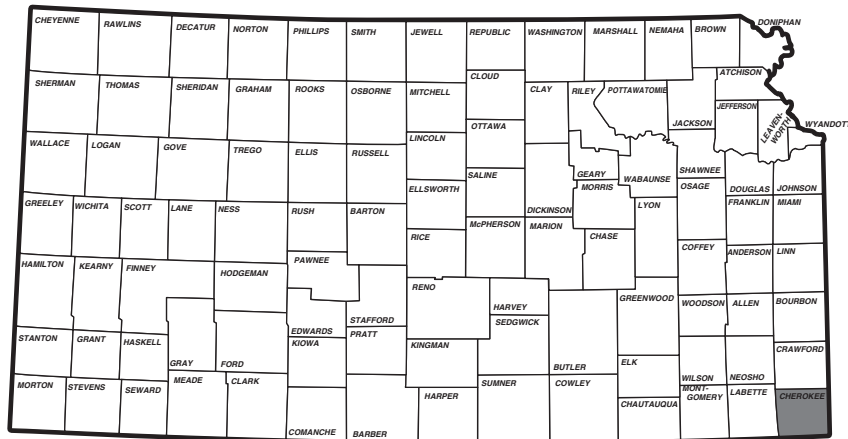
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Butterfly Mussels:

- (1) The main stem of the Neosho River from US-54 in Allen County (Sec. 34-T24S-R18E) to the Kansas/Oklahoma border in Cherokee County (Sec. 18-T35S-R22E).
- (2) The main stem of the Verdigris River from K-47 in Wilson County (Sec. 17-T29S-R16E) to the Kansas/Oklahoma border in Montgomery County (Sec. 18-T35S-R17E).

# CAVE SALAMANDER

*Eurycea lucifuga*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

Adult Cave Salamanders are 4-6 inches long. The animal is bright orange-yellow above and covered with scattered black spots. The belly is white or yellow.

Cave Salamanders inhabit the twilight zone of limestone caves, or near permanent cold springs in forested areas. They may also be found under leaves and forest debris near caves and springs. In Kansas, the Cave Salamander is restricted to suitable habitat within the Ozark Plateau region in Cherokee County.

## SPECIES PROTECTION AND CRITICAL HABITATS

Cave Salamanders are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

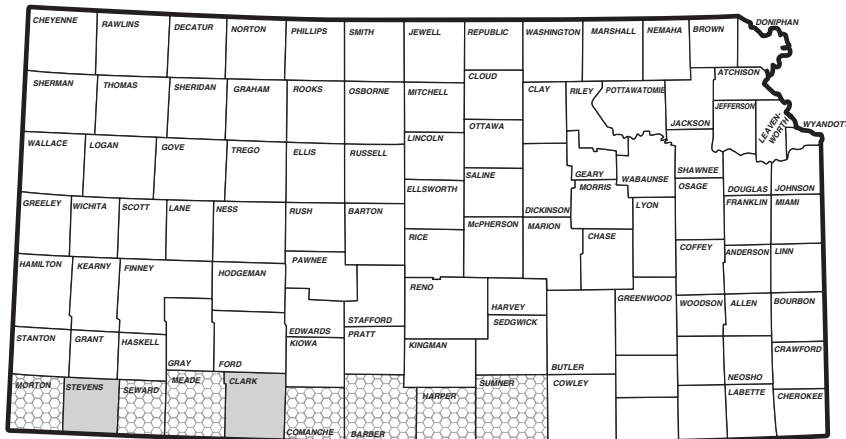
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Cave Salamanders:

All caves and associated spring flows within that portion of Cherokee County lying south and east of a line beginning at the Kansas-Missouri border junction with U.S. Highway 66 at Sec. 13, T34S, R25E, then extending westerly and southerly along U.S. 66 to the Kansas-Oklahoma border at Sec. 14, T35S, R24E.

# CHECKERED GARTER SNAKE

*Thamnophis marcianus*

## RANGE MAP






## STATUS

**KANSAS:**Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Checkered Garter Snake normally grows to 18-24 inches. It has keeled scales, a single anal scale, and narrow yellowish stripes down each side and the back. There is a large yellowish or cream colored crescent mark on each side of the head. The areas between the stripes are brownish-yellow with a bold checkered pattern of dark spots. The belly is plain yellowish.

This rare snake is limited to the southern portions of those counties along the southern border of Kansas. It has not been recorded east of the Arkansas River. It frequents margins of pools of water in streams, small ponds and lakes, or near springs. During winter, this snake uses small animal burrows or deep crevices in rocky hillsides to avoid the cold.

## SPECIES PROTECTION AND CRITICAL HABITATS

Checkered Garter Snakes are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Commission personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

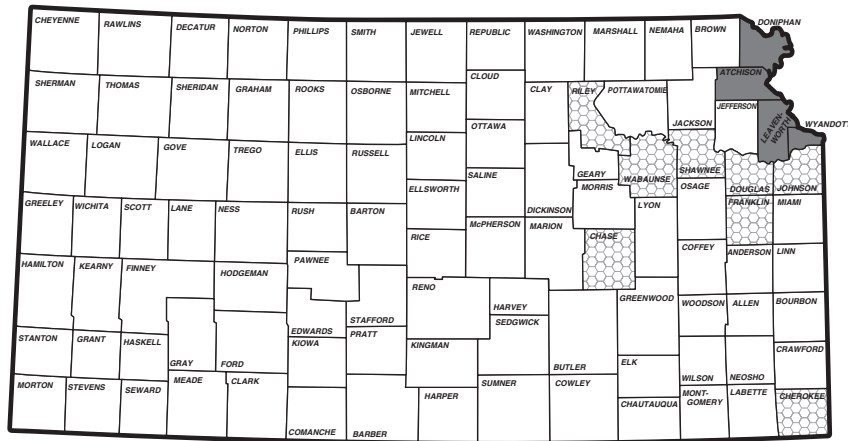
As defined by the Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are considered critical for Checkered Garter Snakes:

Knowledge of current populations of Checkered Garter Snakes is too limited to be able to designate specific areas of critical habitat.

# CHESTNUT LAMPREY

*Ichthyomyzon castaneus*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The lampreys are primitive eel-like fishes which differ from true fishes in the absence of jaws and paired fins and the presence of gill pockets rather than regular gills. The Chestnut Lamprey has a round, sucking-disk mouth, a keel-like rayless fin along the back and around the tip of the tail. Growing to a length of 14 inches, Chestnut Lampreys are gray to greenish-gray in color with a pale belly.

The Chestnut Lamprey is currently known to occur occasionally in the lower Kansas River and may occur in the Missouri River main stem. It may have formerly occurred in larger rivers throughout eastern Kansas. These lampreys are parasitic in their adult stage, preying on large fish such as carp and buffalo. Spawning occurs in smaller tributary streams in swift shallow riffles where the gravel is clean. The larvae remain in bottom sediments of pools, feeding on microorganisms, for several years before reaching maturity.

Loss of suitable spawning areas has been a major factor in Chestnut Lamprey population declines.

## SPECIES PROTECTION AND CRITICAL HABITATS

Chestnut Lampreys are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

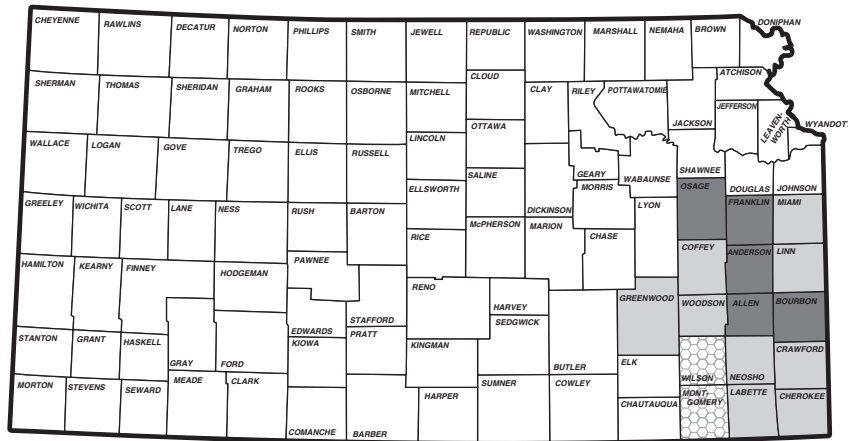
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical habitat for Chestnut Lampreys:

All reaches of the main stem Missouri River that are congruent with the Kansas-Missouri border.

# COMMON MAP TURTLE

*Graptemys geographica*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This turtle has a short tail, ridged upper and lower shell, rear edge of upper shell is jagged and a small yellow spot behind each eye. The upper shell is gray with lines and circles. The lower shell is gray with darker center lines. The head, limbs and tail are olive or brownish with yellow stripes. The shell length is a maximum of 10 inches.

This species' habitat includes creeks, rivers, oxbows and lakes with abundant basking sites, slow to moderate current and soft substrate with aquatic vegetation and tree-lined banks. The range has been reduced to smaller creeks in eastern Kansas south of the Kansas River and east of the Flint Hills.


## SPECIES PROTECTION AND CRITICAL HABITATS

The Common Map Turtle is protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Common Map Turtles:

- (1) The main stem of the Marmaton River from Moran, Allen County (Sec. 36-T24S-R20E) to the Kansas/Missouri border in Bourbon County (Sec. 24-T25S-R25E).
- (2) The main stem of Cedar Creek in Anderson County from its point of entry into Sec. 1-T22S-R18E to its confluence with Pottawatomie Creek (Sec. 1-T20S-R19E).
- (3) The main stem of the South Fork of Pottawatomie Creek in Anderson County from its point of entry into Sec. 27-T21S-R20E to the confluence with Pottawatomie Creek (Sec. 24-T19S-R20E).
- (4) The main stem of the West Fork of Taucy Creek in Franklin County from the Douglas/Franklin County border (Sec. 23-T15S-R19E) to the confluence with Ottawa Creek (Sec. 28-T16S-R20E).
- (5) The main stem of Ottawa Creek in Franklin County from the confluence of the West Fork of Taucy Creek (Sec. 23-T15S-R19E) to the confluence with the Marais des Cygnes River (Sec. 11-T17S-R20E).



(6) The main stem of Long Creek in Osage County from the Osage/Coffey County border (Sec. 36-T18S-R15E) to the confluence of the Marais des Cygnes River (Sec. 2-T18S-R16E).

(7) The main stem of Frog Creek in Osage County from the Osage/Coffey County border (Sec. 34-T18S-R15E) to the confluence with Long Creek (Sec. 30-T18S-R16E).

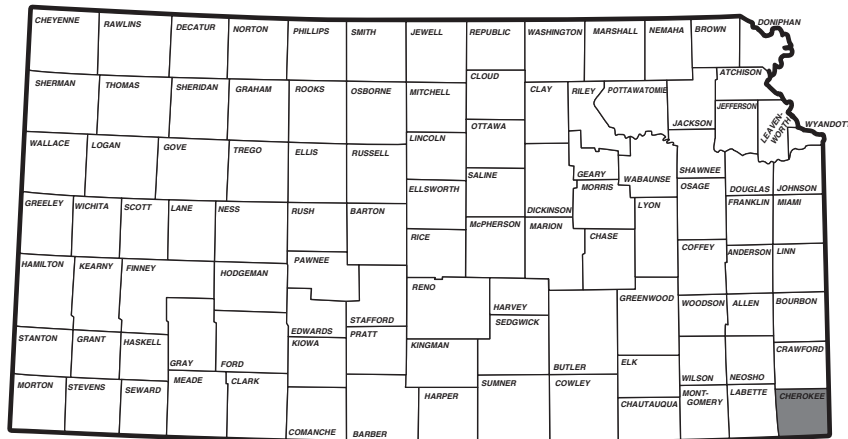
(8) The main stem of the Little Osage River in Bourbon County from the Bourbon/Allen County border (Sec. 36-T23S-R21E) to the Kansas/Missouri border (Sec. 1-T24S-R25E).

(9) The main stem of Appanoose Creek in Franklin County from the Osage/Franklin border (Sec. 23-T15S-R17E) to the confluence with the Marais des Cygnes River (Sec. 32-T16S-R19E).

# EASTERN NARROWMOUTH TOAD

*Gastrophryne carolinensis*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

Adult Eastern Narrowmouth Toads are generally 1-1 1/4 inches long. Their color is a uniform brown to reddish brown. The belly is whitish with dark gray mottling. Males have a blackish throat.

This animal is restricted to extreme southeastern Kansas and is currently known only in the Ozark Plateau region of Cherokee County. It is a spring breeder utilizing clear, temporary, predator-free pools and shallows of well vegetated impoundments. It prefers areas of loose damp soil beneath large rocks and debris. May also be found around old buildings.

## SPECIES PROTECTION AND CRITICAL HABITATS

Eastern Narrowmouth Toads are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

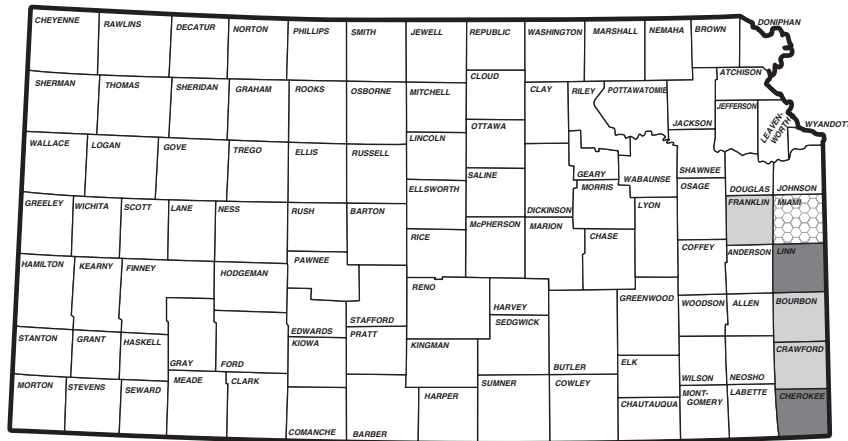
As defined by Kansas Administrative Regulation, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated as critical habitat for Eastern Narrowmouth Toad:

All suitable habitats within that portion of Cherokee County lying south and east of a line beginning at the Kansas-Missouri border at NE corner Sec. 36, T32S, R25E, then extending due west to the NW corner Sec. 32, T32S, R25E, then extending due south to the SW corner Sec. 17, T34S, R25E, then following US 66 southwest to the Kansas-Oklahoma border at the NW/4 Sec. 13, T35S, R24E.

# EASTERN NEWT

*Notophthalmus viridescens*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Eastern Newt is the only Kansas salamander to go through larvae, eft, and adult stages of development. Adults are aquatic preferring ponds, small lakes, marshes, and water-filled ditches. Larvae are also aquatic and live in small weedy pools. Efts are terrestrial, living under moist debris on the woodland floor.

Adults have a distinct yellow belly with small black dots while their head, body, limbs, and tail are olive-green to brown with small black dots.

Current probable range for the Eastern Newt in Kansas is restricted to lowlands within the lower Marais des Cygnes River basin, the Spring River basin, and the lower reach of the Neosho River basin within the Cherokee Plain Region of southeast Kansas.

## SPECIES PROTECTION AND CRITICAL HABITATS

Eastern Newts are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are considered critical for Eastern Newts:

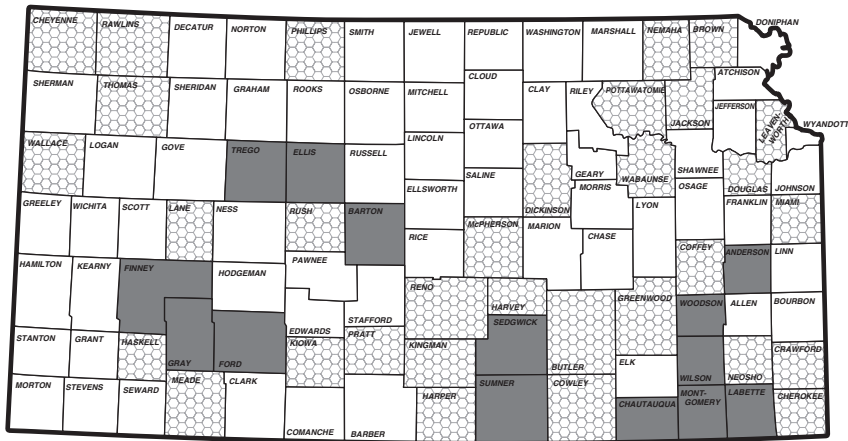
All suitable wetlands, waters, and moist wooded bottomlands occurring within that portion of Cherokee County lying south and east of a line starting at the Kansas-Missouri border at Kansas Highway 96 in the SE 1/4 Sec. 12, T33S, R25E, then extending west along K-96 to its junction with Kansas Highway 26 at the NE corner Sec. 18, T33S, R25E, then south along K-26 to its junction with U.S. Highway 66 at SE corner Sec. 18, T34S, R25E, then south and west along U.S. 66 to the Kansas-Oklahoma border at Sec. 14, T35S, R24E.

All suitable wetlands, water and moist wooded bottomland occurring within 5 air miles of the Marais des Cygnes Wildlife Area, Linn County.

# EASTERN SPOTTED SKUNK

*Spilogale putorius*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This small (16-23 inches) skunk is more weasel-like in body shape than the more familiar striped skunk. The Spotted Skunk's strips are broken in pattern, giving it a "spotted" appearance.

Spotted Skunks seem to prefer forest edges and upland prairie grasslands, especially where rock outcrops and shrub clumps are present. In western counties, it relies heavily on riparian corridors where woody shrubs and woodland edges are present. Woody fencerows, odd areas, and abandoned farm buildings are also important habitat for Spotted Skunks.

Spotted Skunks may occur in suitable habitat anywhere in the state. The marked counties are those for which occurrence has been documented or within which critical habitat has been designated.

## SPECIES PROTECTION AND CRITICAL HABITATS

Eastern Spotted Skunks are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

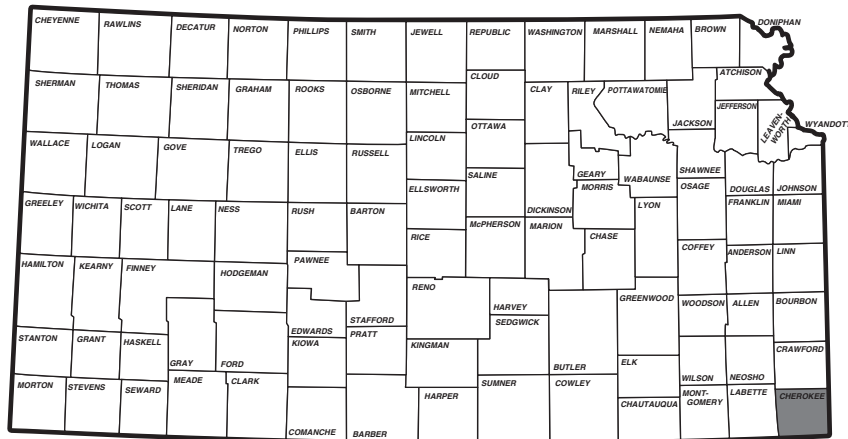
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Eastern Spotted Skunks:

- (1) All suitable habitat within Barton, Anderson, Woodson, Wilson, Chautauqua, Montgomery, and Labette counties.
- (2) All suitable habitats within the Cowskin Creek and Big Slough drainage basins located in Sedgwick and Sumner counties.
- (3) All suitable habitat within a riparian corridor along the main stem Arkansas River in Finney, Ford, and Gray counties. The corridor's outermost boundary is along a line 0.5 mile landward from the named stream's ordinary high water mark on each bank.
- (4) All suitable habitats within the Big Creek drainage basin located in Ellis and Trego counties.

# ELKTOE MUSSEL

*Alasmidonta marginata*

## RANGE MAP

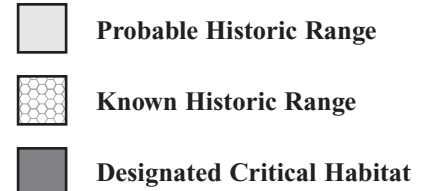


## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY



## SPECIES DESCRIPTION

This freshwater mussel has an elongated, moderately fat shell. When the dorsal margin is viewed straight on, the outline appears shaped like an elk or deer track. The shell is usually yellow to light brown with numerous greenish zig-zag rays and dots on the outer surface. Internal color is white or iridescent. Maximum length is about four inches.

The species is an obligate riverine species that prefers silt to gravel substrate in moderate flowing streams. Historically it occurred in the Spring and Marais des Cygnes Rivers. It is declining to the point that only a few specimens have been found in the Spring River in recent years.

## SPECIES PROTECTION AND CRITICAL HABITATS

Elktoe Mussels are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

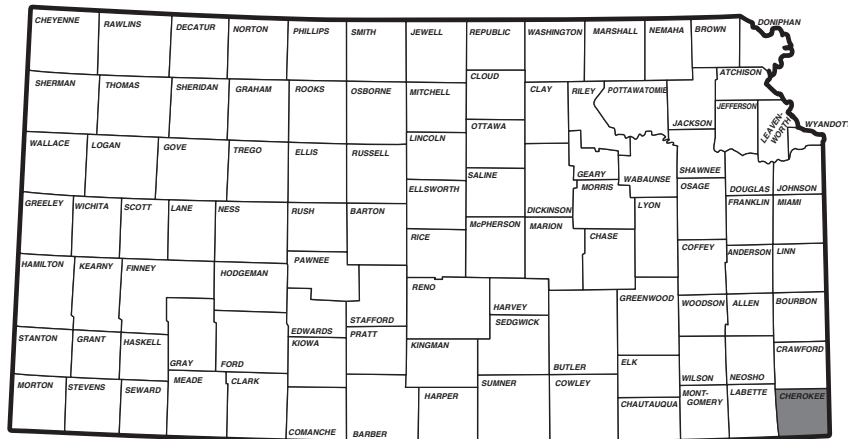
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Elktoe Mussels:

- (1) The main stem of the Spring River in Cherokee County (Sec. 1-T33S-R25E) to U.S. 66 (Sec. 17-T34S-R25E).

# ELLIPSE MUSSEL

*Venustaconcha ellipsiformis*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This freshwater mussel has a moderately thick shell which is elliptical and elongated. It grows to approximately 2.5 inches. The exterior is yellowish-brown to chestnut with many wavy green rays on the posterior half. The interior is mostly white with the center salmon to coppery colored.

The species is an obligate riverine species that prefers clean streams with moderate flow over gravel substrate. The population only occurs in the Spring River.

## SPECIES PROTECTION AND CRITICAL HABITATS

Ellipse Mussels are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

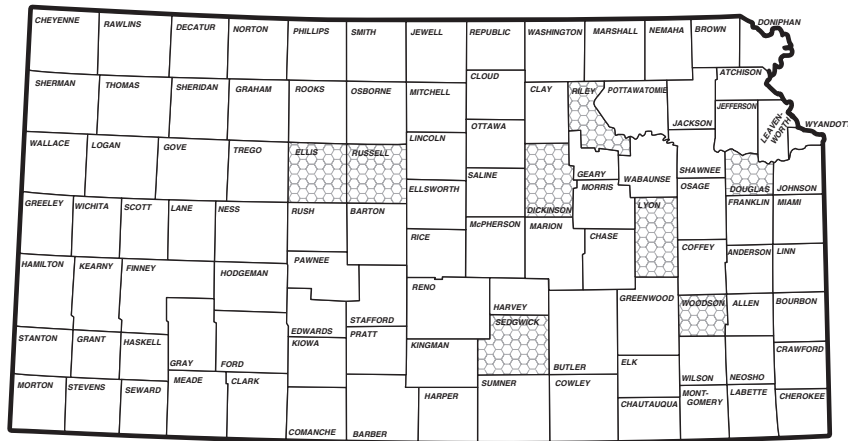
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Ellipse Mussels.

- (1) The main stem of the Spring River in Cherokee County from the Missouri/Kansas border (Sec. 1-T33S-R25E) to U.S. 66 (Sec. 17-T34S-R25E).

# ESKIMO CURLEW

*Numenius borealis*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** Endangered

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Eskimo Curlew is an upland shorebird and the smallest of the North American curlews. It is 12-14 inches long, including its 2-2.5 inch slightly decurved bill, and has a 26-30 inch wingspread. Its general color is buff to pale cinnamon-brown, darker on the back and lighter below. There is a very light stripe over the eye. The bill is black and legs are dark green.

Eskimo Curlews were formerly a regular spring transient through the eastern half of the state. When resting or foraging, the birds preferred plowed fields heavily grazed or burned-over grasslands, and prairie-dog towns where they fed on invertebrates.

Historically, Eskimo Curlews have only been recorded in the marked counties, but they undoubtedly did occur over all the eastern two-thirds of Kansas during migration. The last verified sighting in Kansas was from a Wichita resident in 1902.

## SPECIES PROTECTION AND CRITICAL HABITATS

Eskimo Curlews are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time a project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements under Kansas' statutes. Sponsors of projects impacting Eskimo Curlew habitats must also contact the Endangered Species Specialist, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife.

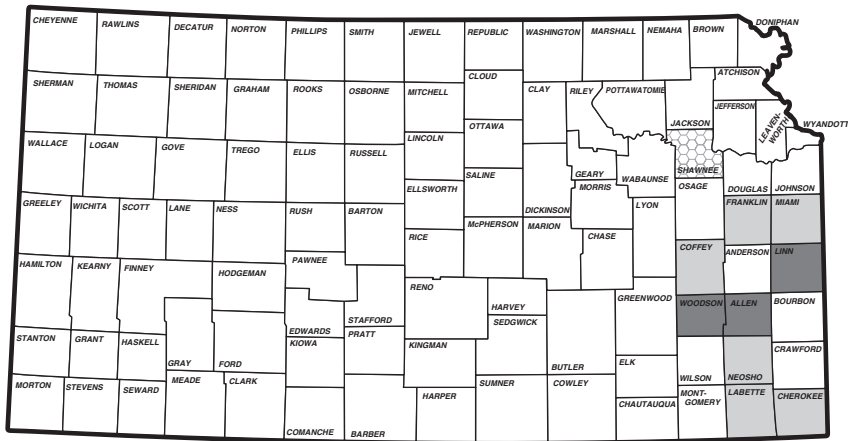
Eskimo Curlews formerly migrated through Kansas in the Spring. There have been no sightings in Kansas since 1902. Department of Wildlife & Parks personnel investigate all reported sightings, but the bird is considered extirpated from the state. There is currently no designated critical curlew habitat in the state.

The U.S. Fish and Wildlife Service also has authority to designate areas of critical habitat for federally listed endangered species, but has not done so for Eskimo Curlew in Kansas.

# FLAT FLOATER MUSSEL

*Anodonta suborbiculata*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Flat Floater is a large, thin-shelled mussel, often reaching 7+ inches long in 5-7 years. The shell is roundly oval in outline and moderately inflated. Color is straw-yellow to dark brown. Nacre (inside color) is iridescent light salmon colored.

In Kansas, the Flat Floater seems to prefer shallow areas of relatively permanent oxbow lakes having organically rich mud bottoms. This preferred habitat is subject to water level changes due to fluctuations in runoff water and flood flows that recharge oxbow lakes. Flat Floaters appear, however, to be able to repopulate suitable areas when favorable habitat conditions return.

The current probable range of the Flat Floater in Kansas is restricted to the lower reaches of the Neosho and Marais des Cygnes Rivers.

## SPECIES PROTECTION AND CRITICAL HABITATS

Flat Floater Mussels are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Flat Floater Mussels:

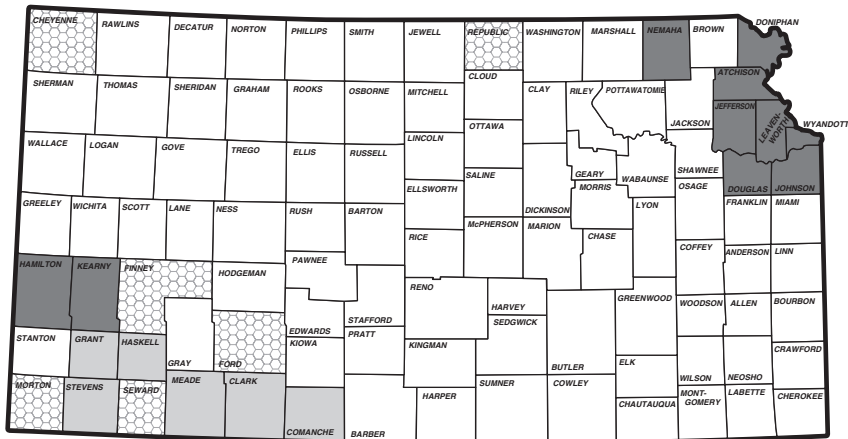
All oxbow lakes within the following described land parcels:

- (1) NE 1/4 Sec. 32 and N 1/2 and SE 1/4 Sec. 33 in T26S, R18E, Allen County.
- (2) All water within the Marais des Cygnes Wildlife Area located in Linn County.
- (3) E 1/2 Sec. 7 and Secs. 25, 34, 35 in T20S, R24E; Secs. 1, 2 in T21S, R24E, and NE 1/4 Sec. 10, T21S, R25E, Linn County.
- (4) SE 1/4 Sec. 20, SW 1/4 Sec. 21, NW 1/4 Sec. 28, NE 1/4 Sec. 29, SE 1/4 Sec. 33 in T23S, R17E, and Sec. 3, NE 1/4 Sec. 4 in T24S, R17E, Woodson County.

# FLATHEAD CHUB

*Platygobio gracilis*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Flathead Chub is one of the larger chub species growing to 9 inches. It has a broad wedge-shaped head, large mouth, and one small barbel on each side of the mouth. Its color is light greenish or brown on the back and plain silvery on the sides.

Flathead Chubs formerly occurred in the main stems of the Missouri, lower Kansas, Republican, Arkansas, and Cimarron Rivers. The only recently documented populations of this species in Kansas were found in the extreme upper reaches of the Arkansas River and in the S. Fork Nemaha River. They are known to still occur in out-of-state reaches of the Arkansas and Cimarron Rivers so may still occur in Kansas during high flow periods.

The Flathead Chub occurs from the Rio Grande to the Arctic Circle in small creeks and the largest rivers that have turbid fluctuating water levels and unstable sand bottoms. As with several other plains fishes, the chub relies on flood flows to successfully spawn.

## SPECIES PROTECTION AND CRITICAL HABITATS

Flathead Chubs are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

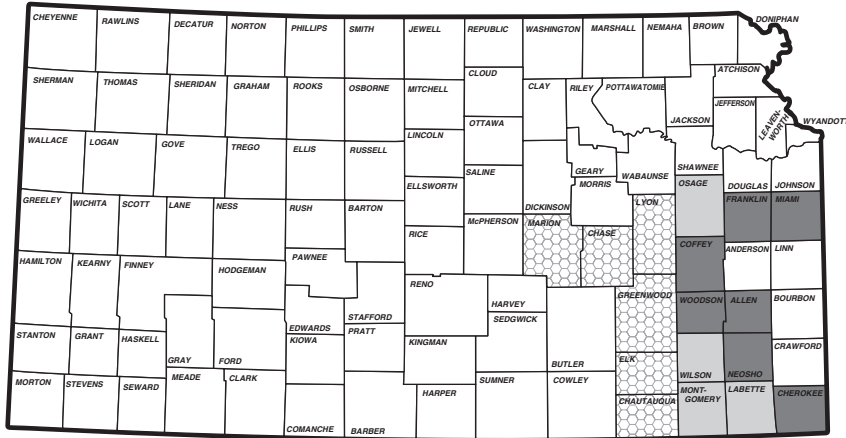
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Flathead Chubs:

- (1) All reaches of the main stem Arkansas River located within Hamilton and Kearny counties.
- (2) All reaches of the main stem of the Kansas River from the point it enters Douglas County at River Mile 71.3 to its confluence with the main stem Missouri River.
- (3) All reaches of the main stem Missouri River congruent with the Kansas-Missouri border.
- (4) All reaches of the main stem South Fork Nemaha River from Highway K-63 in Sec. 23, T3S, R12E, to the Kansas-Nebraska border, all in Nemaha County.

# FLUTEDSHELL MUSSEL

*Lasmigona costata*

## RANGE MAP

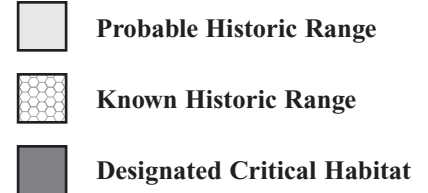


## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY



## SPECIES DESCRIPTION

This freshwater mussel is moderate to thin shelled, elongate to quadrate in shape with a size of approximately 6 inches. The interior color is white to iridescent and external color ranges from tan to black with indistinct broad green rays. The shell is covered by small ridges.

The species is an obligate riverine species preferring clear water riffles with moderate current on substrate of medium to small sized gravel. Historically occurred in the Fall, Elk, Verdigris, Cottonwood, Spring and Marais des Cygnes Rivers. It still occurs in the same watersheds, but at greatly reduced numbers and distribution.

## SPECIES PROTECTION AND CRITICAL HABITATS

Flutedshell Mussels are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

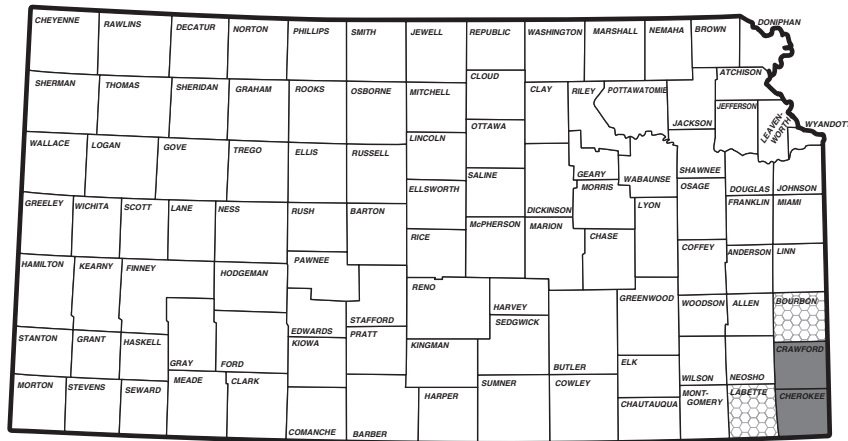
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Flutedshell Mussels:

- (1) The main stem of the Spring River in Cherokee County (Sec. 1-T33S-R25E) to U.S.66 (Sec.17-T34S-R25E).
- (2) Shoal Creek in Cherokee County from the Missouri border (Sec. 36-T34S-R25E) to K-26 (Sec. 35-T34S-R25E).
- (3) The main stem of the Neosho River from K-57 in Coffey County (Sec. 33-T22S-R16E) to K-59 in Neosho County (Sec. 6-T29-R20E).
- (4) The main stem of Pottawatomie Creek from where it enters Franklin County (Sec. 16-T19S-R21E) into Miami County to the confluence with the Marais des Cygnes River (Sec. 12-T18S-R22E).

# GRAY MYOTIS

*Myotis grisescens*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** Endangered

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Gray Myotis is the largest of the *Myotis* species occurring in the eastern U.S. It is distinguished from all other bats within its range by its unicolored grayish brown dorsal fur. All other eastern bats have bi- or tri-colored fur on their backs.

The Gray Myotis is almost totally cave dwelling and occupies a limited geographic range in limestone cave regions of the southeastern U.S. In Kansas, the only known populations are dependent on storm sewers within the Cherokee Plain region in the southeast corner of the state. Nearby streams with adjacent woodlands provide critical foraging habitat. These bats seem to especially utilize woody stream corridors and even linear tree plantings as travel lanes between storm sewer openings and their preferred foraging areas. Foraging is generally over water.

## SPECIES PROTECTION AND CRITICAL HABITATS

Gray Myotis are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements under Kansas statutes. Sponsor of projects impacting Gray Myotis habitats must also contact the Endangered Species Specialist, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, KS 66502.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Gray Myotis:

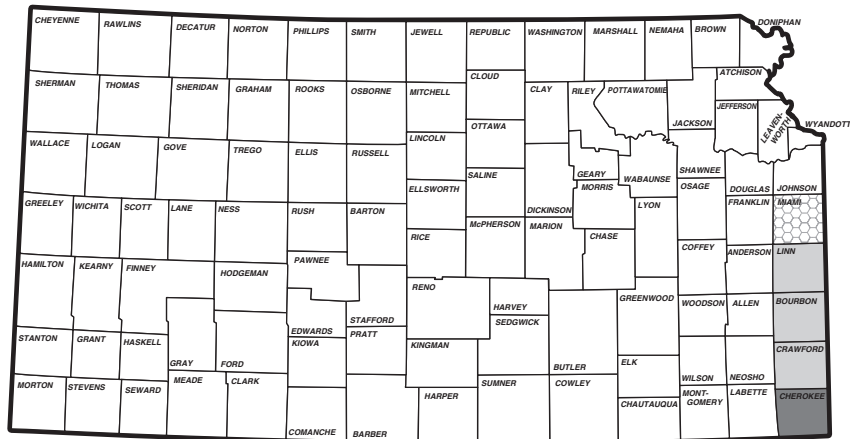
- (1) All portions of the storm sewer system under the City of Pittsburg in Crawford County that were in place as of May 1, 1981.
- (2) All suitable woodlands and water bodies within that portion of Crawford County encircled by a line beginning at the Kansas-Missouri border in NE/4 Sec. 24, T29S, R25E, then extending due west to the NW corner Sec. 19, T29S, R24E, then due south to the SW corner Sec. 18, T31S, R24E, then due east to the Kansas-Missouri border at the SE/4 Sec. 13, T31S, R25E, then due north along the Kansas-Missouri border to the point of origin.
- (3) All woodlands and waters within a corridor along the main stem Cow Creek from its entry into Cherokee County at Sec. 21, T31S, R25E to its confluence with Spring River in Sec. 2, T33S, R25E, Cherokee County. The outermost boundaries of the corridor shall be along lines 150 yards landward from the stream's ordinary high water mark on the right and left banks respectively.
- (4) All woodlands and waters within a corridor along the main stem Spring River from its point of entry into Kansas at Sec. 1 T33S, R25E, to the Kansas Highway K-96 crossing in the S 1/2 Sec. 11, T33S, R25E, all in Cherokee County. The outermost boundaries of the corridor shall be along lines 150 yards landward from the stream's ordinary high water mark on the right and left banks respectively.

The U.S. Fish and Wildlife Service has authority to designate areas of critical habitat for federally listed endangered species, but has not done so for Gray Myotis in Kansas.

# GREEN FROG

*Rana clamitans*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

An adult Green Frog is 3-4 inches long. Its color is olive to olive-brown above, generally uniform, but may sometimes be marked with small black spots on the back. The belly and throat are white.

In Kansas, the Green Frog appears to prefer streams, brooks and adjacent backwater areas. The animal may also be found along edges of small impoundments and water-filled ditches and strip pits.

Kansas is at the edge of the Green Frog's continental range. Its probable range in Kansas is the eastern most tier of counties south from the Marais des Cygnes River Basin. The only currently known populations occur in the Spring River Basin in Cherokee County.

## SPECIES PROTECTION AND CRITICAL HABITATS

Green Frogs are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Green Frogs:

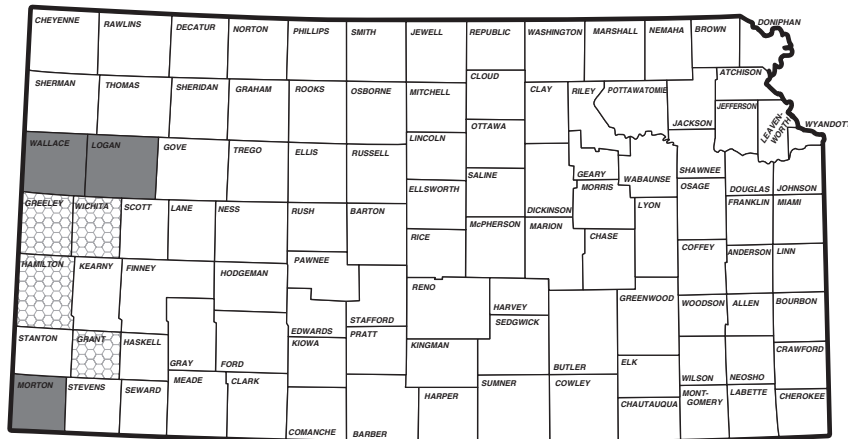
(1) All waters and wetlands within or upon the main stem Spring River channel and adjacent flood plain from the river's point of entry into Cherokee County at Sec. 1, T33S, R25E, to its point of departure at Sec. 18, T35S, R25E.

(2) All waters and wetlands within or upon the main stem Shoal Creek Channel and adjacent flood plain from the creek's point of entry into Cherokee County at Sec. 36, T34S, R25E, to its confluence with Spring River at Sec. 19, T34S, R25E.

# GREEN TOAD

*Bufo debilis*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Green Toad is a small (1-2 inch) brightly colored toad. Its ground color is green to greenish yellow, with yellow spots surrounding brown tipped warts, and having randomly scattered black spots or streaks. The belly is yellowish and may have dark spots.

The continental range of the Green Toad extends from western Kansas south into central Mexico. The animal is restricted to the short grass prairies on the high plains, typically not found below elevations of 3,000 feet. In Kansas, the toad is currently known from isolated populations in three counties.

The preferred habitat for Green Toad is arid grassland plains and valleys with few or no trees or shrubs. Soils with good water holding capacity seem to be required. During unfavorable climatic periods, the animals seek refuge underground in rodent burrows, ant nests, or cracks in the soil surface. Conversion of prairie to cropland has been and continues to be the major threat to the species.

## SPECIES PROTECTION AND CRITICAL HABITATS

Green Toads are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

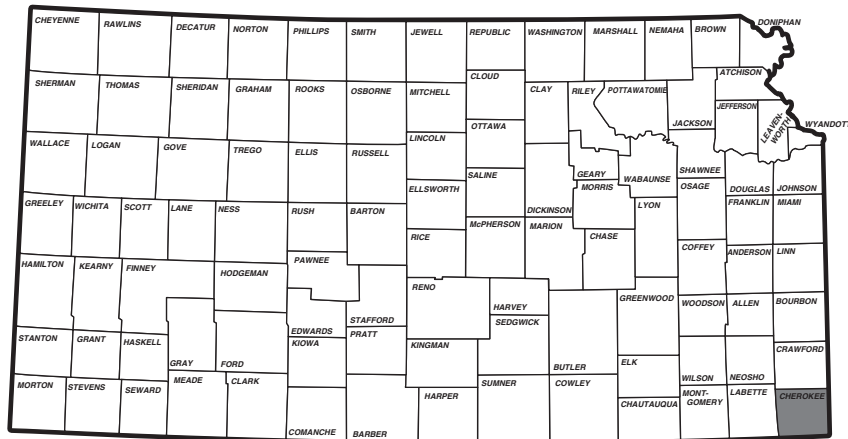
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Green Toads:

- (1) All native prairie lands and waters within an area encircled by a line beginning on the Logan-Wichita County line at SE corner Sec. 36, T15S, R37W, then extending due north to the Smoky Hill River at Sec. 24, T13S, R37W, then continuing westerly along the Smoky Hill River to the Kansas Highway K-27 crossing at Sec. 27, T13S, R40W, Wallace County, then southerly along Kansas Highway K-27 to the Wallace-Greeley County line at SW corner Sec. 35, T15S, R40W, then due east along the county lines to the point of origin at SE corner Sec. 36, T15S, R37W. This area contains lands and waters in Logan and Wallace counties.
- (2) All suitable habitat within the Cimarron National Grasslands in Morton County.

# GROTTO SALAMANDER

*Typhlotriton spelaeus*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

Grotto Salamanders are 3-5 inches long and have a brownish purple to pinkish white body color. Adults are blind and are found only in cave interiors. Larvae of this species have functional eyes and live in streams or spring flows near cave openings.

The only known Kansas populations of Grotto Salamanders are found in the Ozark Plateau region of Cherokee County.

## SPECIES PROTECTION AND CRITICAL HABITATS

Grotto Salamanders are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

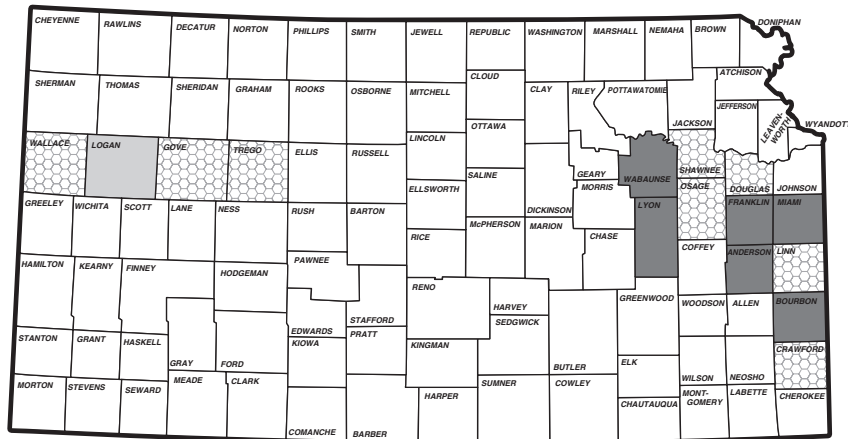
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Grotto Salamanders:

All caves and associated spring flows within that portion of Cherokee County lying south and east of a line beginning at the Kansas-Missouri border junction with U.S. Highway 66 at Sec. 13, T34S, T25E, then extending westerly and southerly along U.S. 66 to the Kansas-Oklahoma border at Sec. 14, T35S, R24E.

# HORNYHEAD CHUB

*Nocomis biguttatus*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Hornyhead Chub is one of Kansas' largest native minnows, attaining a length of 6-8 inches. This fish is quite similar to the more common creek chub. In color, it is dusky to black above and silvery below. It has a large mouth. Adult males have a red spot behind the eye. There is a round blackish spot at the base of the tail fin.

The Hornyhead Chub formerly occurred in small to medium sized, moderate to low gradient, clear gravelly streams throughout most of the Kansas River and Marais des Cygnes River basins. It prefers pools and slow to moderate runs and is often associated with aquatic plants. Requires gravel areas free of silt for spawning. Spawns from late April through early July.


## SPECIES PROTECTION AND CRITICAL HABITATS

Hornyhead Chubs are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Hornyhead Chubs:

- (1) The main stem Pottawatomie Creek from its confluence with Cherry Creek in Sec. 7, T21S, R18E, Anderson County to its confluence with the Marais des Cygnes River in Sec. 12, T18S, R22E, Miami County.
- (2) The main stem Cedar Creek from its point of entry into the Sec. 1, T22S, R18E, to its confluence with Pottawatomie Creek at Sec. 1, T20S, R19E, Anderson County.
- (3) The main stem South Fork Pottawatomie Creek from its point of entry into Sec. 27, T21S, R20E, to its confluence with Pottawatomie Creek at SW Corner Sec. 19, T19S, R21E, Anderson County.
- (4) The main stem Elm Creek from its point of entry into the NW/4 Sec. 31, T14S, R12E, Wabaunsee County, into Lyon County through Sec. 3, T16S, R12E.
- (5) Locust Creek from its point of entry into NW/4 Sec. 2, T15S, R11E to the confluence of Elm Creek (NE/4, Sec. 7, T15S, R12E) Wabaunsee County.
- (6) Hickory Creek from Highway 68 crossing (Sec. 36, T16S, R20E), Franklin County to the confluence of Marais des Cygnes River (Sec. 8, T17S, R21E).



(7) The main stem of Marmaton River in Bourbon County from Highway 3 crossing (Sec. 27, T25S, R22E), into the City of Fort Scott (Sec. 30, T25S, R25E).

(8) Mill Creek from Highway 54 crossing (Sec. 23, T25S, R25E) into the City of Fort Scott, at the confluence of the Marmaton River (Sec. 30, T25S, R25E), Bourbon County.

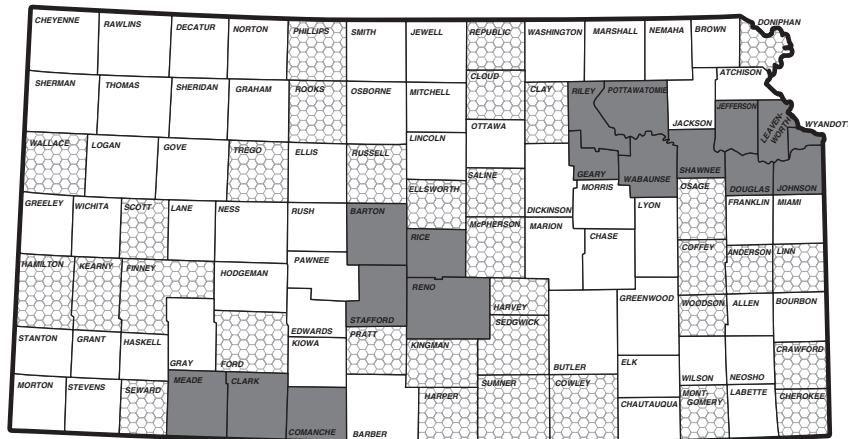
(9) Pawnee Creek from the south point of entry into Sec. 18, T26S, R24E, to the confluence of the Marmaton River in Bourbon County (Sec. 7, T26S, R24E).

(10) North Wea Creek and tributaries in Miami County from where it crosses the Johnson/Miami county line (Sec. 19, T15S, R25E) to State Highway 68 (Sec. 29, T16S, R24E).

# LEAST TERN

*Sterna antillarum*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** Endangered

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This smallest of the North American terns is 8-10 inches long with a wingspread of about 20 inches. The adult is white below and grayish above with a black cap and white forehead. The leading edge of the wing primaries is also black.

Least Terns are summer residents in Kansas. Nesting birds have been recorded in six central and western Kansas counties, Jeffery Energy Center and along the Kansas River. Terns require barren areas near water such as saline flats in salt marshes, sand bars in river beds, and shores of large impoundments. A dependable food supply of small fish and aquatic crustaceans must be nearby.

Least Terns may occur accidentally or occasionally as transients anywhere in the state. The marked counties are the only ones for which reliable records are known.

## SPECIES PROTECTION AND CRITICAL HABITATS

Least Terns are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time a project is proposed that will likely impact the critical habitats designated below, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife & Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements under Kansas statutes. Sponsors of project impacting Least Tern habitats must also contact the Endangered Species Specialist, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Least Terns:

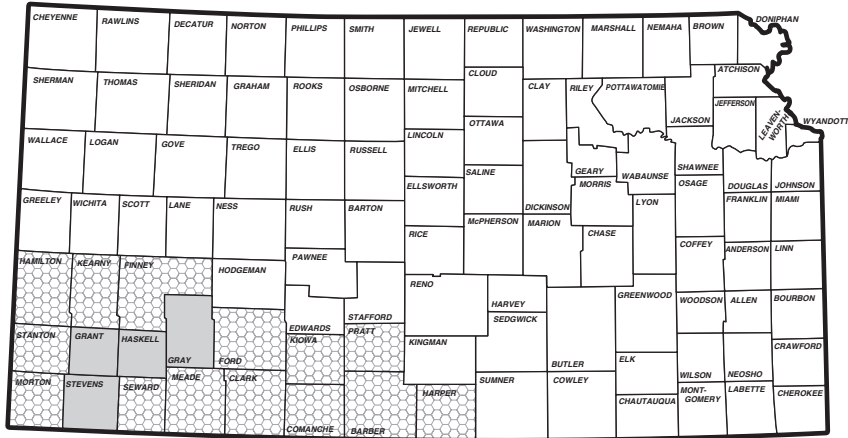
- (1) All lands and waters within the current active main stem channel of those reaches of the Cimarron River located in Clark, Comanche, and Meade counties.
- (2) All lands and waters within the boundaries of Cheyenne Bottoms Wildlife Area in Barton County.
- (3) All lands and waters within Quivira National Wildlife Refuge in Stafford, Reno, and Rice counties.
- (4) In Pottawatomie County, all lands and water within 5 miles of the Jeffery Energy Center, (Secs. 6 & 7, T9S, R12E) and (Secs. 1, 12, T9S, R11E).
- (5) All the waters within a corridor along the main stem of the Kansas River from the confluence of the Smoky Hill River and Republican River on Fort Riley in Geary County to the confluence of the Missouri River in Kansas City, Wyandotte County.

The U.S. Fish and Wildlife Service has authority to designate areas of critical habitat for federally listed endangered species, but has not done so for Least Terns in Kansas.

# LONGNOSE SNAKE

*Rhinocheilus lecontei*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Longnose Snake grows to a length of 22-30 inches. It has smooth scales, a single anal scale, and at least half the scales on the underside of the tail not divided into rows. The snake's ground color is yellowish or cream with black blotches on the body separated by pink or reddish interspaces.

Texas Longnose Snakes prefer grassy or brushy, semiarid regions. Open prairies with sandy soils and/or rocky canyons in southwestern counties provide suitable habitat.

## SPECIES PROTECTION AND CRITICAL HABITATS

Longnose Snakes are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

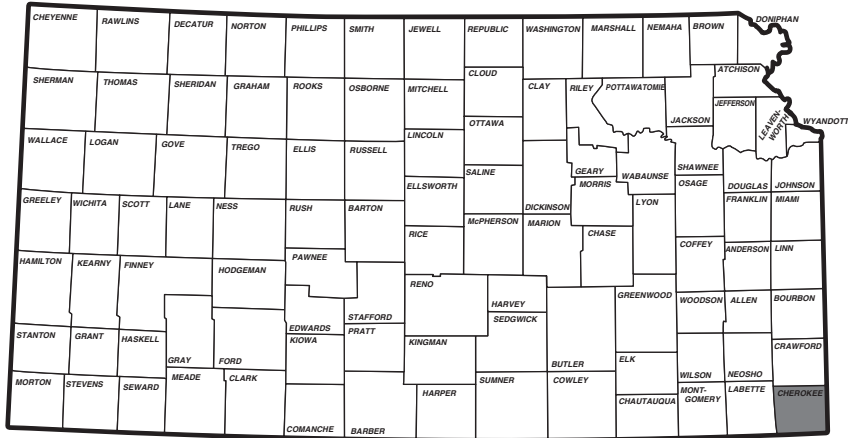
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Longnose Snakes:

Knowledge of current Longnose Snake populations is too limited to designate specific areas of critical habitat.

# LONGTAIL SALAMANDER

*Eurycea longicauda*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

Adult Longtail Salamanders vary from 3.5 to 6 inches in length. The back and head are brownish yellow to bright yellow. Black spots occur on the animal's back and may be scattered in pattern or arranged in a double row. Frequently, the dark spots coalesce on the sides of the body to form a dark lateral stripe. The underside is dull white.

In Kansas, the Longtail Salamander is known only from the Ozark Plateau region of southeast Cherokee County where it is restricted to moist areas near streams, in or near caves, and under rocks and debris where moisture is suitable.

## SPECIES PROTECTION AND CRITICAL HABITATS

Longtail Salamanders are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

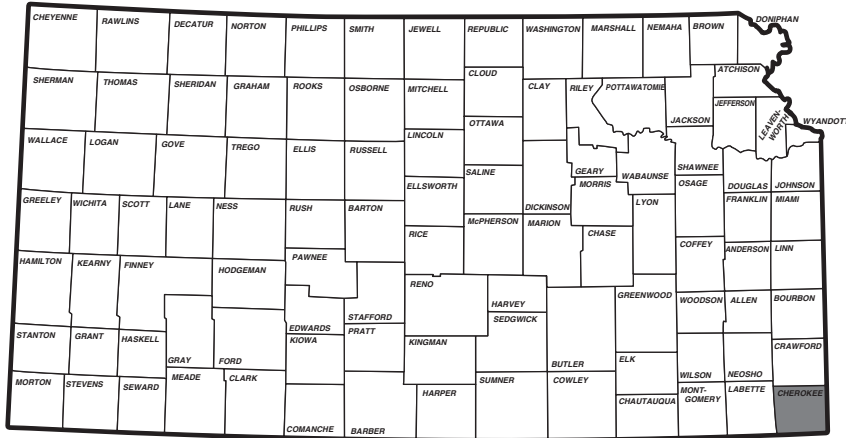
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical habitat for Longtail Salamanders:

All suitable wetlands, waters, and moist wooded bottom lands occurring within that portion of Cherokee County lying south and east of a line starting at the Kansas-Missouri border at Kansas Highway 96 in the SE 1/4 Sec. 12, T33S, R25E, then extending west along K-96 to its junction with Kansas Highway 26 at the NE corner Sec. 18, T33S, R25E, then south along K-26 to its junction with U.S. Highway 66 at SE corner Sec. 18, T34S, R25E, then south and west along U.S. 66 to the Kansas-Oklahoma border at Sec. 14, T35S, R24E.

# MANY-RIBBED SALAMANDER

*Eurycea multiplicata*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The extremely rare Many-ribbed Salamander is Kansas' smallest salamander being only 2-3 inches long. There is a broad brown stripe running from the head down the back. The back may have small dark brown chevrons marking the medial grooves on the back. The animal's belly is pale gray to lemon yellow. This species has been found only in larval form in Kansas. The animal is dependent upon cave streams or spring flows where rock crevices offer cover.

The Many-ribbed Salamander's range in Kansas is limited to the Ozark Plateau region of Cherokee County where it requires caves and associated spring flows. Very little is known about this creature's habits and habitat requirements.

## SPECIES PROTECTION AND CRITICAL HABITATS

Many-ribbed Salamanders are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

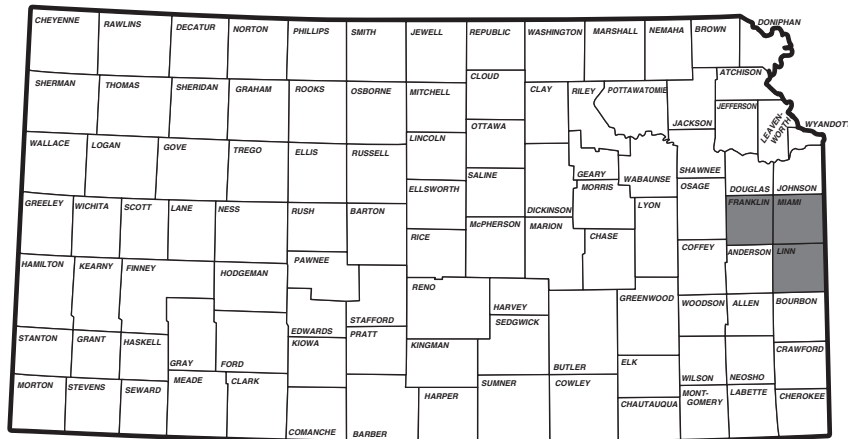
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Many-ribbed Salamanders:

All caves and associated spring flows within that portion of Cherokee County lying south and east of a line beginning at the Kansas-Missouri border junction with U.S. Highway 66 at Sec. 13, T34S, R25E, then extending westerly and southerly along U.S. 66 to the Kansas-Oklahoma border at Sec. 14, T35S, R24E.

# MUCKET MUSSEL

*Actinonaias ligamentina*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The shell of the mucket (mussel) is oblong and generally compressed or moderately inflated. The anterior end is rounded, while the posterior end is bluntly pointed. Shell thickness ranges from moderate in young to very thick in older specimens. The coloration is yellowish-brown with green rays. Maximum length is about eight inches.

Historically, the mucket was never widespread in Kansas, occurring along the Marais des Cygnes River from Osage County to the Missouri State line. The species is currently known from only two locales along the Marais des Cygnes River in Franklin and Miami counties. The species is generally found in large creeks and small to medium rivers with gravel, gravel-sand and gravel-silt substrates with moderate to swift currents. Adults will feed by filtering detritus and plankton from the water.

## SPECIES PROTECTION AND CRITICAL HABITATS

Mucket mussels are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

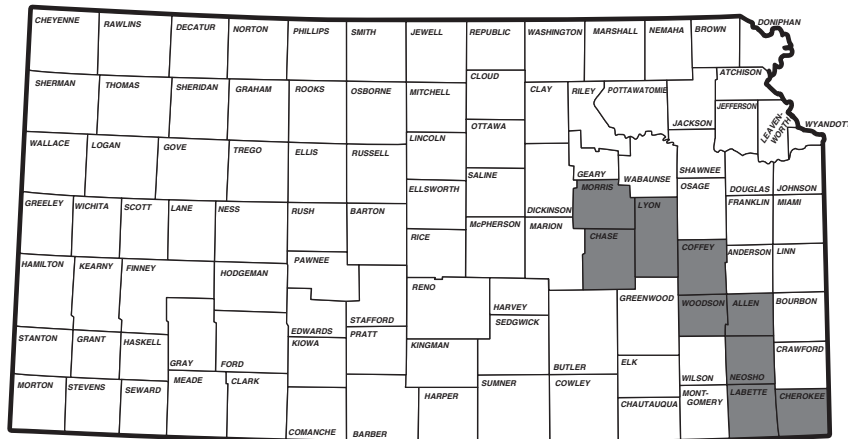
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Mucket Mussels:

- (1) Along the Marais des Cygnes River from the Osage/Franklin County line (Sec. 2, T17S, R17E) to the Linn County/Missouri State line (Sec. 13, T21S, R25E).

# NEOSHO MADTOM

*Noturus placidus*

## RANGE MAP

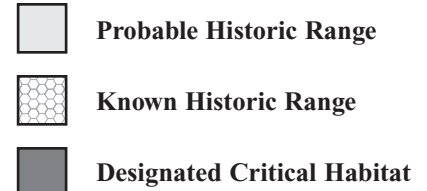


## STATUS

**KANSAS:** Threatened

**FEDERAL:** Threatened

## MAP KEY



## SPECIES DESCRIPTION

This is a small (3 in.) mottled dark-and light-brown catfish with dark bars on the tail and dusky streaks on the dorsal and anal fins. Neosho Madtoms are found only in riffles and along sloping gravel bars in relatively clear moderately-large rivers. Deep deposits of loose, 8-16 mm dia., rounded limestone gravel in moderate to swift currents seems to be preferred.

In Kansas, Neosho Madtoms are known only from the Cottonwood, Neosho, and Spring Rivers. They occasionally be locally abundant but exhibit fluctuating densities at any specific locality.

## SPECIES PROTECTION AND CRITICAL HABITATS

Neosho Madtoms are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements. Sponsors of projects impacting Neosho Madtom habitats must also contact the Endangered Species Office, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Neosho Madtoms:

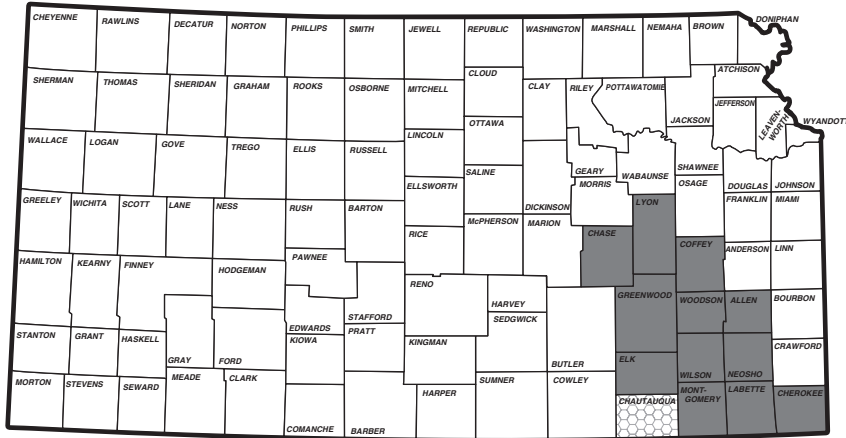
- (1) The main stem Cottonwood River from the point it enters Chase County at Sec. 1, T21S, R5E to its confluence with the Neosho River at Sec. 23, T19S, R12E, Lyon County.
- (2) The main stem Neosho River from its point of discharge from Council Grove Reservoir in Sec. 10, T16S, R8E, Morris County to the point it leaves Lyon County in Sec. 15, T20S, R13E.
- (3) The main stem Neosho River from its point of discharge from John Redmond Reservoir at Sec. 10, T21S, R15E. Coffey County to the Kansas-Oklahoma border at Sec. 18, T35S, R22E, Cherokee County.
- (4) The main stem Spring River from the Kansas-Missouri border to a point where it crosses the west boundary of Sec. 36, T33S, R25E, Cherokee County.
- (5) The main stem of the South Fork of the Cottonwood River in Chase County where it enters Sec. 14, T20S, R8E, until its confluence with the Cottonwood River (Sec. 25, T19S, R8E).

The U.S. Fish and Wildlife Service also has authority to designate areas of critical habitat for federally listed endangered species, but has not done so for Neosho Madtoms in Kansas.

# NEOSHO MUCKET MUSSEL

*Lampsilis rafinesqueana*

## RANGE MAP

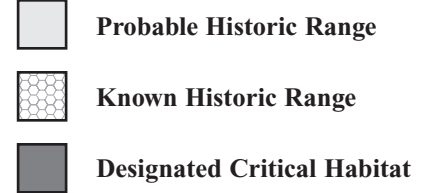


## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY



## SPECIES DESCRIPTION

This freshwater mussel is elongated with a slightly rounded shell. The shell is relatively thin, with a size of approximately 4 inches. There are prominent growth lines. The shell is light brown and has a dull, waxy luster; it usually becomes dark brown with age. Green rays usually cover the surface often chevron shaped during the first three years of growth.

The species is an obligate riverine species preferring shallow clean flowing water in fine to medium gravel substrates. Historically found in the Marais des Cygnes, Cottonwood, Spring, Neosho, Verdigris, Fall and Caney River systems. Currently appears to be extirpated from the Caney River and much reduced in numbers and distribution in the other river systems.

## SPECIES PROTECTION AND CRITICAL HABITATS

Neosho Mucket Mussels are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

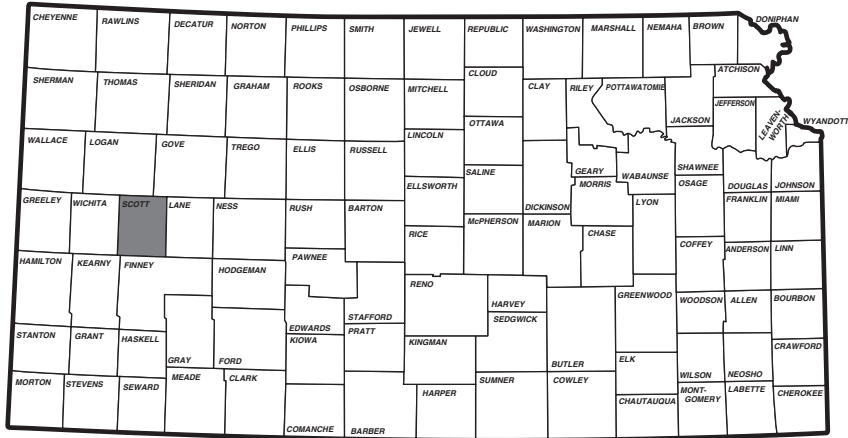
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Neosho Mucket:

- (1) The main stem of the Neosho River from K-57 in Coffey County (Sec. 33-T22S-R16E) to the Kansas/Oklahoma border in Cherokee County (Sec. 18-T35S-R22E).
- (2) The main stem of the Cottonwood River from Elmdale in Chase County (Sec. 26-T19S-R7E) to the confluence with the Neosho River in Lyon County (Sec. 23-T19S-R12E).
- (3) The main stem of Spring River in Cherokee County from the Missouri border (Sec. 1-T33S-R25E) to U.S.66 (Sec. 17-T34S-R25E).
- (4) Shoal Creek in Cherokee County from the Missouri border (Sec. 36-T34S-R25E) to Lowell (Sec. 29-T34S-R25E).
- (5) Fall River from K-96 in Greenwood County (Sec. 12-T28S-R12E) to the confluence of the Verdigris River in Wilson County (Sec. 33-T30S-R16E).
- (6) Verdigris River from K-39 in Wilson County (Sec. 10-T28S-R15E) to the Kansas/Oklahoma border (Sec. 18-T35S-R17E).

# OPTIOSERVUS RIFFLE BEETLE

*Optioservus phaeus*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

Both the adult and larval stages of this small (3 mm) black beetle are aquatic. The preferred habitat is the surface of stones on the substrate of well-oxygenated flowing water. Other debris and aquatic vegetation is used to a limited extent, particularly by larvae. The only known location for this beetle in Kansas is in a spring area within Scott State Park in Scott County.

## SPECIES PROTECTION AND CRITICAL HABITATS

Optioservus Riffle Beetles are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

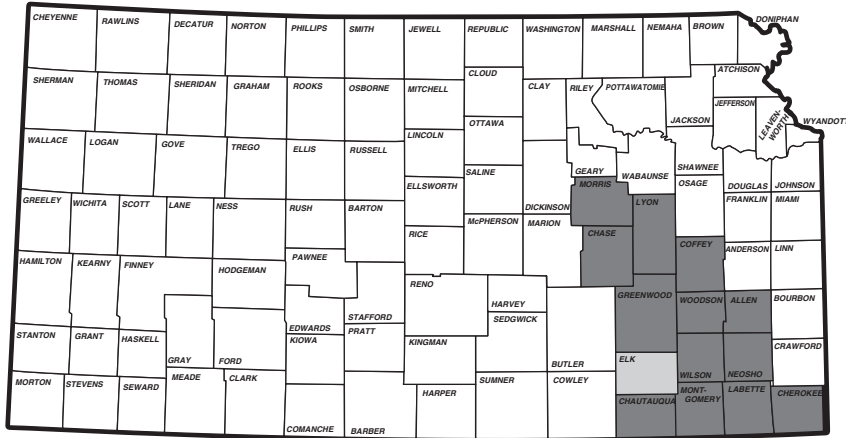
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Optioservus Riffle Beetles:

All springs and spring-fed streams that lie within Section 13, T16S, R33W, Scott County. These lands and waters are currently within the boundaries of Scott State Park.

# OUACHITA KIDNEYSHELL MUSSEL

*Ptychobranchus occidentalis*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This freshwater mussel has an elongated, compressed shell which is thick to moderately thick. The exterior color ranges from yellow to tan to brown with fine, wave rays over most of the shell. The inside of the shell is white. Maximum length is approximately 6 inches.

It is an obligate riverine mussel preferring gravel substrate with clean flowing water. Historically occurred in the main stems and major tributaries of the Verdigris, Neosho and Spring Rivers. It still occurs in many of these areas, but at much reduced numbers.

## SPECIES PROTECTION AND CRITICAL HABITATS

Ouachita Kidneyshell Mussels are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

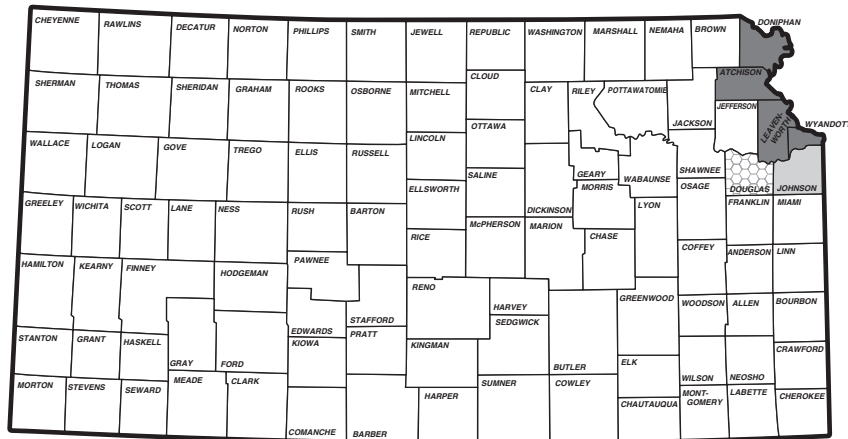
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Ouachita Kidneyshell Mussels:

- (1) The main stem of the Cottonwood River from the Marion/Chase County line (Sec. 1-T21S-R5E) to the confluence of the Neosho River in Lyon County (Sec. 23-T19S-R12E).
- (2) The main stem of the Caney River from the Elk/Chautauqua boundary (Sec. 6-T32S-R9E) to the Kansas/Oklahoma border (Sec. 16-T35S-R10E).
- (3) The main stem of the Spring River from the Missouri border in Cherokee County (Sec. 1-T33S-R25E) to U. S. 66 (Sec. 17-T34S-R25E).
- (4) The main stem of Shoal Creek from the Missouri border in Cherokee County (Sec. 36-T34S-R25E) to K-26 (Sec. 35-T34S-R25E).
- (5) The main stem of the Verdigris River from K-57 in Greenwood County (Sec. 16-T22S-R12E) to the Kansas/Oklahoma border (Sec. 18-T35S-R17E).
- (6) The main stem of the Neosho River from Council Grove Reservoir in Morris County (Sec. 10-T16S-R8E) to the Kansas/Oklahoma border (Sec. 18-T35S-R22E) in Cherokee County.

# PALLID STURGEON

*Scaphirhynchus albus*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** Endangered

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Pallid Sturgeon may reach a length of 60 inches, but no Kansas specimens have been seen that were longer than 30 inches. The belly is entirely naked of scales and the barbels across the snout are unequal in length, the outer pair being longer.

Pallid Sturgeons prefer the main channel of large excessively turbid rivers, frequenting areas of swift currents over firm sand substrate.

In Kansas, Pallid Sturgeons are restricted to the main stem of the Missouri River. Although Pallid Sturgeons have occurred in the Kansas River at Lawrence during flood flows, the river does not seem to provide permanent suitable habitat.

## SPECIES PROTECTION AND CRITICAL HABITATS

Pallid Sturgeons are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements. Sponsors of projects impacting Pallid Sturgeon habitats must also contact the Endangered Species Specialist, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining populations(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Pallid Sturgeons:

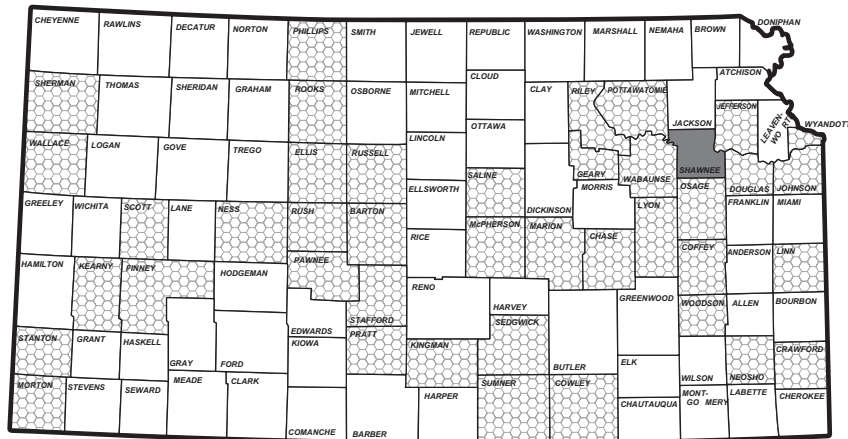
- (1) All Kansas reaches of the main stem Missouri River that are congruent with the Kansas-Missouri border.

The U.S. Fish and Wildlife Service also has authority to designate areas of critical habitat for federally listed endangered species, but has not done so for Pallid Sturgeons.

# PEREGRINE FALCON

*Falco peregrinus*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The crow-sized Peregrine has the pointed wings, narrow tail, and quick wingbeat typical of all falcons. Adults have slaty-blue colored backs, bars and spots below, and heavy black face pattern appearing as dark sideburns.

Peregrine Falcons are uncommon transients and occasional winter residents. They typically prefer to locate near marshes, lakes, and rivers where concentrations of waterfowl or other birdlife provide ample prey. In 1993, a pair of Peregrine Falcons started a nesting tradition on top of a building in downtown Topeka.

Peregrines may occur anywhere in the state. The marked counties are the only ones for which observation records are known.

## SPECIES PROTECTION AND CRITICAL HABITATS

Peregrine Falcons are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements. Sponsors of projects impacting Peregrine Falcon habitats must also contact the Endangered Species Specialist, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife.

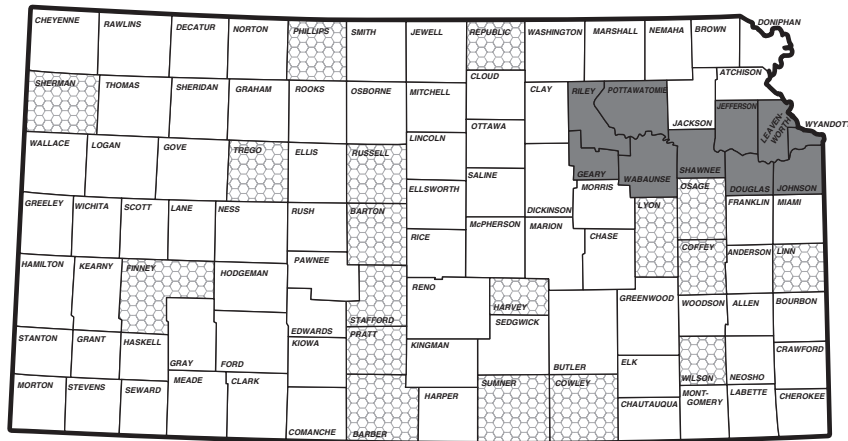
All 5 story and higher buildings within the city limits of Topeka, Shawnee County.

The U.S. Fish and Wildlife Service has authority to designate areas of critical habitat for federally listed endangered species, but has not done so for Peregrine Falcons in Kansas.

# PIPING PLOVER

*Charadrius melodus*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** Threatened

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Piping Plover is a small (6-7 inches long) whitish plover the color of dry sand. It has a narrow black band above the forehead which reaches from eye to eye, a complete or incomplete dark ring around the neck, and yellow legs. In summer, the bill is yellow with a dark tip. In winter bill and legs are dark.

Piping Plovers are rare migrants through Kansas. They require sparsely vegetated shallow wetlands and open beaches and sandbars adjacent to or within streams and impoundments. Nesting has been recorded on sand bars along the Kansas River.

Piping Plovers may occur occasionally anywhere in the state where suitable habitat is found. The marked counties are the only ones for which observation records are known.

## SPECIES PROTECTION AND CRITICAL HABITATS

Piping Plovers are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements under Kansas' statutes. Sponsors of projects impacting Piping Plover habitats must also contact the Endangered Species Specialist, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Piping Plovers:

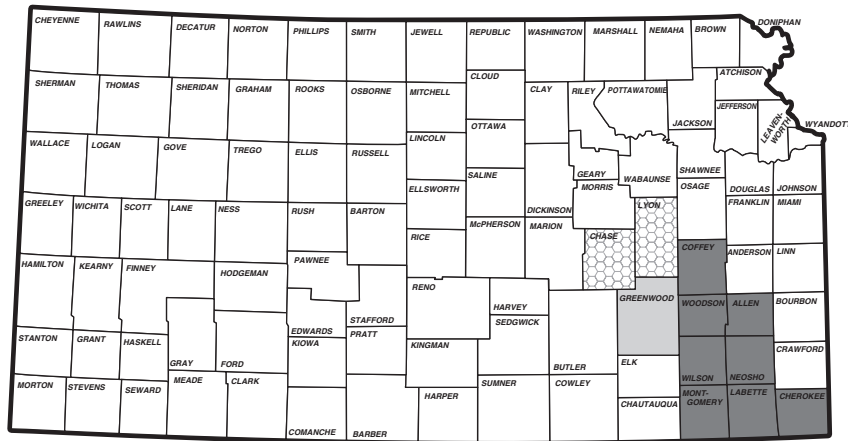
All the waters within a corridor along the main stem of the Kansas River from the confluence of the Smoky Hill River and Republican River on Fort Riley in Geary County to the confluence of the Missouri River in Kansas City, Wyandotte County.

The U.S. Fish and Wildlife Service has authority to designate areas of critical habitat for federally listed threatened species, but has not done so for Piping Plovers in Kansas.

# RABBITSFOOT MUSSEL

*Quadrula cylindrica*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This freshwater mussel is an elongated, rectangular shaped shell, moderately inflated with thick to moderately thick shell. The posterior ridge has longer, distinctive knobs. The exterior of the shell is olive, sometimes yellow-brown and is usually covered with dark green or black triangles. The nacre (inside of shell) is white. The shell can reach a maximum length of 4 inches.

A riverine mussel requiring clear streams with gravel substrate and moderate, stable currents. Historically occurred in the Neosho, Spring and Verdigris Rivers. Currently several known populations occur in the Neosho and Spring Rivers.

## SPECIES PROTECTION AND CRITICAL HABITATS

Rabbitsfoot Mussels are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

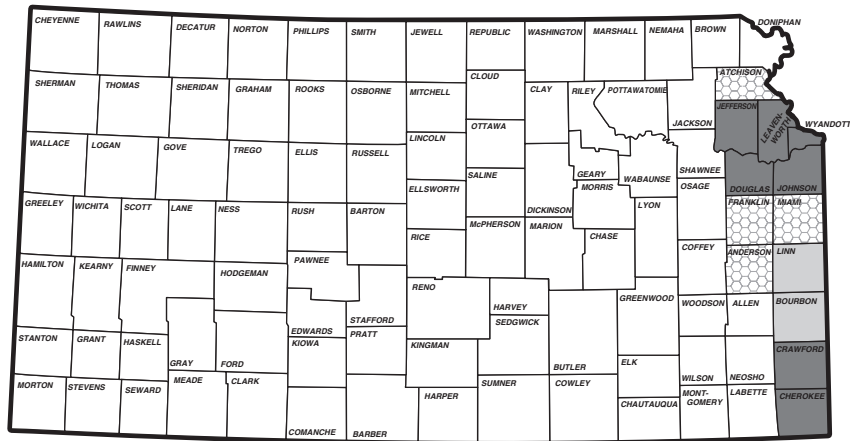
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Rabbitsfoot Mussels:

- (1) The main stem of the Neosho River from John Redmond dam in Sec. 10-T21S-R15E, Coffey County, to the Kansas/Oklahoma border in Sec. 18-T35S-R22E, Cherokee County.
- (2) The main stem of the Spring River in Cherokee County from the Missouri border (Sec. 1-T33S-R25E) to U.S. 66 (Sec. 17-T34S-R25E).
- (3) The main stem of the Verdigris River from the K-47 bridge in Sec. 8-T29S-R16E, Wilson County, to the Kansas/Oklahoma border in Sec. 18-T35S-R17E, Montgomery County.

# REDBELLY SNAKE

*Storeria occipitomaculata*

## RANGE MAP

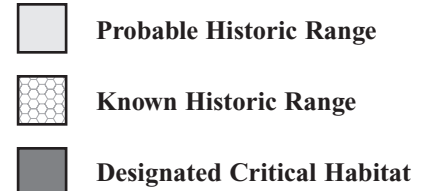


## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY



## SPECIES DESCRIPTION

The Redbelly Snake is 8-10 inches long, has keeled scales, and a divided anal scale. On its dorsal side, its color may be slate gray or reddish brown. Two thin darker stripes are on each side. The snake's belly may be bright orange-red or jet black. Any combination of dorsal and belly colors can occur. There are three light spots on the neck.

Redbelly Snakes seem to prefer deeply wooded regions near rivers and lakes, sandstone woods, wooded hillsides, hillsides near streams, steep slopes of forested hills, moist areas, moist woodlands, woodlands with dense leaf litter, lowlands, forest edge, open fields, the vicinity of old dilapidated farm buildings, and woodlands which remain damp throughout the year. They are usually discovered on damp ground beneath leaf litter, leaf mold, or pine needles mixed with dead leaves; equally as often they are found under flat rocks, logs, rotten logs, boards, and other surface debris.

## SPECIES PROTECTION AND CRITICAL HABITATS

Redbelly Snakes are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Redbelly Snakes:

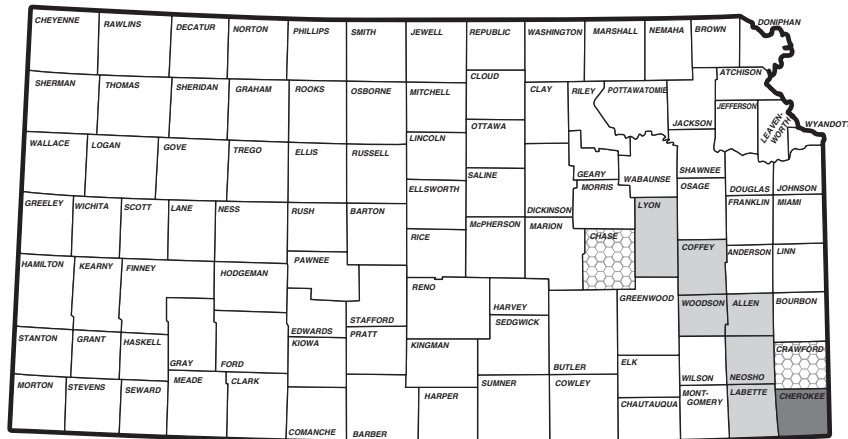
(1) All suitable habitat occurring within the section of Cherokee and Crawford counties east of U.S. Highway 69 at the Kansas-Oklahoma border (Sec. 18, T35S, R24E), extending north to State Highway K-7 (Sec. 7, T33S, R24E), then continuing north to the northern border of Crawford County (Sec. 30, T27S, R24E).

(2) All suitable woodland habitat within Douglas, Jefferson, Johnson, Leavenworth, and Wyandotte counties.

# REDSPOT CHUB

*Nocomis asper*

## RANGE MAP

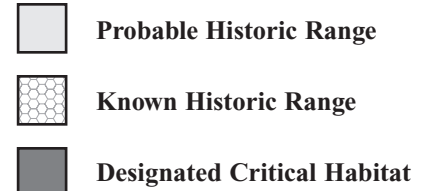


## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY



## SPECIES DESCRIPTION

The Redspot Chub is one of the largest of our native minnows, generally growing to 6-8 inches long. This fish closely resembles the more familiar creek chub but has larger scales and no spot at the front of the dorsal fin. The redspot has a large head and mouth. There is a small barbel on each side of the mouth. Its color is greenish on the back with a white belly.

The range of the Redspot Chub is restricted to streams within the Neosho and Spring River basins. They require streams with a fairly steady flow of clear water, inhabiting deep pools and runs with gravel bottoms. They are most common in those streams having aquatic plants along their margins.

Habitat loss due to intensive land use has been a primary factor in population declines for the Redspot Chub.

## SPECIES PROTECTION AND CRITICAL HABITATS

Redspot Chubs are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

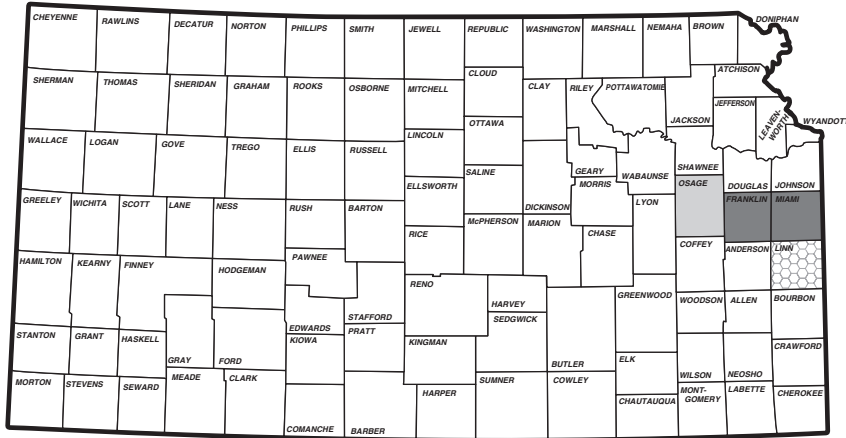
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Redspot Chubs:

- (1) The main stem of Shoal Creek from its point of entry into Kansas at Sec. 36, T34S, R25E to its confluence with Empire Lake in Sec. 29, T34S, R25E in Cherokee County, Kansas.
- (2) The main stem of Spring River at the point of entry on the Kansas-Missouri border in Cherokee County, (Sec. 1, T33S, R25E) to the confluence with Shoal Creek (Sec. 19, T34S, R25E).

# ROCK POCKETBOOK MUSSEL

*Arcidens confragosus*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The mussel is triangular in shape with the dorsal margin nearly straight and the ventral edge rounded in the shape of a bow. The shell is thick and can grow up to 4.5 inches in size. Growth ridges and grooves have distinct color changes. It is a heavily sculptured mussel. In Kansas, an obligate riverine mussel adapted to mud, silt and silty gravel substrates where it prefers quiet water areas and usually buries itself in the soft mud of the river bottom.

Historically occurred in medium to large streams in the Marais des Cygnes basin.

## SPECIES PROTECTION AND CRITICAL HABITATS

Rock Pocketbook Mussels are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

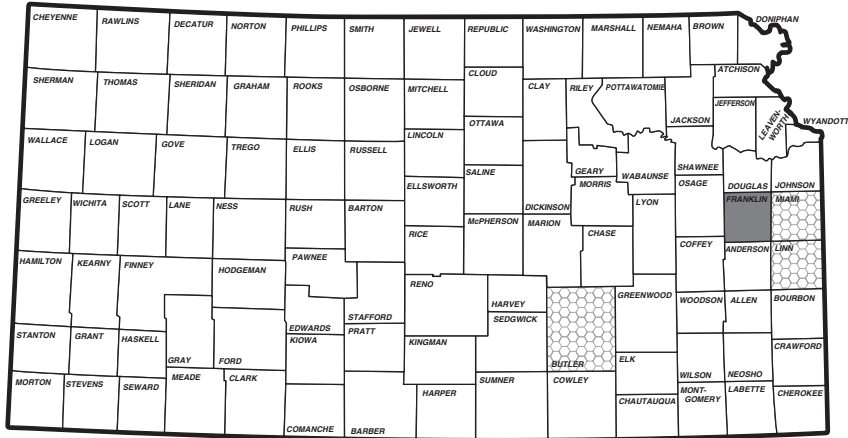
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Rock Pocketbook Mussels:

- (1) The main stem of the Marais des Cygnes River from I-35 in Franklin County (Sec. 6-T17S-R20E) to the Miami/Linn county line (Sec. 17-T19S-R24E).
- (2) The main stem of Pottawatomie Creek from where it enters Franklin County (Sec. 5, T19S, R21E) into Miami County to the confluence with the Marais des Cygnes River (Sec. 12, T18S, R22E).

# SHARP HORNSNAIL

*Pleurocera acuta*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The shell of the sharp hornsnaail is thick and heavy, somewhat conical in shape and much elongated. The whorls are rather flat to slightly convex and usually exhibit nine to eleven whorls. The color of the shell varies from pale brown to dark chestnut, with some specimens showing variable banding. On the average, the adult is about 1 1/8 inches long with a width at the widest point of 3/8 inch.

Historically, this snail was collected from the Walnut River and the Marais des Cygnes River. Recently, it has only been collected on the Marais des Cygnes River. The snail inhabits shallow (from a few inches depth up to three feet) sheltered reaches of larger lakes and streams. Generally, they can be regarded as bottom dwellers, since they burrow under the sand. They may also burrow under layers of decaying leaves and organic materials. This snail is a detritus feeder, mainly eating algae and diatoms.

## SPECIES PROTECTION AND CRITICAL HABITATS

Sharp Hornsnail are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

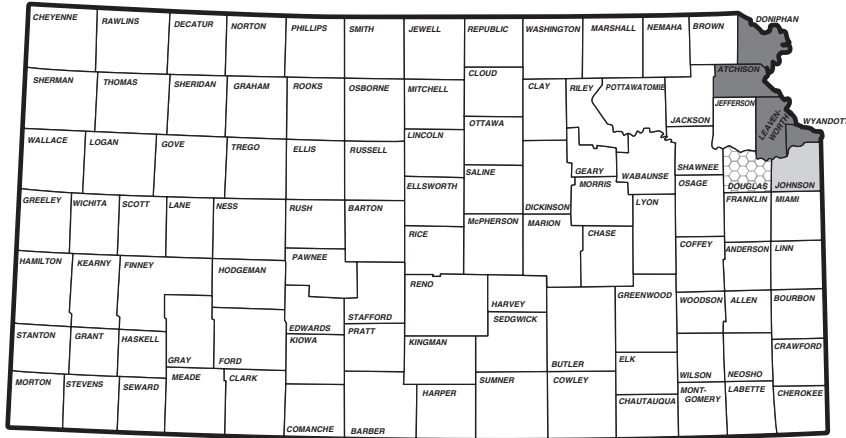
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Sharp Hornsnail:

The entire reach of the Marais des Cygnes River in Franklin County, extending from the Osage/Franklin County line (Sec. 2, T17S, R17E) to the Franklin/Miami County line (Sec. 13, T18S, R21E).

# SICKLEFIN CHUB

*Macrhybopsis meeki*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** Candidate

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Sicklefing Chub is a tawny brown or greenish color and has sharply pointed, sickle-shaped fins. It grows to a length of 4 inches. It has one small barbel on each side of its mouth.

Sicklefin Chubs require continuously and heavily turbid waters of large rivers where it frequents areas of strong current flowing over sand or gravel substrate.

In Kansas, the Sicklefing Chub is restricted to the Missouri River main stem. Although the Sicklefing Chub has been recorded from the lower Kansas River, those collections were during flood flows. The Kansas River does not provide suitable permanent habitat.

## SPECIES PROTECTION AND CRITICAL HABITATS

Sicklefin Chubs are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

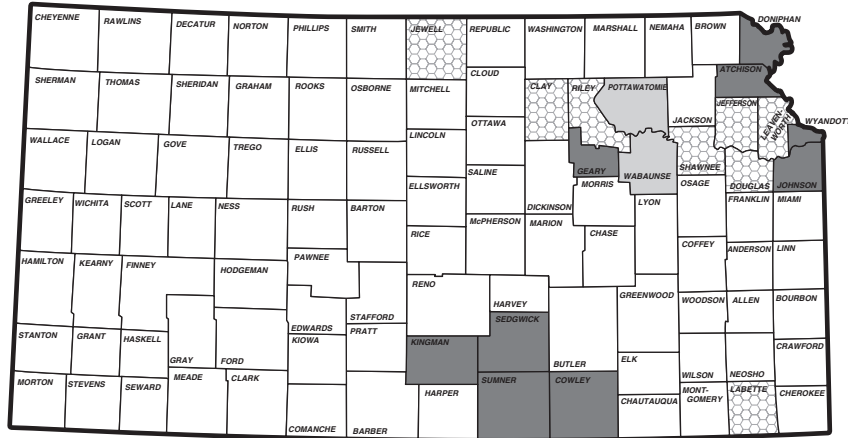
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Sicklefing Chubs:

All reaches of the main stem Missouri River that are congruent with the Kansas-Missouri border.

# SILVER CHUB

*Macrhybopsis storeriana*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This member of the minnow family can reach 6 inches in length. The silver chub has a blunt, rounded snout, a silvery patch in front of its large eyes, and a narrow, bright, silvery streak along the sides. There are small conical barbels at the corner of its mouth that are sensitive to taste.

The silver chub is a fish of large sandy rivers. It lives on or near the bottom where it finds food by sight or taste. It is found in deep water during the summer months. Few are thought to live longer than 3 years.

It was once common in the Kansas and Missouri rivers, but now is so infrequently found during sampling efforts it is considered rare. No collections from the Kansas River have been documented at the University of Kansas Museum of Natural History since 1980. However, specimens have been found during surveys in the Arkansas River and some of its tributary streams including the Ninescaw River. Most of its natural range is east of Kansas and includes the Ohio and Mississippi river basins. In Lake Erie it is known to feed on the invasive zebra mussel.

## SPECIES PROTECTION AND CRITICAL HABITATS

Silver Chubs are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

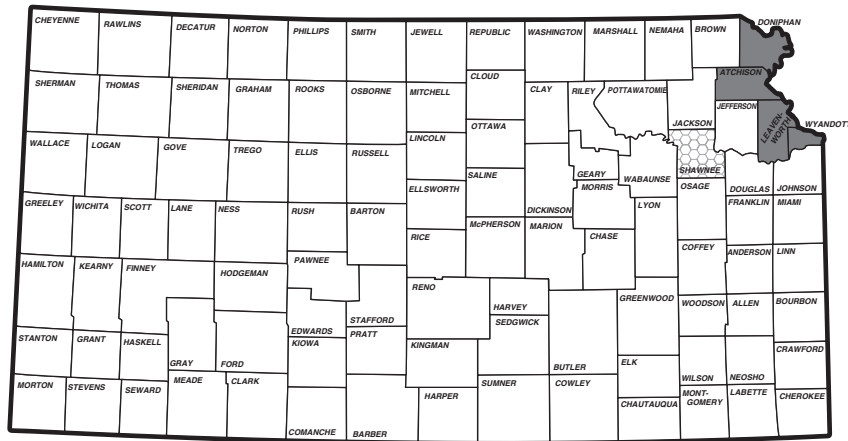
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Silver Chub:

- (1) Missouri River bordering Kansas
- (2) Kansas River from the confluence of Republican and Smoky Hill rivers (Ft. Riley) to the Missouri River (Sec. 1 & 2-T11S-R25E)
- (3) Arkansas River from the point it enters Sedgwick County (Sec. 6-T25S-R3W) to the Oklahoma border (Sec. 36-T29S-R1E)
- (4) South Fork Ninescaw River from point it enters Kingman County (Sec. 30-T27S-R10W) to the confluence with the North Fork Ninescaw River in Sedgwick County (Sec. 36-T28S-R4W)
- (5) Ninescaw River from the confluence of the South Fork Ninescaw and North Fork Ninescaw rivers in Sedgwick County (Sec. 36-T28S-R4W) to its confluence with the Arkansas River in Sumner County (Sec 25-T31S-R2E)

# SILVERBAND SHINER

*Notropis shumardi*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Silverband Shiner is a small (2-2 3/4 inches) minnow with a high sharply pointed dorsal fin located directly above the pelvic fins. Its color is pale green with a narrow silvery lateral stripe.

Silverband Shiners are restricted to the Missouri River in Kansas. It prefers moderately deep, flowing water along sand or gravel bars. Extensive channelization has destroyed the preferred habitat of Silverband Shiners.

## SPECIES PROTECTION AND CRITICAL HABITATS

Silverband Shiners are protected by the Kansas Nongame and Endangered Species Conservation Act administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

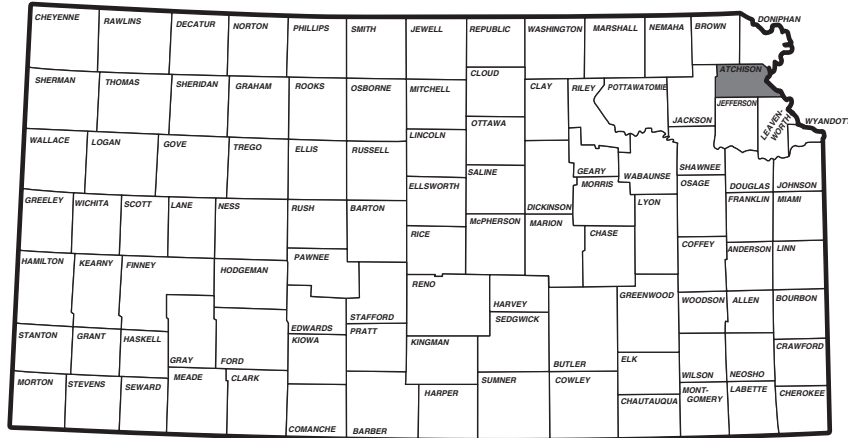
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Silverband Shiners:

All reaches of the main stem Missouri River that are congruent with the Kansas-Missouri border.

# SLENDER WALKER SNAIL

*Pomatiopsis lapidaria*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This small (6-8mm), dark brownish to chestnut amphibious snail lives on the lower stems and within the upper few inches of the substrate in permanent wetlands near the Delaware River in Atchison County. This animal requires high moisture and humidity levels within its habitat. It is most abundant where the wetland substrate is sand with a high proportion of dead plant material.

The major of the Slender Walker is throughout the eastern U.S. Isolated populations have been documented in Kansas, New Mexico and Oklahoma. Within Kansas, the only known population occurs in artesian wetlands in Atchison County.

## SPECIES PROTECTION AND CRITICAL HABITATS

Slender Walker Snails are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

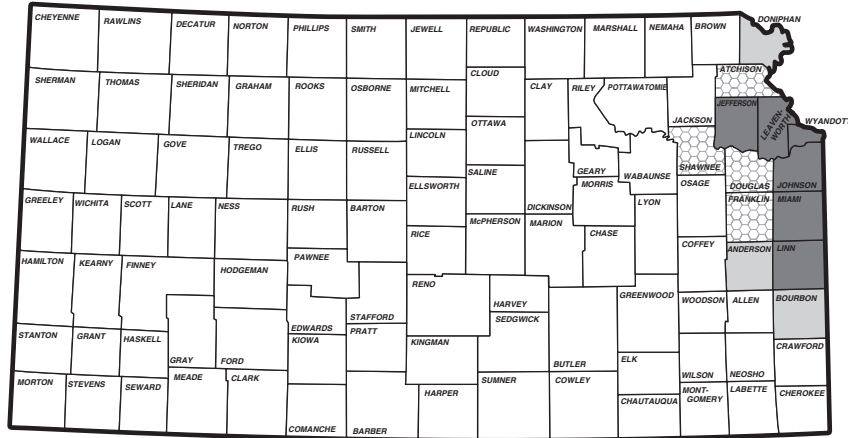
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Slender Walker Snails:

All wetlands and their contiguous drainageways lying within the west half of Sec. 15 and that portion of Sec. 16 east of the left bank ordinary high water mark of the Delaware River, Township 6 South, Range 17 East, Atchison County, Kansas.

# SMOOTH EARTH SNAKE

*Virginia valeriae elegans*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Smooth Earth Snake has smooth scales on the front part and weakly keeled scales on the rear part of the body, a divided anal scale, six scales on the upper lip and two or more scales bordering the rear edge of the eye. The head, body and tail are gray or brown with no pattern. The belly is white. Adults normally grow to 7-10 inches in length.

Smooth Earth Snakes seem to prefer open sandstone woods, rocky hillsides in moist woodlands, deciduous forests, wooded urban areas, woodland edge situations, open brushy woodlands without a continuous leaf canopy, and abandoned fields. They are frequently found in thick piles of dead leaves, or beneath leaf litter, flat rocks, logs, and other surface debris, most often near forest-edge or on hillsides with sparse tree cover.

## SPECIES PROTECTION AND CRITICAL HABITATS

Smooth Earth Snakes are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

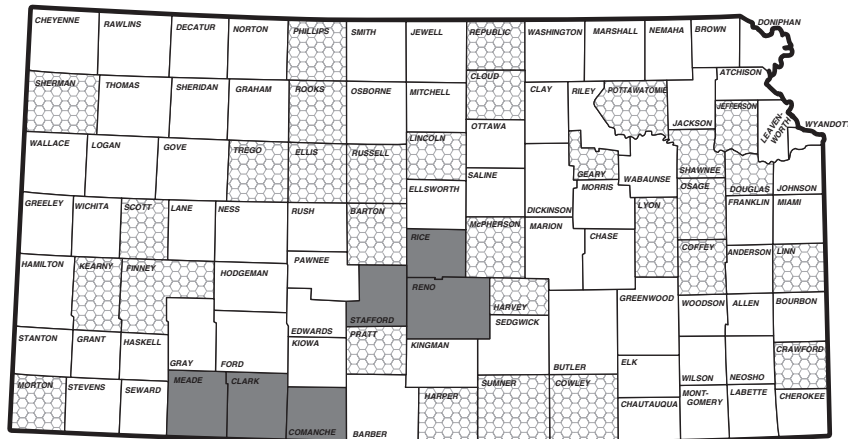
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Smooth Earth Snakes:

- (1) All suitable woodland habitat within Wyandotte, Johnson, Miami, Linn, Leavenworth, and Jefferson counties.

# SNOWY PLOVER

*Charadrius alexandrinus*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

Adult Snowy Plovers are about 6 inches in length with a wingspread of 13-14 inches. Very light color with a thin black bill, black mark behind each eye and over forehead, dark legs and feet, and black slash mark on each side of the lower throat.

The Snowy Plover prefers open salt flats, beaches and bars of rivers, and wetlands. In Kansas, this plover is a regular but uncommon migrant and summer resident. Nesting occurs in scattered locations in central and southwestern Kansas where open salt flats or sandy areas near water occur.

Snowy Plovers may occur occasionally anywhere in the state where habitat is suitable. With the exception of Reno and Rice, the marked counties are those for which observation records are known.

## SPECIES PROTECTION AND CRITICAL HABITATS

Snowy Plovers are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

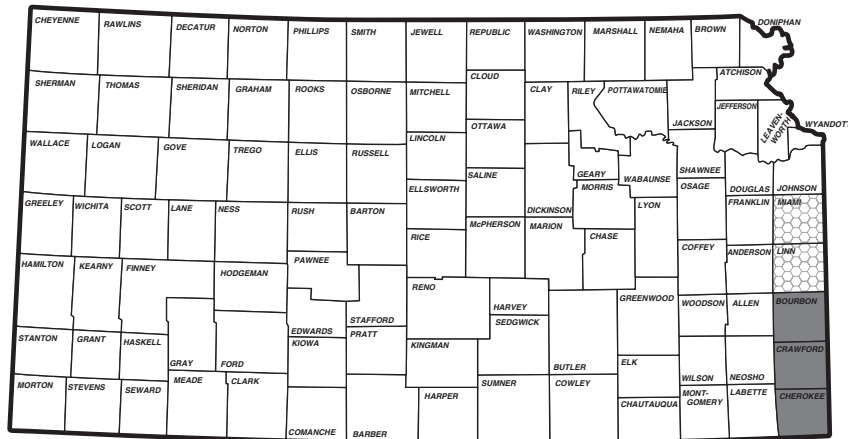
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Snowy Plovers:

- (1) All wetlands within Quivira National Wildlife Refuge in Reno, Rice and Stafford counties.
- (2) All lands and waters within the current active channel of those reaches of the Cimarron River within Clark, Comanche and Meade counties.

# SPRING PEEPER

*Pseudacris crucifer*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Spring Peeper is a small (3/4 - 1 1/4 in.) chorus frog. The head, body and limbs are light brown in background color and the underside is yellowish. A characteristic dark x-shaped mark is evident on the back.

Kansas is at the eastern edge of this frog's continental range. Its current probable distribution within the state is restricted to the eastern tier of counties. The Spring Peeper requires small ponds and wetlands having abundant emergent aquatic vegetation and located within or very near woodlands. This frog was formerly reported from Leavenworth County but drainage and clearing of woodland wetlands has drastically reduced its preferred habitat.

## SPECIES PROTECTION AND CRITICAL HABITATS

Spring Peepers are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

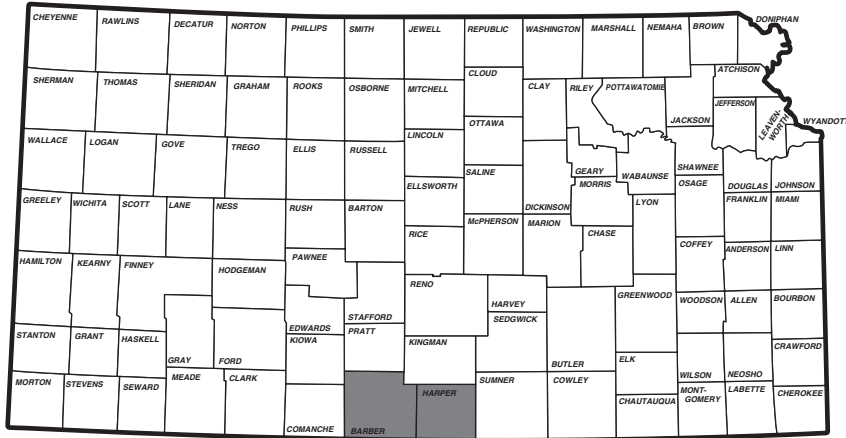
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Spring Peepers:

All temporary and permanent wetlands within that portion of Cherokee, Crawford and Bourbon counties lying east and south of a line beginning at the Kansas-Oklahoma border (Sec. 18, T13S, R24E) extending north on Highway U.S. 69 to K-7, (Sec. 7, T33S, R24E, continue north on K-7 to the junction of K-7 and K-39 in Bourbon County (Sec. 17, T27S, R24E), continue west on K-39 to the junction of K-39 and K-3 in Bourbon County, (Sec. 2, T27S, R22E), continue north on K-3 until the junction of K-3 and U.S. 54 (Sec. 22, T25S, R22E), continue on U.S. 54 to the Kansas-Missouri border (Sec. 25, T25S, R25E).

# STRECKER'S CHORUS FROG

*Pseudacris streckeri*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

In Kansas, this small (1-1 5/8 inches) chorus frog is at the northern edge of its continental range. Body color may vary from brown to gray, green or hazel. It has a dark line through the eye and a dark spot below and just in front of each eye. There are scattered dark spots and blotches on the animal's back.

Habitat at known locations in Kansas usually consists of shallow, run-off pools of relatively unpolluted water where some wetland vegetation is present and no predator fish occur.

Strecker's Chorus Frogs are currently known to occur in only Barber and Harper counties. All breeding colonies are on private lands and are subject to impacts by cultivation, siltation or drainage of wetlands, and spraying of agricultural pesticides.

## SPECIES PROTECTION AND CRITICAL HABITATS

Strecker's Chorus Frogs are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

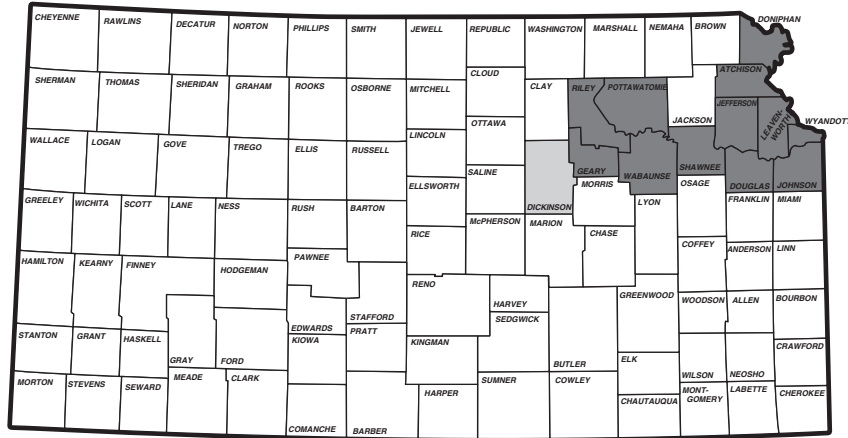
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Strecker's Chorus Frogs:

Due to the intermittency of the individual breeding pools used by Strecker's Chorus Frogs, specific site designations for critical habitats are not made; however, whenever and wherever they occur, all wetlands and rainwater basins and pools within those portions of Barber and Harper counties located south of U.S. Highway 160, east of U.S. Highway 281, and west of a north-south line beginning at the NE corner of Section 26, T32S, R7W, Harper County and extending due south to the Kansas-Oklahoma border are considered critical habitats.

# STURGEON CHUB

*Macrhybopsis gelida*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** Candidate

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The fish has a slender nearly transparent body. Snout long, eye small, mouth ventral, with one or two prominent barbels on each side. It has a keel on each dorsal scale. With a maximum length of 3 1/2 inches.

The species prefers large turbid sandy rivers over substrate of small gravel and coarse sand. They like areas swept by currents especially at heads of islands or exposed sandbars.

## SPECIES PROTECTION AND CRITICAL HABITATS

Sturgeon Chubs are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

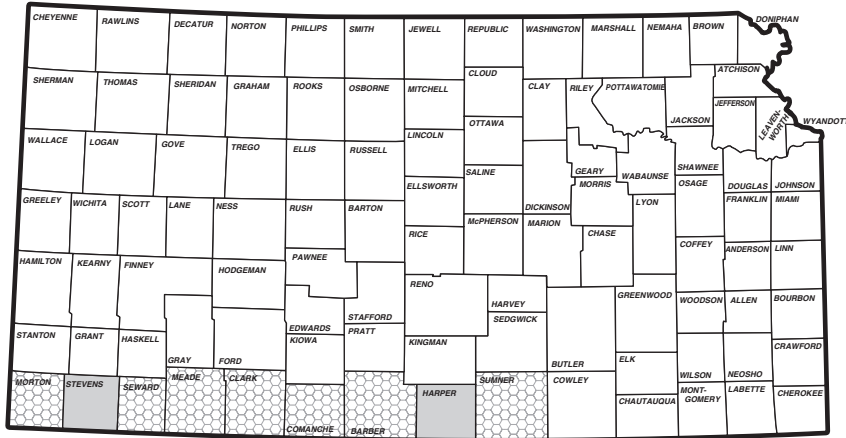
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Sturgeon Chubs:

- (1) All reaches of the main stem of the Missouri River that are congruent with the Kansas/Missouri border.
- (2) The main stem of the Kansas River from its start at the confluence of the Republican and Smoky Hill Rivers in Geary County to its confluence with the Missouri River in Wyandotte County.

# TEXAS BLIND SNAKE

*Leptotyphlops dulcis*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Texas Blind Snake has belly scales the same size as those on its upper body. This snake is uniform pinkish-tan in color. The eyes are tiny black dots. It normally grows to a length of 5-8 inches.

These snakes are restricted to the southern row of counties along the Kansas-Oklahoma border. Texas Blind Snakes are nocturnal and secretive, frequenting ant burrows and moist areas having loose soil or sand where rocks provide cover.

## SPECIES PROTECTION AND CRITICAL HABITATS

Texas Blind Snakes are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Texas Blind Snakes:

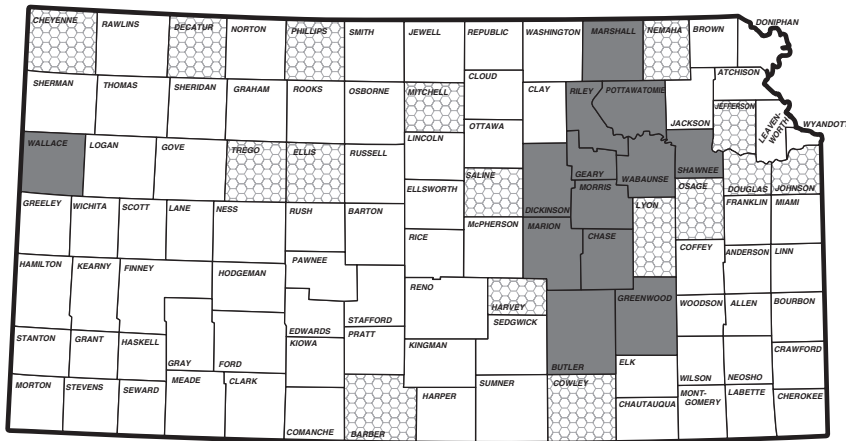
Knowledge of current Texas Blind Snake populations is too limited to designate specific areas of critical habitat.

# TOPEKA SHINER




*Notropis topeka*

## RANGE MAP

## STATUS



### MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This Topeka shiner is a small minnow, not exceeding 3 inches in length. Silvery-sided with a well-defined dark stripe along the side. The tail fin has a black wedge-shaped spot at the base, other fins are plain. Breeding males exhibit reddish-orange coloration on all fins.

Historically, records show that this species was located in all but the southwest part of Kansas. Now it is mainly found in the Flint Hills in east central Kansas and in Wallace County in the far western part of the state. This species lives near the headwaters of small prairie streams with high water quality and cool temperatures. These streams generally exhibit intermittent flow during summer, however pools are maintained by spring or groundwater percolation. The substrates of these streams are most often clean gravel, however bedrock and clay hardpan overlain by a thin silt layer are not uncommon. Topeka shiners most often occur in pool and run areas.


## SPECIES PROTECTION AND CRITICAL HABITATS

Topeka Shiners are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Topeka Shiners:

- (1) Thurman Creek and its tributaries in Chase County from where it enters the South Fork Cottonwood River (Sec. 28, T22S, R8E) upstream to its headwaters (Sec. 34, T22S, R9E).
- (2) Thurman Creek and its tributaries in Greenwood County from where it crosses the Chase/Greenwood County line (Sec. 2, T23S, R8E) upstream to its headwaters (Sec. 20, T23S, R9E).
- (3) South Fork Cottonwood River and its tributaries in Butler County from the Butler/Chase County line (Sec. 4, T23S, R8E) upstream to its headwaters (Sec. 21, T23S, R8E).
- (4) Mercer Creek and its tributaries in Chase County from where it enters the South Fork Cottonwood River (Sec. 8, T22S, R8E) upstream to the Chase/Butler County line (Sec. 31, T22S, R8E).
- (5) Little Cedar Creek and its tributaries in Chase County from where it enters the South Fork Cottonwood River (Sec. 8, T22S, R8E) upstream to its headwaters (Sec. 7, T22S, R8E).



(6) Jacob Creek and its tributaries in Chase County from where it crosses the Chase/Lyon County line (Sec. 36, T19S, R9E) upstream to its headwaters (Sec. 25, T20S, R9E).

(7) Gannon Creek and its tributaries in Chase County from where it enters Diamond Creek (Sec. 10, T19S, R7E) upstream to its headwaters (Sec. 11, T18S, R7E).

(8) Schaffer Creek and its tributaries in Chase County from where it enters Diamond Creek (Sec. 19, T18S, R7E) upstream to its headwaters in Morris County (Sec. 28, T17S, R7E).

(9) Collett Creek and its tributaries in Chase County from where it enters Middle Creek (Sec. 18, T19S, R7E) upstream to its headwaters (Sec. 27, T18S, R6E).

(10) Cary Creek and its tributaries in Dickinson County from where it crosses the Dickinson/Geary County line (Sec. 6, T14S, R5E) upstream to its headwaters (Sec. 33, T15S, R3E).

(11) West Branch Lyon Creek and its tributaries in Dickinson County from where it enters Lyon Creek (Sec. 2, T15S, R4E) upstream to its headwaters (Sec. 16, T16S, R3E).

(12) North Elm Creek and its tributaries in Marshall County from where it enters the Big Blue River (Sec. 14, T1S, R7E) upstream to its headwaters (Sec. 19, T1S, R9E).

(13) Mulberry Creek and its tributaries in Morris County from where it enters Six-mile Creek (Sec. 21, T17S, R6E) upstream to its headwaters (Sec. 25, T17S, R5E).

(14) Clear Fork Creek and its tributaries in Pottawatomie County from where it crosses the Pottawatomie/Marshall County line (Sec. 2, T6S, R9E) upstream to its headwaters (Sec. 28, T6S, R10E).

(15) Deep Creek main stem in Riley County from where it crosses the Riley/Wabaunsee County line (Sec. 22, T10S, R9E) upstream to Interstate Highway 70 (Sec. 25, T11S, R9E).

(16) Mission Creek main stem in Shawnee County from where it crosses State Highway 4 (Sec. 9, T12S, R14E) upstream into Wabaunsee County through Sec. 2, T13S, R12E.

(17) Mill Creek and its tributaries in Wabaunsee County from where it crosses Interstate Highway 70 (Sec. 27, T11S, R11E) upstream to where it crosses State Highway 99 (Sec. 26, T13S, R10E).

(18) Mulberry Creek main stem in Wabaunsee County from where it enters Mill Creek (Sec. 25, T11S, R11E) upstream to its headwaters (Sec. 6, T11S, R11E).

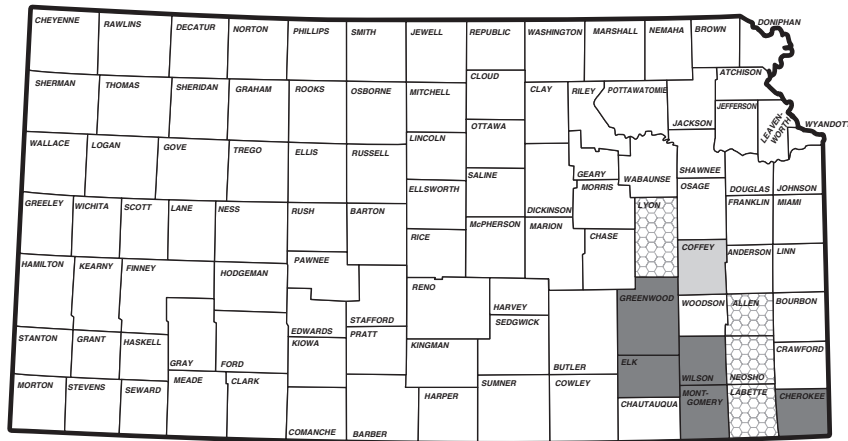
(19) Willow Creek main stem in Wallace County from where it enters the Smoky Hill River (Sec. 17, T13S, R41W) upstream through Sec. 3, T13S, R41W.

Numerous main stem and tributary reaches of: Rock Creek, Sharpes Creek, Bloody Creek, Crocker Creek, Fox Creek, Diamond Creek and Middle Creek in Chase County; Lyon Creek in Dickinson County; Davis Creek, Thomas Creek and Dry Creek in Geary County; Mud Creek and Middle Creek in Marion County; Diamond Creek in Morris County; Walnut Creek, Wildcat Creek, Little Arkansas Creek and Seven-mile Creek in Riley County. Detailed maps showing specific designated stream reaches in these counties are maintained in the Environmental Services Section, Pratt Operations Office.

# WESTERN FANSHELL MUSSEL

*Cyprogenia aberti*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This freshwater mussel is almost round in outline, usually flattened laterally, and ranges up to 2 inches in diameter. The shell has a shallow depression running from the umbo (beak) to the ventral margin which is bumpy and wrinkled. The shell also has distinctive rays.

This species is an obligate riverine species found in mud, sand, gravel and cobble substrate, generally associated with less than three feet of water. Historically found in low densities in the Fall, Verdigris, Neosho, and Spring Rivers. Appears to be extirpated from the Neosho River. Scattered individuals have been documented in recent years in the Verdigris, Fall, and Spring Rivers and Shoal Creek.

## SPECIES PROTECTION AND CRITICAL HABITATS

Western Fanshell Mussels are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

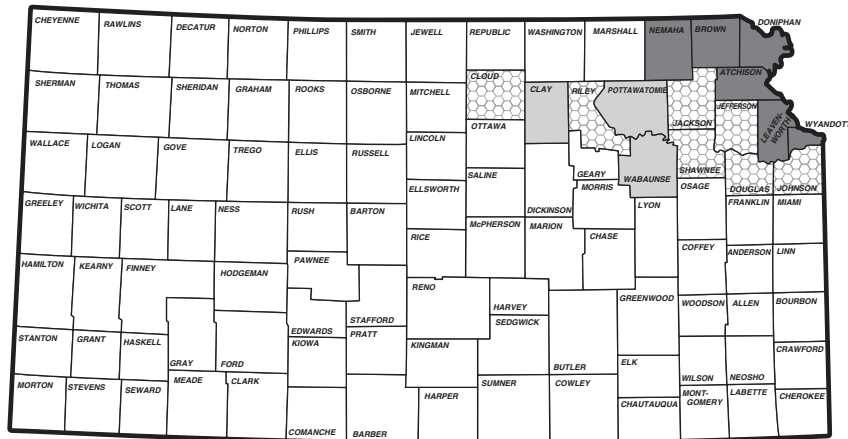
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Western Fanshell Mussels:

- (1) The main stem of the Spring River in Cherokee County from the Missouri/Kansas border (Sec. 1-T33S-R25E) to US-66 (Sec. 17-T34S-R25E).
- (2) The main stem of Shoal Creek in Cherokee County from the Missouri border (Sec. 36-T34S-R25E) to K-26 (Sec. 35-T34S-R25E).
- (3) The main stem of the Fall River from Fall River Reservoir dam in Greenwood County (Sec. 2-T28S-R12E) to the confluence of the Verdigris River in Wilson County (Sec. 33-T30S-R16E).
- (4) The main stem of the Verdigris River from K-47 in Wilson County (Sec. 17-T29S-R16E) to the Kansas/Oklahoma border (Sec. 18-T35S-R17E).

# WESTERN SILVERY MINNOW

*Hybognathus argyritis*

## RANGE MAP






## STATUS

**KANSAS:** Threatened

**FEDERAL:** N/A

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

This fish has a slender body and is streamlined with a maximum length of 6 inches. The eyes are larger. The mouth is thin-lipped, ventral, without barbels. Dorsal fin is directly over pelvic fin. It is straw-colored with sides yellowish-white, not transparent.

This species historically occurred in the Missouri River and the creeks and backwaters of its floodplain. Until recently it was common in the lower Kansas River. It prefers relatively deep water where flow is sluggish and bottoms are silted, but it does occur in strong currents of the mainstream.

## SPECIES PROTECTION AND CRITICAL HABITATS

Western Silvery Minnows are protected by the Kansas Nongame and Endangered Species Conservation Act and administrative regulations applicable thereto. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements.

## DESIGNATED CRITICAL HABITATS

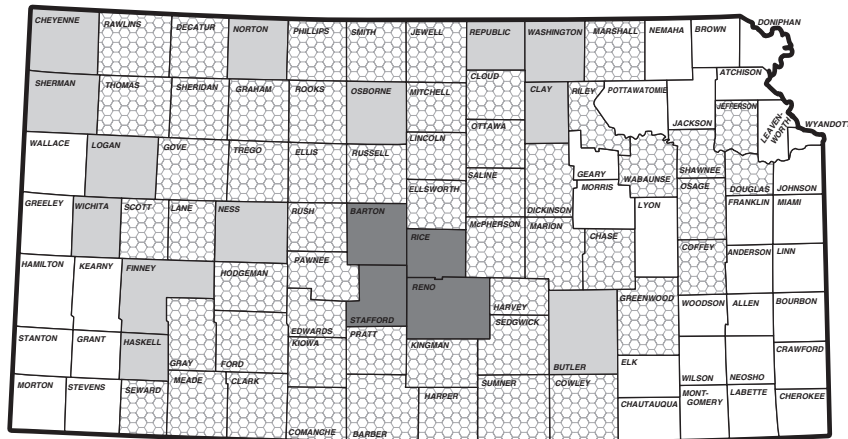
As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Western Silvery Minnows:

- (1) All Kansas reaches of the main stem of the Missouri River that are congruent with the Kansas/Missouri border.
- (2) The main stem of the Big Nemaha River in Nemaha County from the Nebraska/Kansas border (Sec. 2-T1S-R12E) to U.S. 36 (Sec. 26-T2S-R12E).
- (3) The main stem of the Wolf River in Brown County from U.S. 73 (Sec. 16-T3S-R17E) to the confluence with the Missouri River in Doniphan County (Sec. 8-T2S-R20E).

# WHOOPING CRANE

*Grus americana*

## RANGE MAP






## STATUS

**KANSAS:** Endangered

**FEDERAL:** Endangered

## MAP KEY

-  Probable Historic Range
-  Known Historic Range
-  Designated Critical Habitat

## SPECIES DESCRIPTION

The Whooping Crane is the tallest (5 ft.) North American bird and has a 7-8 foot wing spread. Adults are white with black wing tips and a red face. Young may be whitish gray with rusty wash color on their head and neck and scattered reddish brown feathers over their back and sides.

Whooping Cranes are regular spring and fall transients through Kansas, generally passing through the marked corridor in March-April and October-November. Occurrences outside the marked corridor have been infrequent but as crane populations increase, such sightings may become more frequent.

Preferred resting areas are wetlands in level to moderately rolling terrain away from human activity where low, sparse vegetation permits ease of movement and an open view. During migration, cranes feed on grain, frogs, crayfish, grasshoppers, fish, crickets, spiders, and aquatic plants.

## SPECIES PROTECTION AND CRITICAL HABITATS

Whooping Cranes are protected by the Kansas Nongame and Endangered Species Conservation Act, the Federal Endangered Species Act, and state and federal regulations applicable to those acts. Any time an eligible project is proposed that will impact the species' preferred habitats within its probable range, the project sponsor must contact the Environmental Services Section, Kansas Department of Wildlife and Parks, 512 SE 25th Ave., Pratt, Kansas 67124-8174. Department personnel can then advise the project sponsor on permit requirements under Kansas' statutes. Sponsors of projects impacting critical Whooping Crane habitats must also contact the Endangered Species Office, U.S. Fish and Wildlife Service, 315 Houston Street, Suite E, Manhattan, Kansas 66502.

## DESIGNATED CRITICAL HABITATS

As defined by Kansas Administrative Regulations, critical habitats include those areas documented as currently supporting self-sustaining population(s) of any threatened or endangered species of wildlife as well as those areas determined by the Kansas Department of Wildlife and Parks to be essential for the conservation of any threatened or endangered species of wildlife. Currently, the following areas are designated critical for Whooping Crane:

- (1) All lands and waters within Cheyenne Bottoms Wildlife Area located east of U.S. Highway 281 and north of U.S. Highway 56 in Barton County.
- (2) All lands and waters within Quivira National Wildlife Refuge in Stafford, Reno, and Rice counties.

The U.S. Fish and Wildlife Service has authority to designate areas of critical habitat for federally listed endangered species and has designated the following in Kansas:

Areas of land, water, and airspace with the following components: (1) Quivira National Wildlife Refuge in Stafford, Reno, and Rice counties; (2) Cheyenne Bottoms State Waterfowl Management Area in Barton County. (50CFR17.95)

# CONTACTS

Equal opportunity to participate in and benefit from programs described herein is available to all individuals without regard to race, color, national origin, sex, religion, age or handicap. Complaints of discrimination should be sent to Office of the Secretary, Kansas Department of Wildlife and Parks, 1020 S Kansas Ave. Suite 200, Topeka, KS 66612-1327 01/04