

ENVIRONMENTAL BENEFIT STATEMENT

K.A.R. 115-15-1. Threatened and endangered species; general provisions.

REGULATION DESCRIPTION: This permanent regulation designates species classified as threatened and endangered in Kansas (“T&E species”). An environmental benefit statement is required by law when amending an environmental rule or regulation. A regulation adopted by the Secretary of Wildlife, Parks and Tourism concerning threatened or endangered species of wildlife is defined as an environmental rule or regulation. Consequently, this environmental benefit statement has been prepared. The proposed amendments to the regulation are as follows:

- * Remove three endangered species: Black-capped vireo, *Vireo atricapilla*
 Eskimo curlew, *Numenius borealis*
 Many-ribbed salamander, *Eurycea multiplicata*

- * Remove six threatened species: Chestnut lamprey, *Ichthyomyzon castaneus*
 Silverband shiner, *Notropis shumardi*
 Spring peeper, *Pseudacris crucifer*
 Redbelly snake, *Storeria occipitomaculata*
 Longnose snake, *Rhinocheilus lecontei*
 Smooth earth snake, *Virginia valeriae*

In conjunction with these proposed amendments, the department is also proposing amendments to K.A.R. 115-15-2, which designated species in need of conservation in Kansas (or SINC species). Proposed amendments to that regulation include the addition of the Chestnut lamprey, Silverband shiner, Spring peeper, Redbelly snake, Longnose snake, Smooth earth snake and the Northern long-eared bat to the list of SINC species.

The Kansas Nongame and Endangered Species Act, K.S.A. 32-957 et seq., requires the department to adopt rules and regulations “which contain a list of all species of wildlife indigenous to this state which have been determined to be endangered species . . . and a list of all such species which have been determined to be threatened...” (K.S.A. 32-959(c)(1)). In making this determination, a species may be threatened or endangered because of any of the following factors:

- (1) The present or threatened destruction, modification, or curtailment of its habitat or range;
- (2) the overutilization of such species for commercial, sporting, scientific, educational, or other purposes;
- (3) disease or predation;
- (4) the inadequacy of existing regulatory mechanisms; or
- (5) the presence of other natural or man-made factors affecting its continued existence within this state.

The current proposed amendments stem from petitions for listing actions received by the department by July 31, 2013, as well as federal threatened and endangered species listings. Since that time, the department has held various public meetings, collected data, and received official recommendations from a task force composed of personnel from the U.S. Fish and Wildlife Service, universities, the Kansas Biological Survey, and the department. In making its recommendation to the department, that task force collected numerical ratings from individuals and companies believed to have knowledge and scientific information about one or more of the species in question, over a 90-day public comment period.

Taking into consideration response from the Wildlife and Parks Commission, the general public, and the task force recommendations, the department has developed these proposed regulatory amendments. A description of the species and related information, as well as a description of the risk or threat to the species and the need for the regulatory amendment, is included for each of the species in question.

Black-capped vireo (*Vireo atricapilla*)

- Federal Status: Endangered
- Current Kansas Listing Status: Endangered
- Proposed Listing Action: De-list the species
- Description: It is a small songbird. Mature males are olive green above and white below with faint yellow flanks. The crown and upper half of the head is black with a partial white eye-ring and lores. The iris is brownish-red and the bill is black. Females are duller in color than males and have a slate gray crown and underparts washed with greenish yellow
- Size: Adults grow to about 4-5 inches length in body.
- Habitat: Present range is Oklahoma to Northern Mexico. In Kansas, the range is the Red Hills region in the south-central part of the state.
- Reproduction: Breeding occurs April through July.
- Food: Adult insects, insect larvae, and spiders

Threat to the species and need for the regulatory amendment: The Black-capped Vireo is threatened by Brown-headed Cowbird (*Molothrus ater*) brood parasitism, human disturbance, and loss of habitat to urbanization, fire exclusion, grazing, and brush control. However, because of the lack of evidence that this bird is a viable component of the Kansas fauna, delisting is appropriate.

Eskimo curlew (*Numenius borealis*)

- Federal Status: Endangered.
- Current Kansas Listing Status: Endangered.
- Proposed Listing Action: De-list the species.
- Description: Adults have long dark greyish legs and a long bill curved slightly

downward. The upperparts are mottled brown and the underparts are light brown. They show cinnamon wing linings in flight.

- Size: Eskimo curlews are small curlews, about 12-14 inches in length.
- Habitat: Tundra in the Northern Hemisphere to the pampas of South America. In Kansas, the migratory corridor was the all the eastern 2/3rds of the state.
- Reproduction: June with nesting on open ground.
- Food: Insects, snails and other invertebrates.

Threat to the species and need for the regulatory amendment: At one time, the Eskimo curlew may have been one of the most numerous shorebirds in North America, with a population in the millions. As many as 2 million birds per year were killed near the end of the nineteenth century. The last confirmed sightings were in 1962 on Galveston Island, Texas (photographed) and on Barbados in 1963 (specimen). There was a reliable report of 23 birds in Texas in 1981, and more recent additional unconfirmed reports from Texas, Canada (1987), Argentina (1990), and Nova Scotia (2006). No confirmed record of this species has been reported in South America since 1939. Because of the lack of evidence that this bird is a viable component of the Kansas fauna, delisting is appropriate.

Many-ribbed salamander (*Eurycea multiplicata*)

- Federal Status: None
- Current Kansas Listing Status: Endangered
- Proposed Listing Action: De-list the species.
- Description: Variable in coloration from gray to yellowish-tan, 19-20 costal grooves on side, middorsal stripe is slightly paler than the sides.
- Size: The species is between 2 and 3 inches long.
- Habitat: The Ozark Plateaus and the Boston and Ouachita mountains and associated lowland rocky formations in southwestern Missouri, eastern Oklahoma, and northwestern Arkansas. In Kansas, the range is limited to Cherokee County.
- Reproduction: Females lay their eggs in springs, spring-fed pools, and spring-fed ponds from autumn to early spring.
- Food: A variety of aquatic and semi-aquatic vertebrates associated with springs and permanent streams.

Threat to the species and need for the regulatory amendment: Because of the lack of evidence that this amphibian is a viable component of the Kansas fauna, delisting is appropriate.

Chestnut lamprey (*Ichthyomyzon castaneus*)

- Federal Status: None
- Current Kansas Listing Status: Threatened
- Proposed Listing Action: List the species as SINC.
- Description: Eel-like in shape, jawless with disk-shaped mouth, seven pore-like gill openings, single nostril, dorsal fin shallowly notched, back yellowish-tan to light olive-yellow on belly and fins.

- Size: a maximum length of around 14 inches.
- Habitat: Canada, and the Central and Eastern United States, any large lakes or reservoirs and large rivers where large host fish are present. In Kansas, the range is the lower Kansas River and Missouri River main stem.
- Reproduction: Spawning season is from June through July.
- Food: Host species such as fish in a reservoir.

Threat to the species and need for the regulatory amendment: This species was petitioned for removal from the Kansas threatened species list on the basis that it is recently no longer a viable component of the Kansas fauna.

Silverband shiner (*Notropis shumardi*)

- Federal Status: None
- Current Kansas Listing Status: Threatened
- Proposed Listing Action: List as a SINC
- Description: 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.
- Size: 2-4 inches.
- Habitat: Large rivers of Missouri-Mississippi basin (mainly Missouri, Mississippi, Illinois, Kaskaskia, lower Ohio, Arkansas, and Red rivers). In Kansas, the range is limited to the Missouri River in deep flowing water along sand or gravel bars.
- Reproduction: Occurs late May through mid-August.
- Food: Unknown.

Threat to the species and need for the regulatory amendment: This fish species was petitioned for removal from the Kansas threatened species list on the basis that it is no longer a viable part of the Kansas fauna. One specimen was found during the annual survey efforts on the Missouri and lower Kansas Rivers in 2008. Prior to that, the last record was from 1957.

Spring peeper (*Pseudacris crucifer*)

- Federal Status: None
- Current Kansas Listing Status: Threatened
- Proposed Listing Action: List as a SINC
- Description: tan or brown with a dark cross that roughly forms an X on their dorsa.
- Size: 1 inch.
- Habitat: Eastern Kansas counties to Eastern United States in regenerating woodlands near ephemeral or semi-permanent wetlands.
- Reproduction: Occurs late March to June.
- Food: small invertebrates, such as beetles, ants, flies, and spiders.

Threat to the species and need for the regulatory amendment: This frog species was petitioned to be downlisted from threatened to SINC status on the grounds that recent surveys have

documented several additional breeding locations in the last two decades. Small ephemeral wetlands in or near woodlands are essential for the reproduction of this frog. Creation and enhancements of wetland habitat in the eastern border counties through the Wetland Reserve Program have likely improved the population status as well.

Redbelly snake (*Storeria occipitomaculata*)

- Federal Status: None
- Current Kansas Listing Status: Threatened
- Proposed Listing Action: List as a SINC
- Description: The Redbelly Snake 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.
- Size: 8-10 inches long.
- Habitat: Redbelly Snakes 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.
- Reproduction: Late summer or early fall.
- Food: slugs and snails are the primary food items.

Threat to the species and need for the regulatory amendment: The Redbelly snake was petitioned to be downlisted from threatened to SINC status on the grounds that forestland habitat has increased in eastern Kansas, documentation of the species has occurred in two additional counties since listing in 1987 and the assertion that there might be populations that might not have been sampled due to the secretive nature of the species. The Kansas Biological Survey recently completed research on the habitat requirements, models to predict species distribution, and ecological variables for critical habitats. The research revealed that the Redbelly snake is more of a habitat specialist than previously thought. It requires moist old-forest habitat of oak-hickory to support its food source of snails and slugs. It was also shown to be slower than the Smooth earth snake in recovering from drought conditions. Therefore, it may be more likely to disappear from smaller fragmented habitats. The probability of emigration to nearby habitat is low and no evidence was found that shows the increase in forestland in eastern Kansas would have the proper soil-moisture needed to support the species food source. Continuing fragmentation of forestland habitat due to residential and commercial development is a lingering threat to the species and the T&E task committee recommended the species remain threatened. However, the Department is recommending downlisting to SINC status for a variety of reasons including the development of a recovery plan and advisory committee for the species, the ability to secure lands through acquisition and the ability to prevent the species from extirpation simply because of the amount of habitat preserved in perpetuity already. In addition, the existence of the

species is secure nationally and the range for the species is from Canada south to the Gulf of Mexico and from the Great Plains states east to the eastern seaboard.

Longnose snake (*Rhinocheilus lecontei*)

- Federal Status: None
- Current Kansas Listing Status: Threatened
- Proposed Listing Action: List as a SINC
- Description: 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.
- Size: 22-30 inches.
- Habitat: Longnose Snakes prefer grassy or brushy, semiarid regions. Open prairies with sandy soils and/or rocky canyons in southwestern counties in Kansas provide suitable habitat. The snake also ranges south through Oklahoma and Texas.
- Reproduction: clutches of 4-9 eggs in the early summer, which hatch out in the late summer or early fall.
- Food: lizards, amphibians, and sometimes smaller snakes and infrequently rodents.

Threat to the species and need for the regulatory amendment: This nocturnal snake is a secretive resident of southwest Kansas and spends most of the daylight hours underground. The majority of the records of the Longnose snake come from rocky areas of sand sagebrush of the High Plains and Red Hills prairie. A review of this species status was requested by the Secretary. This snake's range is more extensive with many additional instances of documentation in southwest Kansas since the species was listed in 1987. The numerical evaluation from the expert panel that was consulted regarding its status placed its score in the SINC category. In addition, there is a good probability that this snake may be more common than surveys can reveal.

Smooth earth snake (*Virginia valeriae*)

- Federal Status: None
- Current Kansas Listing Status: Threatened
- Proposed Listing Action: List as a SINC
- 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.
- Size: 7-10 inches.
- Habitat: 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 in Eastern Kansas. 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. They also range in the Eastern United States.
- Reproduction: clutches of 4-9 eggs in the early summer, which hatch out in the late

summer or early fall.

- Food: primarily earthworms and other soft-bodied arthropods.

Threat to the species and need for the regulatory amendment: Similar to the Redbelly snake, the petition to delist the Smooth earth snake cited range expansion over the last 35 years in 5 additional counties, an increase in forestland habitat in eastern Kansas, and the assertion that due to the secretive nature of the species, there may be undocumented populations. Research shows the Smooth earth snake is less specific in its habitat requirements and recovers more quickly from drought than the Redbelly snake. In addition, the species has been documented in many more locations since initially listed in 1987