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Rare, Endangered and Extirpated Species in Kansas
II. Amphibians and Reptiles

This list of amphibians and reptiles is the second in a series of lists of rare, endangered and extirpated species of animals and plants in Kansas being compiled by the Soil Conservation Service and the Conservation Committee of the Kansas Academy of Science. The compilers of this list were Ray E. Ashton (amphibians) and Joseph T. Collins (reptiles). The list has been reviewed by Robert F. Clarke and Dwight R. Platt.

Additional information on the status of each species is on file with the Conservation Committee and the Soil Conservation Service. This list will be reviewed periodically and will be revised by the Conservation Committee in the light of new information or changes in status. Information on the status and distribution of species in this list and/or proposals for the addition of species to or deletion of species from this list are solicited from scientists and other knowledgeable persons. Such comments or proposals may be sent to:

Conservation Committee
Kansas Academy of Science
Dwight R. Platt, Chairman
Bethel College
North Newton, Kansas 67117

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The range listed for each species is the present range within Kansas as far as known. In many cases it is not known if the animal still exists in localities from which it has been reported. The status categories have been previously defined (see Transactions of the Kansas Academy of Science, 76(2), 1973) and are listed in order of priority for protection. In these lists, subspecific names are not used unless the rare or endangered status pertains only to a subspecies but not to the total species. Recommendations for protection of each species are those of the compilers and the Conservation Committee. The following general recommendations are given first priority by the committee:

- (1) Further study of the distribution and biology of these species is needed. Their present distribution in Kansas is poorly known in most cases and their assignment to status categories is tentative.
- (2) Sanctuaries should be developed in Cherokee County and at other known breeding sites of species on this list. A sanctuary would need the following protection: (a) the area would be void from further development, consideration of damming, draining or stream improvement; (b) the area would be marked as an endangered species sanctuary; (c) the protected populations would be scientifically studied and monitored. Protection of Shoal Creek in southeastern Kansas is especially important because of the number of rare and endangered species found there. Most of the populations of amphibians could be protected in small sanctuaries.
- (3) Close scrutiny of proposed stream channel improvement projects and dam projects to assess their effect upon rare and endangered species.
- (4) Full protection by law for all species on this list is essential. The sale of animals of these species by anyone in Kansas should be prohibited. State-issued permits should be required for collecting these species. A board of Kansas-oriented herpetologists should review applications for such permits and law enforcement officials should enforce such protection laws. The following reptiles, although not presently rare or endangered, should also be given full protection by law:

1. Texas horned lizard, *Phrynosoma cornutum*

Range: Includes most of Kansas, although it is no longer found in some localities where it was previously common.

2. Milk snake, *Lampropeltis triangulum*

Range: The subspecies *sympila* is common in the eastern one-fourth of Kansas and the subspecies *gentilis* is uncommon in the western three-fourths.

These reptiles could easily become endangered because of the expanding commercial pet trade in this country. Collectors invade known populations of these animals for collection and sale. In doing this, they not only remove large numbers of reproductive stock, but frequently destroy large areas of habitat. Coupled with changes in the environment by land use and pesticides and with our lack of knowledge of their natural populations, this practice may seriously hamper the continued existence of these species.

1. Endangered species. (none)

2. Rare species.

(1) Grotto salamander, *Typhlotriton spelaeus*

Range: Caves in Cherokee Co. (five known localities). The grotto salamander is not included in the most recent (1973) edition of the federal list of threatened wildlife but it is still under consideration by the Bureau of Sport Fisheries and Wildlife for inclusion in that list. It is placed in status category two in this Kansas list by the compilers and the committee because of its limited range (only found on the Salem and Springfield Plateaus of the Ozark region in Arkansas, Kansas, Missouri and Oklahoma), its restricted cave habitat, and threatened disturbance to its habitat (particularly pollution of underground water).

Recommendations: Designation of known cave areas where the species is found in Kansas as sanctuaries; protection against vandalism and disturbance by the general public; protection of any other populations of this species located in the state.

3. Species endangered in Kansas but not nationally.

(1) Long-tailed salamander, *Eurycea longicauda*

Range: Extreme southeastern Kansas (Cherokee Co.) in Shoal Creek area.

Recommendations: Same as for grotto salamander.

(2) Cave salamander, *Eurycea lucifuga*

Range: Extreme southeastern Kansas (Cherokee Co.) in Shoal Creek area.

Recommendations: Same as for grotto salamander.

(2) Many-ribbed salamander, *Eurycea multiplicata*

Range: Extreme southeastern Kansas (Cherokee Co.—one known locality).

Recommendations: Same as for grotto salamander.

4. Species rare in Kansas but not nationally.

(1) Green toad, *Bufo debilis*

Range: Short grass prairie in southwestern Kansas (known from Morton, Grant, Greeley and Logan cos.); present status poorly known.

Recommendations: Increase number of stock watering ponds in region; reduce use of pesticides.

(2) Crawfish frog, *Rana areolata*

Range: Eastern Kansas to just beyond the deciduous forest edge; present status poorly known.

Recommendations: Designation of breeding and habitat sites as sanctuaries; maintenance of wet grassland areas.

(3) Alligator snapping turtle *Macrolemys temmincki*

Range: Specimens known from the Arkansas River in Cowley Co. and the Cottonwood River in Lyon Co.; present status poorly known.

Recommendations: Close scrutiny of any flood control projects involving the Arkansas and Neosho river systems for their possible effect on this species; periodic monitoring of pesticides in fish in these rivers.

(4) Broad-headed skink, *Eumeces laticeps*

Range: Known from Franklin, Miami, Linn, Anderson, Crawford and Cherokee cos.; prefers deciduous forests where it lives high up in the hollows of rotten tree trunks.

Recommendations: Halt lumbering operations on areas in eastern Kansas where this species is known to occur; protect some natural forest habitat with decaying trees.

(5) Smooth green snake, *Opheodrys vernalis*

Range: Specimens known from Franklin, Riley and Geary cos.; present status poorly known.

Recommendations: Discontinue use of persistent pesticides in those areas where this species is known to occur.

(6) Long-nosed snake, *Rhinocheilus lecontei*

Range: Known from Harper, Comanche, Barber, Clark, Meade,, Seward, Morton and Ford cos. in southwestern Kansas.

Recommendations: Establishment of a prairie natural area within the range of this species in Kansas.

(7) Red-bellied snake, *Storeria occipitomaculata*

Range: Known from Atchison, Jefferson, Douglas, Franklin, Miami, Anderson and Cherokee cos. in forested habitat.

Recommendations: Close scrutiny of lumbering operations in eastern Kansas and restriction of large scale lumbering; discontinue use of persistent pesticides in areas where this snake is found.

5. Species with peripheral populations in Kansas.

(1) Hellbender, *Cryptobranchus alleganiensis*

Range: Distribution uncertain due to the difficulty of collecting; specimens only from the southeastern corner of Kansas in Neosho and Spring rivers (Cherokee and Labette cos.); may be in Kansas River although no specimens have been taken.

Recommendations: Further study of the distribution of the species in Kansas; maintenance of streams and rivers in their natural state, especially the Neosho and Spring rivers.

(2) Newt, *Notophthalmus viridescens*

Range: Three known localities in deciduous forest along the eastern border of Kansas (Linn, Cherokee, and Miami cos.).

Recommendations: Designation of any breeding sites located on state, federal or county property or on private property of willing landowners as sanctuaries to be protected from disturbance.

- (3) Eastern narrow-mouthed toad, *Gastrophryne carolinensis*
Range: Extreme eastern Kansas in deciduous forest area (Cherokee Co.—two known localities); present status poorly known.
Recommendations: Same as for newt.
- (4) Red-spotted toad, *Bufo punctatus*
Range: Short grass prairie of southwestern Kansas; known from Morton, Clark, Comanche and Barber cos.; present status poorly known.
Recommendations: Same as for green toad.
- (5) Spring peeper, *Hyla crucifer*
Range: Deciduous forest area of eastern border including the Shoal Creek drainage area (three known localities in Miami, Linn and Cherokee cos.); present status poorly known.
Recommendations: Same as for newt.
- (6) Green frog, *Rana clamitans*
Range: Deciduous forest area along the extreme eastern boundary; reported from Miami and Cherokee cos. (eastern Neosho River drainage).
Recommendations: Same as for newt.
- (7) Pickerel frog, *Rana palustris*
Range: Extreme eastern boundary in deciduous forest areas; present status poorly known but probably restricted to upper tributaries along eastern Neosho River drainage in Cherokee and Crawford cos.
Recommendations: Same as for newt.
- (8) Texas blind snake, *Leptotyphlops dulcis*
Range: Known from Barber, Clark, Meade and Seward cos. along the Oklahoma border; probably also occurs in Comanche Co.
Recommendations: Discontinue use of persistent pesticides in those areas where this species occurs; limitation of mining in those areas where this species occurs.

(9) Night snake, *Hypsiglena ochrorhyncha*

Range: Known only from Barber and Clark cos. in southwestern Kansas; probably also occurs in Comanche Co.

Recommendations: Same as for long-nosed snake.

(10) Rough earth snake, *Virginia striatula*

Range: Known only from Cherokee, Crawford and Chautauqua cos. in extreme southeastern Kansas; forested habitats.

Recommendations: Same as for red-bellied snake.

(11) Smooth earth snake, *Virginia valeria*

Range: Deciduous forests in Wyandotte, Leavenworth, Jefferson, Douglas and Franklin cos. in northeastern Kansas.

Recommendations: Same as for red-bellied snake.

(12) Checkered garter snake, *Thamnophis marcianus*

Range: Known only from Meade, Morton, Seward, Barber and Clark cos. in southcentral and southwestern Kansas.

Recommendations: Discontinue use of persistent pesticides in those areas where this snake has been recorded.

6. Extirpated species. There are no species that have been unquestionably extirpated from Kansas. The following species may not presently be found in Kansas. However records of these species are too few or questionable to demonstrate that self-sustaining permanent populations existed in Kansas in the past.

(1) Wood frog, *Rana sylvatica*

One specimen was collected in Lyon Co. in 1942 but no additional specimens have ever been found.

(2) Short-horned lizard, *Phrynosoma douglassi*

Three extant specimens reputedly collected in Smith, Logan and Edwards cos. at the turn of the century.

(3) Cottonmouth, *Agkistrodon piscivorus*

One specimen was collected in the Neosho River in Labette Co. in 1937 but no additional specimens have been found.

(4) Western diamondback rattlesnake, *Crotalus atrox*

Known only from two questionable records from adjacent localities in Cherokee and Crawford cos.; if present in Kansas, most probably found in southcentral or southwestern border counties.

Conservation Committee, Kansas Academy of Science

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