

Habitat Model for Species: Bullsnake

Pituophis catenifer sayi

[Distribution Map](#)
[Habitat Map](#)

Landcover Category

0 - Comments

Habitat Restrictions

Webb, 1970

Fitch and Shirer, 1971

Clarke, 1956

Gloyd, 1928

Hall and Smith, 1947

Platt, 1985

Gloyd, 1932

Brumwell, 1951

Fitch, 1958

Fitch, 1982

[#Reviewer]

09 - Mixed Oak Ravine Woodland

[#Reviewer]

12 - Sandsage Shrubland

Royal, 1982

Tihen and Sprague, 1939

14 - Willow Shrubland

Royal, 1982

17 - Tallgrass Prairie

Clarke, 1958

Busby and Parmelee, 1996

Fitch, 1982

18 - Sand Prairie

Royal, 1982

Platt, 1998

Busby and Collins, 1996

19 - Sandstone Prairie - not mapped

[#Reviewer]

20 - Western Wheatgrass Prairie

[#Reviewer]

Comments

Paper 1300 does not contain a clear link between the bullsnake and a habitat type.

Paper 1490 had only 2 bullsnake captures and followed one with telemetry. The one snake followed utilized a limestone outcrop and a weedy field (pg 121).

Paper 230 contains information on distribution only.

Paper 340 calls the bullsnake a "prairie frequenting species" but does not list where the specimens were captured or plant species in the habitat description (pg. 125). This paper was not used to model the habitat of

Paper 40 contains no habitat information and only 1 location record.

Paper 530 states that capture rates for bullsnakes were highest in cultivated areas pg. 19). Bullsnakes were found in sand prairie, pastured, and cultivated sandy areas but no plant species were given (pg. 19).

Paper 590 contains information on 1 captured bullsnake and was therefore not used to habitat of the species.

Paper 630 notes that the bullsnake was rare and no adults were found (pg. 205).

Paper 660 does not give specific plant species but it mentions their preference for grasslands and farmlands (pg. 123). It also mentions the use by bullsnakes of south-facing rocky hillsides for hibernation sites (pg.

Bullsnares caught during the study "were mostly stragglers or transients passing between summer range and ...hibernacula". Due to the no. of captures (161 individuals) I decided to use the paper to define the habitats, even if they are transitional.

Busby: found in a variety of herbaceous natural communities.

Platt comment in relation to Fitch 1999: high pop. in sand hills of western Harvey Co. (good pop. of pocket gophers) and very low in grassland of eastern Harvey Co. (few

Platt pers. obs.

Busby: Add more natural herbaceous communities.

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22 - Mixed Prairie

Tihen and Sprague, 1939

24 - Alkali Sacaton Prairie

[#Reviewer]

Busby: Add more natural herbaceous communities.

25 - Shortgrass Prairie

Royal, 1982

Collins and Collins, 1991

suggests that prime habitat is short grass and its ecology is closely linked to pocket gopher (from Platt review).

Tihen and Sprague, 1939

[#Reviewer]

Fitch: optimum habitat is shortgrass prairie.

40 - Non-native Grassland

Fitch, 1958

with many weedy forbs as described by Fitch review. After grazing ceased, grasses replaced forbs, with decrease in bullsnakes, and as woody plants replaced herbaceous, bullsnakes disappeared.

41 - CRP

[#Reviewer]

Distler: pers. obs. Ninescah Field Station; Busby: (#9999) paper does not state specific habitat but one was found in planted native grassland; Platt (#1620)

44 - Cultivated Land

Bugbee, 1945

very few dead snakes were found on the highway when it passed between fields under cultivation (most were between pastures and other uncultivated areas). Most snakes were bullsnakes.

Burt and Hoyle, 1935

Paper 220 mentions use of agricultural lands including alfalfa and clover fields, cornfields, and cultivated areas in general. The paper also contains distribution

Clarke, 1958

Platt, 1985

Burt, 1927

Paper 640 mentions that the bull snake is common in cultivated areas (pg. 6).

Fitch, 1958

Fitch, 1982

Fitch review comment: more numerous off the Reservation on cultivated land or grazed pasture

55 - Deciduous Woodland

[#Reviewer]

Platt - if sufficiently open; see Fitch 1958

60 - Mixed Prairie-Disturbed Land

[#Reviewer]

Busby comment; Platt pers. Obs.

71 - Weedy Upland

[#Reviewer]

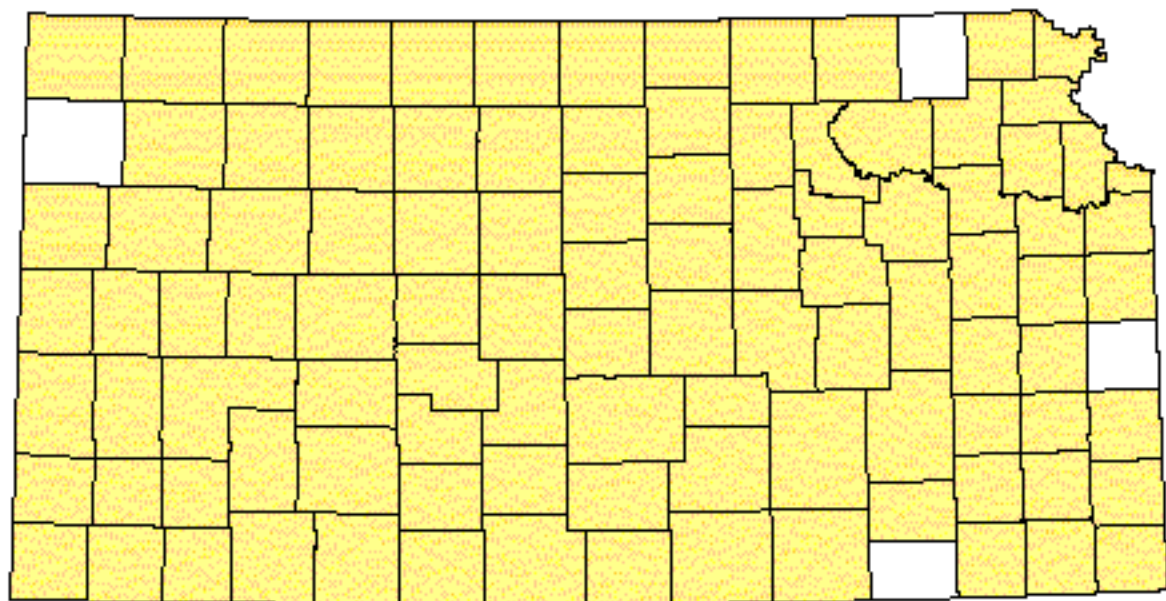
Platt: pers. obs.; Distler: pers obs. Ninescah Field


Reference List

1. Brumwell, M. J. 1951. An ecological survey of Fort Leavenworth Military Reservation. *American Midland Naturalist* 45(1):187-231.
2. Bugbee, R. E. 1945. A note on the mortality of snakes on highways in western Kansas. *Transactions of the Kansas Academy of Science* 47(3):373-374.
3. Burt, C. E. 1927. An annotated list of the amphibians and reptiles of Riley County, Kansas. *Occasional Papers of the Museum of Zoology, University of Michigan* 189:1-9.
4. Burt, C. E. and W. L. Hoyle. 1935. Additional records of the reptiles of the central prairie region of the United States. *Transactions of the Kansas Academy of Science* 37:193-216.
5. Busby, W. H. and J. T. Collins. 1996. The reptiles and amphibians of Fort Riley and vicinity. *Kansas Biological Survey, Lawrence, Kansas, USA.*
6. Busby, W. H. and J. R. Parmelee. 1996. Historical changes in a herpetofaunal assemblage in the Flint Hills of Kansas. *American Midland Naturalist* 135(1):81-91.
7. Clarke, R. F. 1956. Distributional notes on some amphibians and reptiles of Kansas. *Transactions of the Kansas Academy of Science* 59(2):213-219.
8. _____. 1958. An ecological study of the reptiles and amphibians in Osage County, Kansas. *Emporia State Research Studies, Kansas State Teachers College* 7(1):1-52.
9. Collins, J. T. and S. L. Collins. 1991. *Cimarron National Grassland/amphibians/reptiles.* U.S. Forest Service, Elkhart, Kansas, USA.
10. Fitch, H. S. 1958. Home ranges, territories, and seasonal movements of vertebrates of the Natural History Museum. *University of Kansas Publications, Museum of Natural History* 11(3):63-326.

11. _____. 1982. Resources of a snake community in prairie-woodland habitat of northeastern Kansas In N J Scott (ed) Herpetological Communities. Fish and Wildlife Service, Wildlife Research Report 13:83-97.
12. Fitch, H. S. and H. W. Shirer. 1971. A radiotelemetric study of spatial relationships of some common snakes. *Copeia* 1:118-128.
13. Gloyd, H. K. 1928. The amphibians and reptiles of Franklin County, Kansas. *Transactions of the Kansas Academy of Science* 31:115-141.
14. _____. 1932. The herpetological fauna of the Pigeon Lake Region, Miami County, Kansas. *Papers of the Michigan Academy of Science Arts and Letters* 15:389-408.
15. Hall, H. H. and H. M. Smith. 1947. Selected records of reptiles and amphibians from southeast Kansas. *Transactions of the Kansas Academy of Science* 49(4):447-454.
16. Platt, D. R. 1985. Population trends and habitat assessment of snakes and lizards in south central Kansas. Contract # 80 Final report. Kansas Fish and Game Commission, Pratt, Kansas, USA.
17. _____. 1998. Monitoring population trends of snakes and lizards in Harvey County, Kansas. Kansas Department of Wildlife and Parks, Pratt, Kansas, USA.
18. Royal, S. M. 1982. Herpetofauna of a sand sage prairie near Holcomb, Kansas. Thesis, Fort Hays State University, Hays, Kansas, USA.
19. Tihen, J. A. and J. M. Sprague. 1939. Amphibians, reptiles, and mammals of the Meade County State Park. *Transactions of the Kansas Academy of Science* 42:499-512.
20. Webb, R. G. 1970. Reptiles of Oklahoma. University of Oklahoma Press, Norman, Oklahoma, USA.

Bullsnake



 Range from Collins, 1993

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