

**KANSAS DEPARTMENT OF WILDLIFE AND PARKS**  
**Petition for Species Review (submission deadline: October 5, 2023)**  
**Endangered/Threatened/Species-in-Need-of-Conservation Status**

Kansas recognizes rare or declining species by state listing to categories of Endangered\*, Threatened\*\*, or Species-in-Need-of-Conservation (SINC)\*\*\* (K.A.R. 115-15-1 and 2). Every 5 years these lists are reviewed as required by statute (K.S.A. 32-960). A Threatened and Endangered Species Task Committee oversees the process and makes listing recommendations to the Secretary of Kansas Department of Wildlife and Parks (KDWP) based on best available science. Any changes to these lists must be approved by the KDWP Commission.

A review regarding a listing, delisting, uplisting or downlisting of Kansas wildlife regarding the above categories is initiated via a petitioning process. To submit a petition for review, please fully complete the requested information attached below. Petitioners are strongly encouraged to provide all substantive biological information with cited references to aid in the review. A completed petition is no guarantee that the listing request will occur. The scientific information in the petition determines whether or not the requested listing change will merit a full review.

At the request of the KDWP Secretary, the Threatened and Endangered Species Task Committee will evaluate all completed petitions and determine if there is sufficient information to justify a full review of the petitioned status change. If the species is accepted for further review, there will be public information meetings conducted in regard to the proposed listing change.

All petitioning documents pertaining to the species under full review will be made available to the public at the KDWP website (<https://ksoutdoors.com/Services/Threatened-and-Endangered-Wildlife/2023-Five-Year-Review>). If a listing change is recommended, a notice of the proposed action will be sent to federal and state agencies and local and tribal governments that may be affected by the petitioned species, and to all individuals and organizations that have requested notification. KDWP will issue news releases concerning the proposed species listing change. In addition, individual petitions and substantiating data will be distributed to and evaluated by: 1) academia, 2) wildlife agency personnel, 3) other professionals, 4) other resource agencies (state and federal) and 5) nonprofessionals who have known expertise/experience with the petitioned species. This entire process, from petition to final vote by the commission, has taken as long as 18 months.

Questions concerning the petitioning and review process should be directed to Jordan Hofmeier, Assistant Director of Ecological Services, KDWP, 512 SE 25<sup>th</sup> Ave, Pratt, KS 67124 ([Jordan.Hofmeier@ks.gov](mailto:Jordan.Hofmeier@ks.gov)).

**Completed “Petition for Species Review” pdf forms should be sent to [kdwpt.ess@ks.gov](mailto:kdwpt.ess@ks.gov) or paper copies to KDWP, Attn: Ecological Services, 512 SE 25<sup>th</sup> Ave., Pratt, KS 67124-8174.**

\* Endangered Species: any species of wildlife whose continued existence as a viable component of the state’s wild fauna is determined to be in jeopardy (KSA 32-958c).

\*\*Threatened Species: any species of wildlife which appears likely, within the foreseeable future, to become an endangered species (KSA 32-958f).

\*\*\*Species-in-Need-of-Conservation: (SINC) any species which are highly specialized, whose habitat is very limited in Kansas, or shows a population decline that warrants data collection concerning its status in Kansas. Conservation efforts focused on this species can prevent future listing as threatened or endangered. This listing is not defined in the Kansas Statutes.

Species Common Name: Greater Prairie-Chicken

Species Scientific Name: *Tympanuchus cupido*

Currently listed as:

Endangered  Threatened  Species-In-Need-of-Conservation (SINC)  not listed

Petitioned to:

Endangered  Threatened  SINC  not listed

Note to petitioner: Feel free to expand the blanks below to add sufficient information. When completed, please convert Word document to a pdf prior to submitting.

1) List the survey/research information that has occurred since the last 5-year review (2018) that has prompted your petition to change the listing category of this species.

2022 resurvey of 31 leks present in 1997 in eastern Greenwood County showed an 84% decline in leks. Many parallel results suggest that the declines in this species are statewide, likely related to widespread spraying of herbicides, woody plant encroachment, and Spring burning.

- 2) a. Provide a map of the species' current distribution in Kansas and range wide.  
Species is broadly distributed across central and northwestern Kansas; see map attached of population loss in Greenwood County
- b. Is the Kansas population considered connected with the population in an adjoining state? eastern Greenwood County  
Yes  No  Don't know   
There is likely genetic contiguity to populations in adjacent parts of Nebraska
- c. If no, what is the distance to the nearest out-of-state population? \_\_\_\_\_
- d. Is the Kansas population genetically distinct from the core population in other states?  
Yes  No  Don't know  (appears that there is little genetic structure in the species)

Wong, M. 2003. High spatial homogeneity in a sex-biased mating system: The genetic population structure of greater prairie chickens (*Tympanuchus cupido pinnatus*) in Kansas, Missouri, and Nebraska. Master's Thesis. Division of Biology, Kansas State University.

3) How and to what magnitude has the species' distribution changed within Kansas during the past 35 years?

Dramatic decline across the species' range in the state, extirpation from Anderson, Douglas, and Shawnee counties. Populations crashing even where still present (e.g., Greenwood County).

Globally? The entire eastern half of the species' distribution has been lost; Kansas should be a stronghold\*.  
Cite references: Robbins, M.B. et al. 2002. Major negative impacts of early intensive cattle stocking on tallgrass prairies: The case of the Greater Prairie-Chicken (*Tympanuchus cupido*). North American Birds, 56: 239-244.

4) Describe the species' population (not distribution) trend within Kansas during the past 35 years.

See comments above. This species can linger in an area long after its demography is markedly negative, with massive declines in the Osage Plains and Flint Hills regions; possibly stronger in north-central Kansas.

Globally? Rangewide population declines, possibly except for the northern Great Plains.

Cite references: McNew, L. B. 2012. Demography of Greater Prairie-Chickens: regional variation in vital rates, sensitivity values, and population dynamics. Journal of Wildlife Management 76:987-1000

\*See summaries from

Baker, M. F. (1950). Prairie chickens in Kansas. Transactions of the Kansas Academy of Science (1903-), 53(3), 316-318.

Horak, G. J. 1984. Kansas Prairie Chickens. Kansas Fish and Game Commission, Pratt, Kansas.

- 5) a. What is the Global Rank of this species from NatureServe? (<http://natureserve.org/>)  
b. What is species status and trend on IUCN Red List? (<http://www.iucnredlist.org/>)  
c. What proportion of the species' global population is currently found within Kansas?  
2020 Near Threatened status according to IUCN
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6) What is the species' current residency status within Kansas (vagrant, migrant, wintering, or year-round)?  
year-round resident

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7) Describe the species' current breeding status within Kansas.  
established native breeding species

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Cite references: Johnson, J.A., M.A. Schroeder, and L.A. Robb, Greater Prairie-Chicken (*Tympanuchus cupido*), version 1.0, in *Birds of the World*, A.F. Poole, Editor. 2020, Cornell Lab of Ornithology: Ithaca.

8) Describe the species' habitat requirements:  
large expanses of mid- and tall-grass prairie

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Cite references: Johnson, J.A., M.A. Schroeder, and L.A. Robb, Greater Prairie-Chicken (*Tympanuchus cupido*), version 1.0, in *Birds of the World*, A.F. Poole, Editor. 2020, Cornell Lab of Ornithology: Ithaca.

9) Discuss the species' degree of specialization with regard to habitat, food, or other life history factors.

Species is quite specialized on native grasslands, with few or no populations known to be present under any other conditions.

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Cite references: Svedarsky, W.D. 2000. Status and management of the greater prairie-chicken *Tympanuchus cupido pinnatus* in North America. *Wildlife Biology* 6:277-284.

10) Discuss the species' sensitivity to environmental contaminants and disease, if any, including known potential problems:

unknown

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Cite references: n/a

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11) To what degree is this species currently vulnerable to consumptive and/or commercial use in Kansas, and what relationship does that use have on its total population?

Hunting of prairie-chickens is legal in Kansas, though we suspect that the harvest pressure is light compared to the population losses coming from habitat loss and degradation.

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Cite references: <https://ksoutdoors.com/Hunting/Upland-Birds/Greater-and-Lesser-Prairie-Chicken>

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12) What are the current and imminent threats to the species in Kansas? Please list in priority order with the highest-ranked threat first.

Spring burning, Woody plant encroachment, Herbicidal spraying, Drought

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Cite references: Horak, G. J. 1984. Kansas Prairie Chickens. Kansas Fish and Game Commission, Pratt, Kansas.  
Robbins, M. B., A. T. Peterson, and M. A. Ortega-Huerta. 2002. Major negative impacts of early intensive cattle stocking on tallgrass prairies: The case of the Greater Prairie-Chicken (*Tympanuchus cupido*). *North American Birds* 56:239-244.

13) a. What is the recovery potential of this species?

Excellent \_\_\_\_\_ Good \_\_\_\_\_ Fair  x  Poor \_\_\_\_\_ Unlikely \_\_\_\_\_

Explain: \_\_\_\_\_

Species would likely rebound in the Flint Hills and other regions with proper grassland management.

b. List any conservation actions that are currently addressing the needs of this species.

Prairie conservation efforts scattered across the state.

c. List any pending conservation actions that might improve the status of this species.

Possible beginning of movement to reduce Spring burning, or to burn less frequently.

14) Summarize your reasons for requesting a review of this species:

The Kansas prairies have long been considered as the stronghold/core area for this species. Given Greenwood County resurvey results, this is clearly no longer the case.

15) Describe your expertise/experience with the species you are petitioning.

Extensive experience with the species' populations across the state and across many other sectors of its full geographic distribution.

Note on citations: It is not necessary to provide extensive literature citations, however, any pertinent data is helpful in determining species status. Feel free to attach any information you may have pertaining to the status or biology of this species that will help in its review.

If there is insufficient space for your reply to any of the informational requests, attach extra sheets. Be sure to reference your attached material to the appropriate numbered questions.

The currently-listed Kansas species can be found at:

<http://ksoutdoors.com/Services/Threatened-and-Endangered-Wildlife/Kansas-Threatened-and-Endangered-Species-Statewide> (Threatened and Endangered list)

<http://ksoutdoors.com/Services/Threatened-and-Endangered-Wildlife> (SINC list)

Petitioner(s):

Name:  A. Townsend Peterson and Mark B. Robbins

Address:  Biodiversity Institute, 1345 Jayhawk Blvd.

City:  Lawrence  State  Kansas  Zip  66045

Phone:  785-864-3926

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Send fully completed petition to (deadline is **October 5, 2023**): [kdwpt.ess@ks.gov](mailto:kdwpt.ess@ks.gov) or

Kansas Department of Wildlife and Parks  
Attn: Ecological Services  
512 SE 25<sup>th</sup> Ave  
Pratt, KS 67124-8174

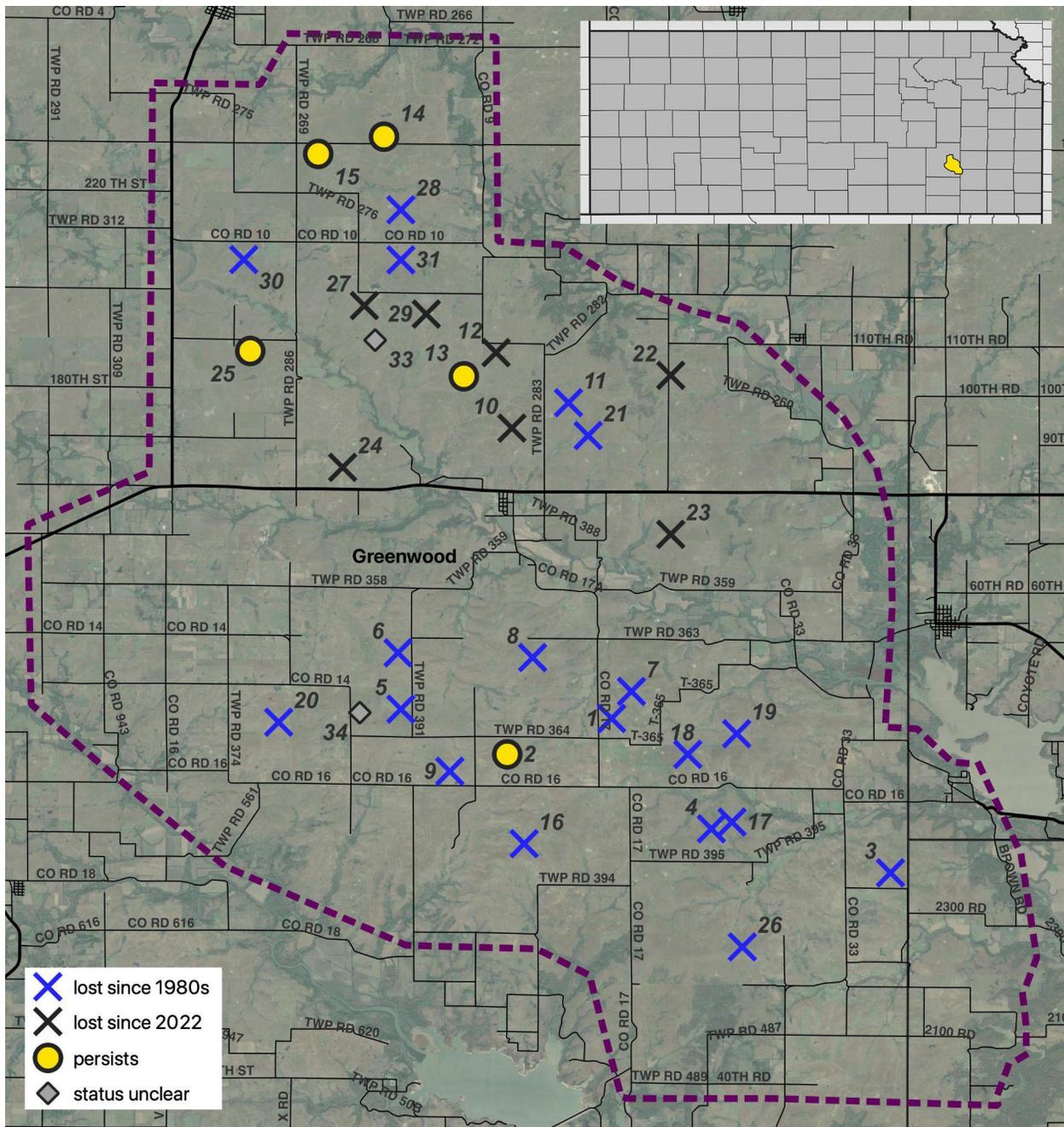


Figure. Summary of Greater Prairie-Chicken leks across the study area in eastern Greenwood County, Kansas. Shown are 31 leks detected in the 1997 surveys, which either have persisted (yellow circles), or have been lost since the original surveys (X's). Also shown are two sites where birds were detected in 2022, but were not clearly documented as constituting a lek and were not present in 2023, such that they are considered to be of unclear status. The inset map shows the position of the study area (in yellow) in the state of Kansas. Note in particular the loss of numerous leks just between the 2022 and 2023 breeding seasons.