



8 March 2013

Public Comments Processing
Attn: FWS-R2-ES-2012-0071
Division of Policy and Directives Management
U.S. Fish and Wildlife Service
4401 N. Fairfax Drive
MS 2042-PDM
Arlington, VA 22203.

To U.S. Fish and Wildlife Service:

Pursuant to the *Endangered Species Act* (1973, 16 USC 1531 et seq., as amended) and the request by the U.S. Fish and Wildlife Service (USFWS) for information on the proposed listing of the Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*) as Threatened (50 CFR Part 17, 77(238):72828-73888, Docket No. FWS-R2-ES-2012-0071:4500030113) we, the Kansas Ornithological Society (KOS) and Oklahoma Ornithological Society (OOS) jointly support the listing of the Lesser Prairie-Chicken as threatened for the following reasons: biological considerations including range reduction and population declines; anthropocentric factors such as wind power and oil development in existing habitat; climatic factors such as global warming and its potential impact on habitat; and the lack of regulatory mechanisms or action by the state of Kansas to protect the species.

Range Reduction -- The figure below (Figure 1) represented the historic range of the Lesser Prairie-Chicken (USFWS 2008), however, the additional red outlined area represents an expanded range based on Thompson et al. (2011). Goss (1891) indicated the Lesser Prairie-Chicken occurred in southwest Missouri and Goss himself met with the bird in southeast Kansas (pg 227) and he listed measurements of two birds taken from Neosho County, Kansas (male: length = 16.7 in, stretch of wing = 27.25 in, wing = 8.25 in, tail = 4.0 in, tarsus = 1.6 in, bill = 0.6 in; female length = 15.6, stretch of wing = 26.5 in, wing = 8.1 in, tail 3.65 in, tarsus = 1.6 in, bill 0.58 in), both of which were part of the Goss Collection currently housed at the University of Kansas Natural History Museum (KUMNH #71641, 71642). Thompson et al. (2011) found four additional specimens from Anderson, Miami, and Lyon counties (Harvard University Museum of Comparative Zoology, MCZ #187193, 187194, 25382, 331738), all from January and February from 1881 to 1894. All specimens in Kansas are from the years of 1878 to 1894, and all from winter months. The fact that these specimens were obtained during the winter over a period of 17 years suggests that the Lesser Prairie-Chicken at least wintered in southeastern Kansas as part of its historical range.

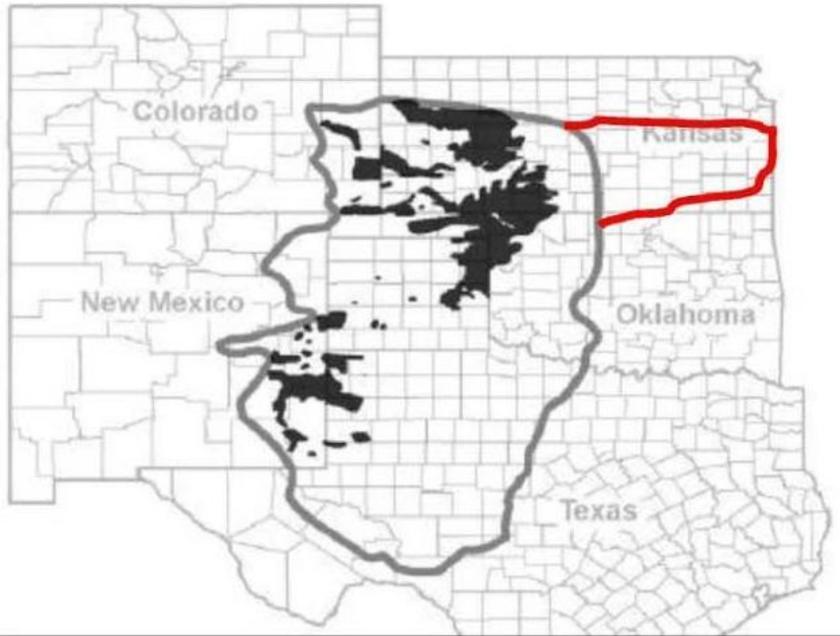


Figure 1. Estimated historic (perimeter circle) and current (black polygons) occupied LPC range in CO, KS, NM, OK and TX. Current (2007) range map layer courtesy of TPWD.

Thompson and Ely (1989) included a portion of Goss's records (Figure 2, below). Thompson et al. (2011) provided the most up to date map representing counties with verified site records and specimens (Figure 3, below).

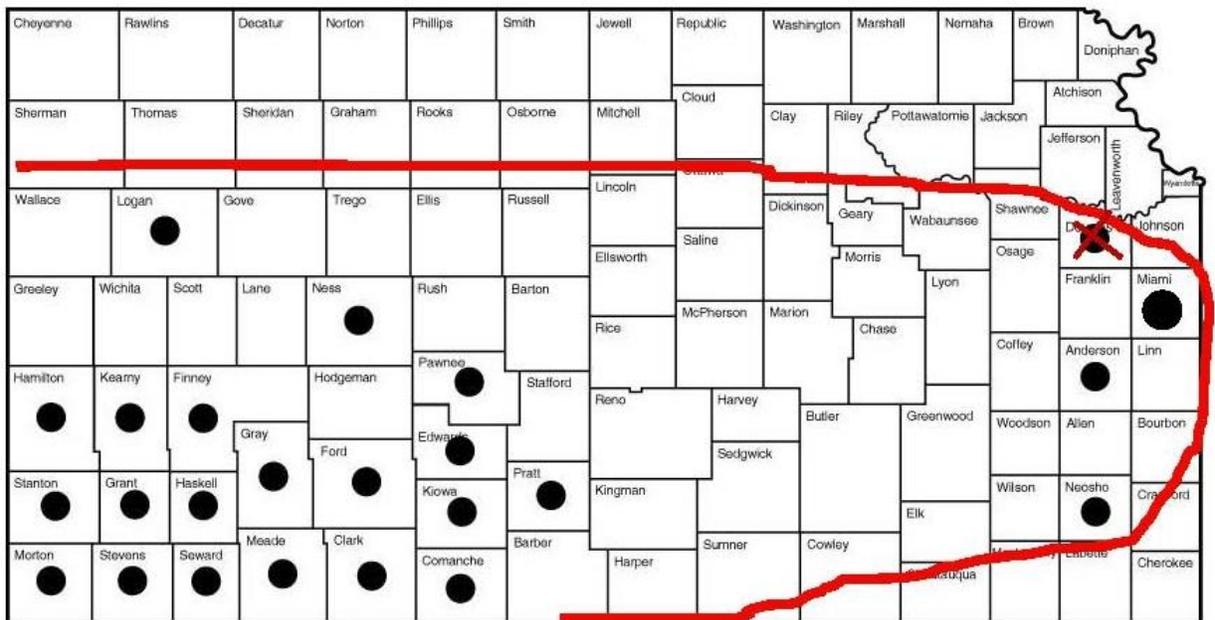


Figure 2. Lesser Prairie-Chicken county records depicted by Thompson and Ely (1989) with red line indicating presumed historic range based on specimens by Goss. The red X through Douglas County indicates the record was erroneously placed and should've been in Miami County (large black dot).

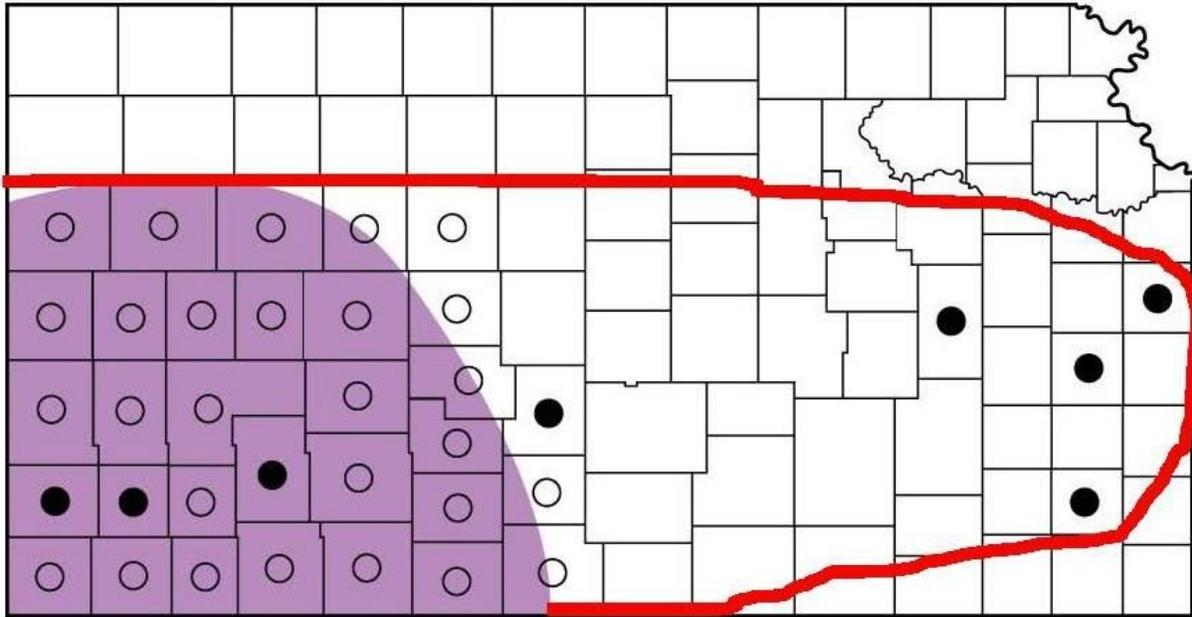


Figure 3. Lesser Prairie-Chicken county records depicted by Thompson et al. (2011) with red line indicating presumed historic range based on specimens (southeastern Kansas), verified site records (southwestern Kansas or specimens) all with solid circles, and confirmed breeding with open circles. Purple area indicates current range of the Lesser Prairie-Chicken in Kansas.

Furthermore, to substantiate Goss's records for southeastern Kansas, there is a record from southwestern Missouri (recognized by Goss) and published by Lawrence (1877). John Hubbard corresponding with Mark Robbins (pers. comm.) indicated he examined historical records, including Lawrence (1877), where about 30 carcasses were found for sale in the Fulton Market in New York during the latter part of January 1877. Hubbard went on to indicate that Lawrence ascertained the birds were from around Pierce City, Missouri, two of these were preserved as specimens and are housed at the Smithsonian Institution (USNM #74007) and the American Museum of Natural History (AMNH #45207) (Hubbard pers. comm.). Interestingly, Lawrence indicated these small birds (Lesser's) were not noticed before this winter (1877). Widmann (1907, pg 82), Neff (1923, pg 205), and Robbins and Easterla (1981) included the records for southwestern Missouri, but the latter two indicated the year was 1887, which is incorrect, it was 1877 (pointed out by Hubbard pers. comm.). Interestingly, these southwestern Missouri records coincide with the records from southeastern Kansas as reported by Goss (1891).

Additionally, there were birds reported from southwestern Nebraska during the autumn of 1925, as reported by Myron Swenk at the annual meeting of the Wilson Ornithological Society in 1931 (in Sharpe 1968, pg 47-50). Swenk provided an account of how Mr. A.M. Brooking of Hastings, Nebraska, examined prairie-chickens killed by hunters near Danbury beginning on 1 October 1925. On 7 October 1925, six Lesser Prairie-Chickens were identified, of which five were procured for specimens by Brooking, and Sharpe later confirmed three or four as this taxon (Hubbard pers. comm.). Therefore, it appears the actual "Historic Range" of the Lesser Prairie-Chicken for a period from at least 1877 through 1925 likely included: from southwestern Nebraska (northern limits), southeastward to southwestern Missouri (eastern limits) (Figure 4).

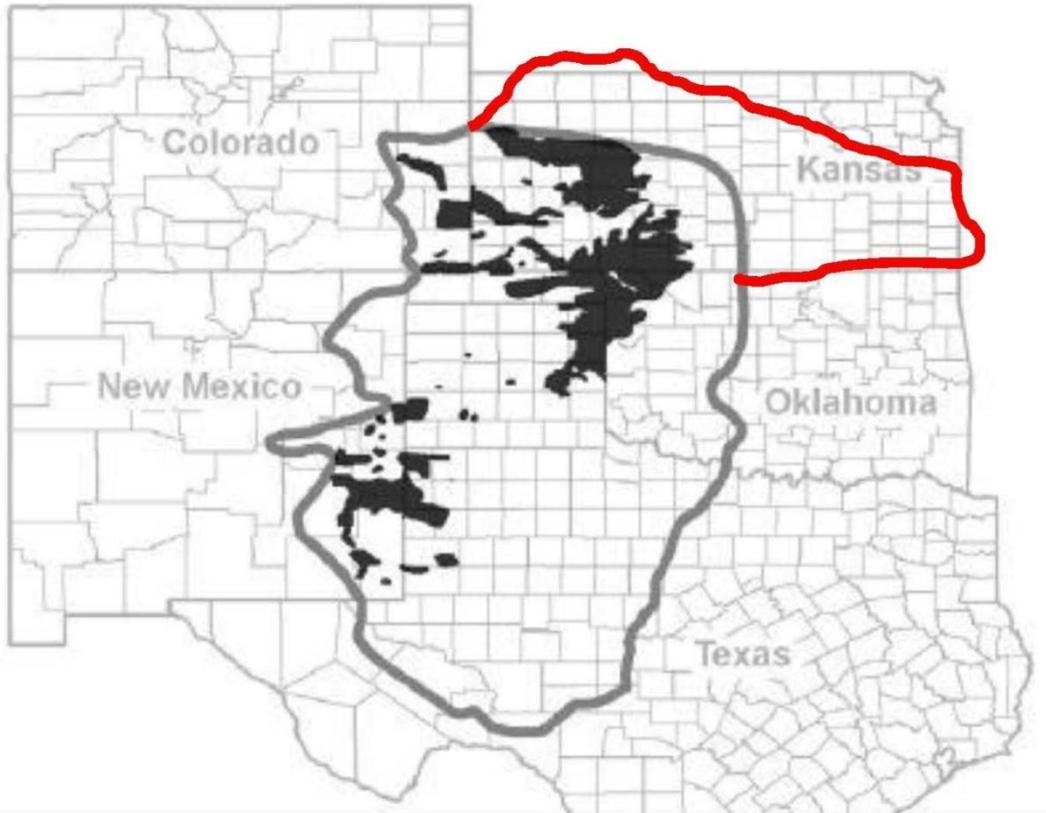


Figure 4. Estimated historic range of Lesser Prairie-Chicken from 1877-1925 added in red to the historic and current range based on USFWS (2008).

Although the majority of early records for Kansas were mostly south of the Arkansas River with only one known specimen north of the river (Logan County, 1921, KUMNH #11177), as outlined above, birds likely occurred farther north based on the observations of birds from southwestern Nebraska. Thus, the apparent “increased range expansion” in Kansas is really movement back into its previous range, and not an expansion of its range. Additionally, this reestablishment back to its former range appears to be within artificial habitat, CRP grasslands. The fact that these grasslands are artificial, but more importantly, dependent on funding from the U.S. Government, and associated with “Farm Bills”, makes them perilously close to removal from the program at any given time. As an example, Schrag (2009) indicated that two-thirds of the CRP contracts in KS were scheduled to expire by 2012. Underscoring the amount of CRP being used, the USFWS (2008) indicated CRP fields in KS comprise 12.5% of the occupied Lesser Prairie-Chicken range, second only to TX (13.8%).

Additionally, we are unaware of any studies to indicate the efficacy of CRP to enhance Lesser Prairie-Chicken populations long-term. Are these CRP grasslands providing new habitat in previously occupied range and allowing populations to increase, or are they providing ecological sinks, removing populations away from native grasslands that have already been affected by anthropogenic factors or fragmentation? Until we have some biological certainty that CRP grasslands are providing appropriate nesting, brood rearing, and lekking habitat, and these grasslands will remain intact, we should be apprehensive in using such habitat as a reason not to list the Lesser Prairie-Chicken at this time.

Population Decline -- The overall population of the Lesser Prairie-Chicken still appears to be in decline, even with conservation efforts since the species was proposed and was warranted as a Candidate Species at a Category 8 by the USFWS in 1998 (USFWS 2008). In 2008 when the USFWS (2008) moved it to a Candidate Category 2 there was an estimate of between 35,214 and 64,669 individuals. Since 2008 the population has continued to decrease, with the most recent estimate of 37,170 or between 23,632 and 50,704 (McDonald et al. 2012). While we recognize different survey techniques were used to determine the population size between 2008 and 2012, across the range, lek counts have continued to show declines except within the CRP grasslands (see comments above).

Anthropogenic Factors -- As outlined in the Petition to List the Lesser Prairie-Chicken in Kansas (KOS 2009) structural fragmentation (introduced vertical structure) is known to cause Lesser Prairie-Chickens to avoid or abandoned otherwise suitable habitat. They included recent studies (Hagen 2003, Pittman 2003, Robel et al. 2004, Pittman et al. 2005) demonstrating how this species avoids human-made structure. This information, coupled with similar avoidance behavior noted in other “grouse” species, suggests there is cause for concern over negative impacts on prairie-chickens of other types of structures as well, including communication towers, wind farms, and suburban homes. Below (Figure 5) is the most recent update for potential wind farm development in Kansas (Kansas Wind Energy 2013) and Figure 6 depicts potential wind energy development in Oklahoma (Schoeling 2012).

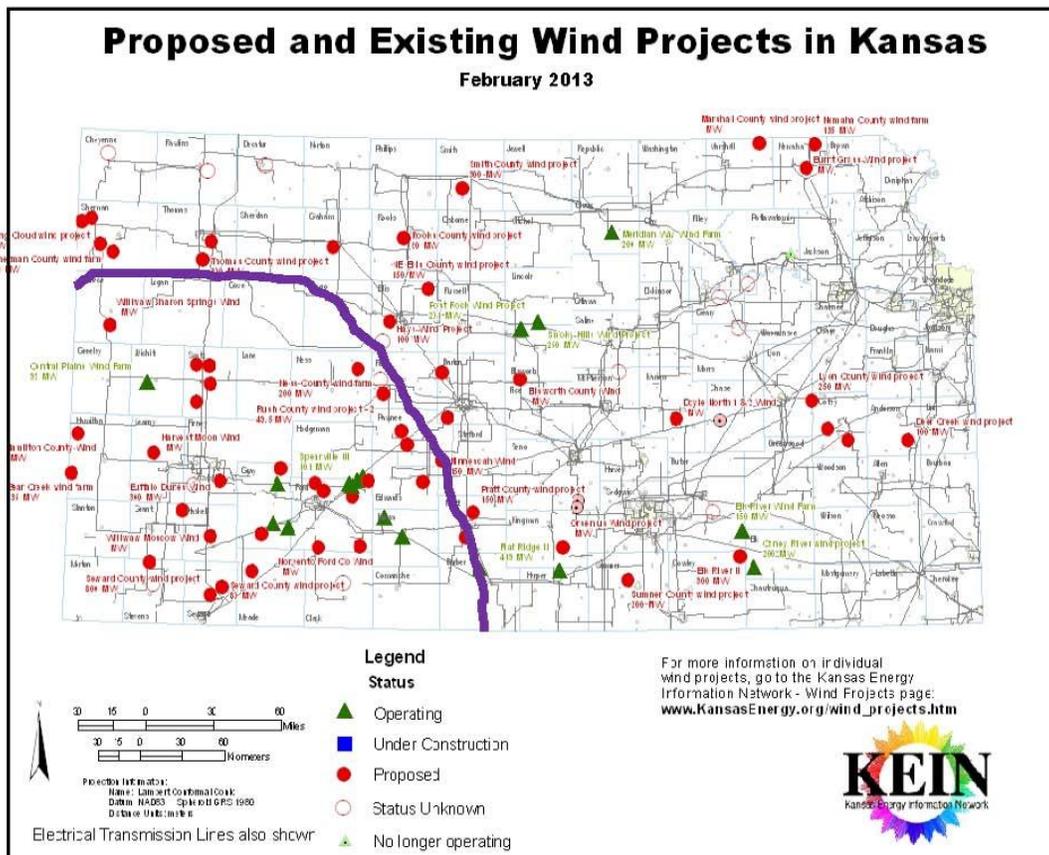


Figure 5. Proposed and existing wind projects in Kansas (Kansas Wind Energy 2013) with the purple line representing the current Lesser Prairie-Chicken range based on Thompson et al. (2011).

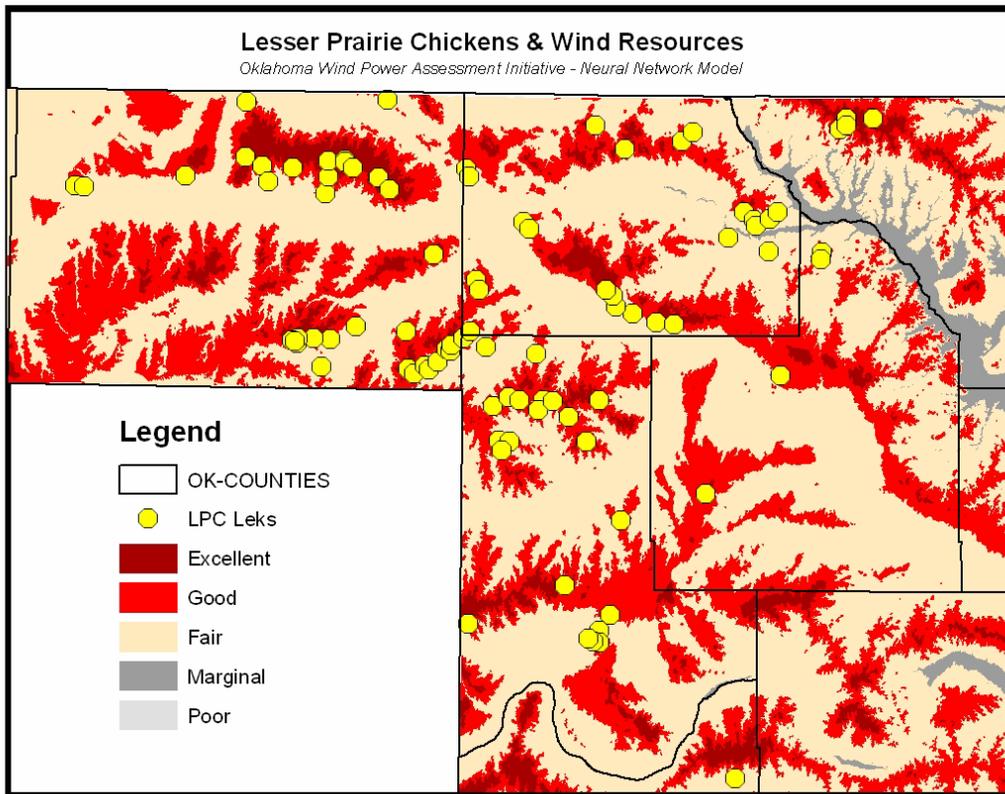


Figure 6. Lesser Prairie-Chicken leks associated with optimal wind energy resources in Oklahoma taken from Schoeling (2012).

As we continue to promote wind energy, the likelihood of wind development moving into existing or former Lesser Prairie-Chicken habitat is not going away. In fact, on 22 May 2009, Governor Parkinson signed legislation, the Renewable Energy Standards Act, which codifies the goal for KS utilities to generate 20% of their power by renewable energy by 2020 (Office of the Governor 2009), and an examination of the above figure indicates that much of this would be directly within the Lesser Prairie-Chickens main range, or the largest remaining population. Furthermore, as a result of the increase in wind energy there will be an increase in transmission line development. While current efforts try to encourage development away or not near current Lesser Prairie-Chicken habitat, grassland habitat is being used, albeit fragmented, or non-prime habitat, but none the less it is habitat within the range of the species. The fact that such habitat is currently being developed would likely prevent the possibility of reintroductions, or re-establishment within its current range of unoccupied habitat. We also ask what guidelines come into play to prevent CRP grasslands from being used for wind energy in the future if the Lesser Prairie-Chicken is not protected under ESA?

The Lesser Prairie-Chicken range (Figure 7 and 8) is well within some of the largest gas and oil fields in Kansas (Newell et al. 1987) and Oklahoma (Boyd 2002, 2005). Current prices of oil and gas drive the exploration and production in Kansas, including the increase in horizontal drilling (fracking) within the species range (Newell 2012). Similar trends occur in Oklahoma. Like Kansas, Oklahoma has had an increase in natural gas production in recent years (Figure 9, Oklahoma Geological Survey 2009).

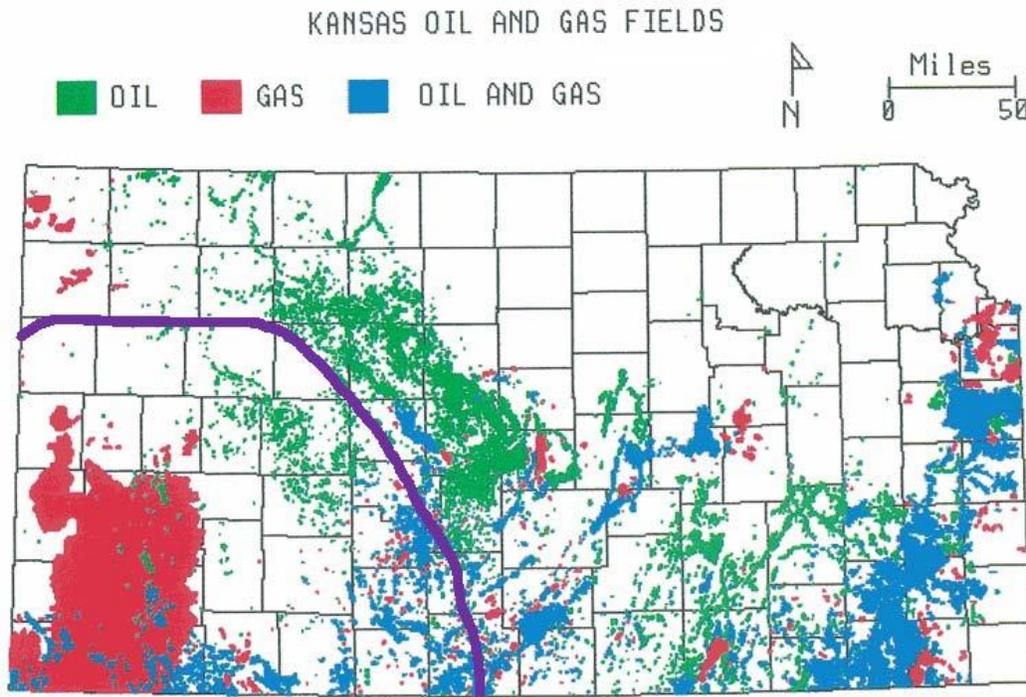


Figure 7. Kansas oil and gas fields from Newell et al. (1987) associated with the current Lesser Prairie-Chicken range depicted by purple line, based on Thompson et al. (2011).

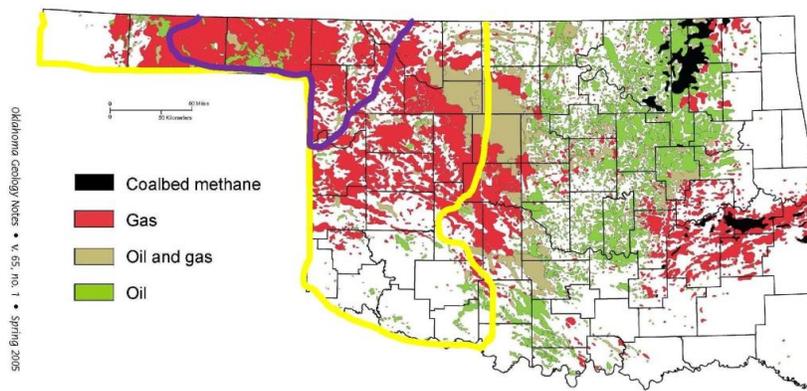


Figure 2. Oil and gas fields of Oklahoma. Map modified from Boyd (2002c).

Figure 8. Oklahoma oil and gas fields from Boyd (2005) associated with the current Lesser Prairie-Chicken range depicted by purple line, and historic range by yellow line based on USFWS (2008).

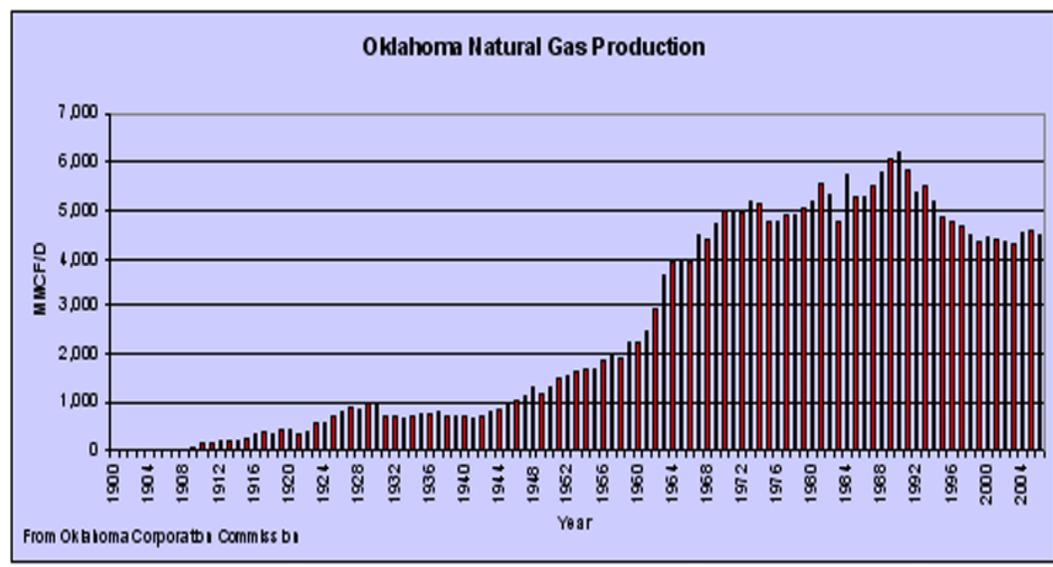


Figure 9. Increased natural gas production in Oklahoma (Oklahoma Geological Survey web page 2009).

All indications demonstrate a continued increase in anthropogenic disturbances within the core population of Lesser Prairie-Chickens in Kansas and Oklahoma; therefore, we believe that listing the Lesser Prairie-Chicken might be the only mechanism to maintain the species from becoming endangered or extinct.

Climate Change -- Peterson (2003) modeled climate change scenarios on montane and Great Plains bird species, including Lesser Prairie-Chicken, and predicted that Great Plains species would be more heavily influenced by climate change. The predictions under the assumption of no dispersal indicated there would be a dramatic area reduction (mode 35% of distributional area lost) and significant spatial movements (0-400 km shift of range centroid) of appropriate habitat. Channell (2010, pg 40) indicated “we might be reaching a time where climate/weather becomes the signal. If we understand how weather influences the lesser prairie-chicken populations now we will be in better position to manage those populations in the future.”

Regulatory Mechanisms – Currently no regulatory mechanisms exist within the state of Kansas to protect the Lesser Prairie-Chicken. Every five years Kansas Department of Wildlife, Parks, and Tourism (KDWP&T, formerly Kansas Department of Wildlife and Parks, KDWP) is responsible for reviewing the listing of rare species of fauna as Endangered, Threatened, or Species-in-Need-of-Conservation as required by Kansas statute (K.S.A. 32-960). A Threatened and Endangered Species Task Committee (Committee) oversees the process and makes listing recommendations to the Secretary of KDWP&T. The recommended changes must then be approved by the KDWP&T Commission. In 2008, the Committee solicited input from other entities regarding listing, delisting, uplisting, or downlisting of Kansas wildlife as part of the review process. The Lesser Prairie-Chicken was not petitioned for listing. The USFWS completed a review of the prairie-chicken in November 2008 to reassess its candidate status. This review was completed after solicitation and review of petitions received by KDWP. So the KOS (2009) and seven co-petitioners pursuant to the authority under K.S.A. 32-960, petitioned the Secretary of KDWP to consider the Lesser Prairie-Chicken as a “threatened” species in Kansas on 6 July 2009 (available at on-line, see Literature Cited). The KDWP declined to list the species as threatened. Underscoring this fact, since 1998 when the species was first

petitioned to be listed federally, KDWP or the current KDWP&T has failed to list the species, not even as a Species in Need of Conservation (SINC) (KDWP&T 2013). In fact, there is currently a bill in the state legislature to do away with the K.S.A. 32-960 statute.

In Oklahoma, under Title 29, Oklahoma Statutes, §29-3-103, the Wildlife Conservation Commission shall constitute an advisory, administrative and policymaking board for the protection, restoration, perpetuation, conservation, supervision, maintenance, enhancement, and management of wildlife in this state as provided in the Oklahoma Wildlife Conservation Code. While the Lesser Prairie-Chicken has been identified as a species of greatest conservation need by the Oklahoma Department of Wildlife Conservation (ODWC) it is not listed as a "State-listed Species" (ODWC 2011). However, ODWC suspended hunting seasons in 1997 (Schoeling 2012) under title 800:25-7-14 (including the Greater Prairie-Chicken). Schoeling (2012) indicated (per statute) the season shall remain closed until populations have recovered to levels at which sustained hunting is warranted as provided by the July 1997 Adaptive Harvest Management Strategy for Prairie Chickens in Oklahoma report for firearms hunting, and the June 1999 Archery and Falconry Adaptive Harvest management for falconry or archery hunting. The hunting season will be opened at the most liberal level allowed by these Adaptive Harvest Management Strategy reports.

On behalf of our letter of support for the listing of the Lesser Prairie-Chicken as threatened, the point of contact for all technical aspects related to this is:

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Thank you for your consideration on this matter.

Respectfully Submitted;



Henry Armknecht, President
Kansas Ornithological Society



Chris Butler, President
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