BEFORE THE
UNITED STATES
DEPARTMENT OF THE INTERIOR

AGENCY INFORMATION COLLECTION ACTIVITIES: ENDANGERED AND THREATENED WILDLIFE AND PLANTS: LISTING OF THE LESSER PRARIE CHICKEN AS A THREATENED SPECIES UNDER THE ENDANGERED SPECIES ACT

[Docket Number: FWS-R2-ES-2012 - 0071:4500030113]
RIN 1018-av21

COMMENTS
OF
KANSAS COUNTIES:

Clark, Gove, Greeley, Hodgeman, Kearny, Lane, Logan, Morton, Ness, Seward, Scott, Trego, Wallace, Wichita,
and,
Kansas Electric Cooperatives (KEC)
Kansans for Balanced Resource Choices (KBRC)
171 Private Kansas Landholders

Background –

The Lesser Prairie Chicken (*Tympanuchus pallidicinctus*) is a wonderful upland prairie grouse species displaying some of the most extraordinary mating rituals in the avian world. On early spring Kansas mornings, groups of male Lesser Prairie Chickens can be found at lek sites exhibiting elaborate dancing and vocalizations designed to attract females. Kansans care about preservation of the Lesser Prairie Chicken within the context of respect for private landholders, balanced environmental stewardship, the right of sovereign State and Local governments to govern their own regions, and sound scientific judgment.

The Lesser Prairie Chicken (LPC) is known to occupy areas in Eastern Colorado, Northern Texas, Eastern New Mexico, Western Oklahoma and Western Kansas. The majority (>80%) of land within known LPC range is privately owned, with the exception of significant parcels of BLM land in eastern New Mexico.

The historical LPC range prior to 1960 is speculative and population (census) counts are limited, qualitative and speculative.

Currently, the LPC is found in four ecoregions called *Sand Shinnery Oak*, *Mixed Grass Prairie*, *Shortgrass*, and *Sandsage Prairie*. Of the four ecoregions, the LPC in Kansas is displaying good recovery and populations not previously observed north of the Arkansas River are being counted, even as far north as Interstate 70. It is noteworthy that the highest population density of LPCs being observed in Kansas are in areas *previously undocumented* by this species, demonstrating their resilience, adaptability and ability to migrate to conditions better suited for sustainability.

Drought –

Since 2006, nearly the entire ecoregion occupied by the LPC has been undergoing a severe drought comparable to those of the 1930s and 1950s. During all three periods the Palmer Drought Severity Index (PDSI) throughout most of the Great Plains exceeded "-4," classified as "*severe to extreme*."

LPC census counts during and immediately following the droughts of the 1930s and 1950s demonstrate LPC populations fluctuate widely, experiencing significant decline during dry periods and recovering remarkably following drought events.[1] Similarly, during drought periods LPCs have been observed to permanently relocate considerable distances to more preferable habitat (Copelin 1963, Riley et al. 1994).

We were astonished not to find *any* literature discussion - and the associated impacts - of the decade-long drying of the Arkansas River between Deerfield and Great Bend Kansas, which particularly augments the ongoing drought season (Schwilling, 1955).

Because the ecoregions within the current range of the LPC are experiencing an ongoing, intense and severe drought, LPC population counts and data collection activities – and any policies derived from them – will not reflect typical conditions.

Ring-Necked Pheasant –

In 1906 the Ring-Necked Pheasant (*Phasianus colchicus*) was introduced in 84 Kansas Counties, and it is found throughout the range of the LPC. Ring-Necked Pheasants are hearty, prolific and have been documented as being both aggressive[2,3] and parasitic to the nests of Lesser Prairie Chickens.[4] Holt, in particular, studied aggressive Pheasant behavior toward LPCs during breeding activities noting that "*Disturbance of leks during breeding season could prevent breeding activities and have a negative impact on populations.*" Other studies also support this conclusion. Because steep decline of the LPC populations correlates well with introduction of Ring-Necked Pheasants and the droughts of 1930s and 1950s, it is highly probable the cumulative impacts of those events, coupled with habitat losses from native land conversions (1950 – 1995) are the primary contributors to the observed reduction in LPC populations.

Habitat Degradation -

The primary anthropogenic (man induced) mechanism contributing to regional decline of LPC populations is conversion of land from native prairie to agriculture and rangeland uses. The trend in native prairie conversions, and associated LPC habitat degradation, leveled off in the 1990s and in the case of the NRCS CRP Program, has even reversed (Rogers and Hoffman 2005).

In contrast to native prairie conversions from agricultural activities, land-use allocations for roadways, oil and gas exploration, wind generation, transmission line service roads and similar industrial uses are localized in scale and miniscule in area. Substantial literature disagreements exist as to the degree of impact from service roads, oil and gas pads and pump jacks on LPC lekking, nesting and brooding activities[a] (Jamison, et al. 2002). While anthropogenic activities can affect the *nest selection* process, they typically do not affect *nest success* (brood numbers) – meaning that LPCs prefer quieter neighborhoods, with a minimum of threats, given a choice.

In its Federal Register Notification, USF&W is basing the substance of its proposed LPC Listing as attributable to: "*the historical, ongoing and probable future impacts of habitat loss and fragmentation resulting from conversion of grassland to agricultural uses; encroachment by invasive woody plants; wind energy development; petroleum production; and presence of roads and manmade structures including towers, utility lines, fences, turbines, wells and buildings*." Of these, LPC habitat losses and fragmentation from agricultural/ranching conversions appear at near completion, and even to be reversing; programs for control of invasive flora are ongoing and most western-Kansas Counties have entire Departments dedicated to invasive plant control.

USF&W proposes to list the LPC out of concern for anticipated habitat losses from wind farm construction and operation, fragmentation from transmission line corridors and roadways, and impacts by petroleum production and transmission. For purposes of these comments we have addressed these items separately.

Wind Farm Construction and Operations -

With significant fiscal support from Federal Subsidies, wind farm construction on private, western-Kansas lands is ongoing. In many cases, construction of wind farms is taking place on lands already converted from native prairie to agricultural and ranching purposes. This multi-purpose land use offers environmental benefits from the standpoints of electricity production and agriculture.

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[a]See also: Crawford and Bolen 1976a, Davis et al. 1979, Sell 1979, Taylor 1979, Ahlborn 1980, Locke 1992, Bidwell et al. 2003.

In a shrill call to regulate the wind-energy sector, Pruett et. al[5] use adjectives like "*dire*" and "*imperiled*" to impart urgency that they "*feel*" study of negative effects from wind energy to be timely and important - and we agree: more study is necessary prior to initiating Policy affecting the wind energy sector. What we do not agree with, as Policymakers ourselves, is the necessity to regulate in the absence of compelling data and legitimate, peer-reviewed studies which scientifically confirm impacts and preferences of the LPC. One need not look far to find examples of environmental policies that are expensive, have unintended consequences, and which offer limited benefit to the species they propose to protect.

Similar to the literature conflicts identified in the LPC habitat studies, studies on wind-farms also have conflicting findings. As example, Vodenal et al. (2011) found Greater Prairie Chickens to lek, nest, brood and remain in the proximity of a Nebraska wind farm despite the presence of localized, towering structures. The Vodenal Study, in tandem with observations that LPCs routinely cross transmission corridors to feed and migrate,[6] is at odds with the notion of "*Site Fidelity*" – the conjecture some biologists have used to explain away data aberrations that LPCs do in fact nest, brood and live in electric transmission line corridors.

Because tower height and blade design has negated direct LPC collisions, combined with the fact that wind farms typically bury transmission lines underground, it would seem to us the majority of potential impacts from wind farms consist only in habitat loss from conversion of native prairie lands.

Transmission Line Corridors -

Prior to settlement, the Great Plains landscape was occupied by few elevated structures, save a few hearty trees. As modern man progressed, the prairie landscape was transformed through construction of grain elevators, bridges, light poles, signage - with electrical transmission/distribution lines to serve them.

Construction of elevated, manmade structures provides raptors and like-kind birds-of-prey with an enhanced opportunity for both vantage and rest, and this advantage has been well documented. This is not limited to electric utility poles.

A study by Hagan, et al.[7] (field work 1997-2002; published 2011) sought to test the "*behavioral avoidance of landscape features by LPCs in southwestern Kansas*." This study included radio-tagging and movement-monitoring of 190 LPCs over a 4 year period, followed by complex regression analysis. Findings include a *general* preference of LPCs to avoid powerlines and buildings, and that LPCs "*were less likely to include powerlines* [in their range] *than other non-use areas*." Data from the same study also found LPCs nesting in newly-constructed transmission corridors did not exhibit avoidance tendencies and had similar nest success to non-corridor populations.

In response to conflicting transmission corridor-avoidance data, the concept of "Site Fidelity" was introduced and has been carried through the literature as science, including justification for the current Listing proposal by USF&W. Site Fidelity is the speculation that adult LPCs tend to return or remain in areas where disturbances exist, with subsequent generations displaying less affinity to those areas than their parents. It is noteworthy that LPCs in "disturbed" areas display similar nest success and they will remain in those areas given adequate, mixed-grass cover.

Electrical transmission and distribution poles provide enhanced vantage and rest opportunities for raptors, and LPCs (and other vulnerable prey) simply elect to build nests in more preferable, mixed-grass habitats which provide better cover. In human terms, if one is born in East Saint Louis, South Side Chicago, East Los Angeles, or near Branch Avenue in Washington D.C., they will, given a choice, relocate for better cover in future generations.

Fragmentation -

Fragmentation of LPC habitat has occurred primarily through conversion of native prairie to agriculture, which combined with the stressors of extreme drought and aggression by Ring-necked Pheasants, has contributed to overall population decline of the LPC. Various hypotheses have been forwarded pointing to habitat fragmentation from oil/gas pipelines, distribution/transmission powerlines, roadways and service lanes. While these anthropogenic sources do present logistical impediments to LPC movement, the literature clearly demonstrates LPCs to navigate across *all* anthropogenic sources - including powerlines - in search of forage (Copelin 1963, Taylor and Guthery,1980), winter riparian corridors (Schwilling, 1955), and more preferred, mixed-grass habitat.

Discussion

Many of those represented in this document reside on property held in our families for *generations*, with some going back to era of Land Grants. For Kansans, we are concerned for the Lesser Prairie Chicken because it is part of our heritage and neighborhoods.

Objective review of the Public Record and simple, down-home knowledge of this bird indicate LPC population declines are a result of drought, loss of habitat from native prairie conversions, and stressors from aggression/parasitism by Ring-necked Pheasants. Just as no one likes to cross bad neighborhoods in rough urban settings, LPCs display a general avoidance of buildings, pump jacks and power-line corridors – and this fact neither makes these fixtures a barrier nor imparts culpability for their presence.

Concern is expressed about the apparent unbalanced – perhaps even biased – focus away from natural LPC stressors and fragmentation toward future, perceived impacts - especially in light of glaringly conflicting studies. Because habitat fragmentation is complete and empirical data from specific anthropogenic sources is limited, conflicting or anecdotal, a Threatened Listing of the LPC would be premature, - or perhaps even elongate recovery of the Lesser Prairie Chicken.

Concluding Remarks

We concur with the Conservation recommdations explicitly outlined by C.H. Hagen, B. Jamison, K. Giesen and T. Riley:[8]

> "*We recommend that each State develop and implement conservation plans for LPCHs. These Plans should use local groups comprised of representatives from all interested stakeholders to identify and solve regional issues within ecological regions. Conservation Plans should include 1) quantity of habitat remaining in each state, 2) common problems involved in conserving the LPCH, and 3) conditions needed to maintain healthy populations*."

and believe the best conservation approach to include a collaboration of local, state and regional initiatives coordinated by the existing 5-State Interstate Working Group. Many Conservation Agreements (CCAs) are already in place, others are still in progress. Similarly, the *Draft, Range-Wide Conservation Plan* (RWCP) displays good promise as a potential voluntary plan central to LPC Recovery. We look forward to more information as to how Impact Assessment Credits would be calculated for Transmission Line mitigation; our current understanding is the debit-and-credit mitigation calculation may not consist of an acre-for-acre mitigation – which could be important to us for equity reasons.[9]

USF&W is constrained to base final action for the LPC on the *best scientific and commercially available data available.* We respectfully submit that a complete Body of such information is not currently available, and as such, we encourage USF&W to issue a "Not-Warranted" determination for this Action.

Authorities

Endangered Species Act (16 USC 1361-1407; 16 USC 1531-1544; 16 USC 4201-4245); FR Volume 77 No. 238: December 11, 2012.

Respectfully submitted,

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[7] Ibid.

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