

# Lesser Prairie-Chicken under review



# Kansas Threatened & Endangered List

- Endangered
  - 24 species
- Threatened
  - 36 species
- SINC (species-in-need-of-conservation)
  - 76 species



(majority of listed species are aquatic)

(if species is federally listed it is  
required by statute to be KS listed)

# Kansas Threatened & Endangered List

- History
  - 1975 Authorized
    - Nongame and Endangered Species Act
  - 1978: First lists approved (26 species)
  - 1987: First SINC list approved
  - 1997: Recovery plans required
  - Five-year review required by statute



# Lesser Prairie-Chicken

*Tympanuchus pallidicinctus*

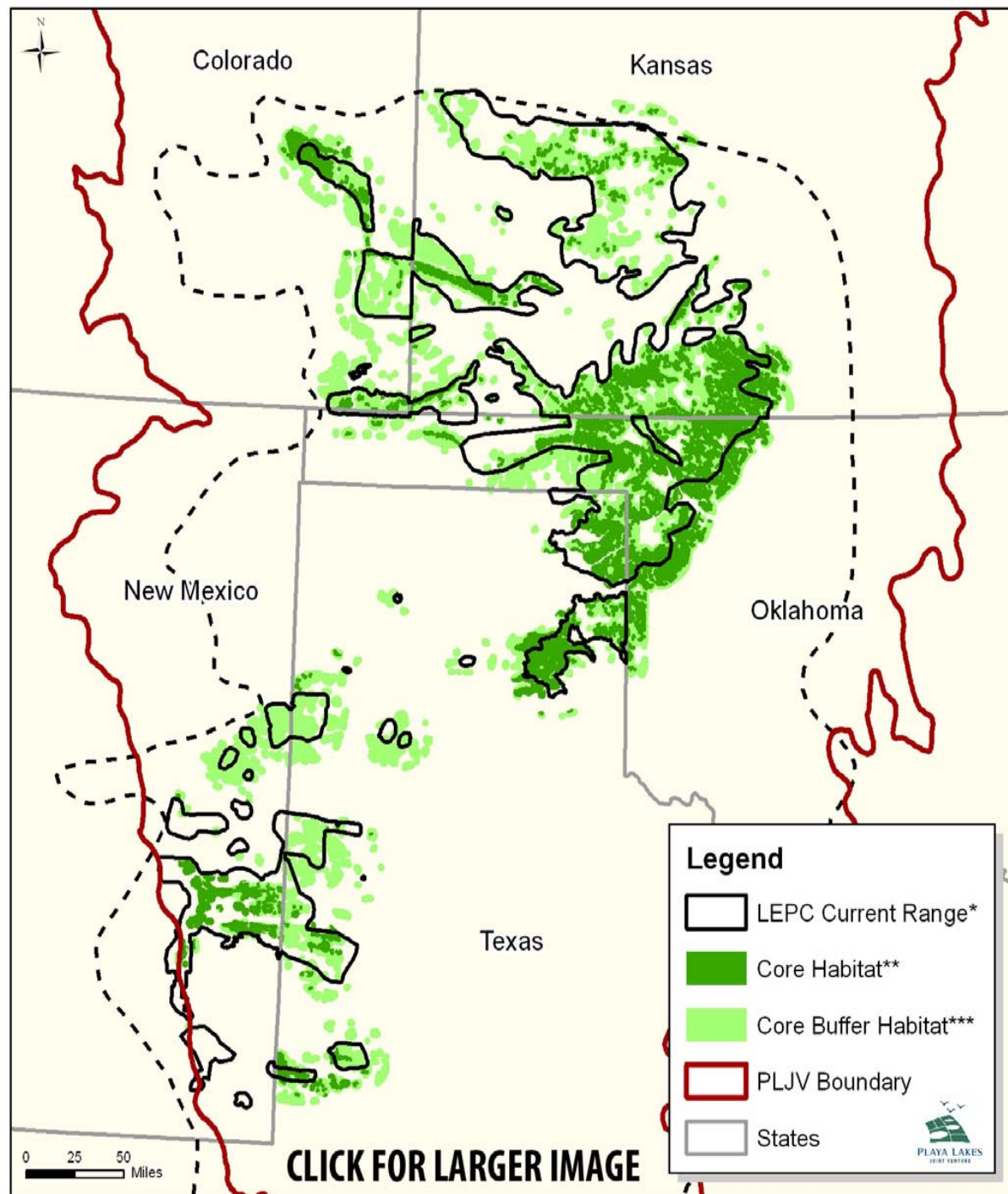


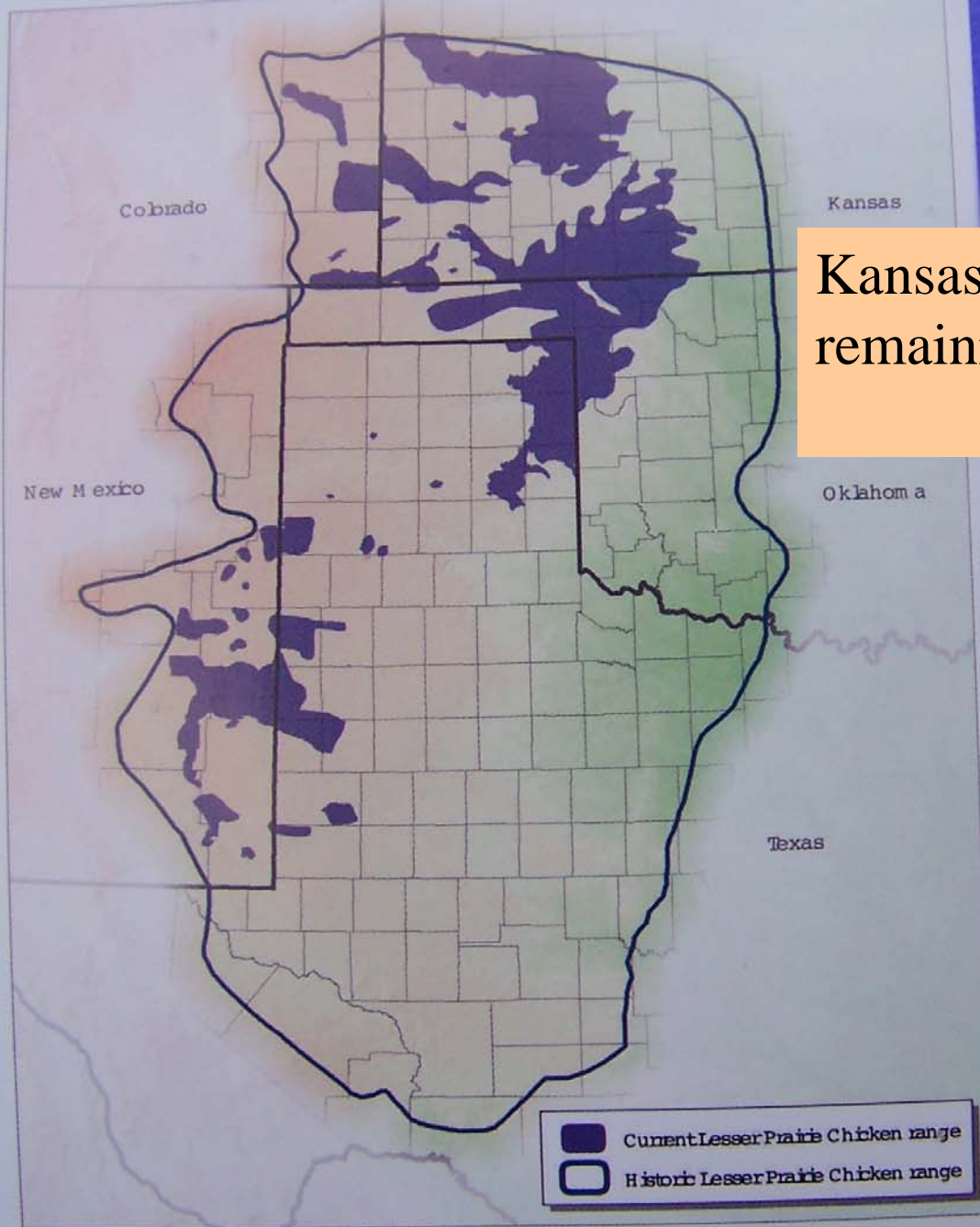
# Greater Prairie-Chicken

*Tympanuchus cupido*



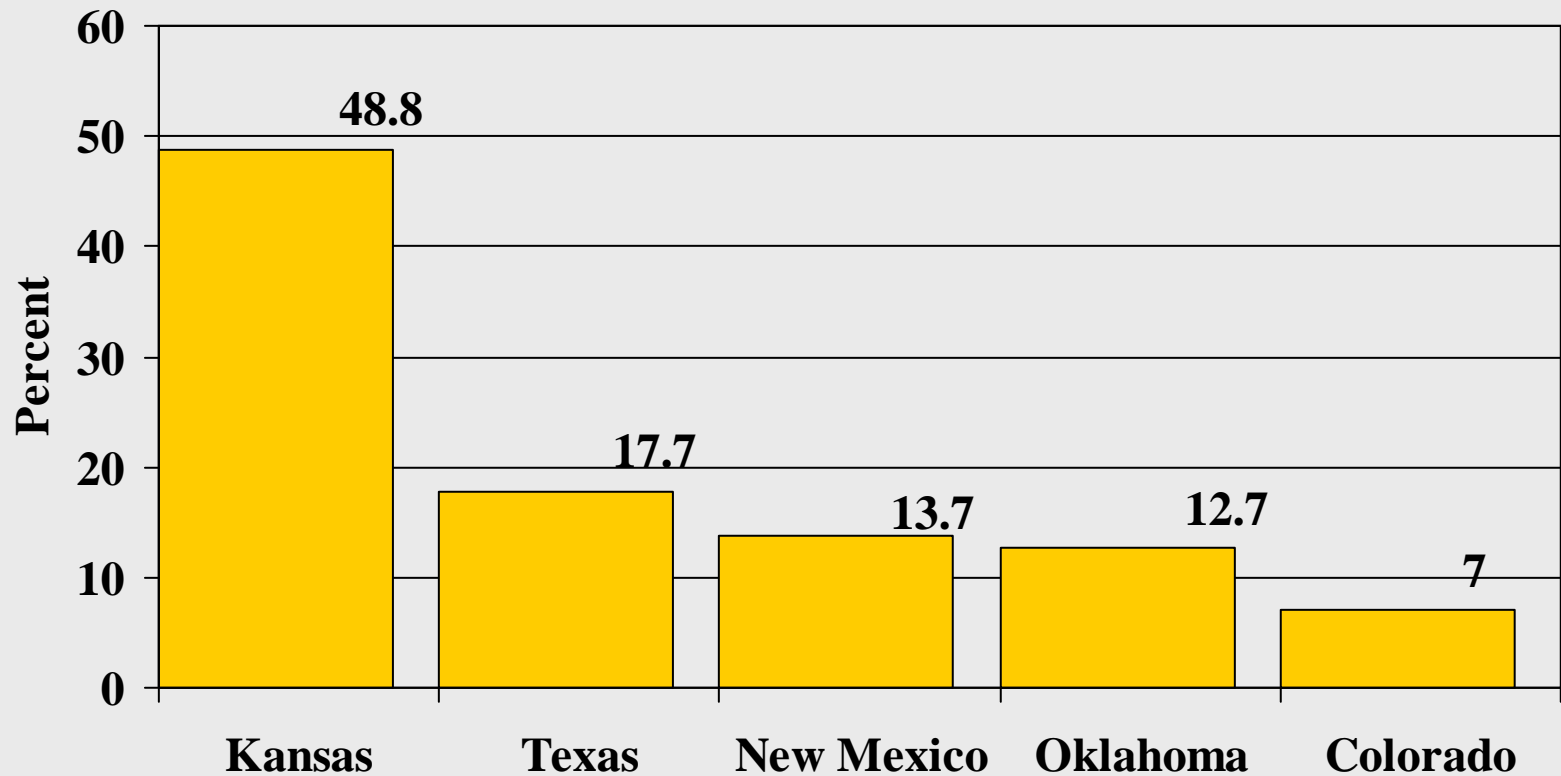
# Lesser Prairie-Chicken Range





Kansas has most of the remaining LEPC range.

# LEPC Distribution



EMERGENCY PETITION SPECIES REVIEW  
6 July 2009

Petition for Species Review to List the Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*)

Kansas Department of Wildlife and Parks (KDWP) is responsible for listing rare species of fauna in KS as Endangered, Threatened, or Species-in-Need-of-Conservation (SINC). Every five years the list is reviewed as required by 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. The recommended changes must then be approved by the KDWP Commission.

The Committee solicited input from other sources regarding listing, delisting, uplisting, or downlisting of KS wildlife in 2008 as part of the review process. The Lesser Prairie-Chicken (*Tympanuchus pallidicinctus*), hereafter LPC, was not petitioned for listing. The US Fish and Wildlife Service (USFWS) completed a review of the LPC in November of 2008 to reassess its candidate status. The USFWS review was completed after solicitation and review of petitions received by KDWP, moreover, a paper just published underscores the vulnerability of the species rangewide. As such, new data on potential threats to existing populations in KS necessitates a petition that warrants emergency State listing of the LPC in KS.

PETITION FOR EMERGENCY SPECIES REVIEW 6 July 2009

Species Common Name: Lesser Prairie-Chicken

Species Scientific Name: *Tympanuchus pallidicinctus*

Recommended change in petition species status (please circle or check):  
List as: Endangered ☒ Threatened ☐ Species-in-need-of-conservation (SINC)  
And/or remove from: Endangered ☐ Threatened ☐ SINC

1) Describe the species' current distribution and abundance:

**In Kansas:** The current range in the western portion of the State is approximately 29,130 sq km, within all or part of 35 counties since 1999. Houts et al. (in press) using GIS and the KS GAP vegetation map determined that there is between 2,221,133 ha (5,488,539 ac) and 2,903,364 ha (7,174,369 ac) of suitable LPC habitat remaining. Recently, LPC distribution in Kansas has moved northward. At the same time the Greater Prairie-Chicken (hereafter GPC, *Tympanuchus cupido*) range has expanded northwestward in Kansas. As a result of these changes a hybrid zone now exists between the two species in approximately eleven northwestern counties and individuals of both species have been reported at the same lek in Pawnee County. A hybridization rate of about 2.5% was estimated on at least one survey route (Bain and Farley 2002, USFWS 2008).

Based on survey routes and the National Gap Analysis, the estimated population for LPCs in 2006 was between 19,700 and 31,100 individuals (Rodgers 2007a, USFWS 2008). KDWP survey route data from 2005 and 2006 were not statistically significant from each other ( $n = 15$  routes, 14.2 and 16.3 LPC/sq km respectively, Rodgers 2006, 2007b). However, in 2007 there was a statistically significant reduction by 38%, down to 10.1 LPC/sq km. Factors for the sudden decline in 2007 were attributed to drought during the breeding season and heavy snow cover in the winter (Rodgers 2007b). Kansas is key to the species' survival, as it contains the

5 million acres  
suitable  
habitat

insignificant

# Petitioners

- Kansas Ornithological Society
- 6 Local Audubon Chapters
  - Wichita Audubon Society
  - Northern Flint Hills Audubon Society
  - Topeka Audubon Society
  - Jayhawk Audubon Society
  - Burroughs Audubon Society
  - Smoky Hills Audubon Society

# T&E Task Committee

- Bill Busby

Kansas Biological Survey

- Mark Eberle

Ft. Hays State University

- Elmer Finck

Ft. Hays State University

- James Larson

KS Dept. Wildl. & Parks

- Edwin Miller

KS Dept. Wildl. & Parks

- Tom Mosher

KS Dept. Wildl. & Parks

- Dan Mulhern

USFWS

# Threat: End of CRP Contracts



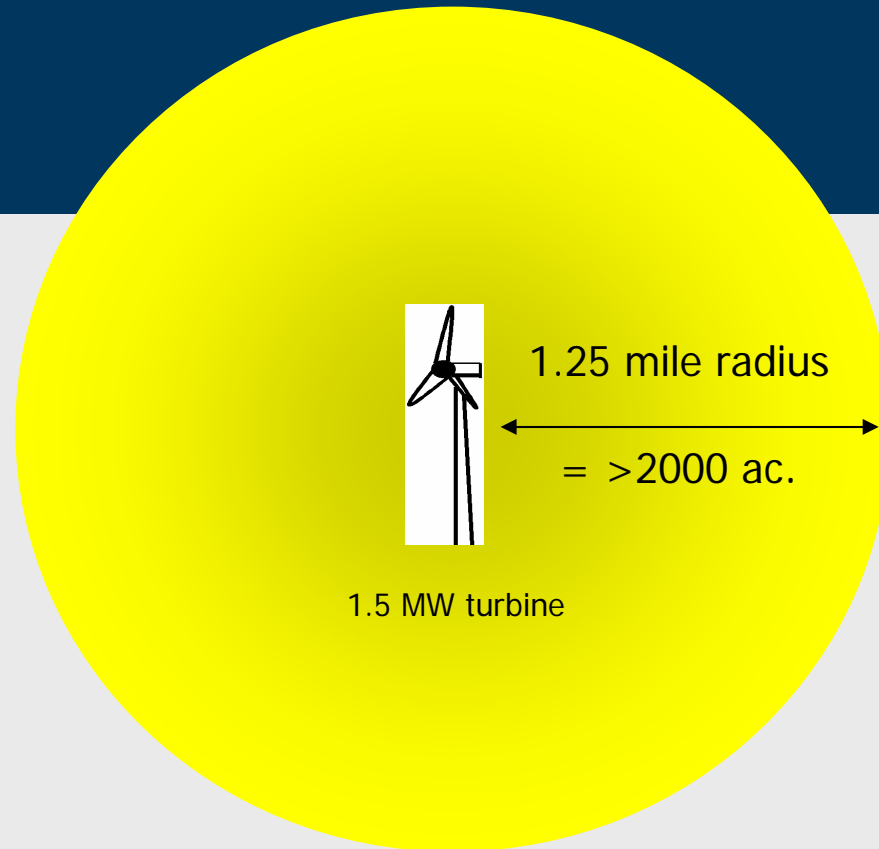
**Ness County, KS**

# Threat: Habitat Fragmentation



An aerial photograph of a vast, flat, brown landscape, likely a dry lake bed or salt flat. A grid of roads or paths is visible, dividing the area into rectangular sections. Numerous white wind turbines are scattered across the landscape, primarily aligned along the roads. The text "This too is fragmentation" is overlaid in the center of the image.

This too is fragmentation



Area that may be abandoned  
by prairie chickens  
(nesting & brood rearing activities)

# Status in other states

- Texas: game species (no open season)
- New Mexico: petitioned to threatened in 1997  
withdrawn in 1999 (gather info.)  
decision not to list 2006  
conservation actions enacted
- Oklahoma: remains game species (no open season)
- Colorado: listed as threatened on CO list (1973)

# Is Federal listing pending?

- Priority elevated in 2008

  - Listing priority      2

- Threat: High

- Immediacy: Imminent

- Petitioned in 1995

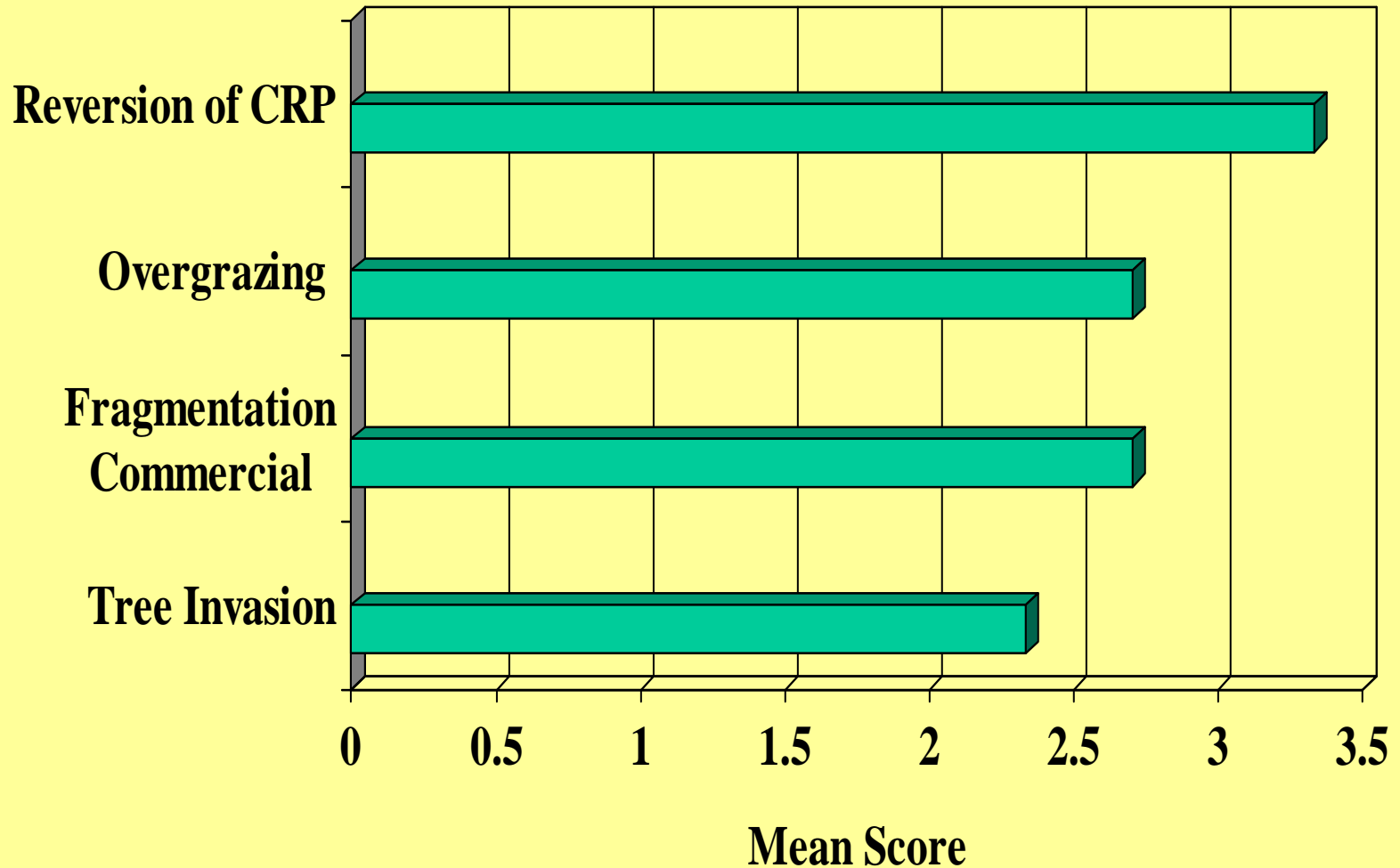
  - Warranted but precluded



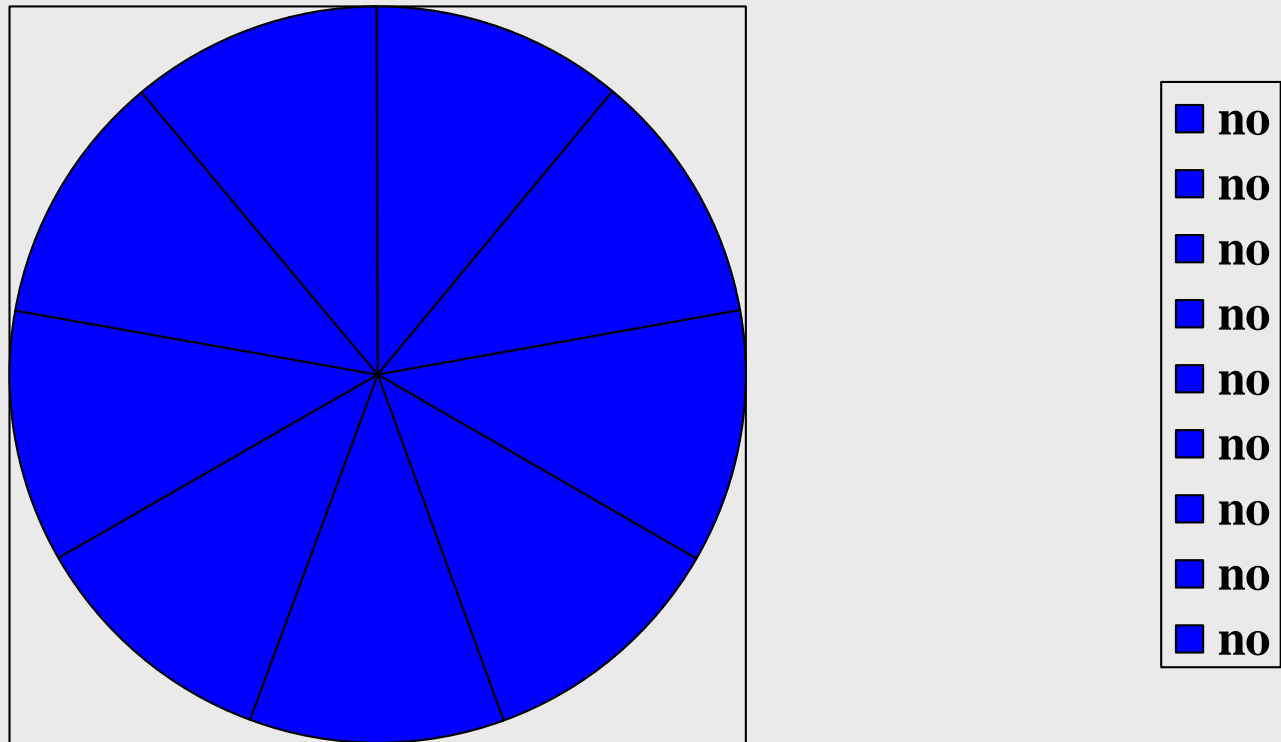
# Ad Hoc Committee Lesser Prairie-Chicken Experts

<b>Clait Braun</b> Grouse Inc.	<b>Greg Farley</b> Fort Hays State University	<b>Christian Hagen</b> Oregon Dept Fish & Wildlife
<b>Stephanie Manes</b> Ranchland Trust of Kansas	<b>Jim Pitman</b> KS Dept. Wildlife & Parks	<b>Robert Robel</b> Kansas State University
<b>Randy Rodgers</b> KS Dept. Wildlife & Parks	<b>Brett Sandercock</b> Kansas State University	<b>Don Wolfe</b> Sutton Avian Research Center

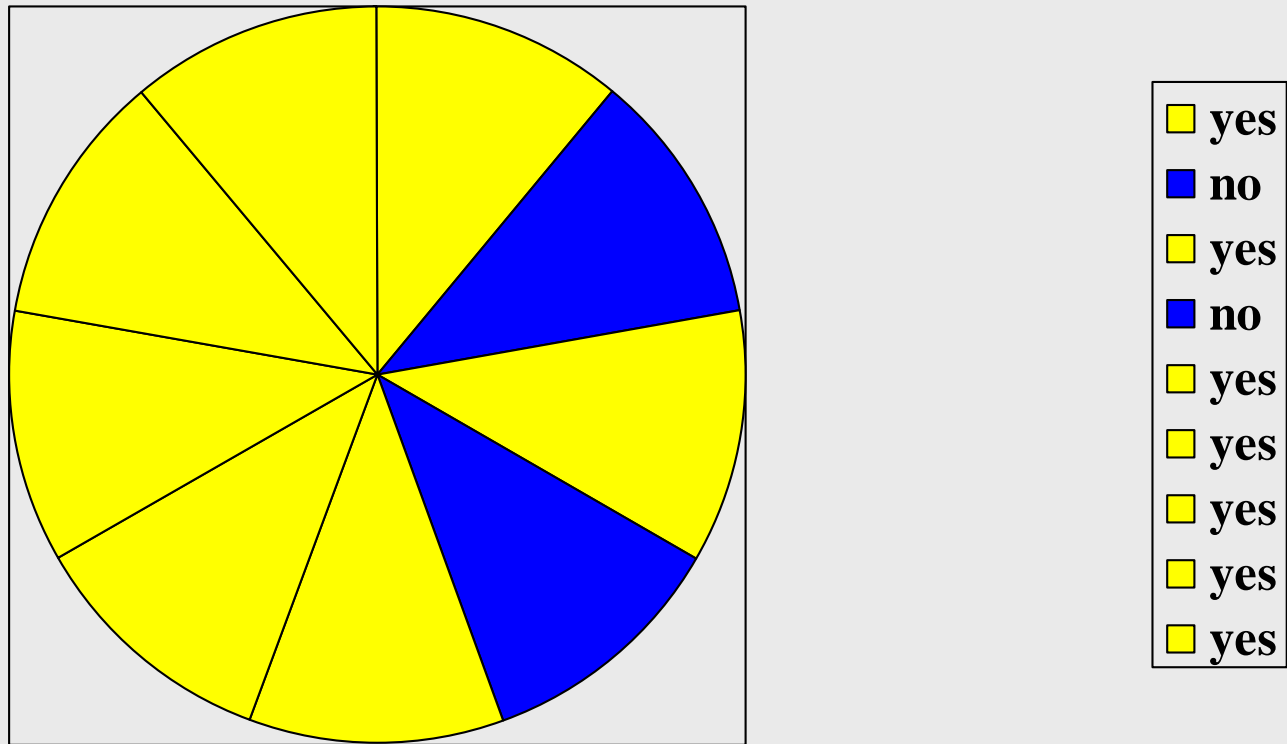
# Impending Threats to LEPC



# Is hunting a significant factor in LEPC population?



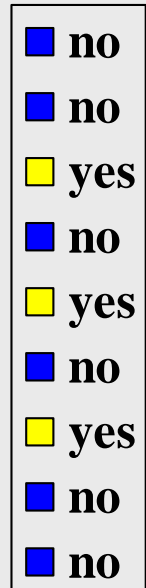
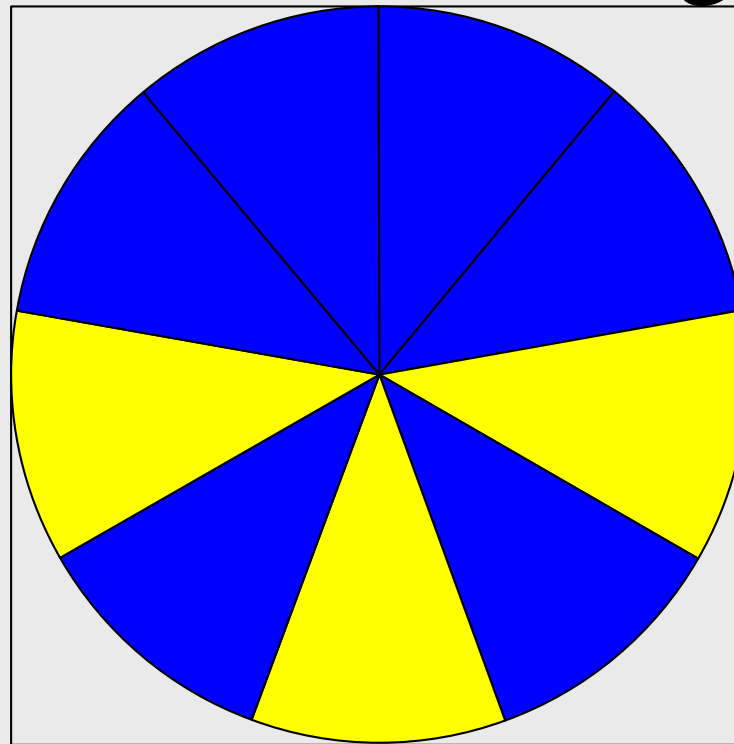
# Is lek count data appropriate for estimating population trends?



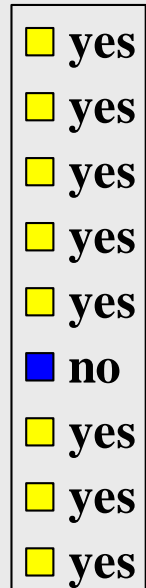
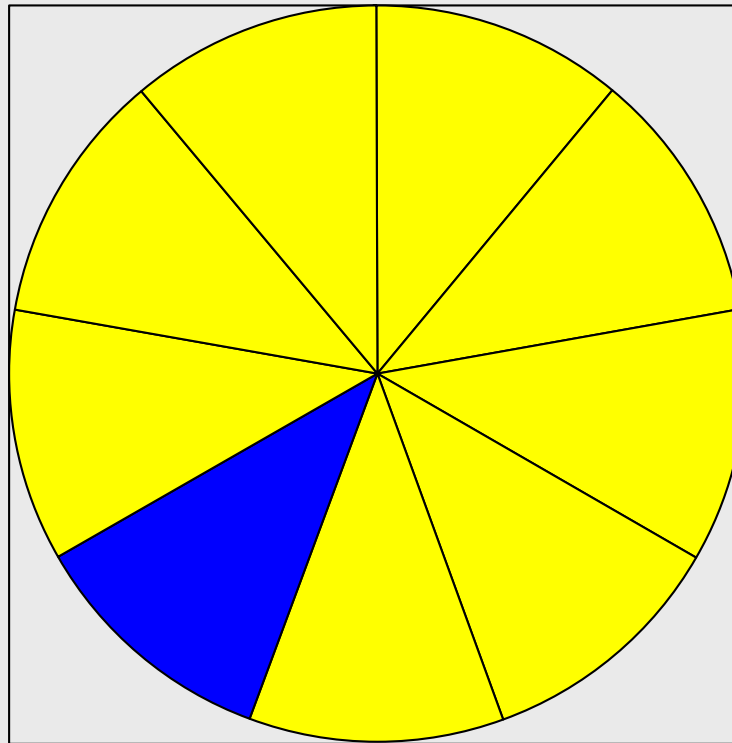
# What is the LEPC trend since 1975?

- Gradual but significant decline (3)
- Rapid and significant decline (2)
- Stable (no significant trend) (2)
- One trend does not explain what has occurred since 1975 (2)

Are there pending conservation actions that alleviate the need for state listing?



# Is there enough information to confidently make a listing decision?



# Listing recommendation from ad hoc Committee

- Do not list (7)
  - implement strategies to alleviate need for listing (4)
  - to maintain better cooperation with landowners (2)
  - stays eligible for federal funds (P-R) and keep hunting tradition (1)

- List as threatened (2)
  - so Recovery Plan can be formulated and implemented
  - to ensure re-enrollment of CRP occurs

# Conservation Strategies to Keep LEPC Population Viable

- Target CRP reenrollment to LEPC habitat
- Regulatory requirements to keep energy production away from LEPC habitat
- Incentives to landowners to reduce grazing pressure and remove trees

Recommendation:  
pending completion of review process (June)

