

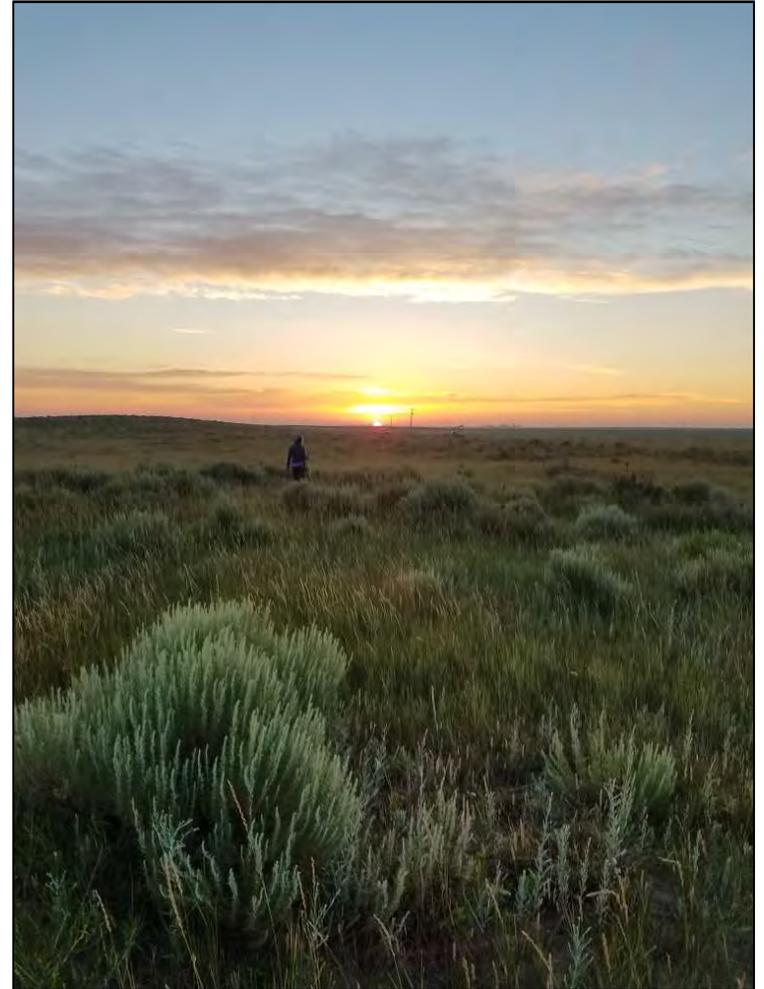


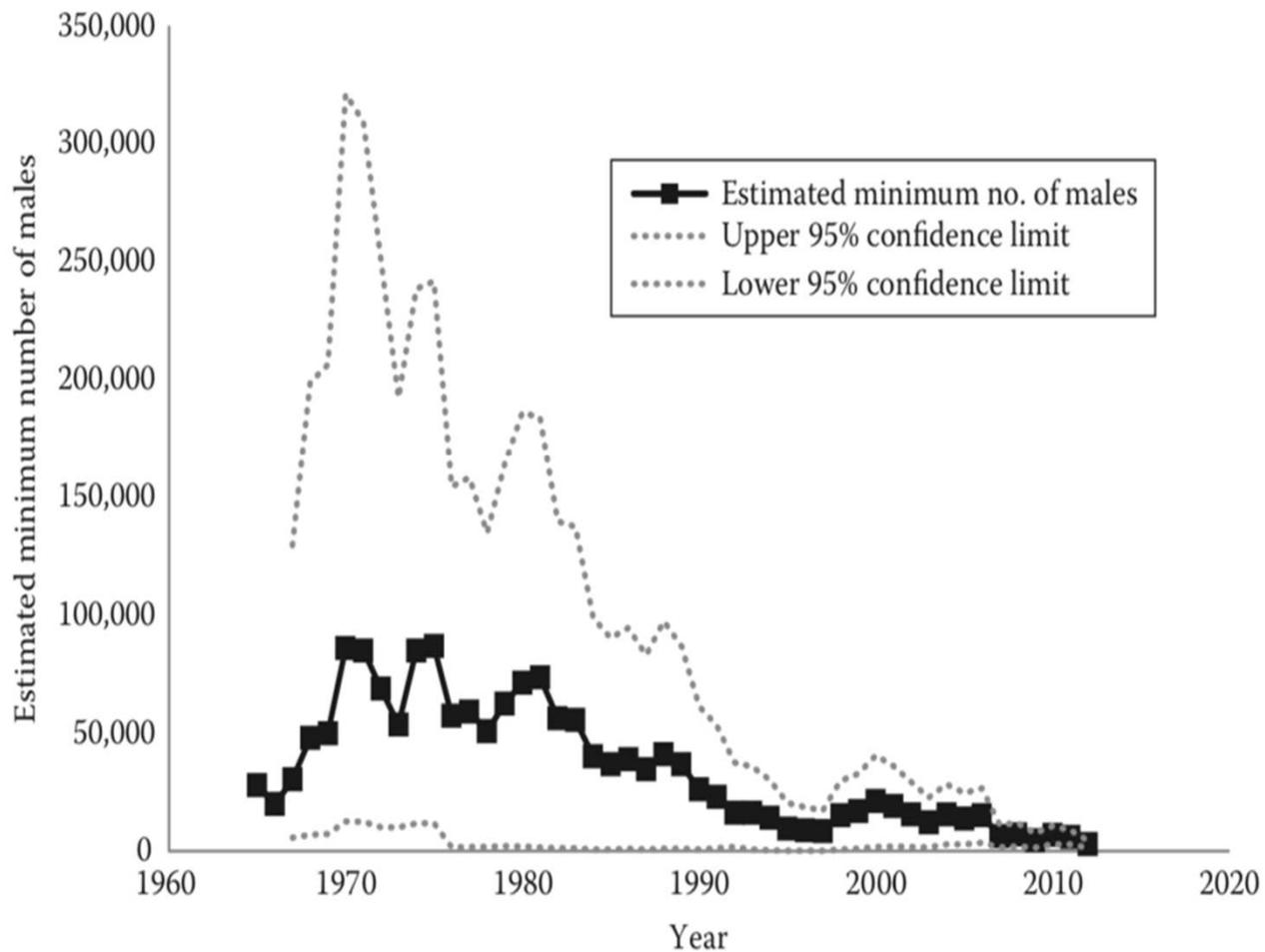
# Assessing a Lesser Prairie- Chicken Translocation in the Sand Sagebrush Prairie Ecoregion

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Kraig Schultz, Jonathan  
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# Why the Sand Sagebrush Prairie Ecoregion?

- The sand sagebrush had the greatest lesser prairie-chicken density of any ecoregion until the early 1990s.
- The population declined ~98%
  - Extreme drought and winter storms

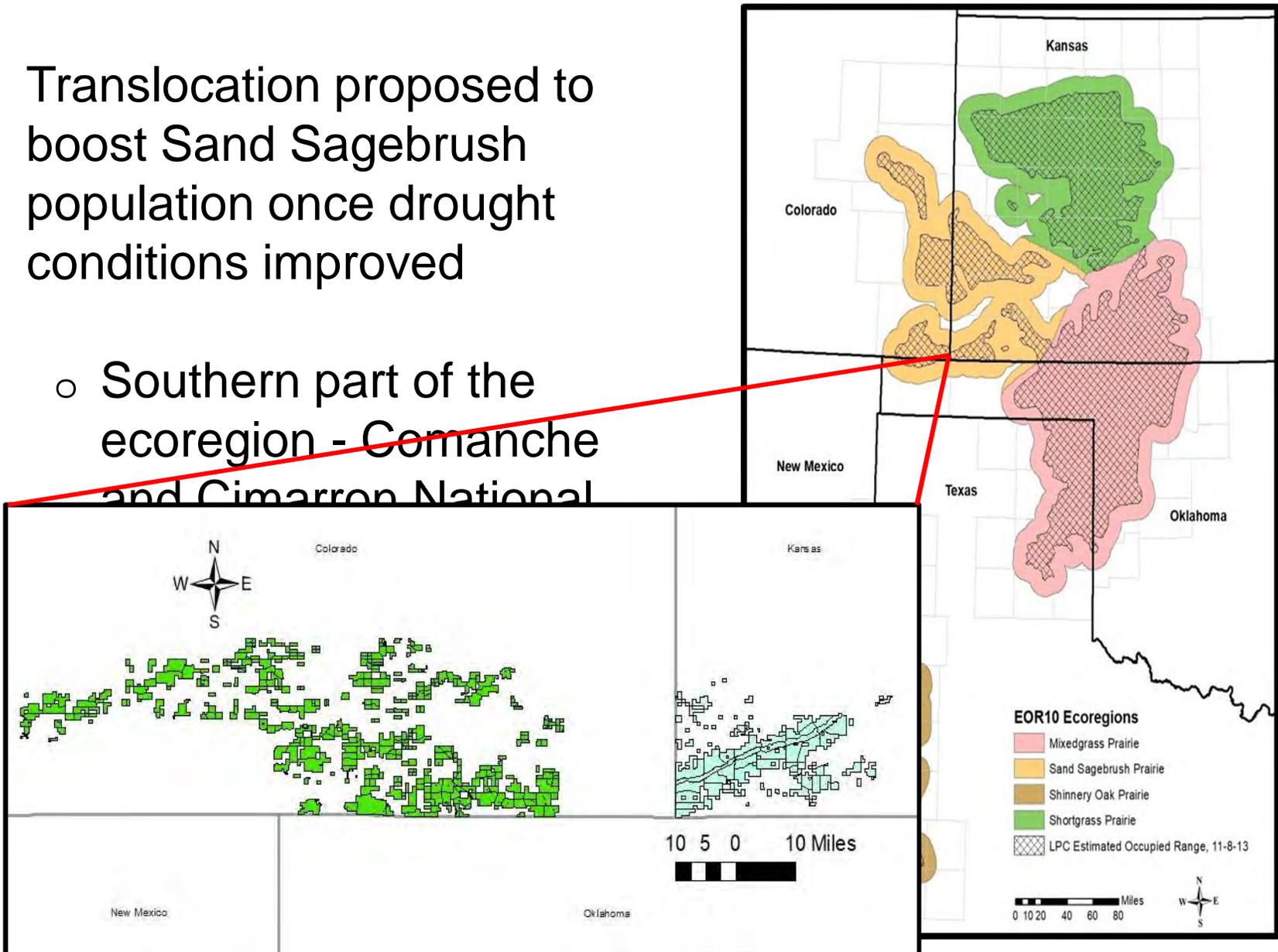




Estimated minimum number of LEPCs attending leks 1964-2012 in Sand Sagebrush Ecoregion. Adapted from Haukos and Boal 2016.

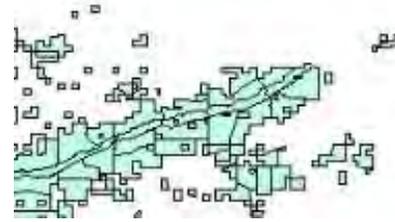
# Why the Sand Sagebrush Prairie Ecoregion?

- Translocation proposed to boost Sand Sagebrush population once drought conditions improved
  - Southern part of the ecoregion - Comanche and Cimarron National

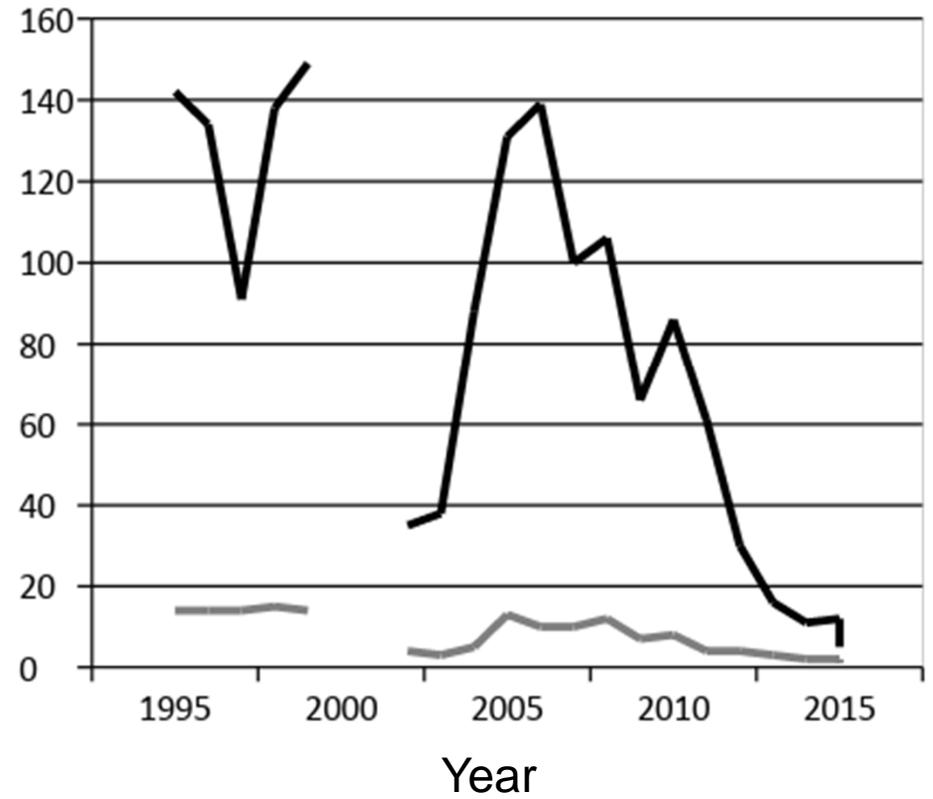
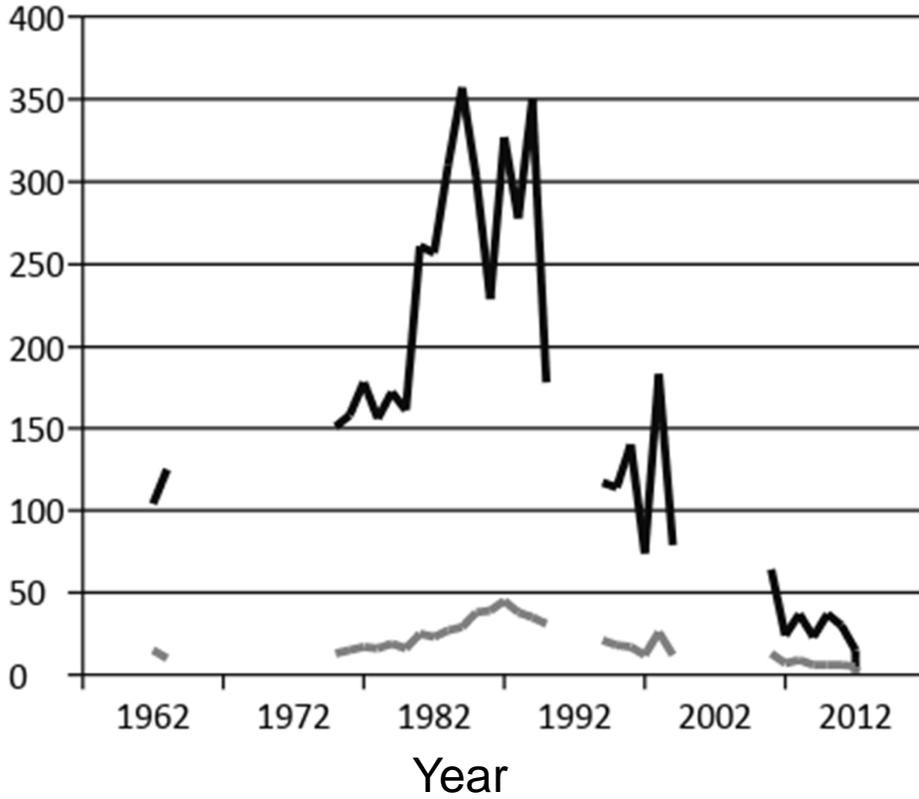




**Comanche National Grasslands, CO**

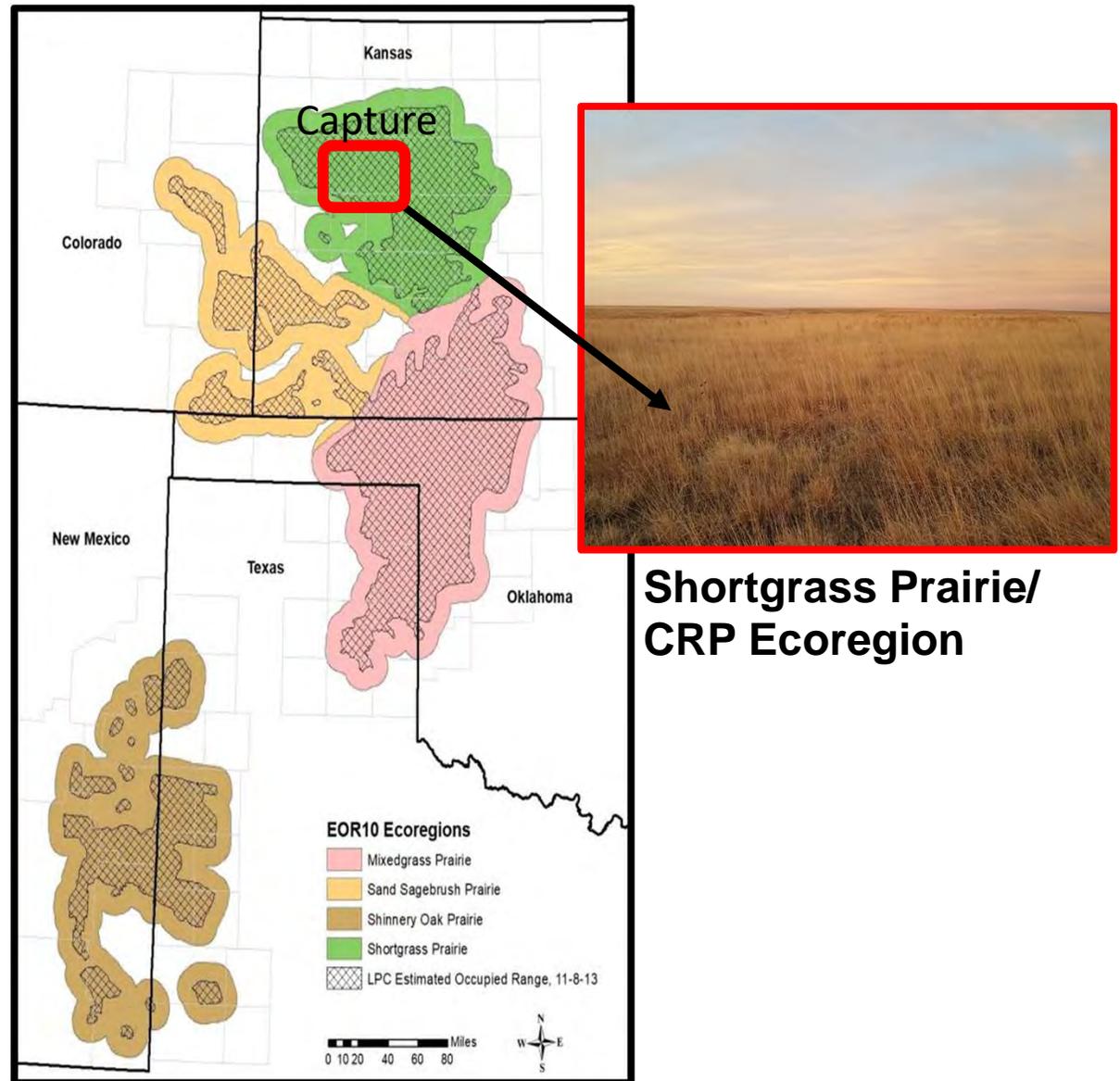


**Cimarron National Grasslands, KS**



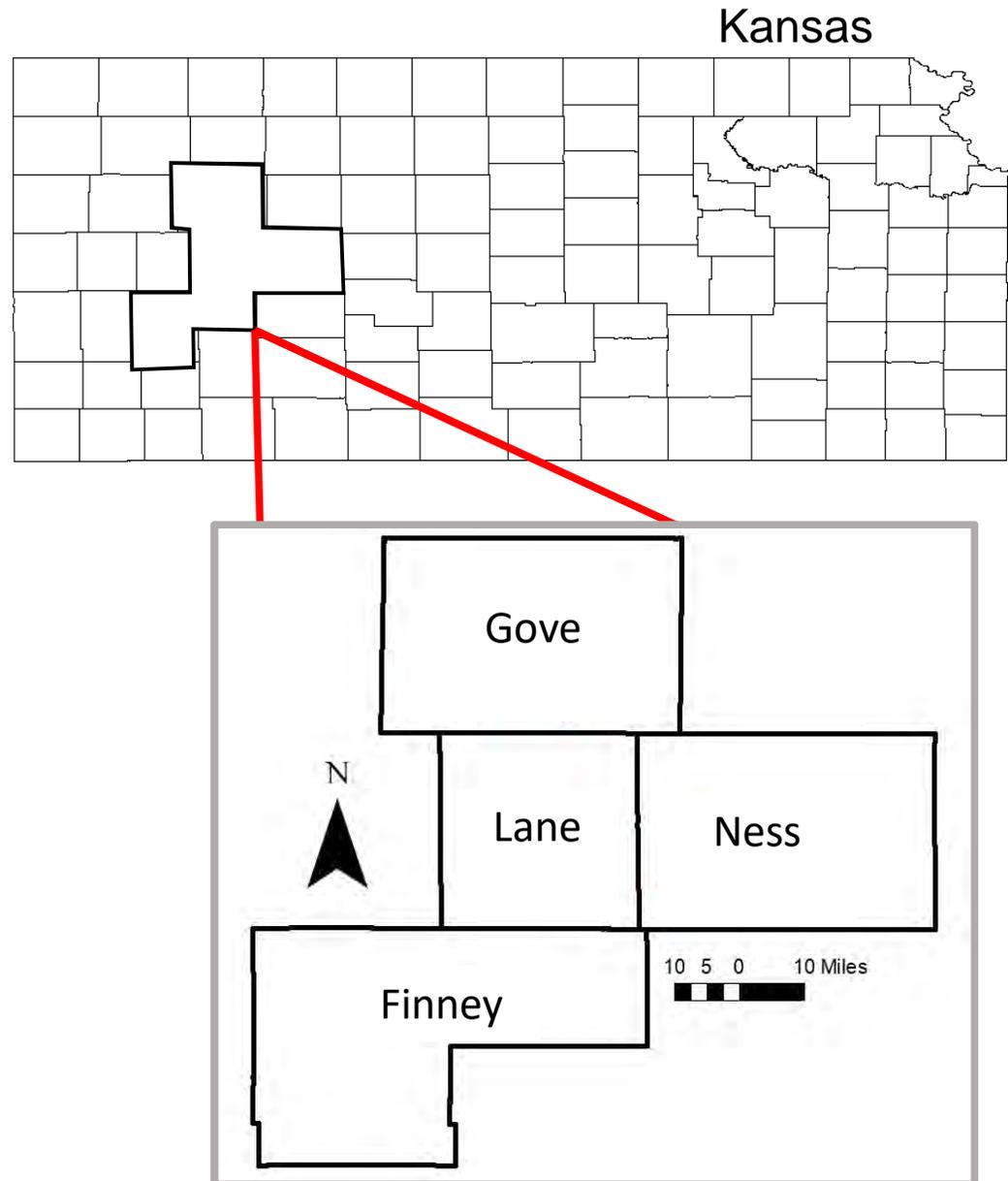
 Male High Count  
 # of Active Leks

# Translocation to the Sand Sagebrush Prairie Ecoregion

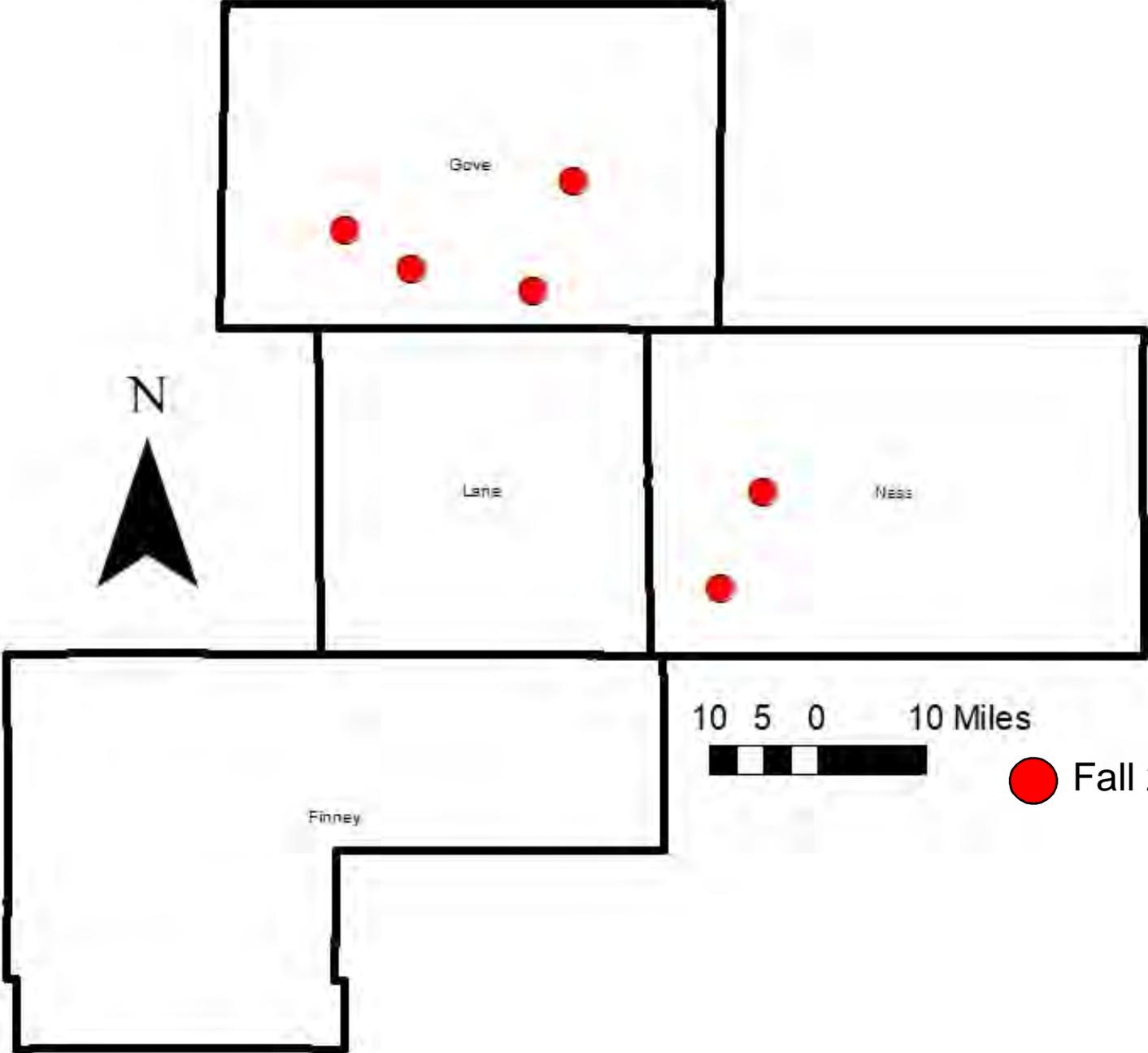


# Capture: Location

- LEPCs captured in 4 counties in Northwest Kansas
- Collaborative Capture effort KDWPT, CPW, KSU and volunteers



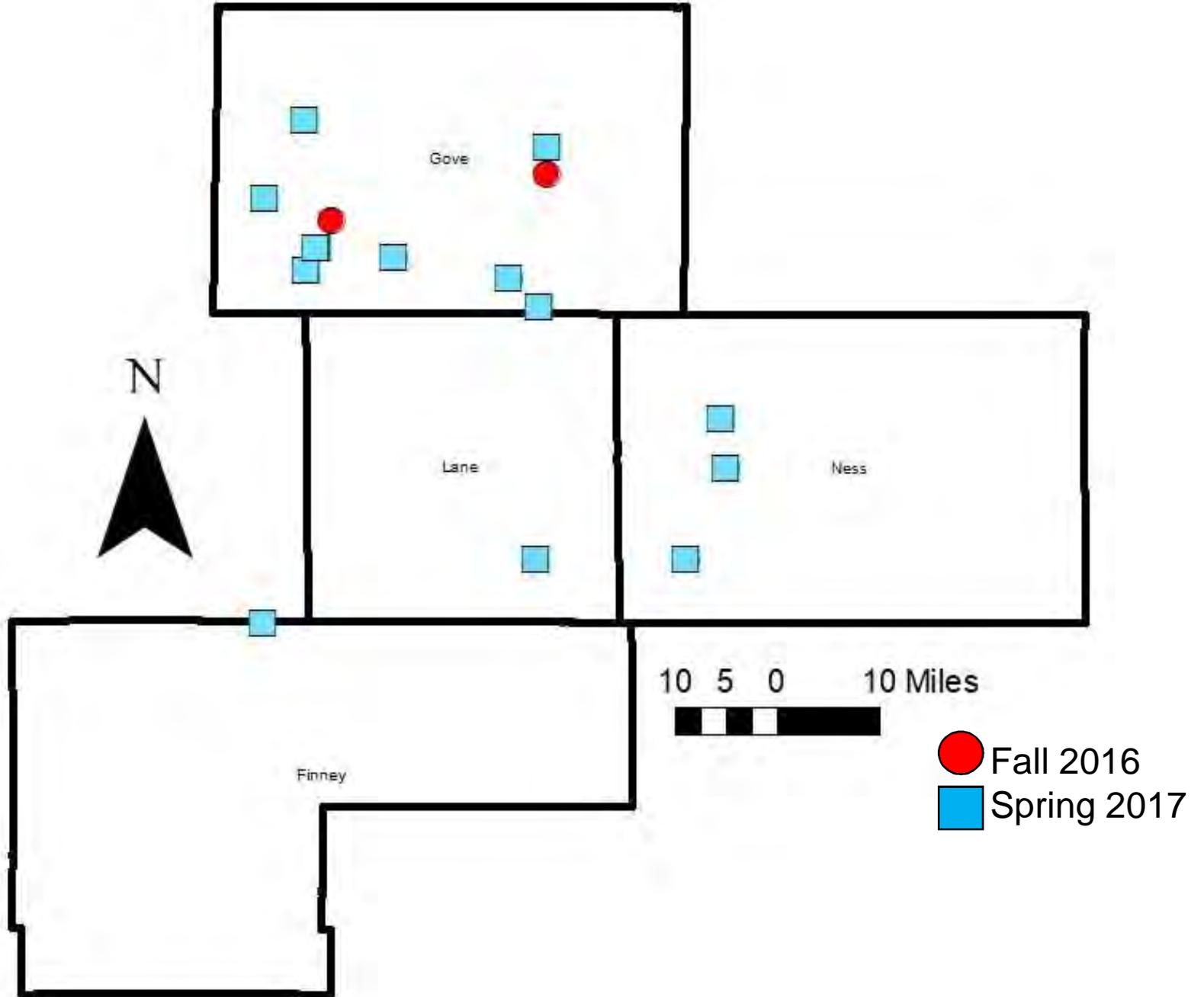
# Fall 2016 Capture Leks



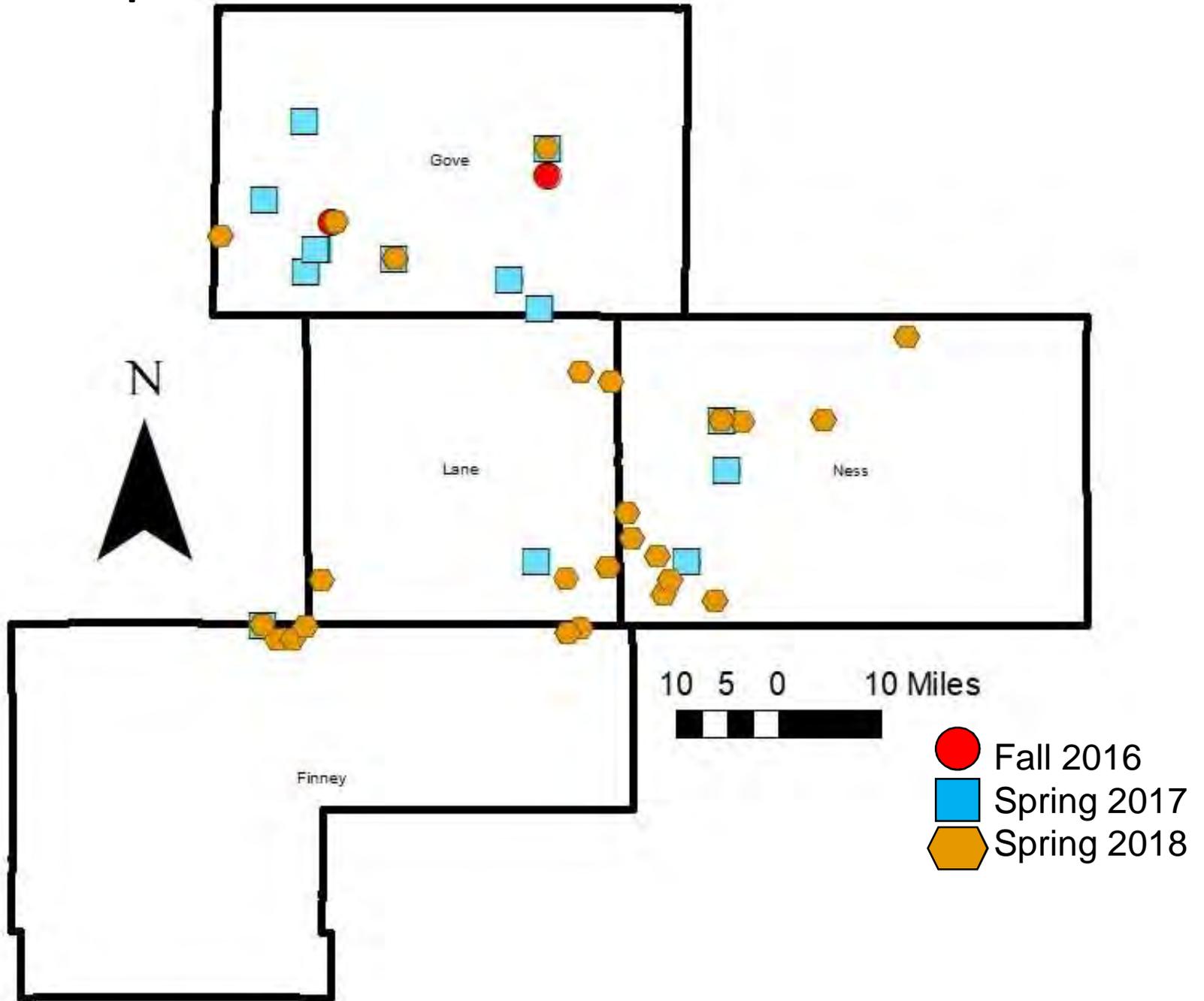
10 5 0 10 Miles

● Fall 2016

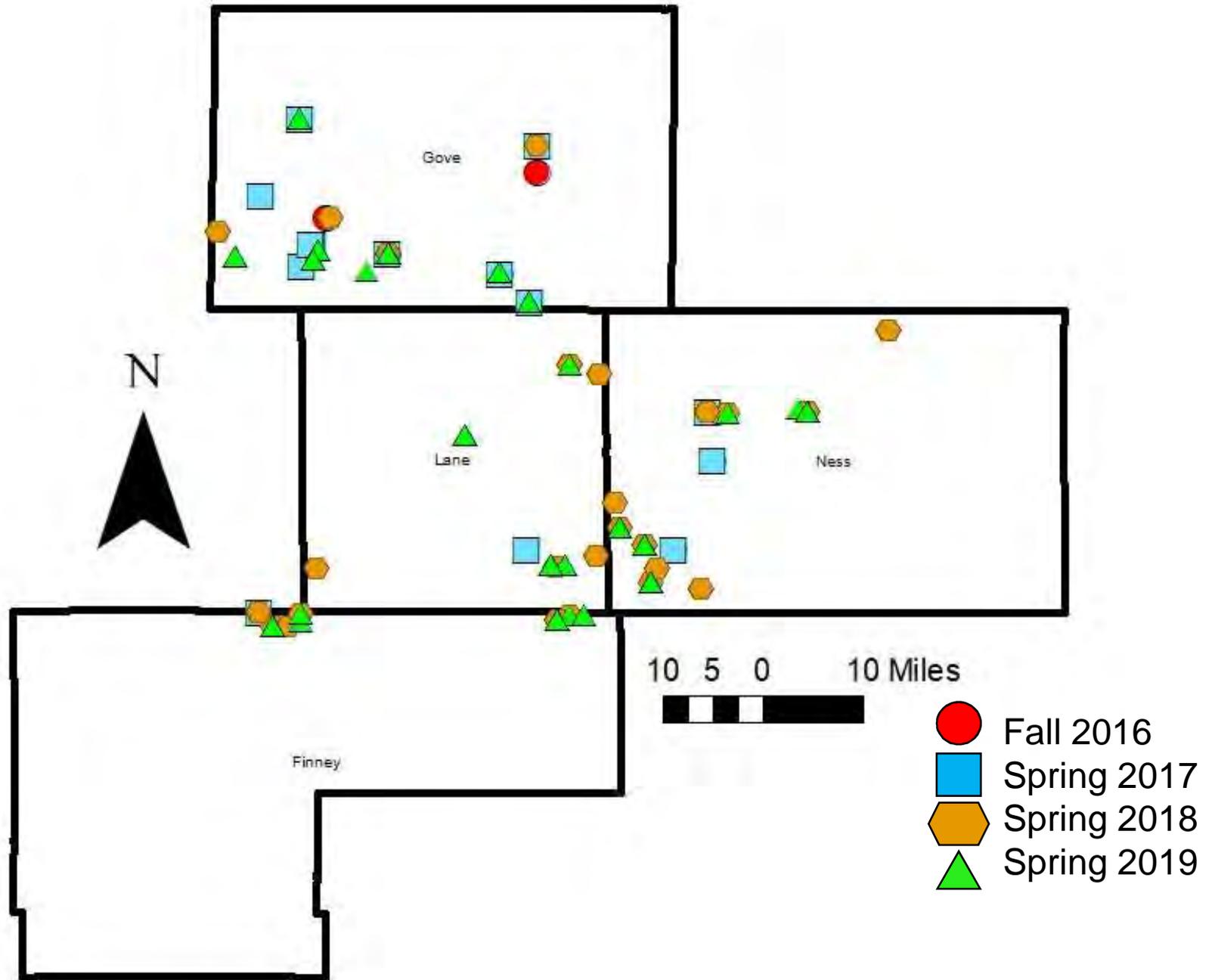
# Spring 2017 Capture Leks



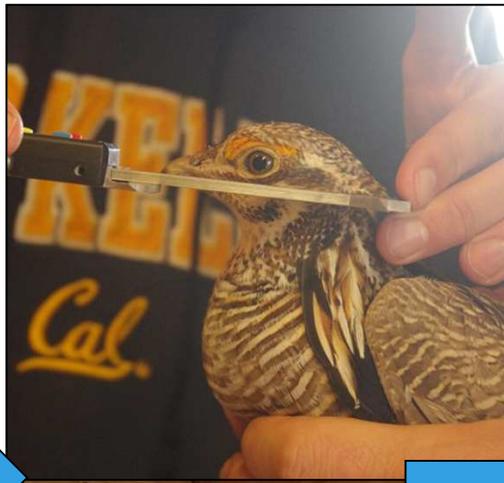
# Spring 2018 Capture Leks



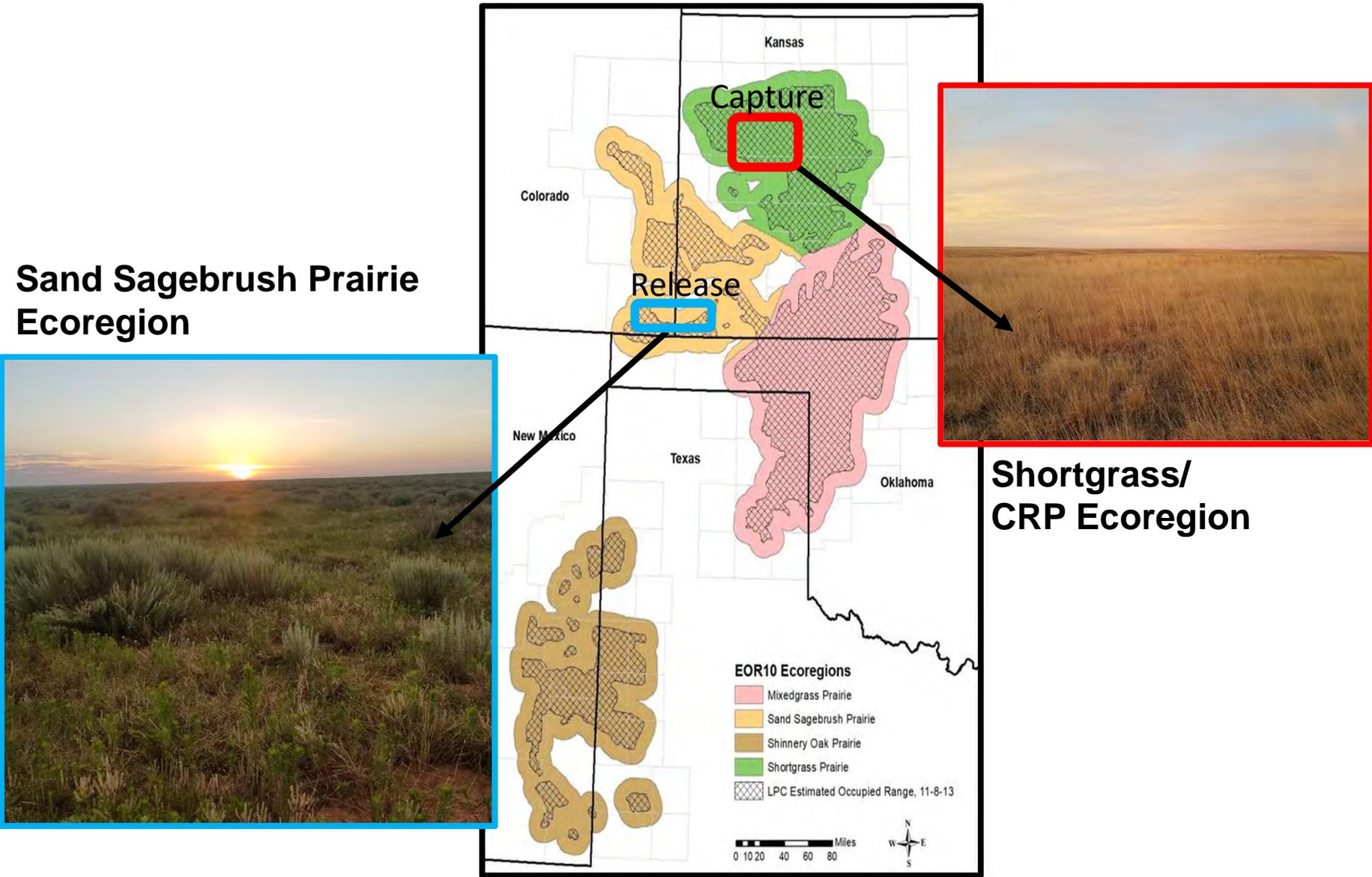
# Spring 2019 Capture Leks



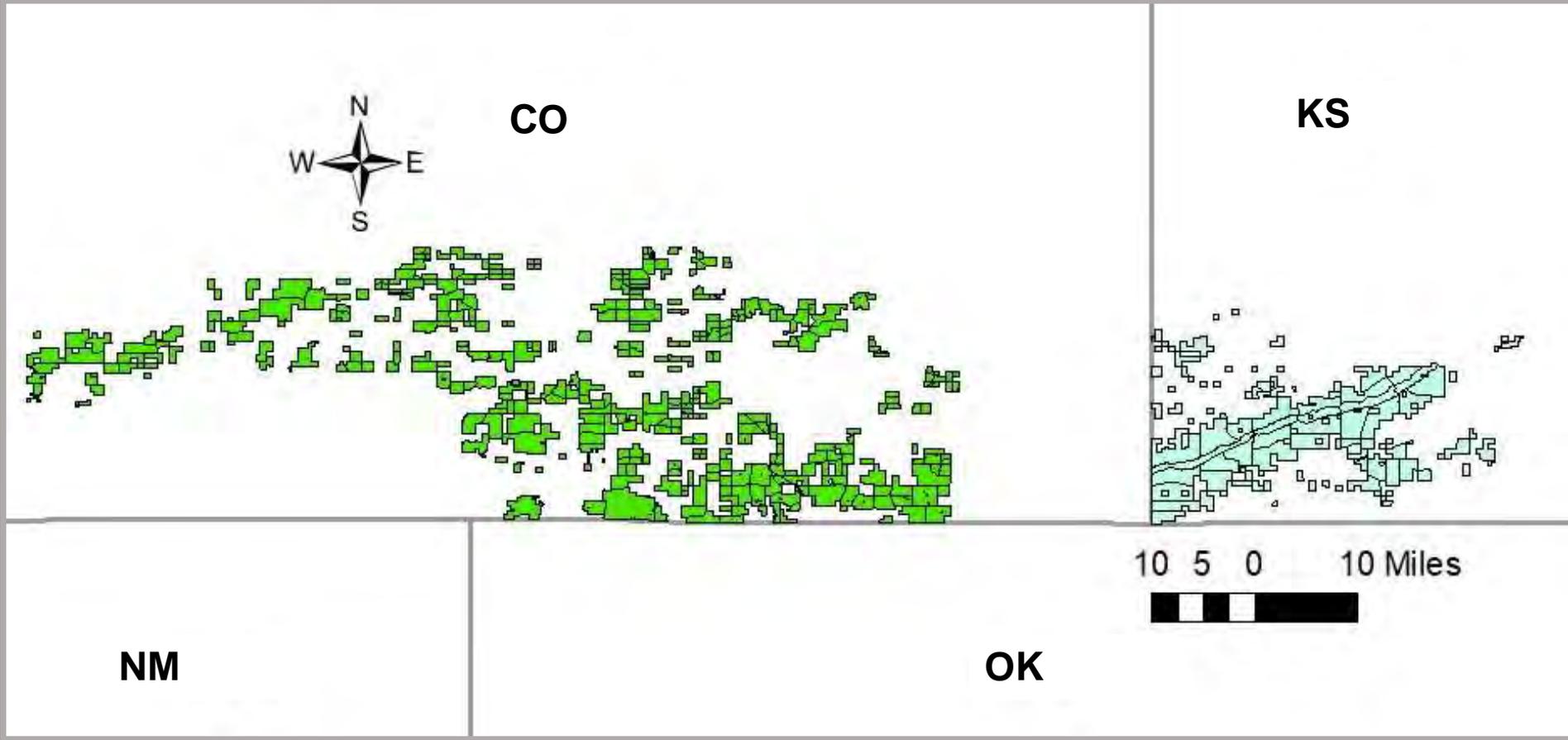
# Capture: Methods



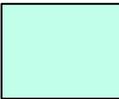
# Translocation to the Sand Sagebrush Prairie Ecoregion



# Release Area: Comanche and Cimarron National Grasslands



 Comanche National Grasslands

 Cimarron National Grasslands

# Release Sites for the Cimarron Natl. Grasslands

- × 2016, 2017, 2018
- × 2018
- × 2019
- Cimarron National Grasslands



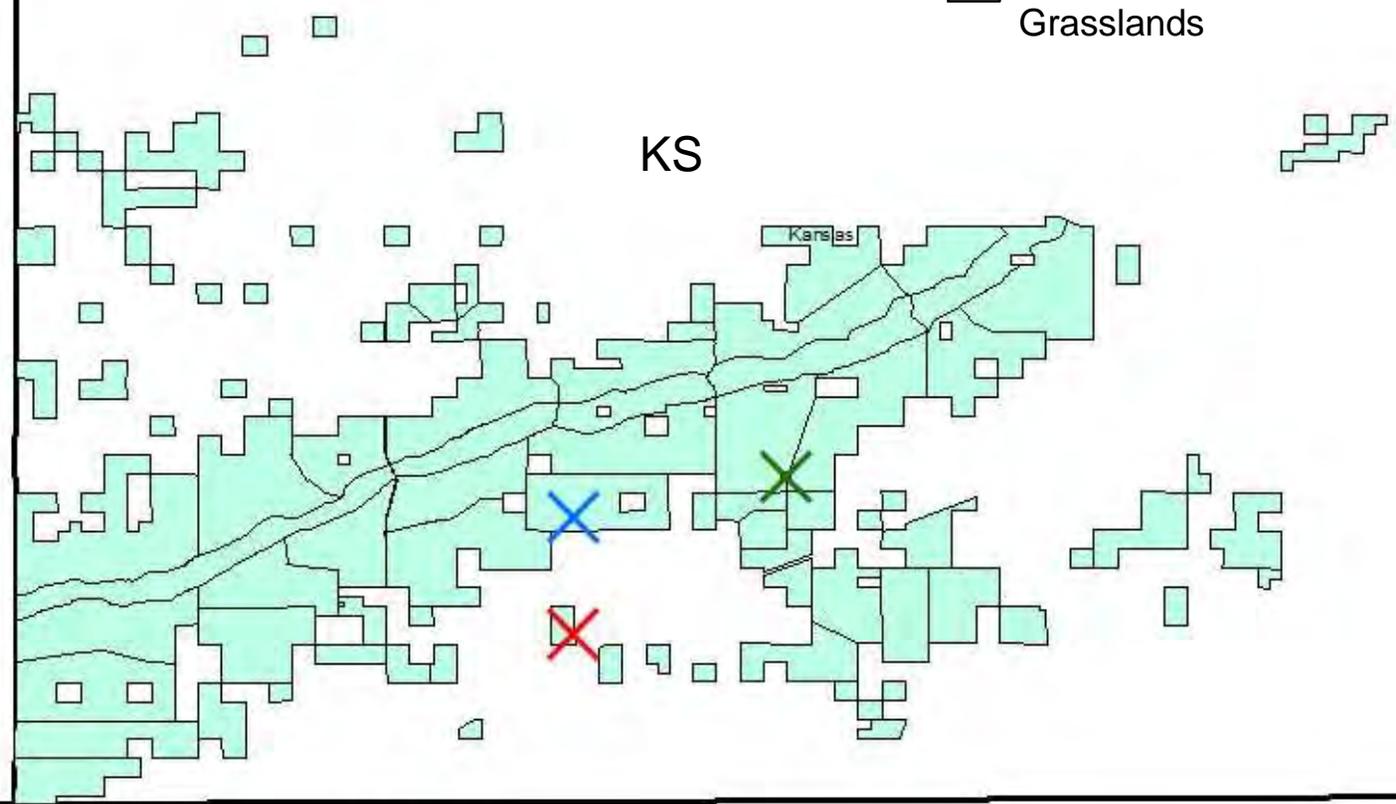
CO

KS

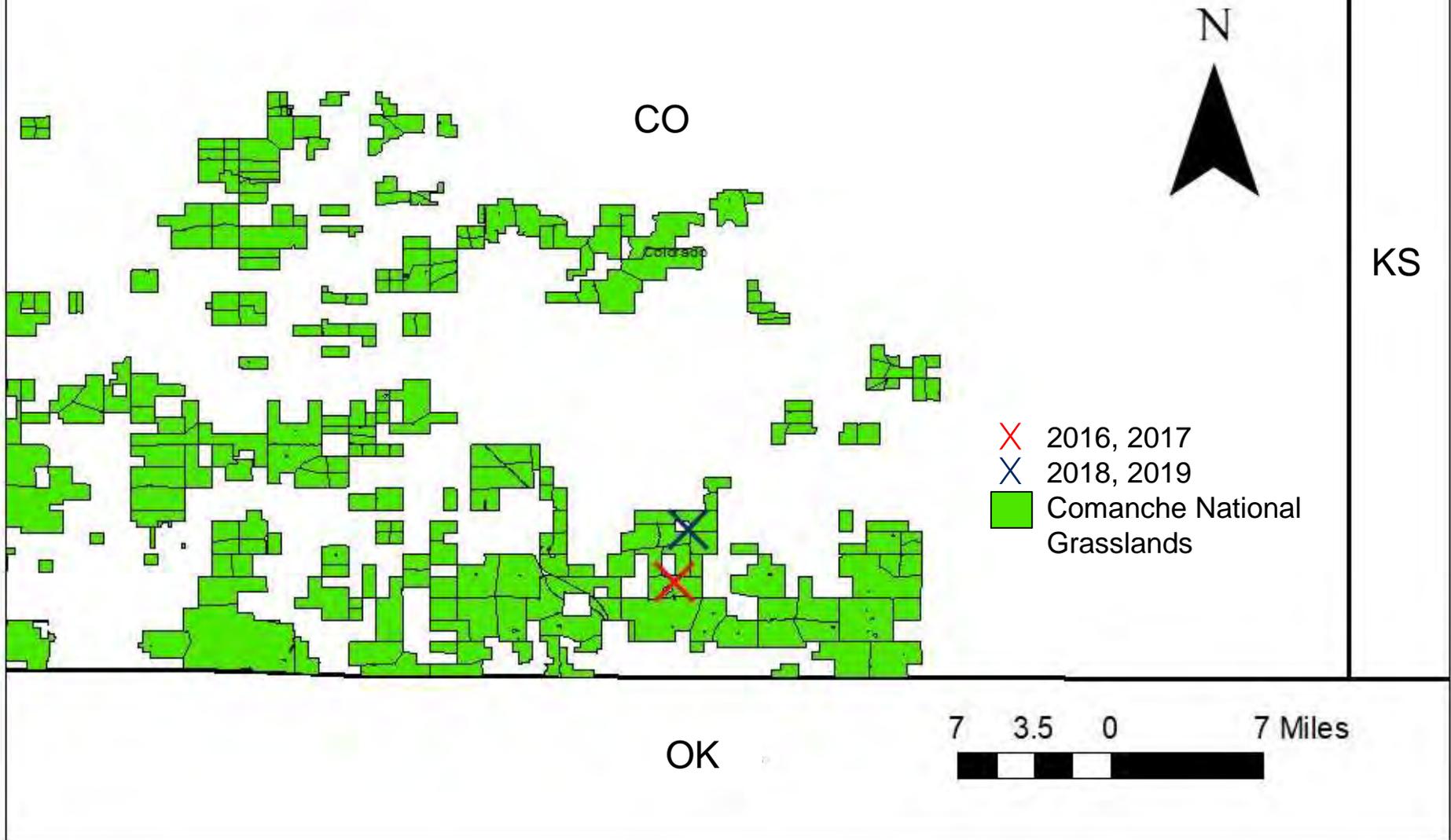
Kansas

5.5 2.75 0 5.5 Miles

OK



# Release Sites for the Comanche Natl. Grasslands



## Total Birds Translocated

	<u>Kansas</u>		<u>Colorado</u>		
	Males	Females	Males	Females	Total
Fall 2016	13	0	13	1	27
Spring 2017	16	19	29	19	83
Spring 2018	32	37	39	36	144
Spring 2019	40	49	22	46	157
Total	101	105	103	102	<b>411</b>

**This exceeded the 390 birds proposed**

# Monitoring

## Telemetry

- 1-5 points per individual bird per week
- Birds are located with omni and yagi antennas
- CPW aircraft also used to locate individuals

## Satellite

- Transmitter locations – 8-10 locations a day

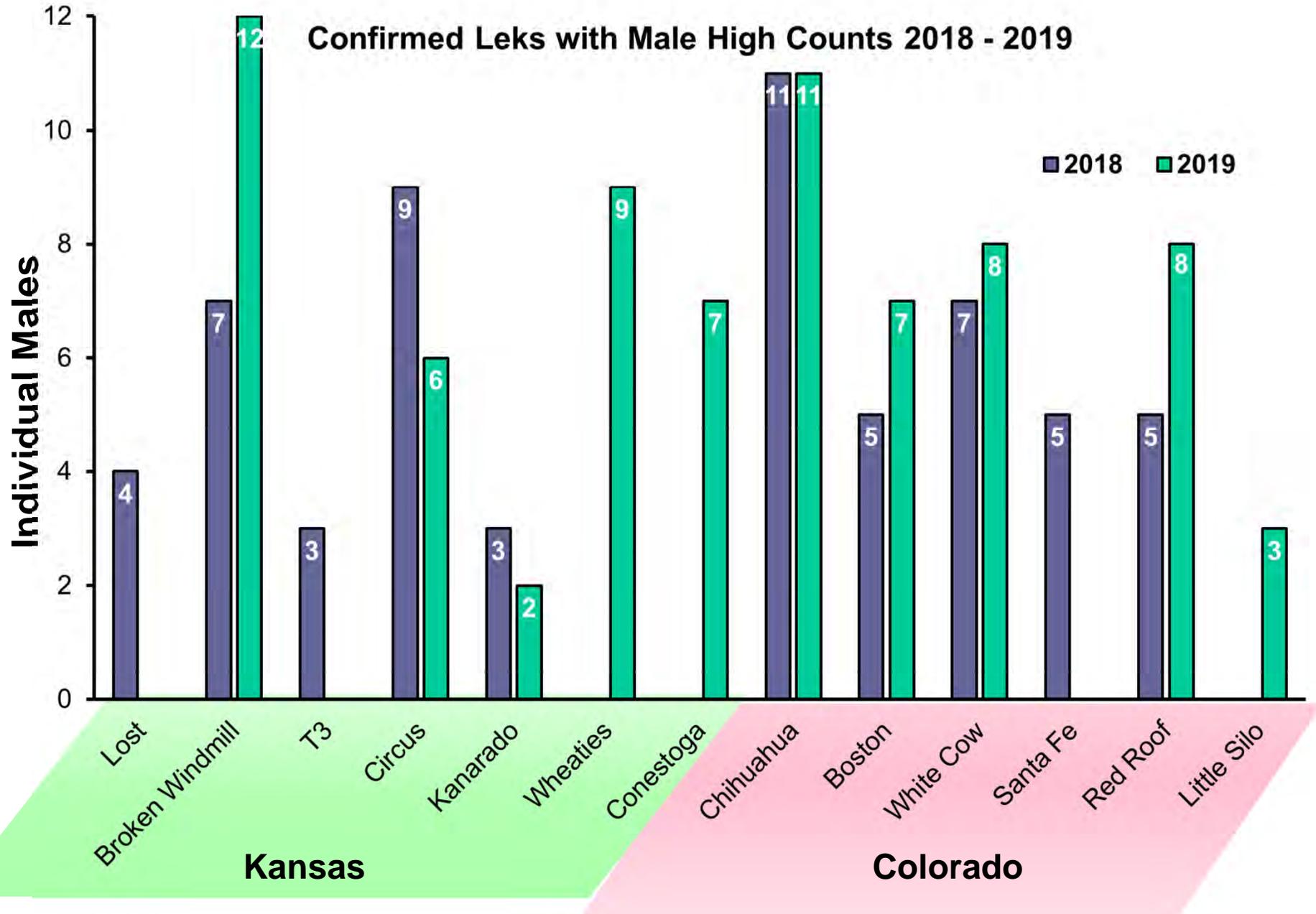
## Vegetation Surveys

- Extensive Veg. Surveys –  
Transects and Points



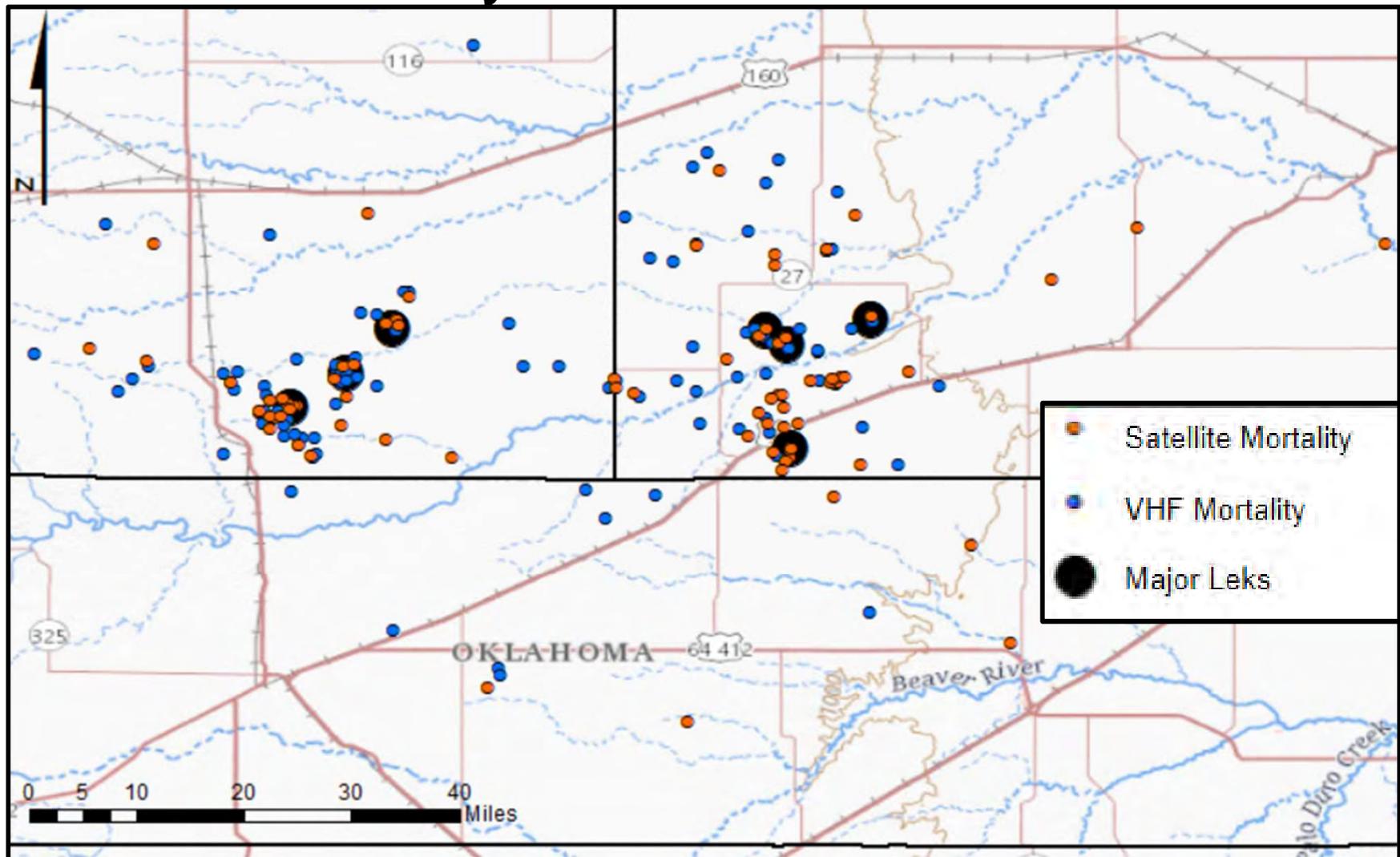
# Results

## Confirmed Leks with Male High Counts 2018 - 2019

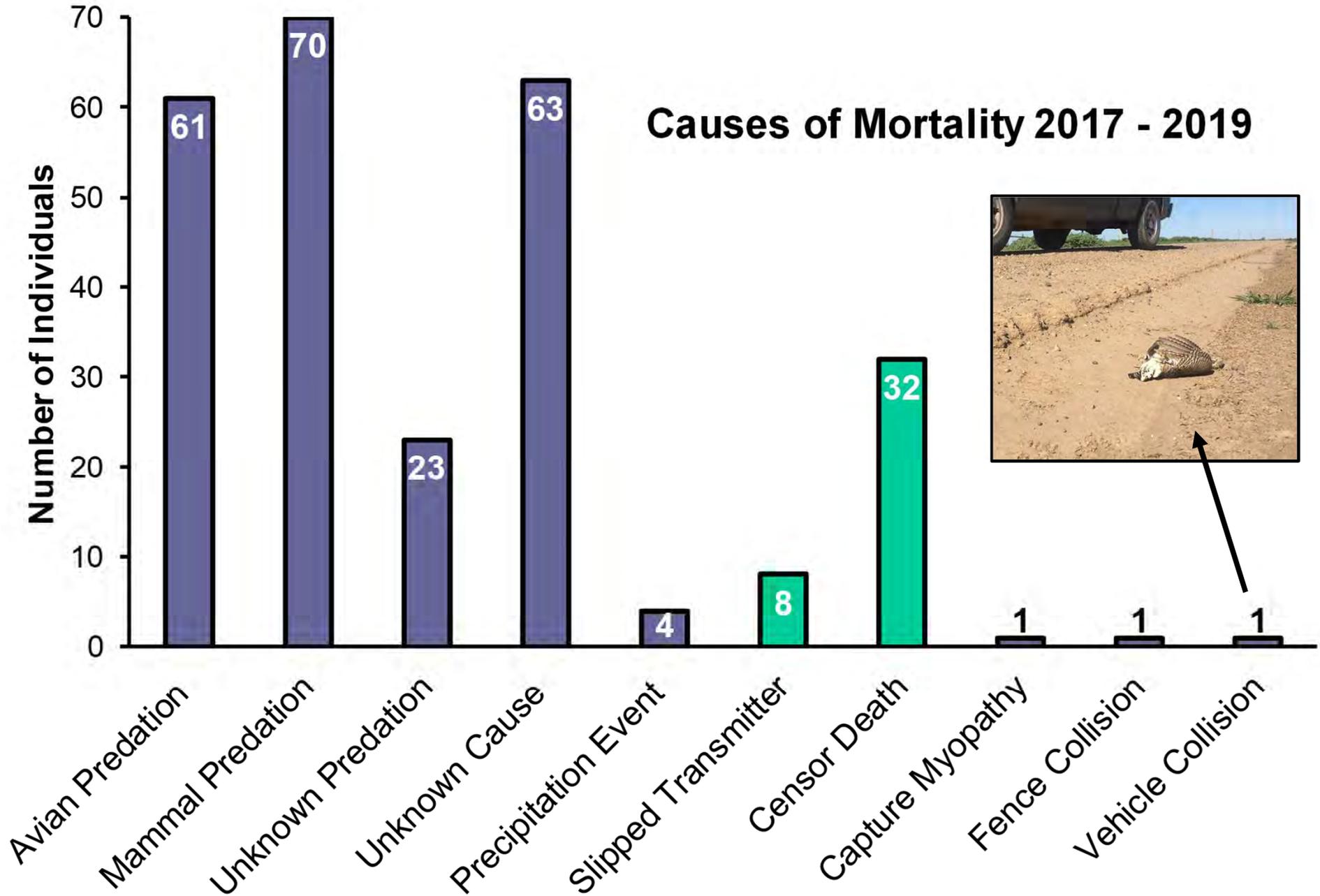


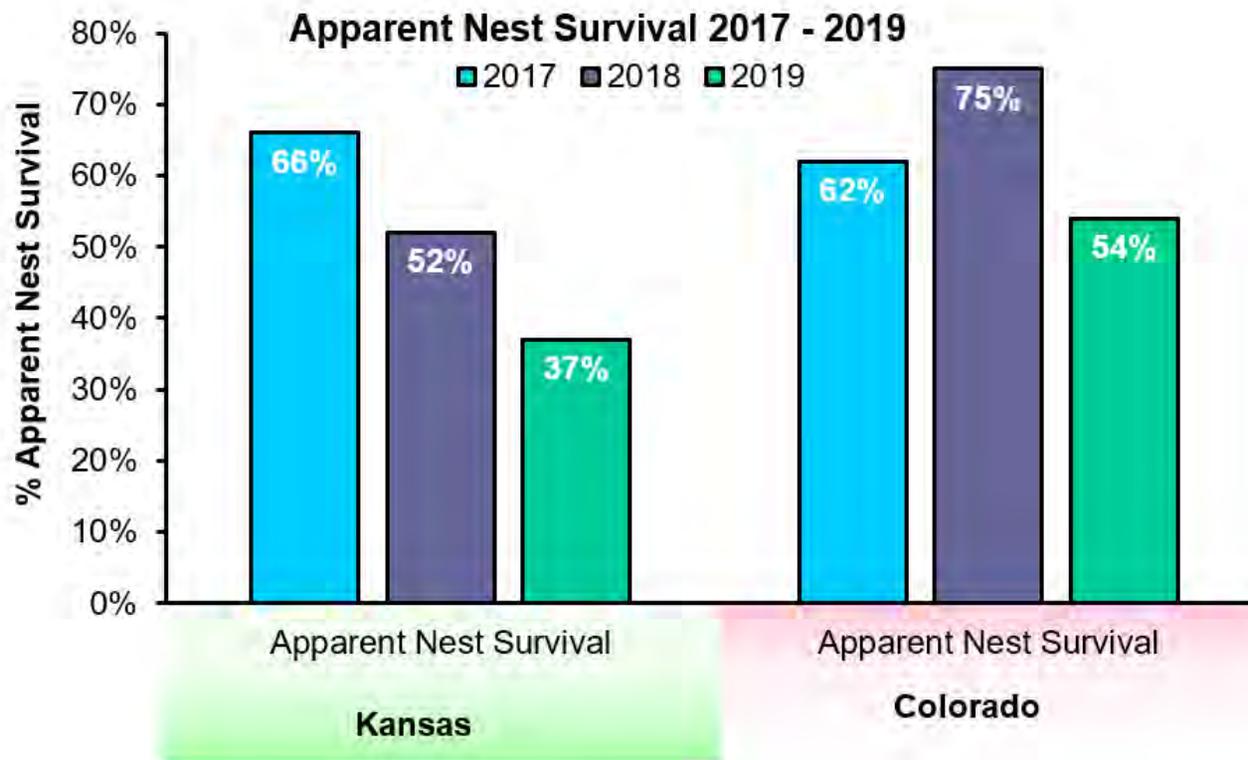
# Results

## Mortality Locations 2017-2019



# Causes of Mortality 2017 - 2019





### Total Known Chick Survival at 35 days

	Kansas	Colorado
2017	1	16
2018	17	5
2019	18	41

# Conclusions

- Persistent leks show promise
- Extensive monitoring will continue through August 2020
- Future lek counts will be conducted to monitor the population into the future



Thank you!

**Landowners of western Kansas and eastern Colorado**

**David Haukos  
Jonathan Reitz  
Liza Rossi  
Kent Fricke  
Kraig Schultz  
Dan Sullins  
Nick Parker**

**Technicians**

**Wayne Heideman, Zack Brewer,  
Ariana DiCocco, JoJo Morelli,  
Nicole DeFelice, Anna Wiebe, Trent  
Delehanty, Ben Posick, Seth  
Wallace, Kat Bernier, Megan Vhay,  
Kimberly Nijoka, Allison Bryant**

**Haukos Lab Deer Project  
KDWPT Staff  
Colorado Parks and Wildlife Staff  
Current and Former  
Haukos Lab Members  
U.S. Forest Service & Volunteers**



Photo Credit: Carly Aulicky, Liam Berigan, Nicholas Parker, JoJo Morelli, Anna Wiebe, Trent Delehanty



Questions?



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