



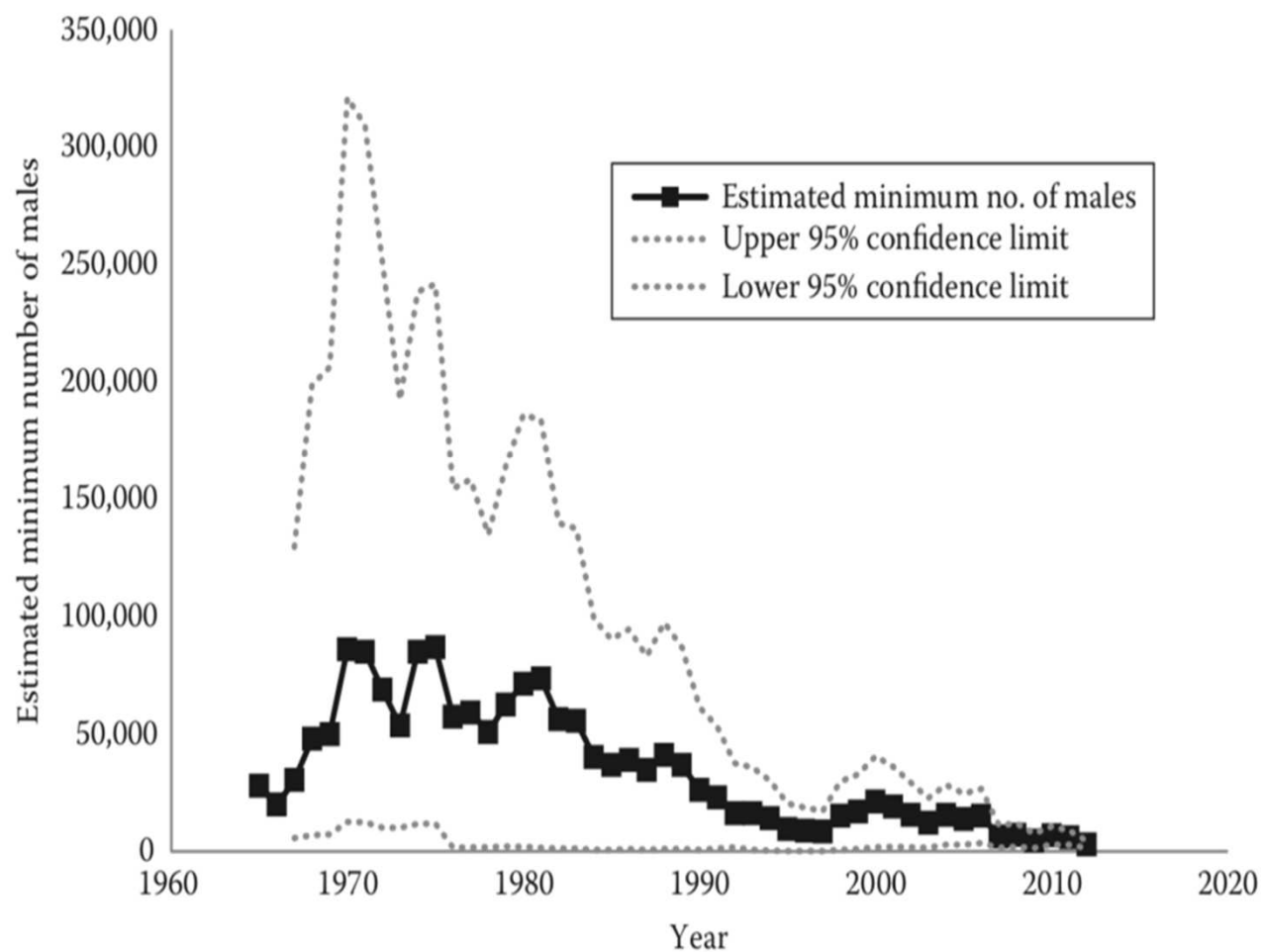
Assessing a Lesser Prairie- Chicken Translocation in the Sand Sagebrush Prairie Ecoregion

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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

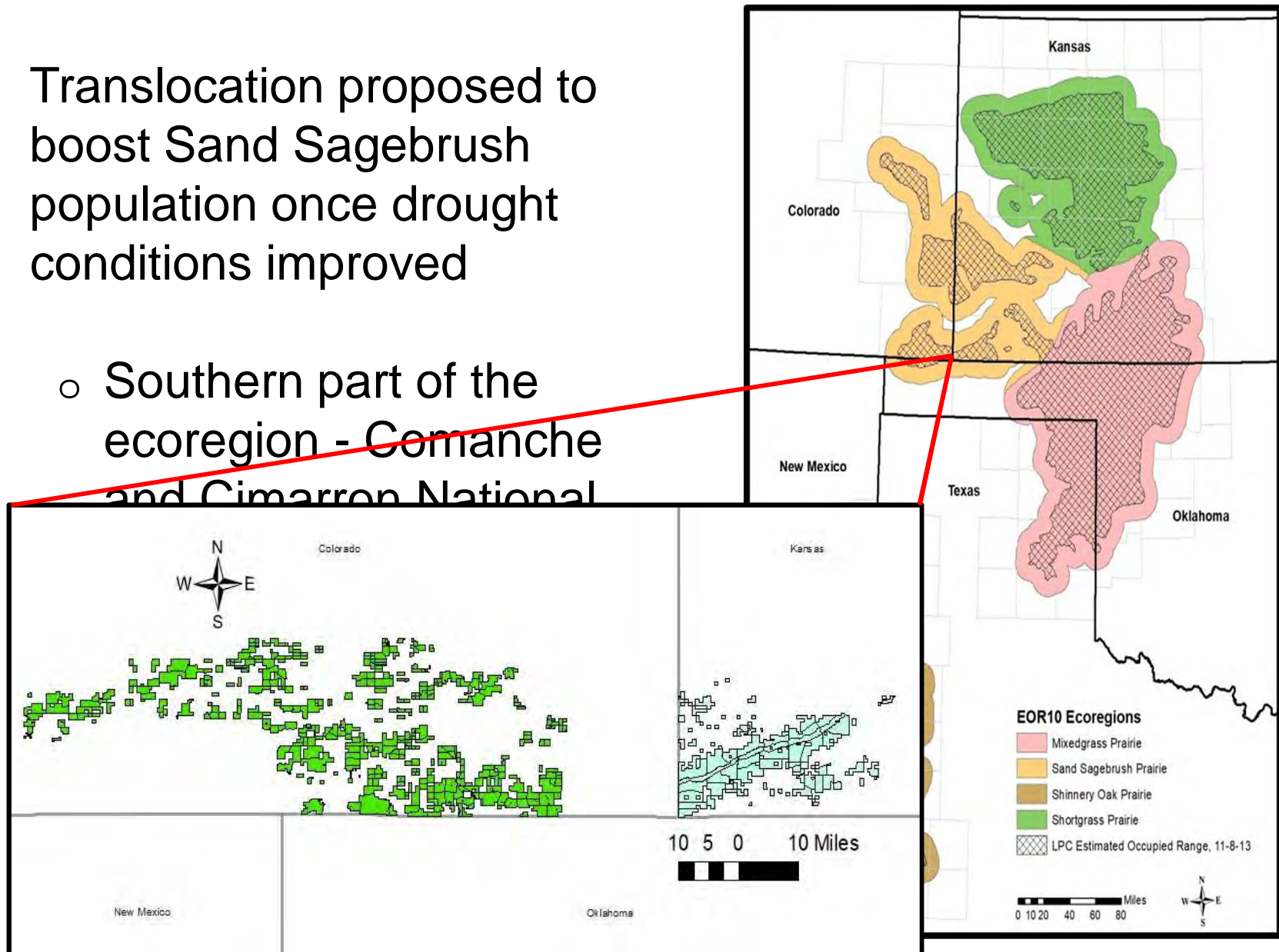




Estimated minimum number of LEPCs attending leks 1964-2012 in Sand Sagebrush Ecoregion. Adapted from Haukos and Boal 2016.

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

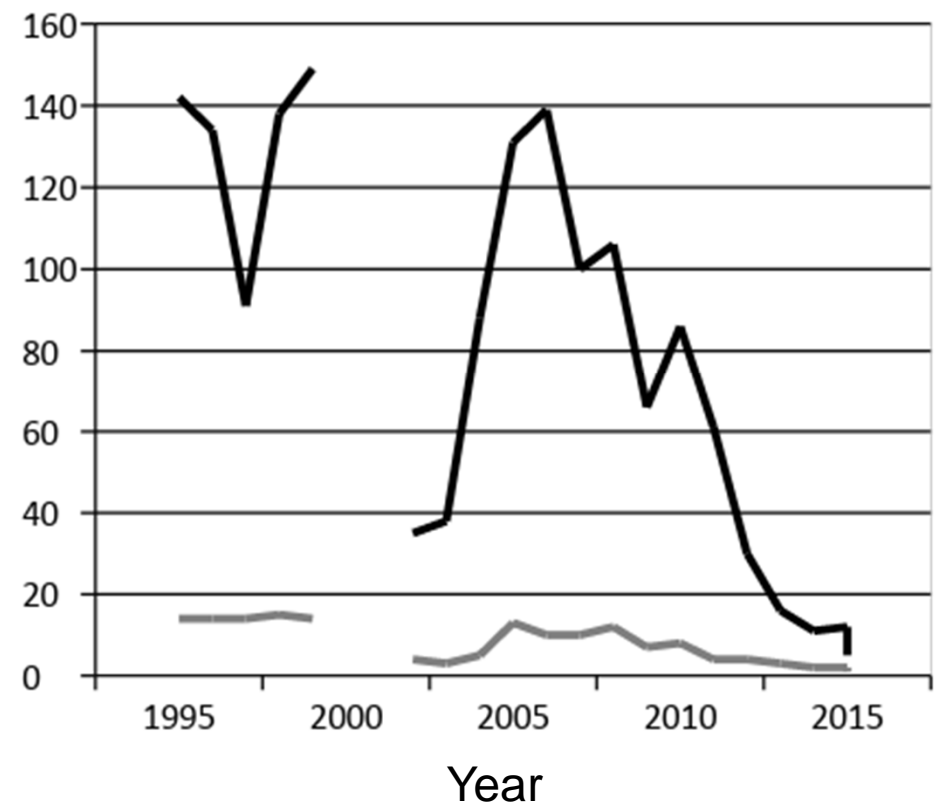
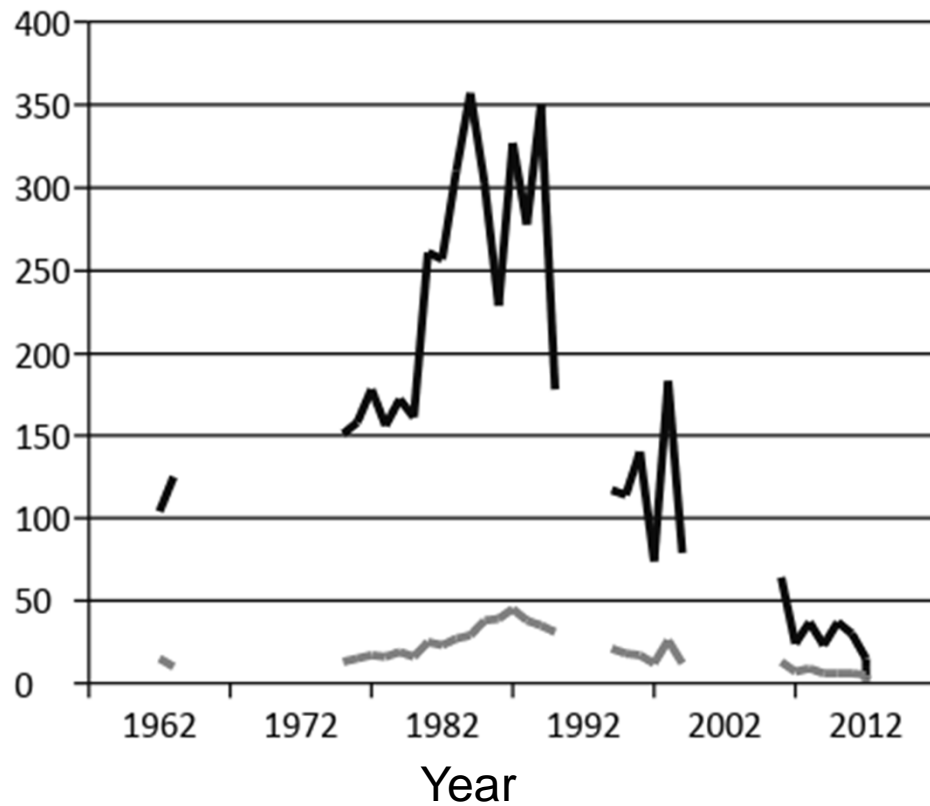




Comanche National Grasslands, CO

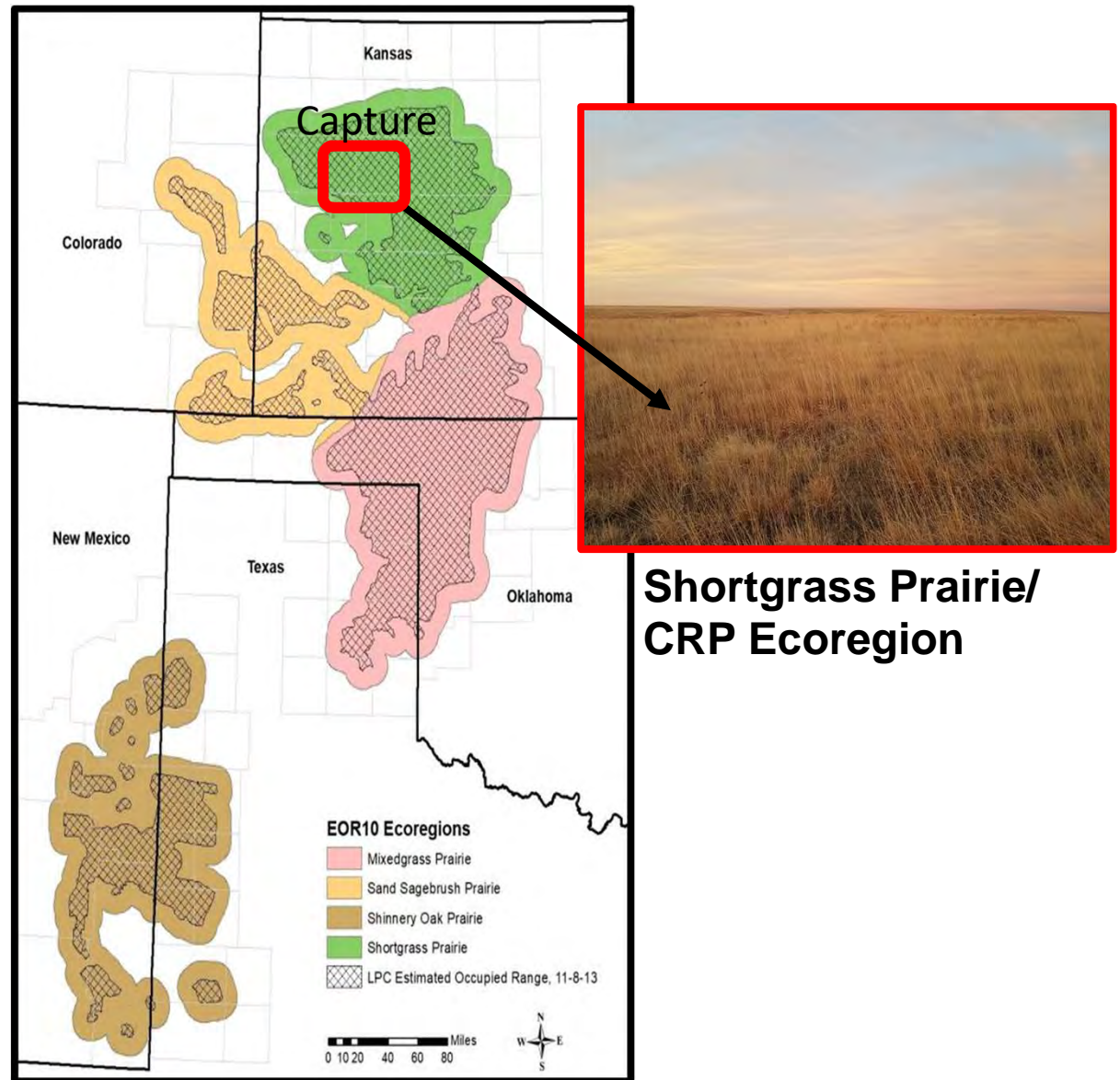


Cimarron National Grasslands, KS



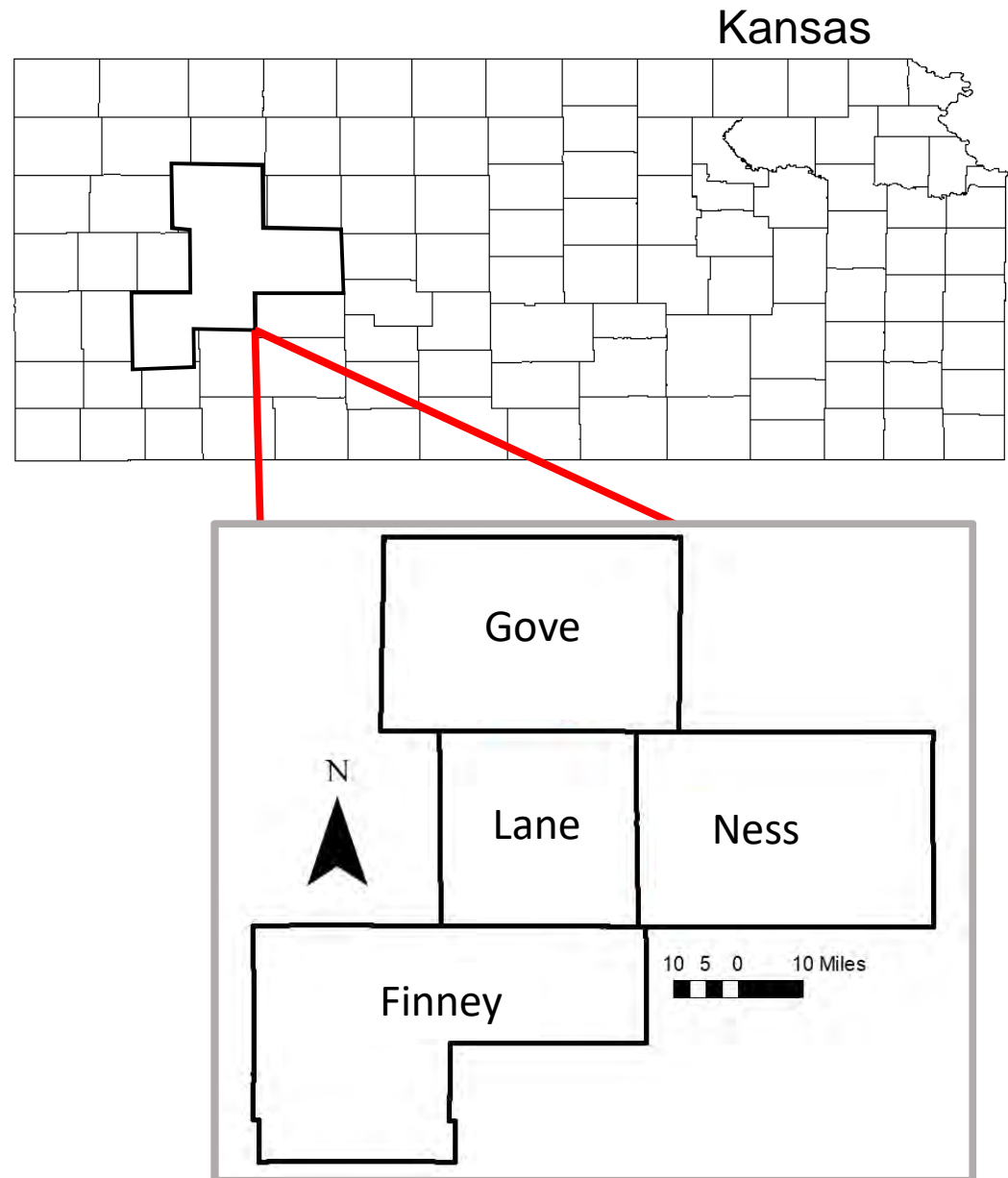
— Male High Count
 — # of Active Leks

Translocation to the Sand Sagebrush Prairie Ecoregion

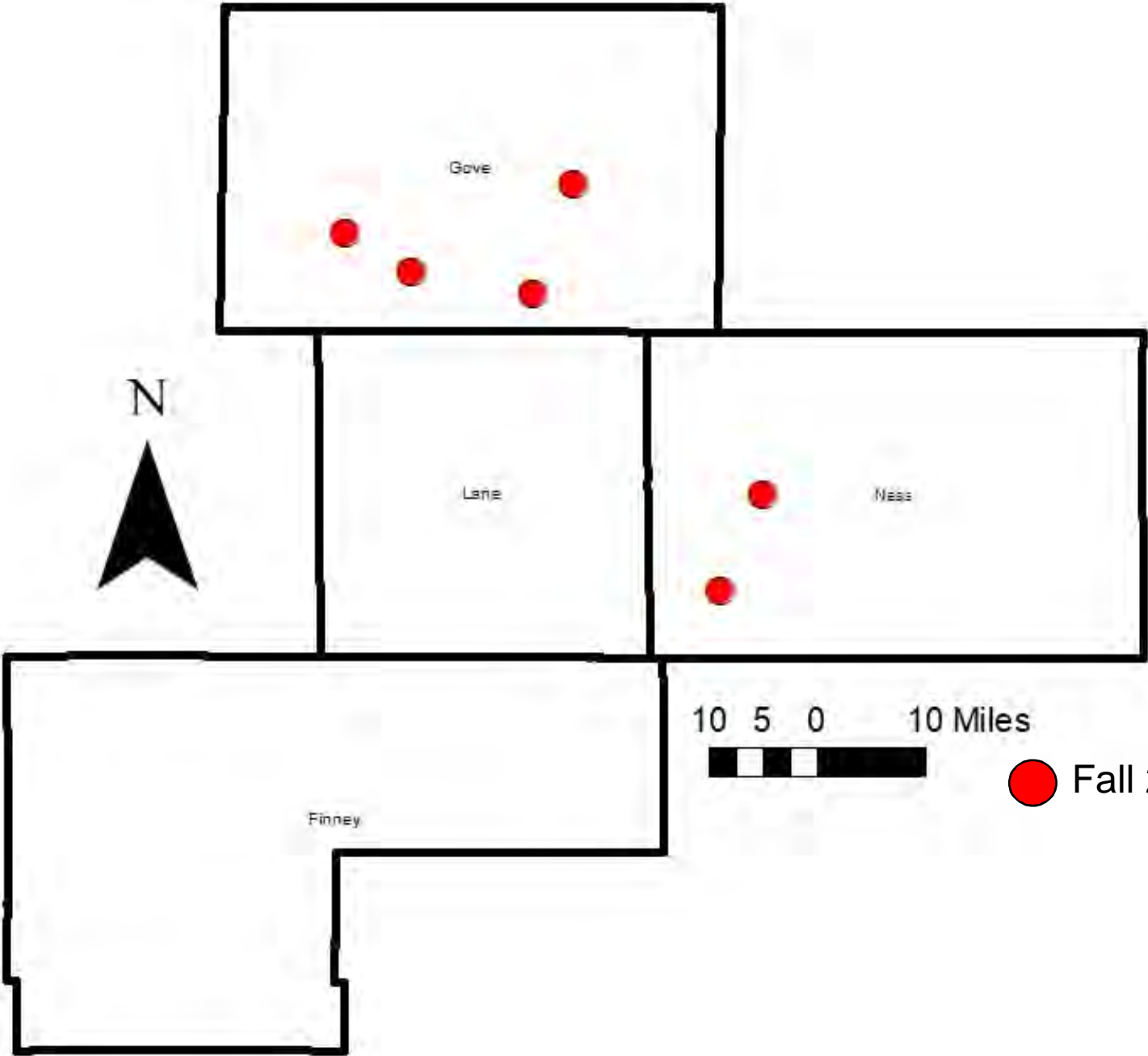


Capture: Location

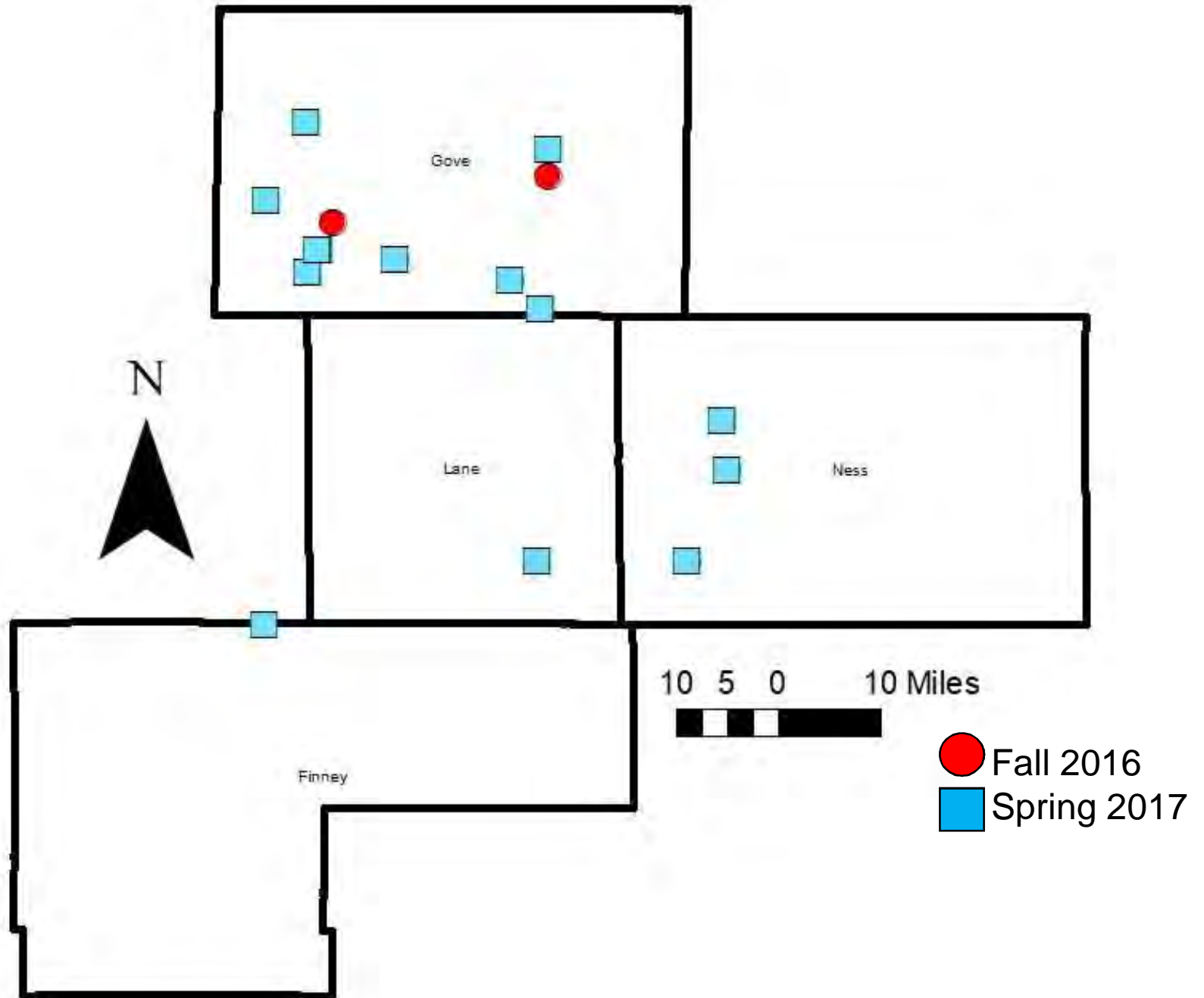
- LEPCs captured in 4 counties in Northwest Kansas
- Collaborative Capture effort KDWPT, CPW, KSU and volunteers



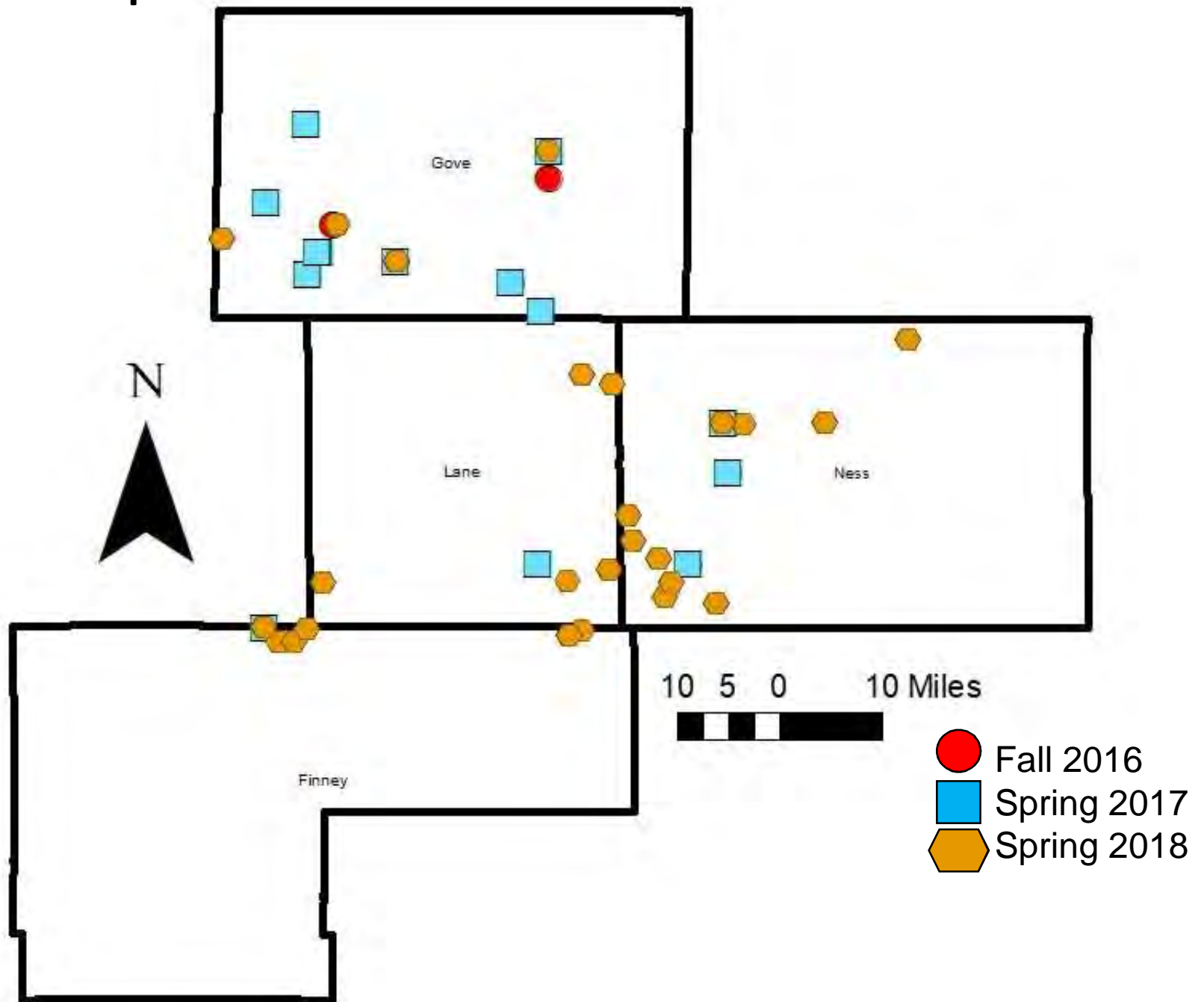
Fall 2016 Capture Leks



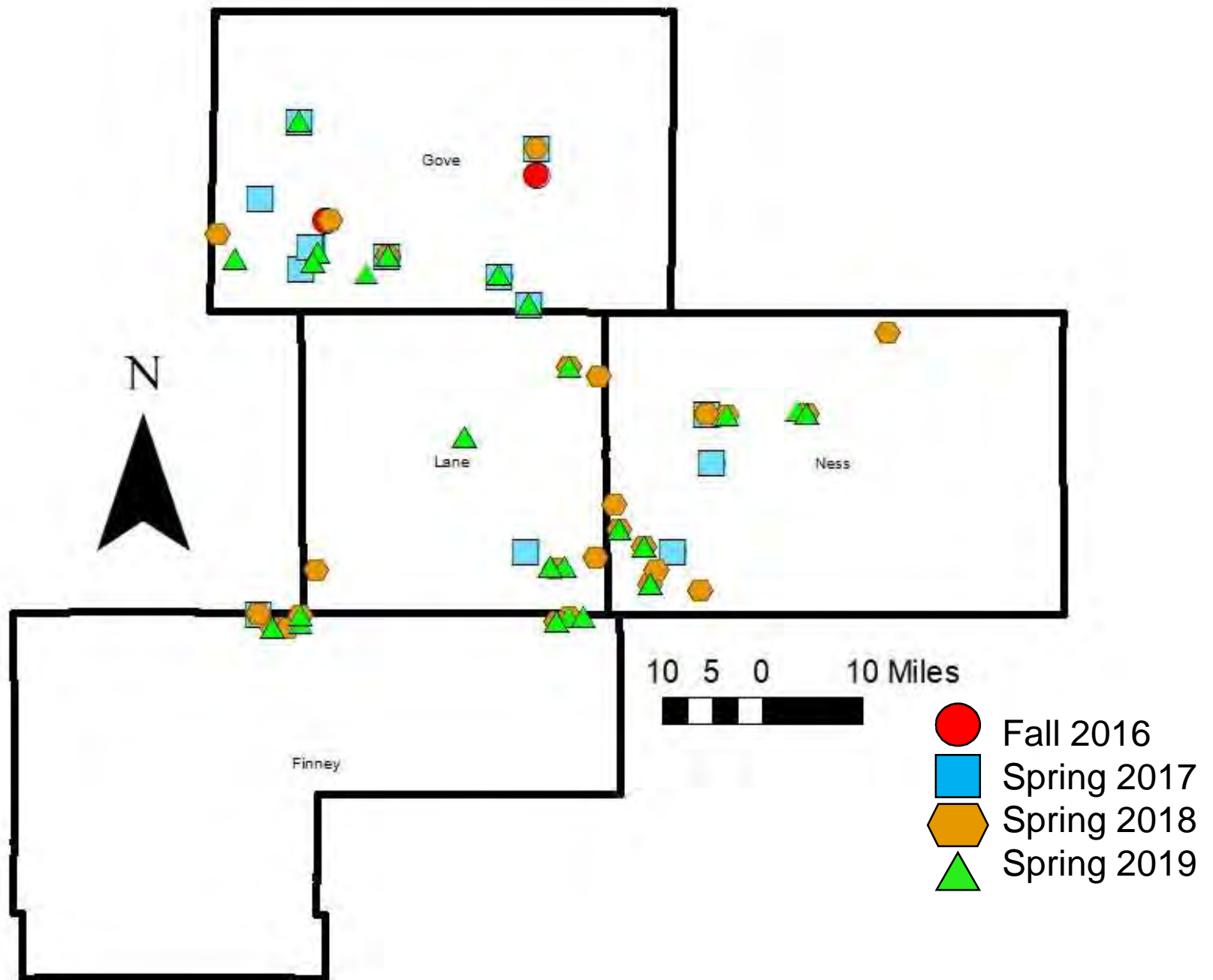
Spring 2017 Capture Leks



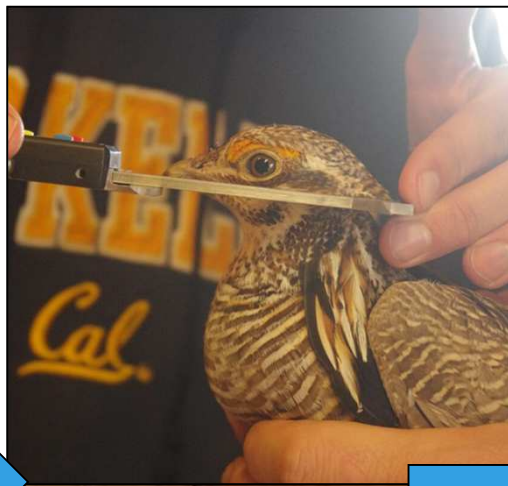
Spring 2018 Capture Leks



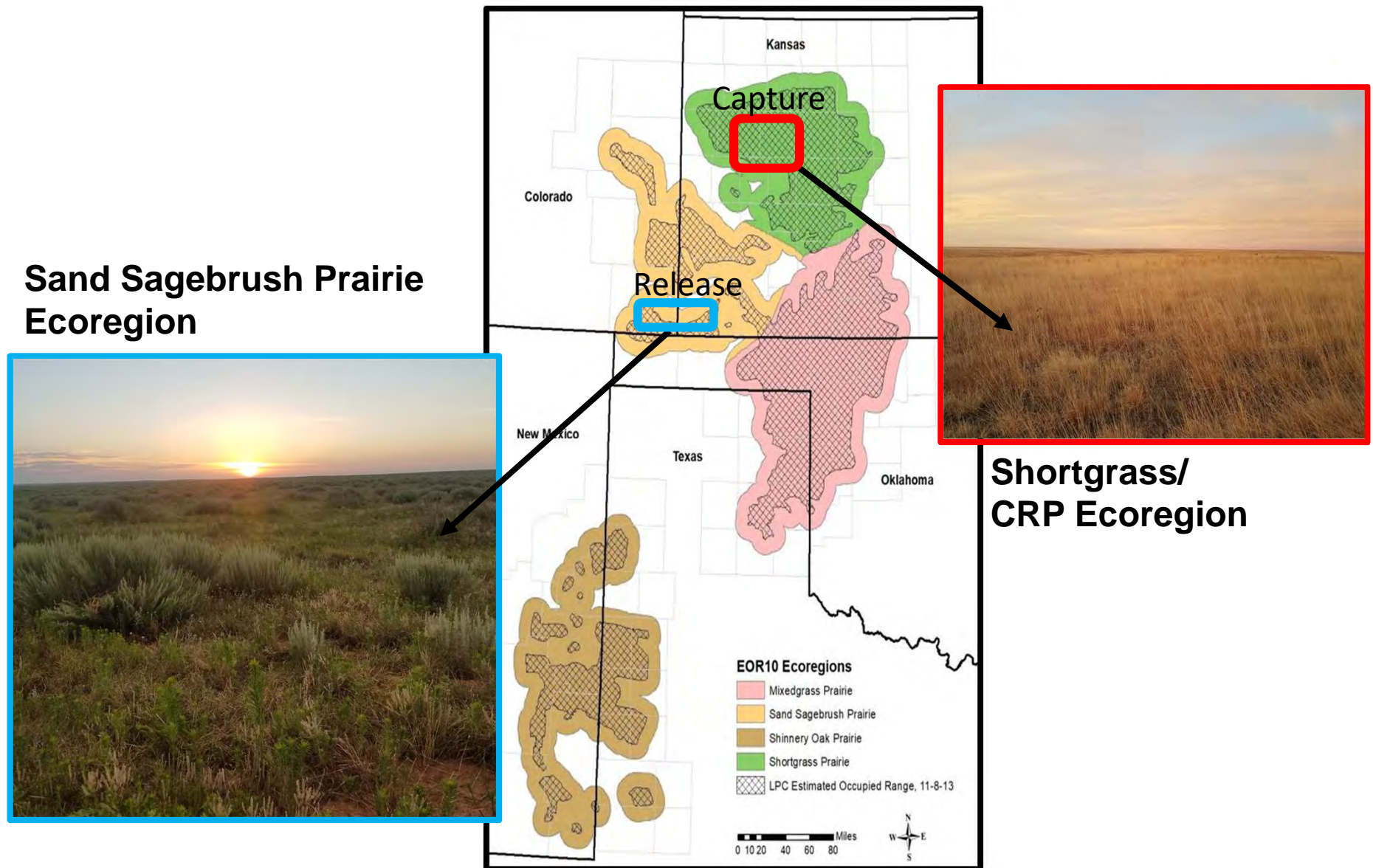
Spring 2019 Capture Leks



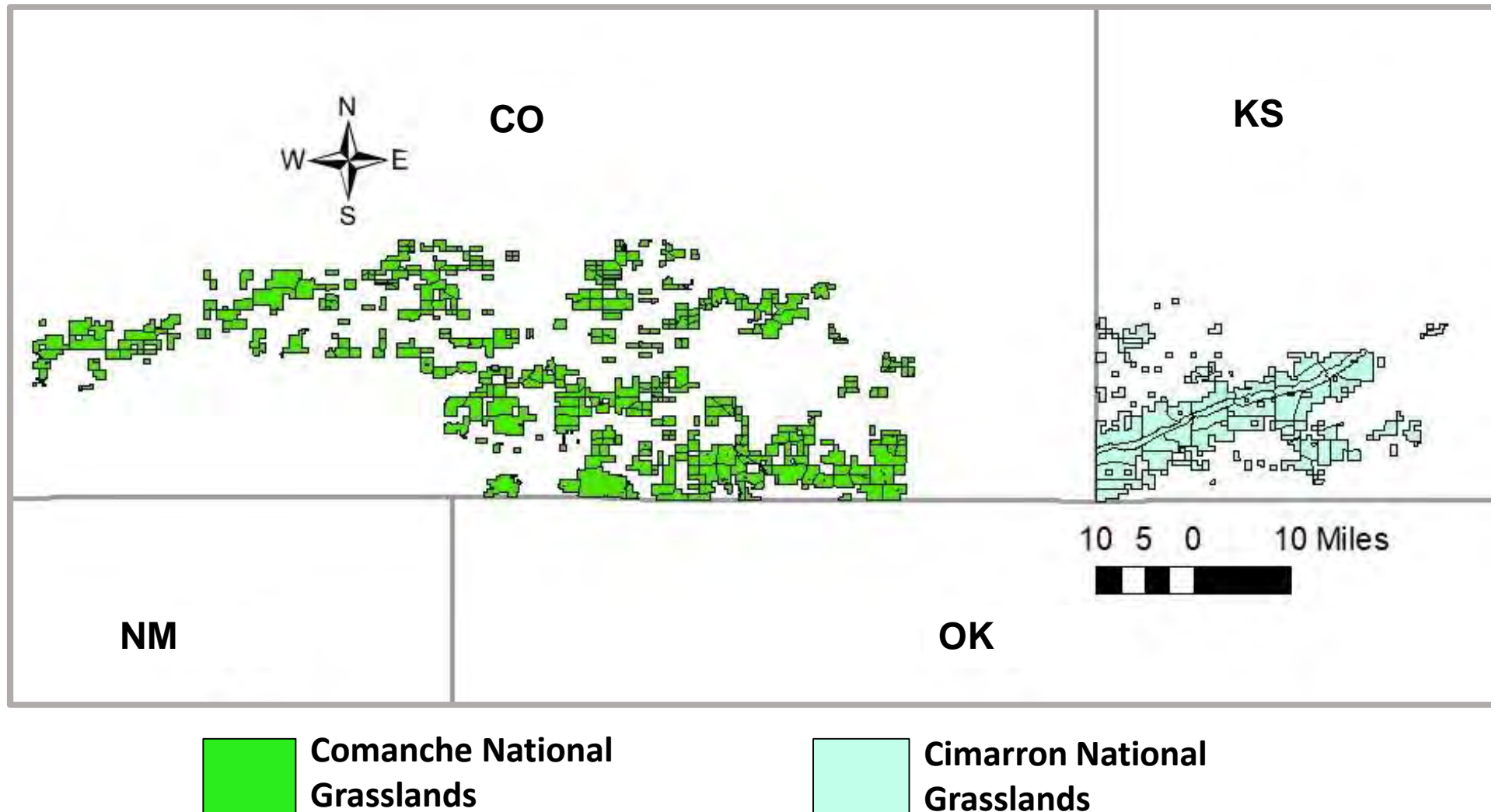
Capture: Methods



Translocation to the Sand Sagebrush Prairie Ecoregion

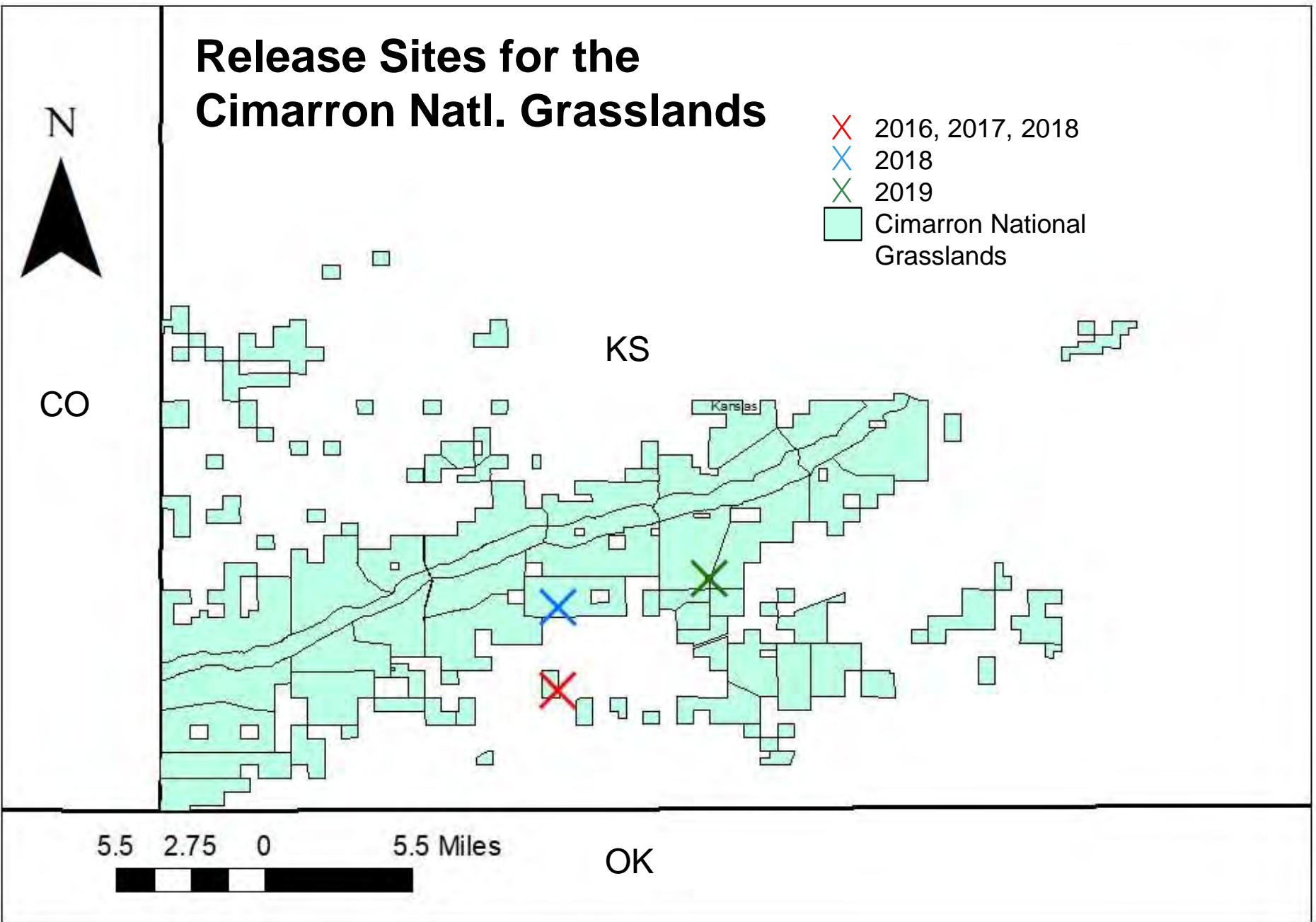


Release Area: Comanche and Cimarron National Grasslands

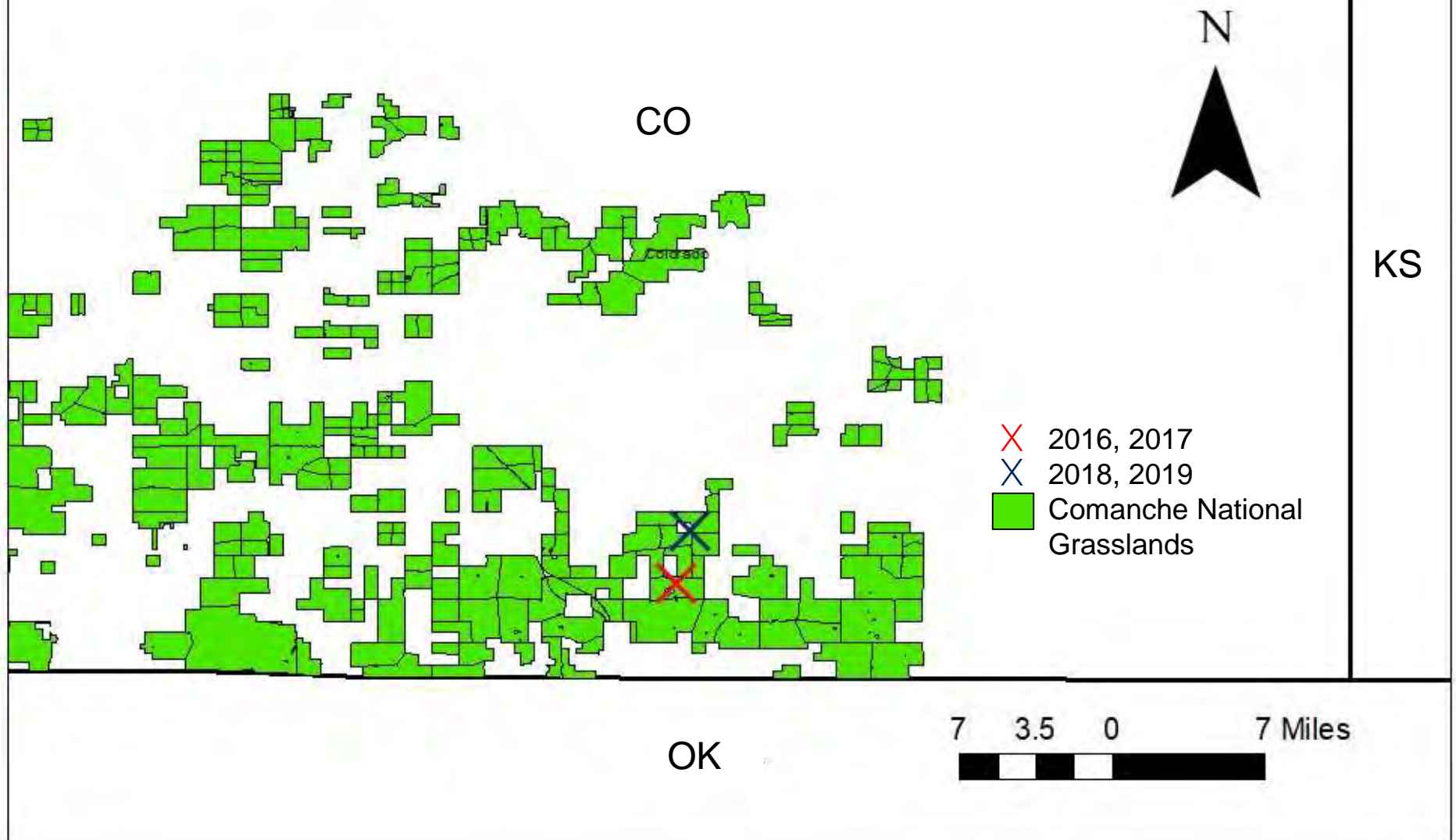


Release Sites for the Cimarron Natl. Grasslands

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



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	411

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

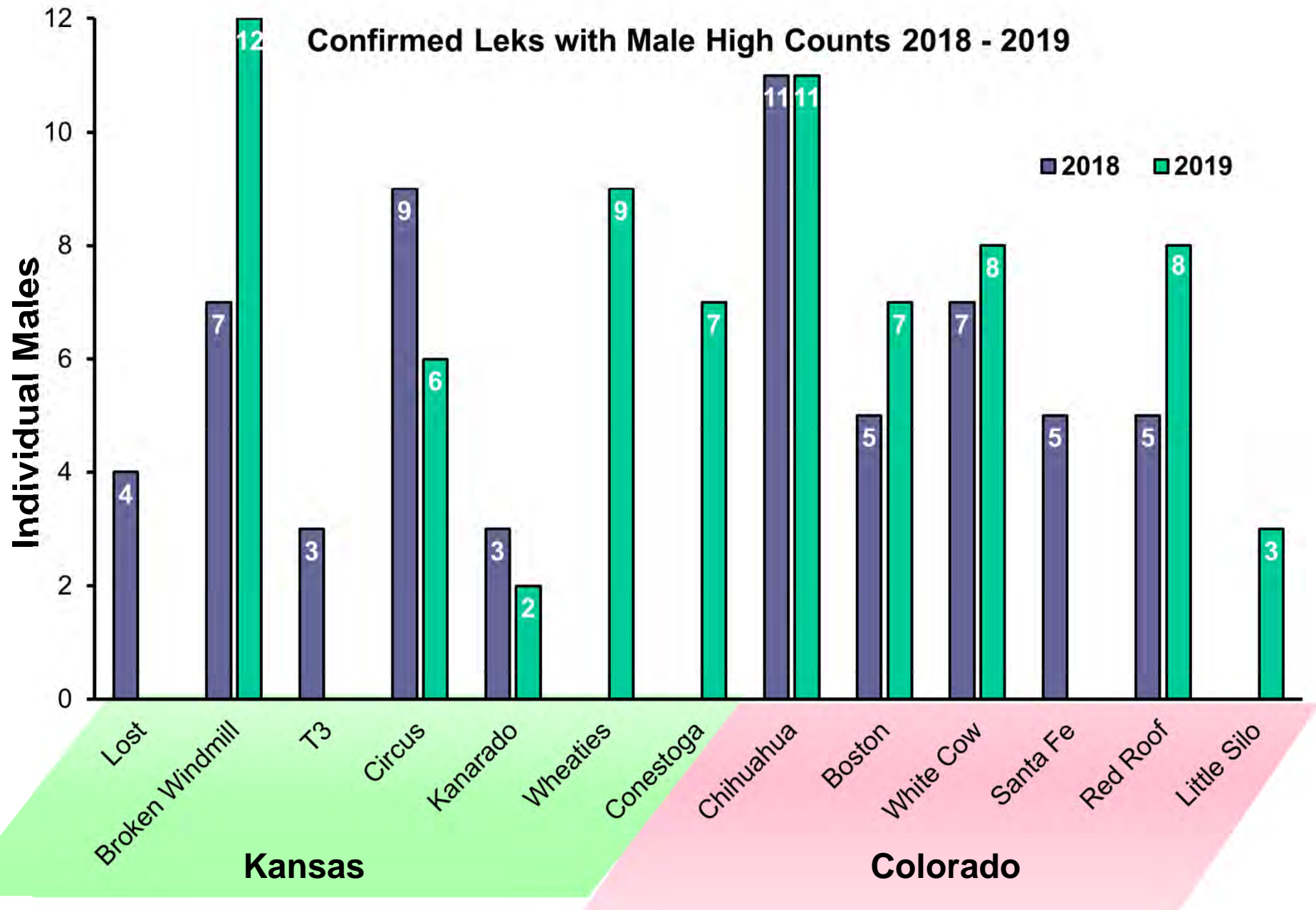
- Transmitter locations – 8-10 locations a day

Vegetation Surveys

- Extensive Veg. Surveys – Transects and Points

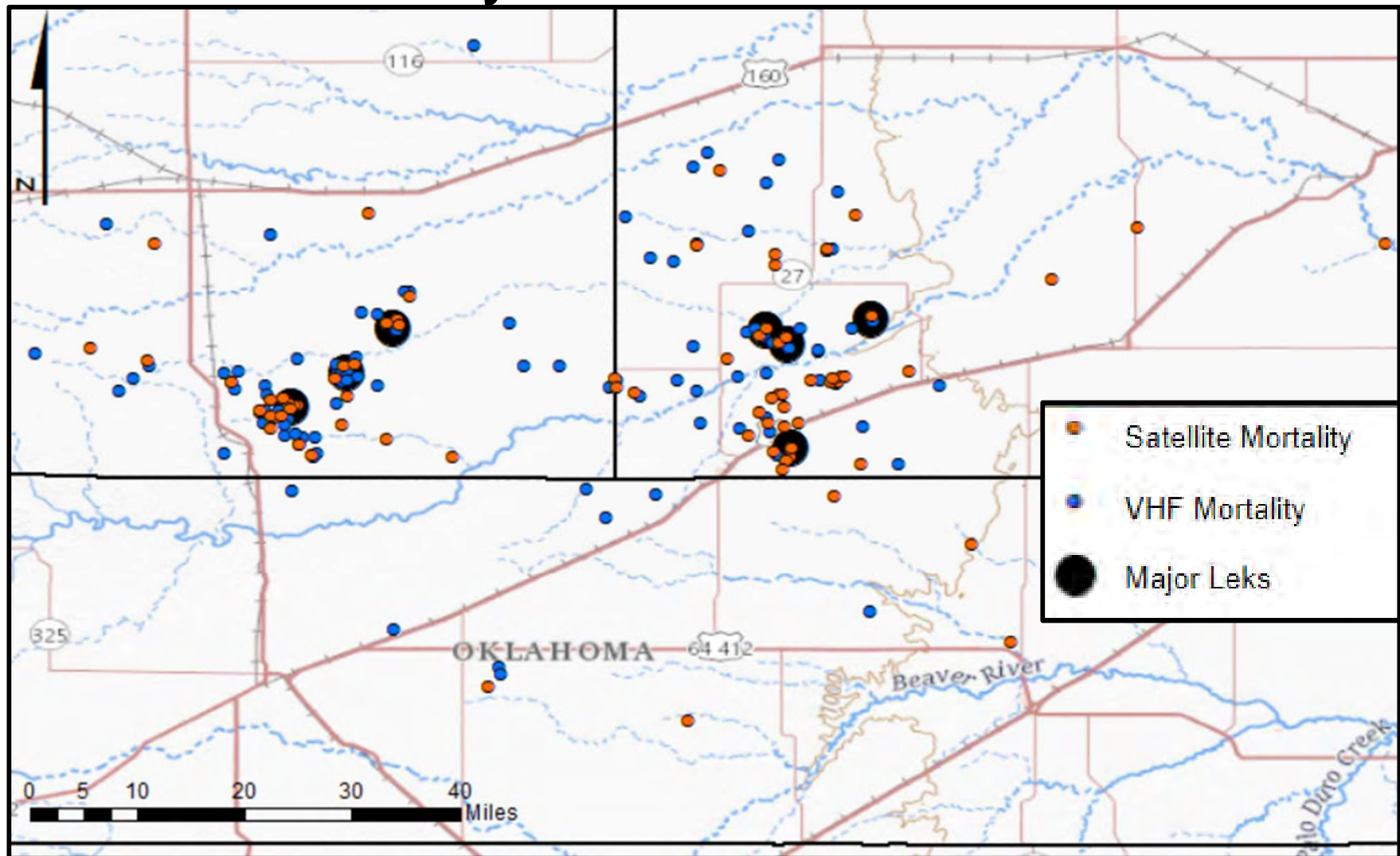


Results

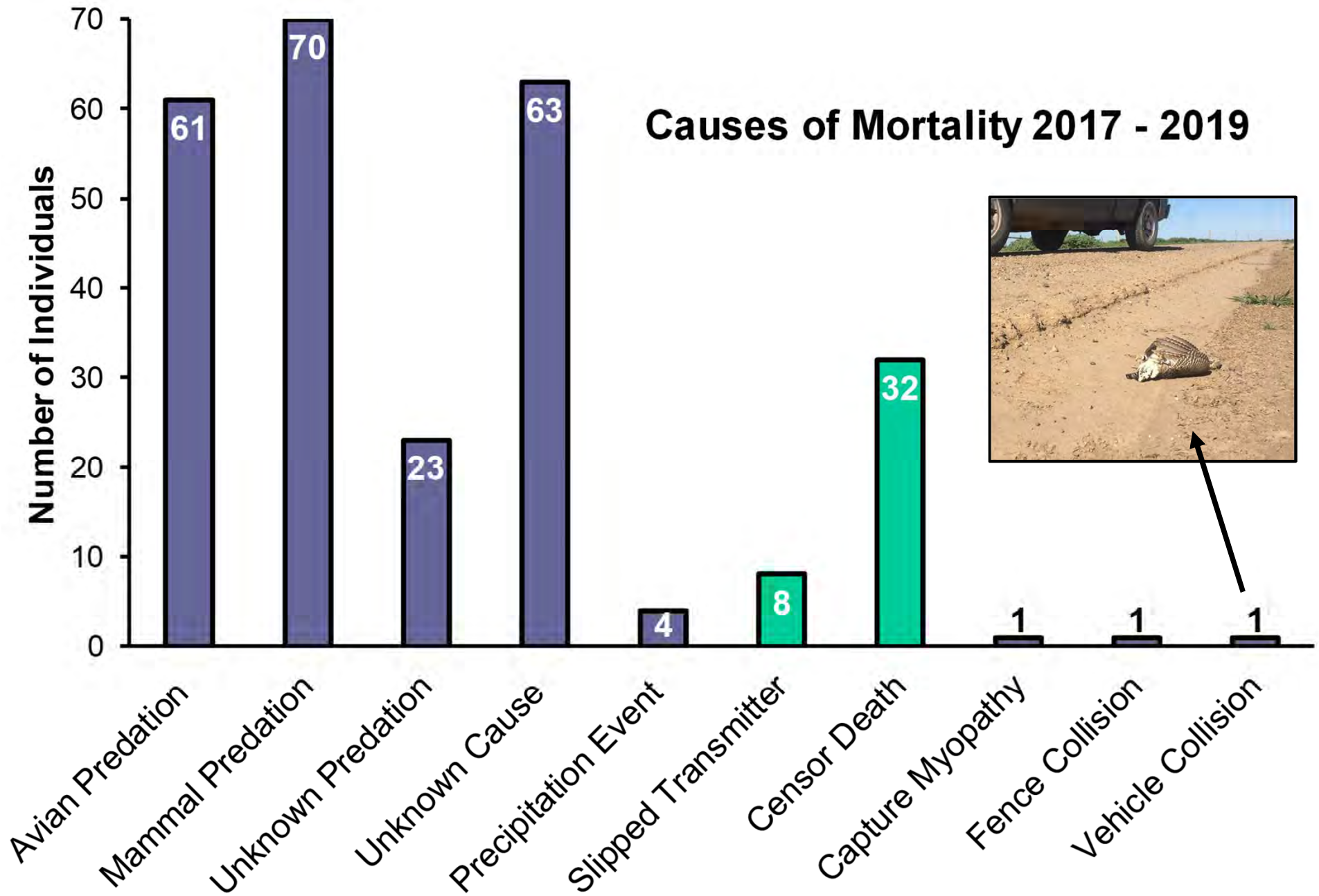


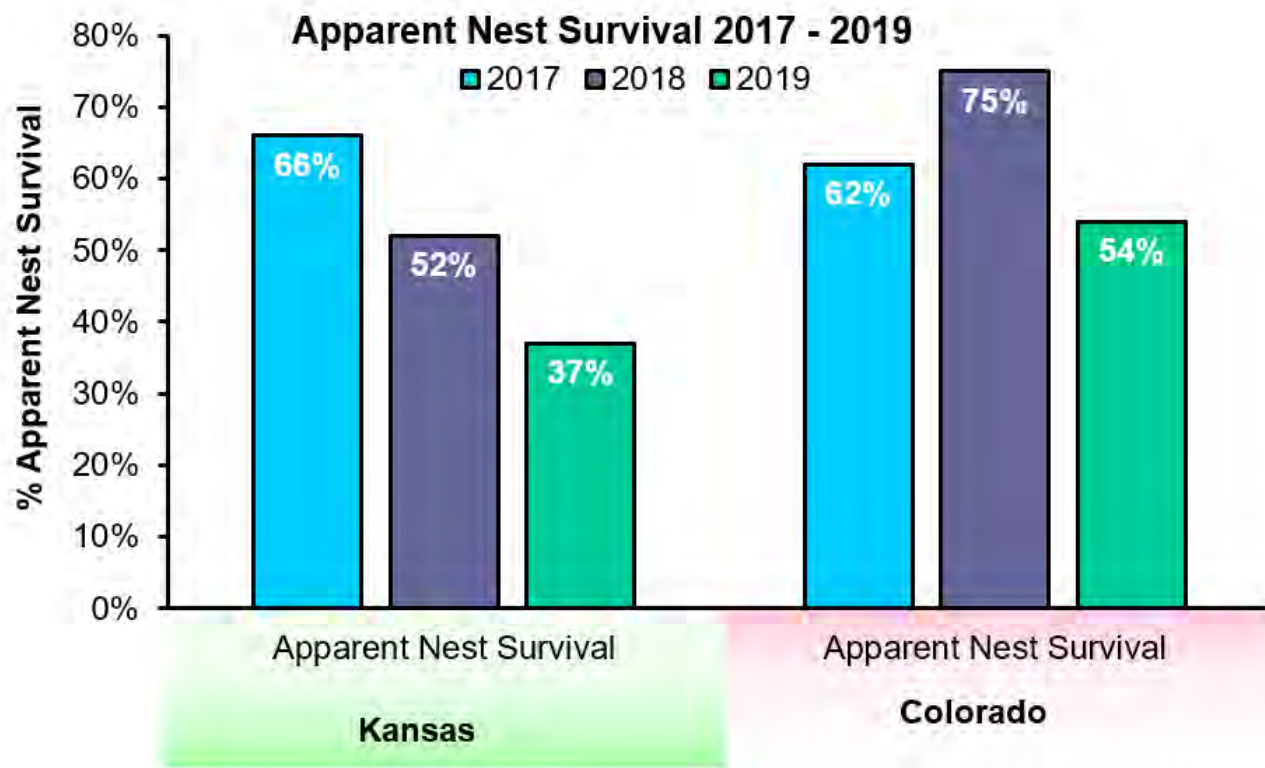
Results

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
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Kraig Schultz
Dan Sullins
Nick Parker

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Haukos Lab Deer Project

KDWPT Staff

Colorado Parks and Wildlife Staff

Current and Former

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U.S. Forest Service & Volunteers



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



Questions?



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