THE ECOLOGY AND STATUS OF LESSER PRAIRIE CHICKENS IN NEW MEXICO

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Figure 1. Population status of Lesser prairie-chickens in New Mexico, 1998-2016.
- Range wide population based on aerial surveys
- Estimated population of 25,651 in 2016
- SOPR is about 12.6% of total population
LEPC HABITAT- LEKS

- Low, sparse vegetation, <4”
- Often on ridges or grama grass covered flat areas
- Sometimes in disturbed areas such as roads, well pads, livestock watering areas, or prairie dog towns
- Focus of monitoring surveys
- Not considered a limiting factor
LEPC HABITAT - NESTING

- Native grass and shrub cover (sand sagebrush, shinnery oak, tall warm season grasses >15-20”)
- Native grass CRP fields
- Denser vegetation
- Residual herbaceous cover
- Females typically nest within 1-2 miles of a lek
- 2/3 of the habitat
- A primary habitat need
Good cover of herbaceous vegetation and shrubs but less than nesting
 Needs to be close to nesting habitat
 Good abundance of forbs
 Open near the ground for movements of chicks
 Abundant insects
 1/3 of habitat
 Another key habitat need
- Generally similar to nesting and brood habitat
- Grain fields may be used for foraging
- Sand shinnery oak provides leaves, catkins, acorns, and insect galls as seasonal food resources.
- Needs met with nesting and brood habitat
LEPC need large blocks of habitat

- 25,000-50,000 acre areas

- Habitat should have some variability within it to provide optimal nesting, brood, and lekking conditions - at least 2/3 in good nesting habitat
LEPC THREATS

- Habitat conversion by agriculture
- Collision mortality
- Altered fire regimes and woody plant invasion
- Energy Development
- Poor grazing practices
- Climate change
- Habitat loss and fragmentation
Incentive programs to maintain native grass and shrub communities
Convert croplands back to native grasslands
Prescribed fire and grazing
Chemical and mechanical control of woody plants
Removal or marking of fences or powerlines where needed
Restoration of oil and gas well pads and roads
Work with companies to avoid siting in critical areas, apply BMP’s, and provide mitigation opportunities for unavoidable impacts
Encourage restoration and maintenance of large blocks of high quality habitat
Encourage development of connectivity zones to allow movements and population shifts
LEPC RESEARCH

- Avoidance behavior
- Grassland/LEPC response to prescribed fire and grazing
- Translocation methodologies
- Effects of climate change on LEPC
- Effects of energy development on LEPC
THE END!