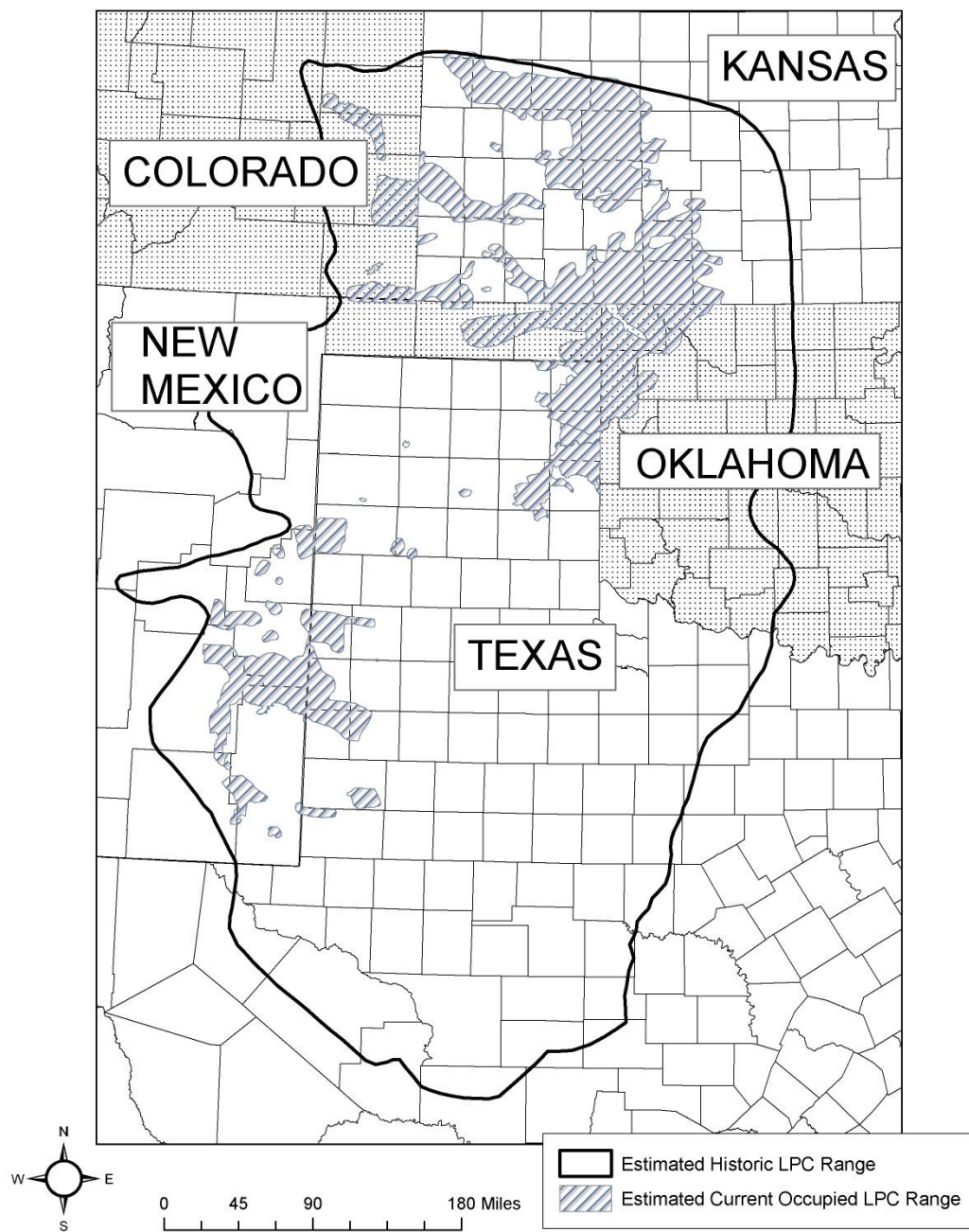


THE ECOLOGY AND STATUS OF LESSER PRAIRIE CHICKENS IN NEW MEXICO



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POPULATION STATUS

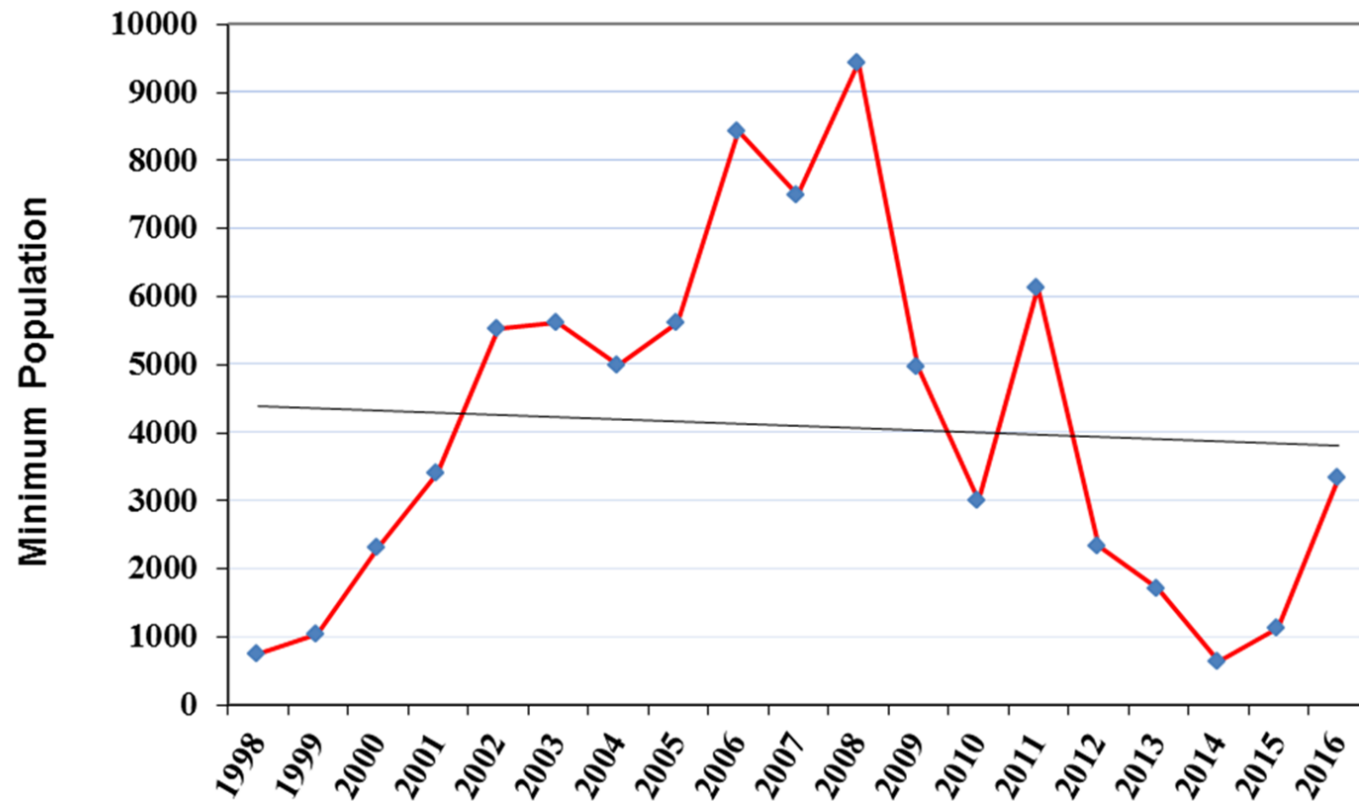
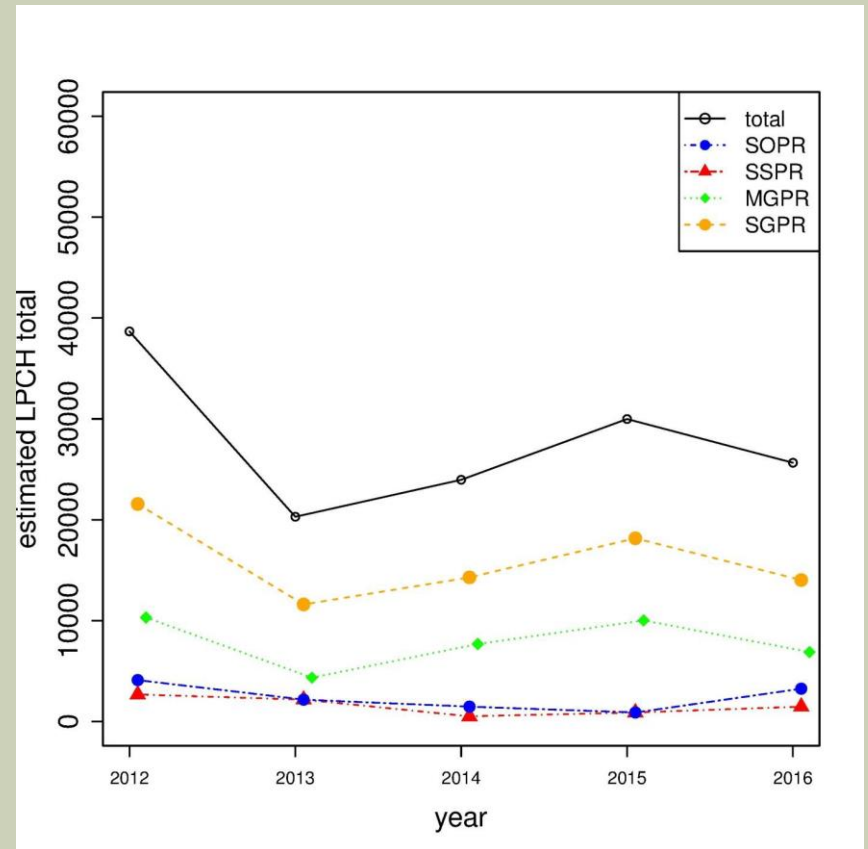


Figure 1. Population status of Lesser prairie-chickens in New Mexico, 1998-2016.

POPULATION STATUS

- 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



LEPC HABITAT- BROODS

- 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



LEPC HABITAT- FALL/WINTER

- 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



LANDSCAPE COMPOSITION

- 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**

LEPC MANAGEMENT PRACTICES

- 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**

