Introduction

- Bare sandbars are necessary for two federally listed species - Interior Least Tern (*Sternula antillarum*) and Piping Plover (*Charadrius melodus*).
- New sandbar formation is limited along the Missouri River, but habitat is maintained for sandbar-dependent species by preventing the colonization of early successional cottonwood-willow forest.
- Early successional forest may supply habitat for a diverse bird community.
- An understanding of the biological tradeoffs to vegetation management options is necessary for a balanced ecosystem-based approach to sandbar management.

Methods

Data Collection: 2018

- **Point Counts**
  - Breeding Season: 7 locations visited twice at least 10 days apart
  - Fall Migration: 4 locations weekly for several weeks
- **Nest Monitoring**: 3-4 day frequency at 3 locations ($N = 97$, 14 Species)
- **Nest Success**: Mayfield Method

Study Area

- Missouri National Recreational River (MNRR)
- Study Locations

Results

- **Species Observed**
  - Migration: 60
  - Breeding Season: 48
  - Nest Success: 26%

- Average for 14 species

- Nest success at three sites monitored during the breeding season.

Conclusions

- Cumulative nest survival recorded in nearby mature riparian forest 36% and in farmstead woodlots 44%; Yellow Warbler nest success reported as 28% (Gentry et al. 2006).

Overall, nesting birds were less successful during the 2018 breeding season than we expected. The 2018 breeding season experienced higher water levels than a typical year and this may have influenced nesting success. Further comparisons of species-specific nest survival will help identify key breeding areas and migratory stopover sites.

Literature Cited: