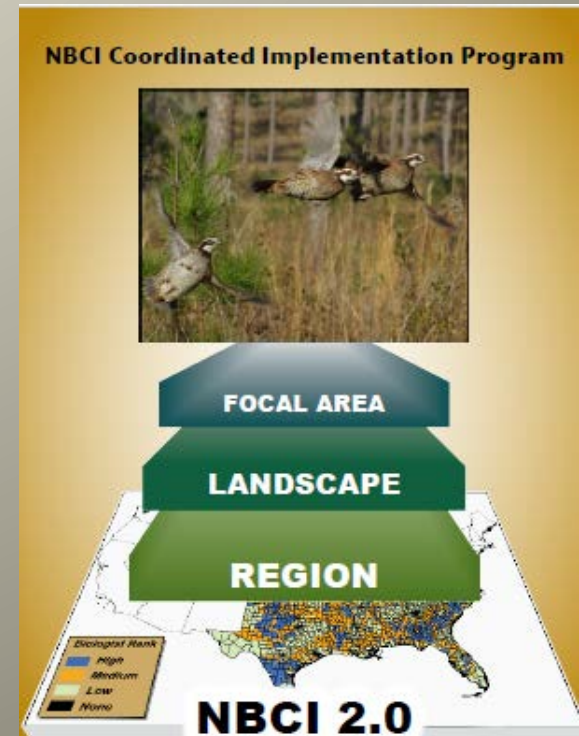


NBCI Monitoring in the 2C Focus Area Missouri

Beth Emmerich, Bill White, & Lee Metcalf
Missouri Department of Conservation



What is the NBCI?

- Southeast Quail Study Group-started to work on quail declines in the Southeast
- SE Assn. of Fish and Wildlife Agencies charged group to come up with a plan for quail recovery
- 2002-group published the National Bobwhite Conservation Initiative

NBCI-1st Rangewide Plan for Quail

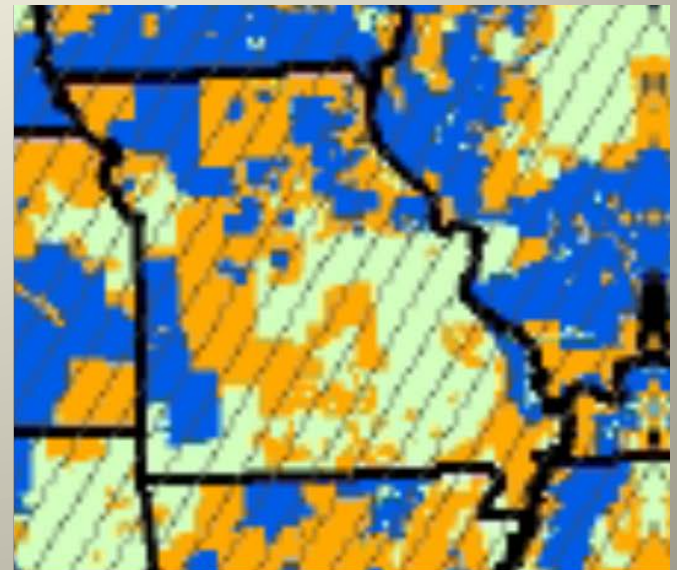
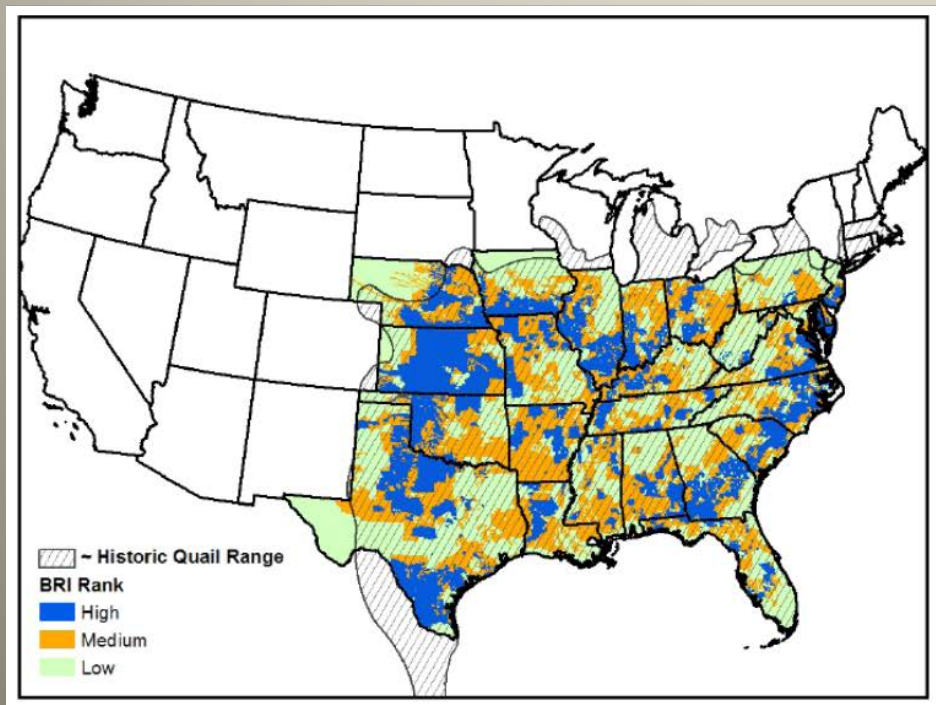
NORTHERN BOBWHITE CONSERVATION INITIATIVE



March 2002

- Similar to NA Waterfowl Plan
- Restore quail to 1980's levels
- Habitat based estimates
- Identified nesting & brood-rearing habitat as most limiting

NBCI 2.0-GIS-based Revision

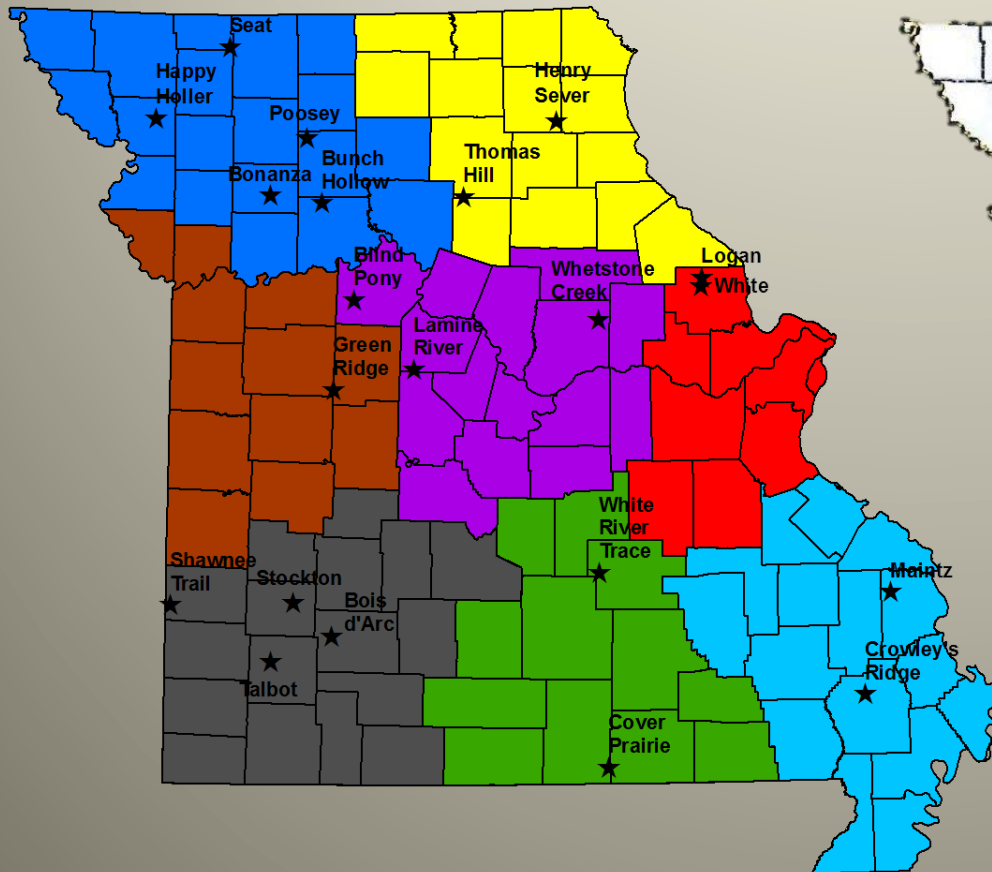


NBCI Coordinated Implementation Plan (CIP)

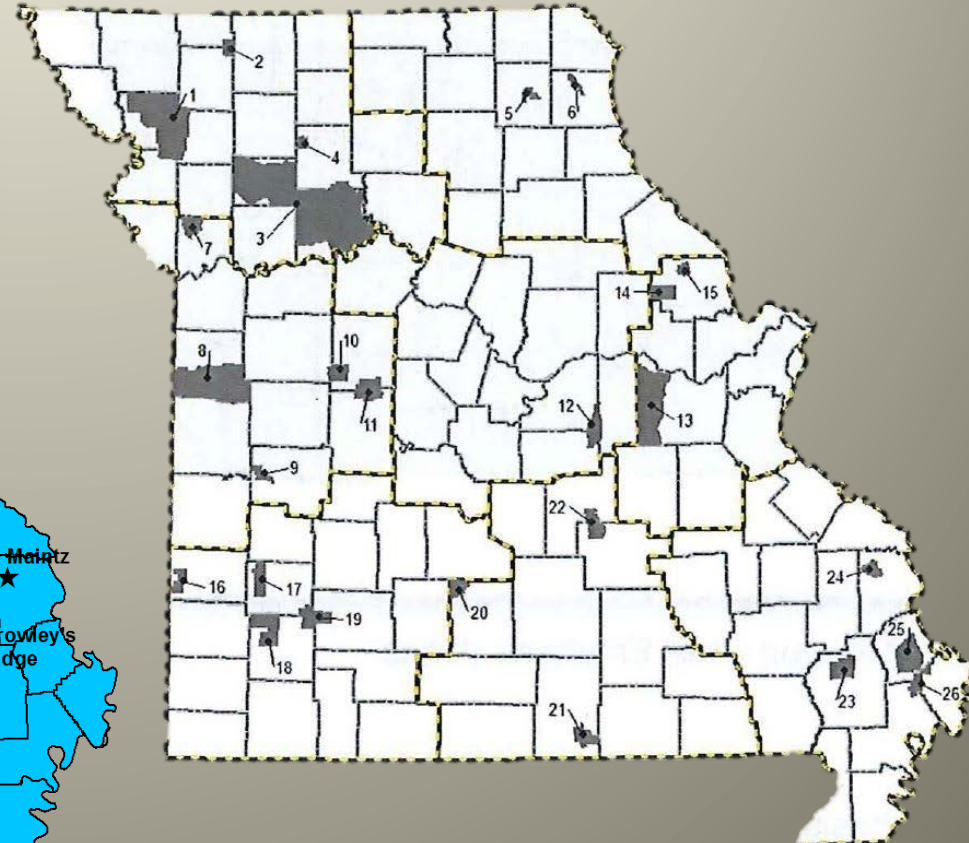
- Outlines a “roadmap for restoration”
- Focal Area < Focal Landscape < Focal Region
- Start small and grow
- Monitoring protocol for Focal Areas

Targeted Quail Efforts in Missouri

Quail Emphasis Areas
(QEAs)



Quail Focus Areas
(QFAs)



Site Selection

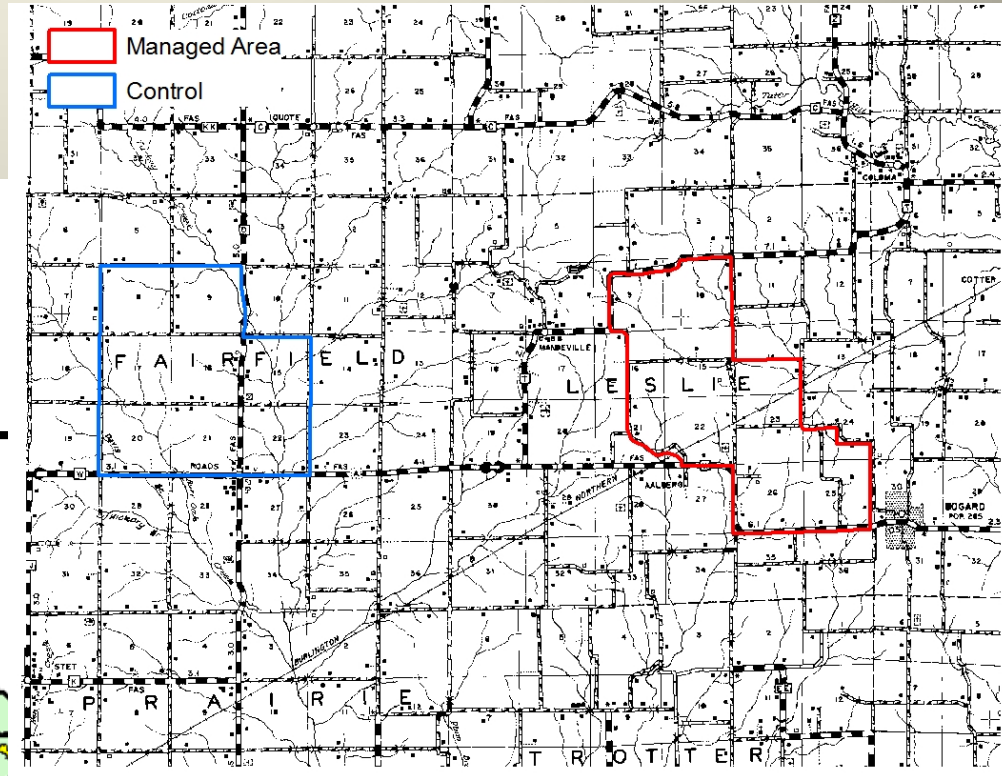
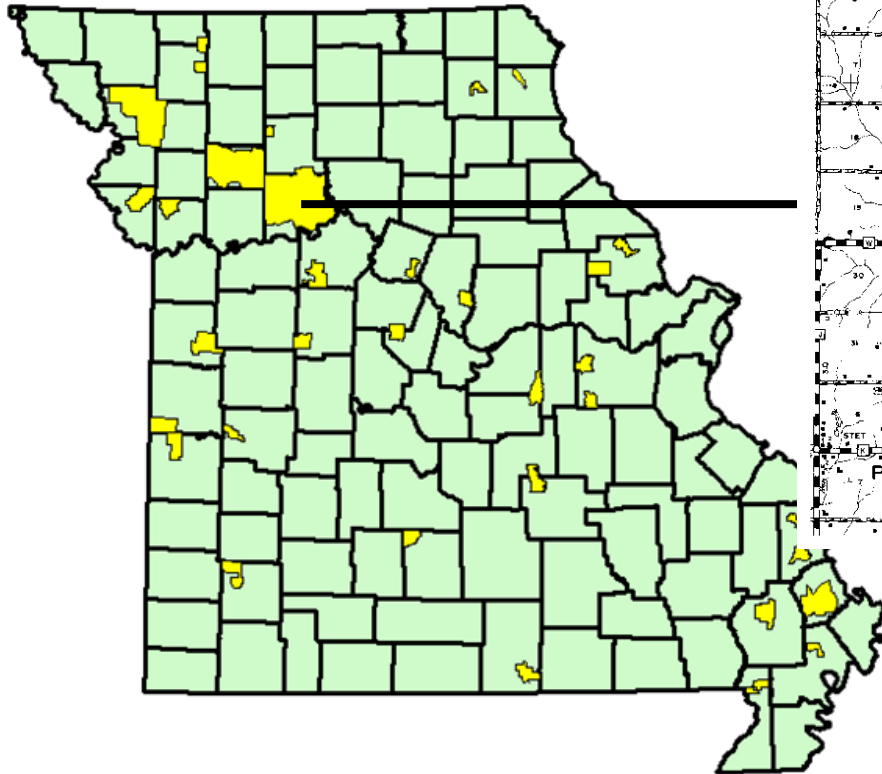
- Each site is 5,200 ac (sample 20% of area)
- Fall covey surveys = 194 ac (12 points)
- Spring surveys = 49 ac (48 points)
- Close enough to be comparable, far enough to not count same birds

Habitat in the Focal Area

- 9 miles of edgefeathering (30 ft wide)
- 1,600 ac of CRP (WSG)
- Food plots on 5-10% area annually
- 30-40% of CRP have mid-contract management practices applied each year
- USDA Farm Bill Programs, Quail Forever, NRCS, and MDC

Monitoring Area-2C Focus Area

Carroll County

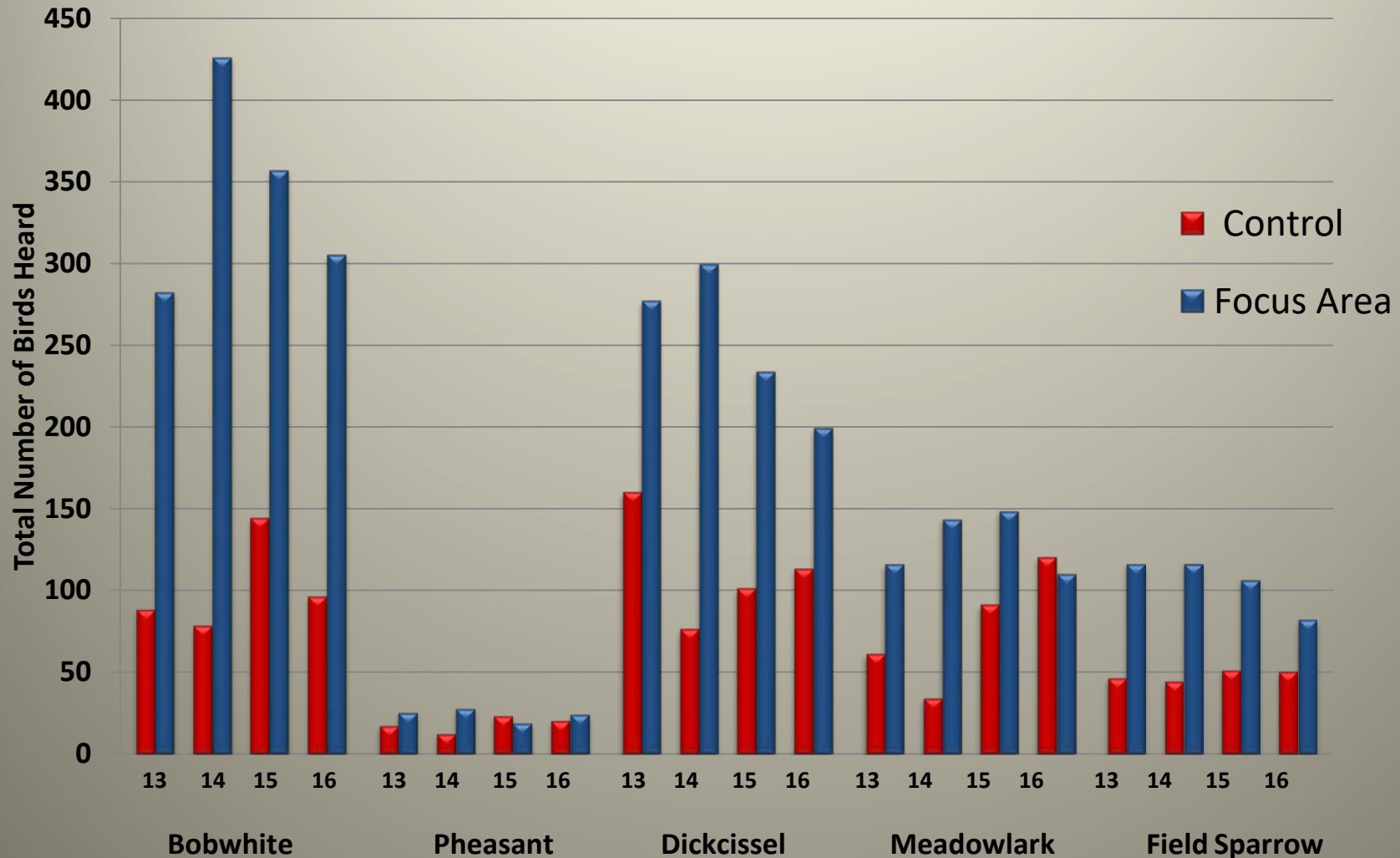


Bird Monitoring

- Breeding Season-birds representative of good quail habitat, easily recognized calls
- Bobwhite, Pheasant, Dickcissel, Meadowlark, and Field Sparrow
- Surveys are conducted during peak of breeding season, 3x/point
- Fall covey surveys-October try for 3x/point
- Point Distance Sampling methods
- Protocols outlined in CIP



NBCI Focal Area Monitoring-Spring 2013-2016



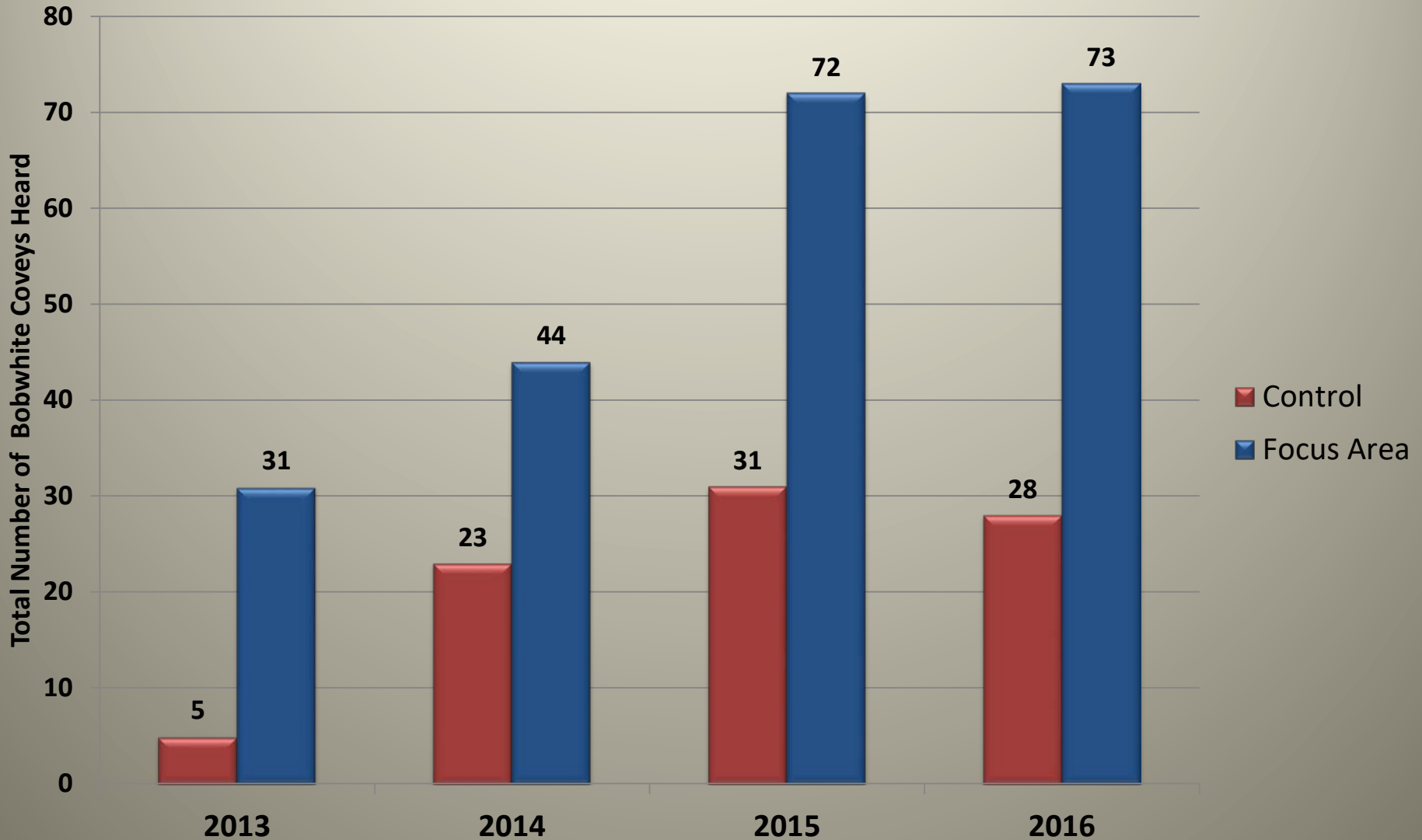
Breeding Birds-All higher in focal area

- 237% Bobwhite
- 33% Pheasants
- 124% Dickcissels
- 69% E. Meadowlarks
- 120% Field Sparrows



NBCI Focal Area-Fall Coveys

2013-2016



Conclusions

- Quail and other grassland bird numbers are higher in the focal area vs. reference area
- Habitat work has been ongoing in this area for 20+ years
- Habitat is KEY!



Future Research

- Analyze data with Program Distance
- Compare densities on QFA vs those on our public land QEAs
- Continue monitoring (birds and habitat) 6 more years
- Compare with other states doing CIP monitoring

Acknowledgements

Bill White, Private Lands Services Division Chief
Lee Metcalf, Private Lands Conservationist
Quail Forever (Elsa Gallagher and MO QF Team)
Many private landowners in Carroll County



*Joint
Quail
Conference*

