

NORTH DAKOTA GAME AND FISH DEPARTMENT

FINAL REPORT

Tallgrass Prairie Reconstruction

Project T-37-D

May 1, 2013 – April 30, 2016

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Submitted by  
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## **State Wildlife Grant: Tallgrass Prairie Reconstruction Final Report**

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### **Project Goals and Objectives:**

The goal of the proposed project is to reconstruct grassland habitat that contains native grasses and forbs. We will accomplish this goal by seeding native perennial herbaceous mixtures on formerly cropped priority WPAs in the Tewaukon National Wildlife Refuge (NWR). Sections 5.1.c, 5.2.c, 5.5.b, and Appendix A in North Dakota's CWCS all touch on the need for restoring and protecting prairie for species of conservation priority identified in this proposed project, and issues of fragmentation, loss of grazing and fire, noxious weeds, and woody plant encroachment. The objectives also embrace the process of adaptive management articulated in Section 6 of the CWCS.

1. Restore approximately 213 acres of existing cropland with a diverse mix of native grasses and forbs that occurred in this ecotype to create a 400 acre block of grasslands for a variety of prairie species.
2. Increase the amount of vegetative structure available for nesting grassland birds with varying heights to provide for a diversity of structure needs.
3. Monitor both the vegetation species composition and structure along with breeding bird surveys on the WPA indefinitely.

### **Final Report:**

#### Seeding

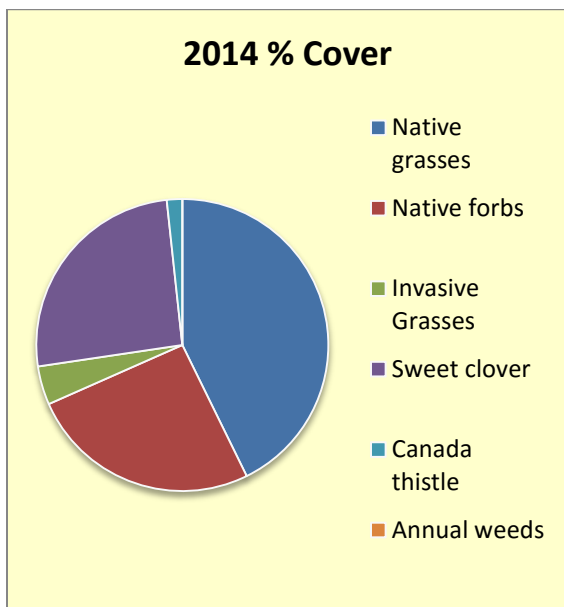
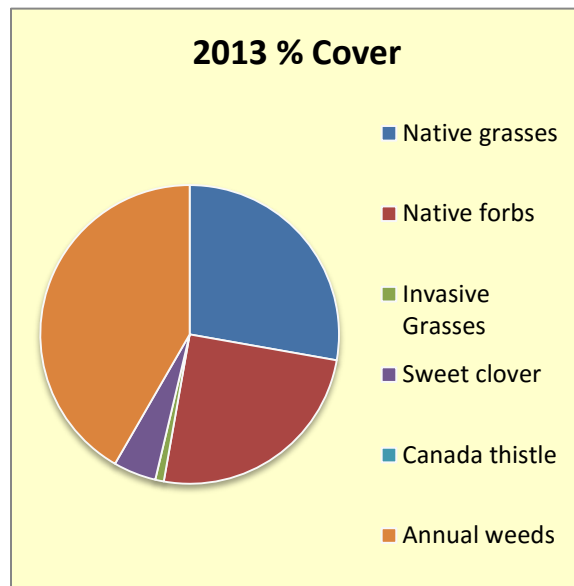
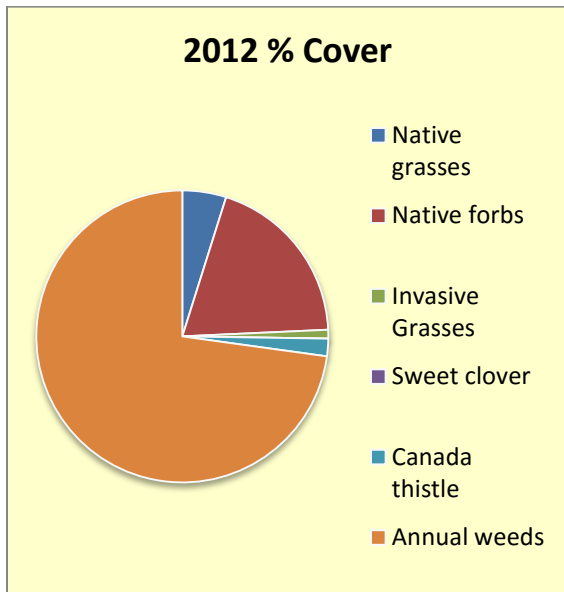
A total of 170 acres have been seeded to date with 50 acres left to seed in 2016.

Field A (North half) was seeded to a highly diverse seed mix in March 2016. The seed mix included 25 species of native grasses and forbs from both hand collected and commercial seed sources. The mix also included forbs that are in the same functional group as Canada thistle to increase competition and reduce thistle in the fields. The south half of Field A and Field D will be seeded in the winter of 2016 by the Fish & Wildlife Service. Seed has already been purchased and will be dormant seeded via broadcaster.

#### Monitoring:

Vegetation monitoring transects were established in Field F in 2012 and run 2012, 2013 and 2014. Monitoring of Field F will be run every other year. Additional vegetation transects will be established in Field B in July 2016. The monitoring is intensive and covers species frequency and cover, structure, and litter depth. Breeding bird surveys will be added in year three or four after a prescribed burn has been conducted and native vegetation is well established.

Percent cover is depicted for 2012-2014 in the charts below for Field F.



The vegetative community in reconstruction fields change, moving from a dominance of annual weeds in year 1 to more native perennial grasses and forbs in subsequent years. In our experience in other reconstructions it may take anywhere from 5-8 years before all the species that were planted are represented in the fields. Field F has predominately green needle grass and Canada wildrye in 2013 with big bluestem and little bluestem showing up in the 2014 monitoring. Monitoring in 2016 will most likely continue with the presence and more cover from other native grasses and forbs. Canada thistle cover remains low in this field and sweetclover is the dominant invasive forb.

**2012 – Transect #2**



**2014 – Transect #2**



**Future Management:**

Forbs and cool season native grasses will be incorporated into Field G which is currently comprised primarily of three –four warm season native grasses. Service staff will use a patch method to bring diversity and structure into this field.

Future management plans on the site will include prescribed fire after year three and then fencing to allow for grazing after year seven or eight. Regular defoliation of 3-5 years will help maintain the native vegetation. The site will be evaluated and monitored each year to determine the management strategy for the next year.

**Recreation and Wildlife Use:**

The reconstructed uplands should provide excellent grassland bird nesting habitat and the increase in forb species will provide nectar sources for pollinators. The variety in structure and species will allow the site to host a diversity of ground nesting birds from the Western meadowlark and Northern pintail to the gadwall and ring-necked pheasant. The amount of winter cover available for wildlife will increase as the stands mature and spread out.

Previously, the Waterfowl Production Area was primarily used by waterfowl hunters. The new upland vegetative cover should increase the amount of habitat for upland game birds and hunter opportunities. Dove and pheasant hunters have already begun using the vegetative uplands. A cormorant and heron rookery located south of the township road will offer excellent bird watching opportunities.

**Snow Seeding:**





Prairie Reconstruction Project  
Podhola Waterfowl Production Area  
Richland County

T.129 N. R. 52 LTL Sect.18 S2SW4, S2SE4 & NE4SE4; 19 N2NW4; 13 W2SE4

