

NORTH DAKOTA GAME AND FISH DEPARTMENT

Final Report  
**Habitat Enhancement for Grassland Birds in the Sheyenne Delta Landscape**  
Project T-25-HM

April 1, 2008 – December 31, 2013

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Habitat Enhancement for Grassland Birds in the  
Sheyenne Delta Landscape

2013 Final Progress Report

Eric Hoff,  
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## Habitat Enhancement for Grassland Birds in the Sheyenne Delta Landscape

The primary objectives of this project have been to: Treat 3,100 acres of private land for leafy spurge, remove ½ mile of tree rows from the prairie landscape, and utilize prescribed fire on 3,100 acres of private lands to slow the spread of woody vegetation. These objectives address major threats to the success of almost all grassland birds. In 2010 we amended the project to include seed collection for several reasons. The first being that a majority of the original work planned had been accomplished. Second, due to constant high water and wet summers, the ability to treat spurge has been greatly reduced. With time and personnel available, collecting native seed and planting it in areas that had been negatively impacted by spraying spurge should prove beneficial to grassland bird species.

### Objective 1

**Use selective herbicides to treat non-native and invasive species including but not limited to Leafy Spurge, Buckthorn, Prickly Ash, Reed Canary Grass and Absinth Wormwood within the project area.**

This year was much less challenging than previous field seasons due to a drastic drop in ground water levels in connection with the almost drought like conditions. Our biggest challenge in treating spurge this year was finding populations that were not dormant, trampled by cattle or already being attacked by leaf tying moths.

This year's treatment required about 30 hours of labor, which assessed approximately 705 acres and resulted in just over 25 treated acres.

It appears that the treatments of past years have been very effective since most of the areas treated were small to moderate in size ranging from a few square feet to a double car garage. There were a few areas that had obviously been missed the previous season. Each pasture was searched in a grid format using an ATV/UTV and infestations were treated and GPS'd as they were found. (See Maps A & B)

In addition to treating spurge, we also continued the treatment of other invasive/non-native plant species. The assessment and then treatment/control of Canadian & Bull Thistle, Absinth Wormwood, Siberian Elm and Phragmites was accomplished on approximately 622 acres. (See Map A & B)

Over the duration of this project 11,244 total acres have been assessed and 8,465 total acres have been treated for non-native and invasive species control.

### Objective 2

**Remove trees within the project area**

We did not remove any more tree rows this year.

Over the duration of this project 2.5 miles of tree rows have been removed from the landscape using approximately 859 hours of labor.

### Objective 3

#### **Utilize prescribed fire within the project area to decrease the spread of woody vegetation**

We conducted one prescribed burn on TNC land this spring. Two of the three planned burn units for this spring burned in a wildfire. Total prescribed burn acres for 2013 were 300. Total acres burned were approximately 720. (See Map A)

After this season, our total treated acres using prescribed fire are now 2,411. If you add in the use of the wildfire acreage it adds another 420 acres, bringing the overall total to 2,831.

As mentioned in previous reports, prescribed fire has been difficult to implement on the Sheyenne Delta because of high water, unfavorable weather conditions or a lack of burn crew availability.

### Objective 4

#### **TNC will use staff and a contractor to perform grassland restorations within the identified project area. This includes seed collection, site preparation, site mapping and monitoring. Collected seed will be used in restoration projects within the project area.**

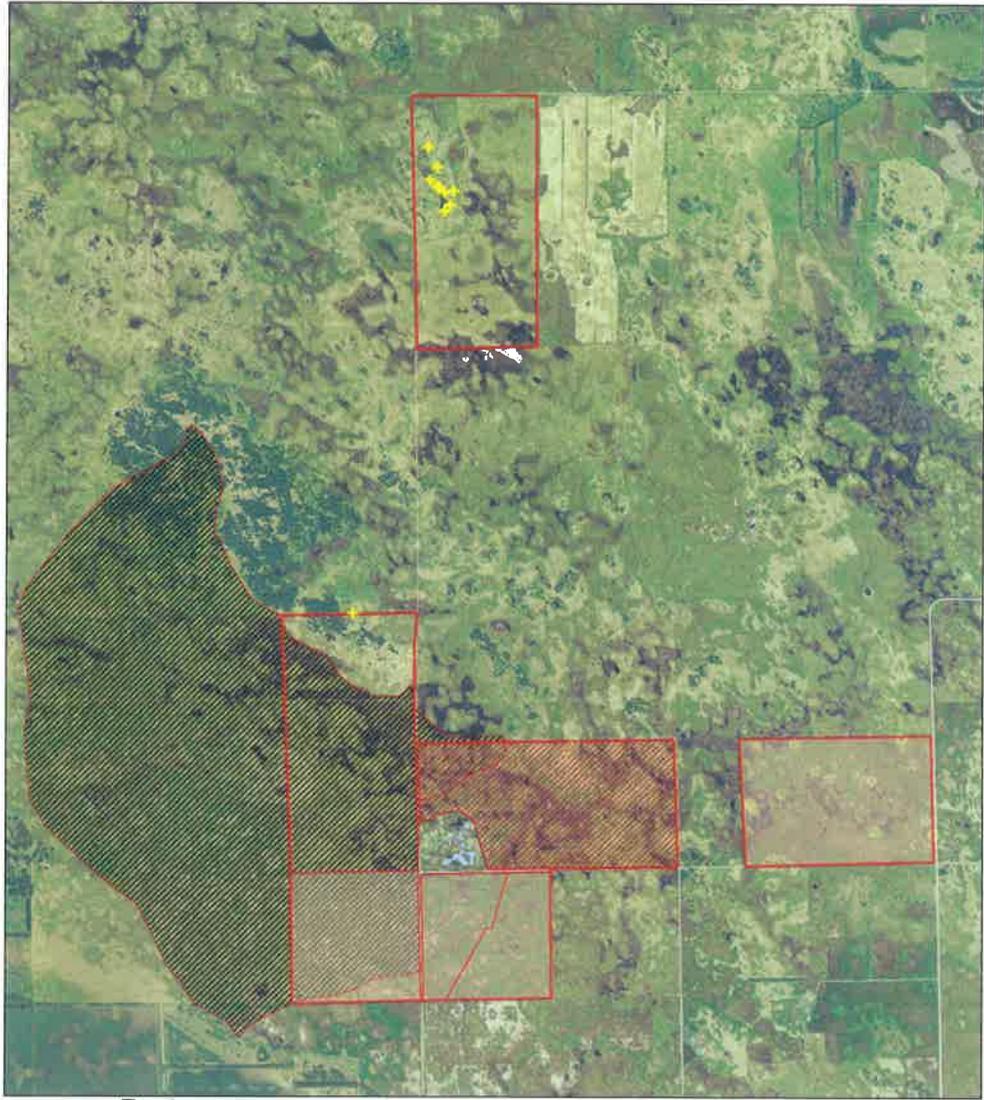
We were limited to hand collecting seed again this year so we focused on species that are hard to collect mechanically. We were able to gather just over 10 pounds of native seed and then spread it by hand in eroded or low diversity areas across approximately 40 acres of TNC property.

Despite the multitude of challenges that arose, ranging from extreme weather conditions, a change in staff and an alteration to the original agreement, we believe that the execution of this grant has been very successful. We met and exceeded our goals for treatment on each objective with the exception of applying prescribed fire to the landscape. We believe that through these efforts we have made a significant contribution to habitat improvement for grassland birds in the Sheyenne Delta.

Thank you to the North Dakota Game and Fish Department for your support of these projects. We hope that you are as pleased with the results as we are. We look forward to an opportunity to collaborate with you on future projects in the Sheyenne Delta Landscape.

Map A

### Habitat Enhancement for Grassland Birds in the Sheynne Delta Landscape: Brown Ranch Project Area



#### Projects

- |  |   |
|--|---|
|  Brown Ranch                |  Thislie Assessed    |
|  Spurge_Treated             |  TNC 4 Rx Unit       |
|  Thislie_Treated_Summer     |  Gregor Pasture Fire |
|  CanadaThistle_Treated_Fall |   |

0 0.25 0.5 1 Miles

Map By: Eric Hoff  
The Nature Conservancy  
December 10, 2013

Map B

### Habitat Enhancement for Grassland Birds in the Sheyenne Delta Landscape: Pigeon Point Project Area



**Projects**

Pigeon Point	SiberianEri_Assessed_Treated_8-13
Buckhorn_CuffTreated_10-22	WarmWood_Treated
FieldCanary_Treated	Spurge_BroadcastTreated
Spurge_Treated	

0 0.25 0.5 Miles

Map By: Eric Hoff  
The Nature Conservancy  
December 10, 2013