

**Semi-Annual Report for GL-00E00466
For time period ending October 31, 2013**

Barrens Habitat Restoration for Endangered/Threatened Species

I. Restoration Work Accomplished

Restoration work for the past six months is summarized (blue column) in Table 1.

Table 1: Six-month accomplishments in acres (May 2013 through October 2013)					
Property	Project Activity	Site Restoration Accomplishments in acres			Project Goal
		Previous	New	Total	
Emmons Creek W.A.	Tree/brush removal	41	4	45	20
	Invasive plant control	17	0	17	44
	Seeding	14	0	14	55
Greenwood W.A.	Tree/brush removal	32	13	45	20
	Prescribed burning	78	0	78	500
	Seeding	18	13	31	0
White River W.A.	Tree/brush removal	32	20	52	11
	Prescribed burn	125	0	125	586
	Invasive Control	20	29	49	3
	Seeding	0	57	57	29
Hartman Creek S.P.	Tree/brush removal	2	4	6	69
	Prescribed burn	0	0	0	167
	Invasive plant control	0	80	80	85
	Seeding	0	0	0	96
Acres treated		379	220	599	1685
Percent treated		23%	13%	36%	100%
Other Project Accomplishments					
Greenwood W.A.	Firebreak construction	5mi	0	5mi	20mi
All treatment sites	Vegetation surveys	980ac	0	980ac	
Reference sites	Karner butterfly surveys	158ac	0	158ac	
Restoration sites	Karner butterfly surveys	40ac	0	40ac	
Total Ac. Surveyed		1177	0	1177	

Explanatory Note:

This grant project involves four Wisconsin DNR properties located within the high probability range of the federally endangered Karner blue butterfly (*Lycaeides melissa*)

samuelis). It is intended to restore and enhance 1390 acres of barrens habitat that support the Karner blue and more than fifty other state and federal SGCN's (species of greatest conservation need). Some sites will receive more than one treatment, resulting in 1685 acres treated, but 1390 acres restored. Percentage of project goals completed is based on the 1685 acre figure.

II. Object Class Category Changes

None

III. Corrective Actions

None

IV. Projected New Work (May 2013 through October 2013)

Work plans for the next six months are listed in Table 2 below.

Table 2. Six-Month Projected Work Plans		
Property	Project Activity	Acres
Emmons Creek W.A.	Tree/brush removal	0
	Invasive plant control	9
	Seeding	13
Greenwood W.,A.	Tree/brush removal	0
	Prescribed burn	200
	Seeding	0
White River W.A.	Tree/brush removal	0
	Prescribed burn	200
	Invasive plant control	
	Seeding	0
Hartman Creek S.P.	Tree/brush removal	30
	Prescribed burn	80
	Invasive plant control	0
	Seeding	40
Greenwood W.A.	Firebreak construction	0
All treatment sites	Vegetation surveys	0
Reference sites	Karner butterfly surveys	0
Restoration sites	Karner butterfly surveys	0

The four properties participating in this project have developed a six month work plan projected to complete (cumulatively) 40% of prescribed burning, and 90% of the seeding goals by the end of April, 2013. There may be additional opportunities for tree/brush removal and invasive plant control during the winter and spring.

V. Percent Completion of Scheduled Work

Table 3 below shows actual acres completed as a percent of the original acres proposed for the project.

Table 3: Percentage of project completed to date				
Activity	Project Goals (Ac.)	Original Target Date	Completed Acres	Percent Completed
Tree/brush removal	120	07/30/2012	148	123%
Invasive plant control	132	Not Established	146	111%
Prescribed burn	1253	06/30/2013	203	16%
Seeding	180	11/30/2012	102	57%
Totals	1685		570	34%
Prelim. vegetation surveys	1390	08/31/2011	1099	79%
Monitoring reference sites	237	08/31/2013	237	100%

Notes on Previous 6-month Activities:

Tree and Brush Removal: Tree and brush removal now stands at 123% of property goals. At this time, the Emmons Creek, Greenwood, and White River properties have surpassed their original goals.

Prescribed Burning: Prescribed burning is conducted in the spring of each year, usually from early March into April. This year the weather was cold and wet from March will into May. Prescribed burning was not possible during this six-month period due to forest protection fire restrictions.

Seeding: Greenwood hand-seeded 13 acres to lupine. White River seeded 57 acres to prairie grasses, forbs, and lupine using a wildland drill.

Invasive Plant Control: Hartman Creek treated a 40-acre grass field twice (spring and fall) to control invasive grasses and weeds as preparation for seeding in November. White River Wildlife Area treated 29 acres of invasive grasses and buckthorn in June.

Monitoring: Karner reference sites were monitored under contract with the University of Wisconsin – Stevens Point to track general KBB populations trends. KBB population on the reference sites dropped by 41% from 2012 levels. We believe this is due to poor overwinter conditions for Karner eggs, and reduced availability of lupine for larval feeding during both first and second Karner flights. Costs for monitoring contracts were covered by a USFWS Section 6 grant.

VI. Budget Expenditures

The current statement for the project budget is listed in Table 4 below.

Table 4: Percent of Budget Spent/Encumbered as of October 22, 2013	
Total Allotment of GLRI grant	\$ 108,925
Expended to date	\$ 61,045
Encumbered funds	\$13,164
Percent expended/encumbered	32 %
Balance remaining (April 30, 2013))	\$ 34,716

VII. Change in Principal Investigator

No change

VIII. Changes Needed in Project Period

This project has been extended until August 31, 2014. The extension should allow us to complete the field work and follow-up documentation expected for the project.

IX. Delays or Adverse Conditions

For two consecutive years the project has been hindered by extreme weather conditions. In the summer and fall of 2012 we experienced severe drought across Wisconsin, followed by a severe winter with near record snowfalls. Prescribed burning was minimal because of the drought. Winter brushing operations were minimized due to snow depth. In 2013 we experienced a long, cold, wet spring followed by rapid warming and greenup. The window for prescribed burning was so narrow that no burning was conducted on the project sites. It is unlikely that the prescribed burning goal of 1253 acres will be achieved under this grant.

Photo Gallery for May 2013 through October 2013



Figure 1. Hartman Creek State Park. Site map of canopy/brush removal to allow Karner butterfly movement between field segments.



Figure 2. White River Wildlife Area. Seeding dry prairie with wildland drill. Invasive grasses were killed with herbicides prior to seeding.

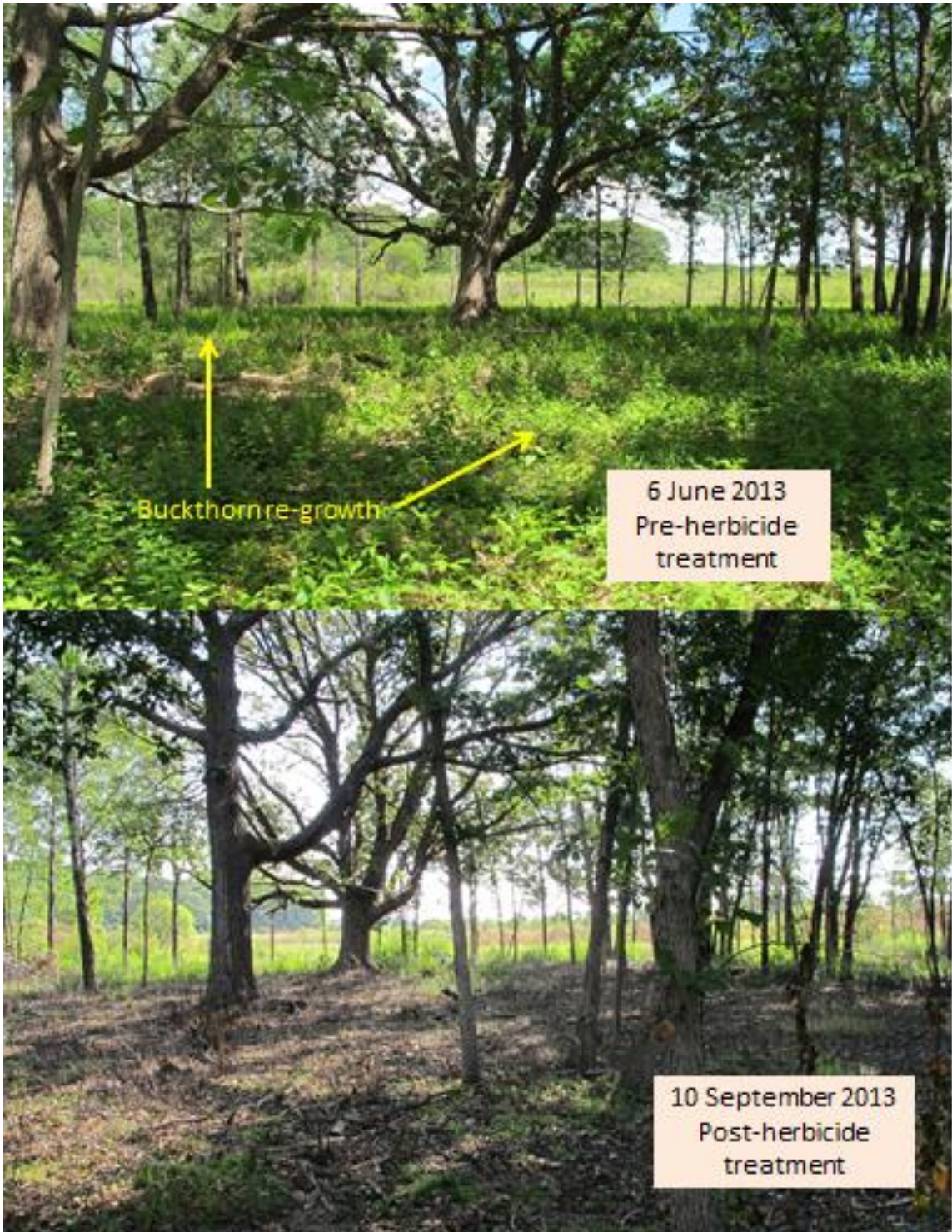


Figure 3. White River Wildlife Area. Invasive species control of buckthorn on a savanna restoration site.



Figure 4. Brush mowing completed on Greenwood Wildlife Area. Note brushy understory (unmowed) in background illustrating pre and post management conditions.



Figure 5. Herbicide treatment of invasive grasses on Hartman Creek State Park as site preparation for dry prairie seeding. Foreground is private land and not treated.