

STATE WILDLIFE GRANT PROGRAM  
State of Illinois

Final Report June 30, 2022

**Grant Award Number:** F13AF01015

**Grant Title/Description:** Statewide Public Lands Native Forest & Woodland Wildlife Habitat Restoration Project, T-84-D-1

**Project Manager:** Todd Strole, Illinois Department of Natural Resources

*General Summary*

The project was awarded in September 5, 2013 and continued through June 2021. The grant was amended twice. Amendment #1 added 3 sites (George Fell Nature Preserve, Mississippi Palisades State Park and Hidden Springs State Forest), increased the number of acres to be treated, increased federal funding by \$112,778 and extended the grant end date to June 2019. Amendment #2 extended the deadline of the grant to June 2021.

Objectives

*By the end of this grant period, this project maintained, enhanced and developed 7,835 acres of forest and woodland habitats and their adjacent buffers using ecosystem-based natural community and habitat management practices on 15 IDNR-owned and -managed lands statewide (Figure 1). These lands will include State Parks (SP), State Natural Areas (SNA), Illinois Nature Preserves under IDNR ownership (NP) and Land and Water Reserves under IDNR ownership (LWR).*



Figure 1. Sites included in the Public Lands Forest and Woodlands SWG, T-84-D-1 were scattered across Illinois

Funds approved through this grant were used to expand the restoration and stewardship of high-quality wildlife habitats on these publicly owned lands to meet the goals and objectives set forth in the Illinois Wildlife Action Plan (IWAP). The focus of this initiative is suitable IDNR-owned sites. This primarily included sites that 1) are listed on the Illinois Natural Areas Inventory (INAI), 2) provide suitable habitat for threatened and endangered species, 3) provide suitable habitat for multiple species in greatest need of conservation, 4) are protected in perpetuity through an Illinois Nature Preserve program, or 5) are within a designated Conservation Opportunity Area (COA).

Types of activities accomplished under this project include habitat protection and management achieved through a landscape level perspective of the natural communities present (including flora, fauna, and resource threats). The management and restoration of rare habitat types that contain unique assemblages of wildlife will also be targeted among different Natural Divisions and Section – Illinois’ equivalent of physiographic divisions (IWAP, 2005 p.119).

During the final 10 months of the grant, between September 2020 through June 30, 2021, 3,055.37 acres received treatment across 10 sites (Table 1).

Table 1. Summary of acres managed since the last reporting period.

<b>Annual Progress Report Form</b>						
<b>1 Sept 2020 to 30 June 2021</b>						
<b>T-84-D-1 Statewide Public Lands Forest Wildlife Habitat Restoration Project</b>						
<b>SITE: ALL SITES</b>						
<b>BIOLOGIST: MULTIPLE</b>						
<b>Management Actions</b>	<b>Units</b>	<b>Forest Units Accomplished</b>	<b>Woodland Units Accomplished</b>	<b>Barrens/Glade Units Accomplished</b>	<b>Total Units Accomplished</b>	
<b>Prescribed Fire</b>						
Firelanes established / maintained	miles	20.27	12.01	6.61	38.89	
Prescribed fire	acres	1150	533.5	188.5	1872	
<b>Invasive Woody Plant Control</b>						
Mechanical removal	acres	30.5	10.75	13.2	54.45	
Herbicide treatments	acres	28.5	43	0	71.5	
<b>Invasive Exotic Plant Control</b>						
Mechanical Removal	acres	37	35	6.01	78.01	
Herbicide treatments	acres	537	410.38	7.03	954.41	
<b>Habitat Creation/Reconstruction/Enhancement</b>						
Tree plantings (incl Tree & Shrub plantings)	acres	0	0	0	0	
Shrub only plantings	acres	0	0	0	0	
Herbaceous plantings	acres	0	0	0	0	
Vegetation maintenance (e.g. mowing CSG or b/t planted trees, hi-mow of prairie plantings)	acres	0	0	0	0	
		0				
<b>Erosion/Sediment Control</b>						
Erosion/Sediment control	acres affected	25	0	0	25	
<b>Boundary Protection/Fencing</b>						
Boundary protection/Fencing	miles	2	0	0	2	
<b>Hydrology Restoration</b>						
Ephemeral pools created	each	0	0	0	0	
Surface / groundwater hydrologic restoration	acres affected	0	0	0	0	
<b>Project Administration</b>						
Project administration	Office days	28.05	0	3	31.05	
<b>TOTAL ACRES</b>		<b>1808</b>	<b>1032.63</b>	<b>214.74</b>	<b>3055.37</b>	

Since inception of this project in September 2013, 18,104 acres have been maintained, enhanced, and/or developed for forest wildlife (including glades, barrens and woodland) on 15 IDNR sites and satellites statewide. This far exceeded the goal of 7,835 acres treated that was set forth in the proposal. Additional accomplishments that were not counted towards the acreage goal include 202 miles of firebreak construction and maintenance, and 2 miles of boundary fence construction (Table 2).

Table 2. The number of acres treated by management category, and by community type, over the duration of the grant (September 2013 – June 2021).

Final Progress Report Form						
1 Sept 2014 to 30 Aug 2021						
T-84-D-1 Statewide Public Lands Forest Wildlife Habitat Restoration Project						
SITE: ALL						
BIOLOGIST: Multiple						
Management Actions	Units	Forest Units Accomplished	Woodland Units Accomplished	Barrens/Glade Units Accomplished	Total Units Accomplished	
<b>Prescribed Fire</b>						
Firelanes established / maintained	miles	98.62	74.63	28.95	202.2	
Prescribed fire	acres	6413.6	4675.5	772.2	11861.3	
<b>Invasive Woody Plant Control</b>						
Mechanical removal	acres	159.5	485.57	381	1026.07	
Herbicide treatments	acres	525.5	1779.2	21.5	2326.2	
<b>Invasive Exotic Plant Control</b>						
Mechanical Removal	acres	200.45	224	58.21	482.66	
Herbicide treatments	acres	1487.4	768.63	89.63	2345.66	
<b>Habitat Creation/Reconstruction/Enhancement</b>						
Tree plantings (incl Tree & Shrub plantings)	acres	0	0	0	0	
Shrub only plantings	acres	0	0	0	0	
Herbaceous plantings	acres	0	1	1	2	
Vegetation maintainance (e.g. mowing CSG or b/t planted trees, hi-mow of prairie plantings)	acres	4	1	0	5	
<b>Erosion/Sediment Control</b>						
Erosion/Sediment control	acres affected	55	0	0	55	
<b>Boundary Protection/Fencing</b>						
Boundary protection/Fencing	miles	2.8	0	0	2.8	
<b>Hydrology Restoration</b>						
Ephemeral pools created	each	0	0	0	0	
Surface / groundwater hydrologic restoration	acres affected	0	0	0	0	
<b>Project Administration</b>						
Project administration	Office days	136.55	99	38	273.55	
<b>TOTAL ACRES</b>		<b>8845.45</b>	<b>7934.9</b>	<b>1323.54</b>	<b>18103.89</b>	

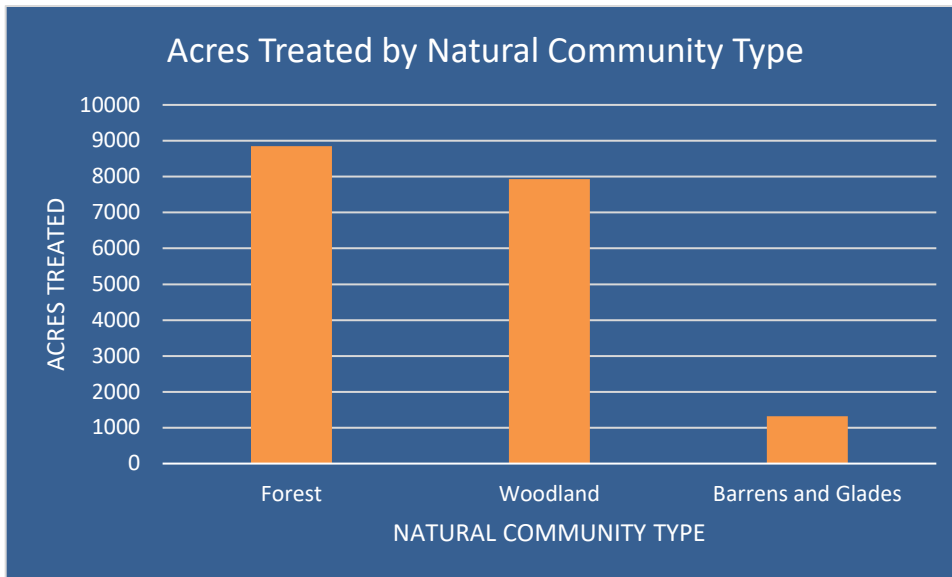


Figure 2. The total number of acres treated by natural community type between 2014 - 2021.

The number of forest and woodland acres treated were nearly equal and accounted for ~93% of the acres treated (Figure 2). Although 1/3 of the sites included in this proposal included glades and barrens community types, they are typically smaller. The small size of these sites, isolated locations, and the labor intensive work of invasive woody species control are the primary drivers behind the relatively

small acreage treated compared to other natural communities types. Nonetheless, 1,323.45 acres of glades and barrens received much needed management. The contribution of these sites to overall biodiversity of an area and the provision of habitat to species reliant on the open nature of barrens and glades make this work high impactful.

Prescribed Fire was utilized to treat the most acres (11,861.3) during the grant. Invasive woody control treatment, both mechanically and chemically, totaled 3,352.27 acres. This included removing eastern red cedars from glades and mesic woody species (sugar maple, sassafras, black cherry, northern hackberry) from dry mesic upland forest and woodlands. Invasive exotic plant control totaled 2,828.32 acres treated. This high number of acres treated resulted from finding several large populations of Japanese stiltgrass at Siloam Springs State Park. Only 62 acres were treated using all other approved management types, and two separate treatments accounted for protecting 55 acres from erosion. Figure 3 shows the percentages of each approved conservation practice utilized across the sites.

Table 3 shows the types of management activities that accrued at each site over the life of the grant. Three sites (Beaver Dam State Park, Pere Marquette State Park and Siloam Springs State Park) received some type of approved management activity every year.

## Acres treated By Management Activity

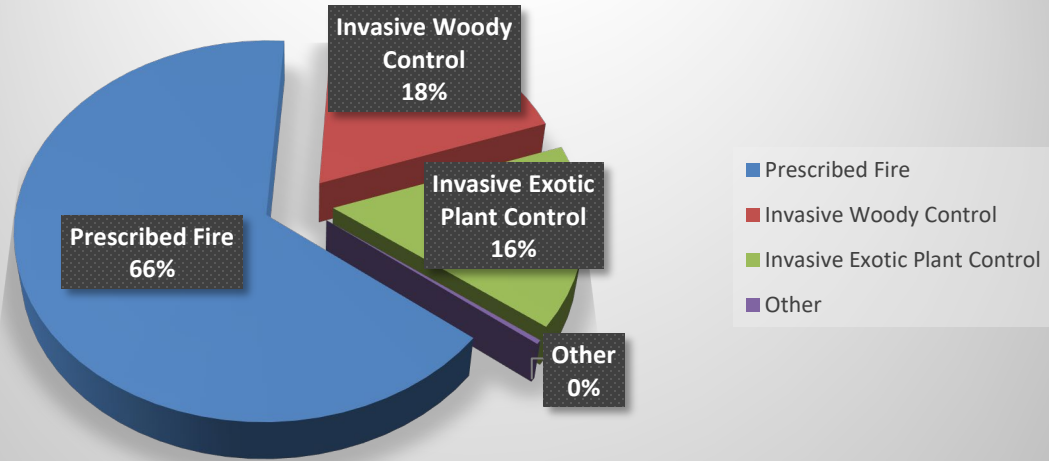


Figure 3. Prescribed fire accounted for two-thirds of the acres treated during the life of the grant. Invasive woody control and invasive exotic plant control accounted for the remaining one-third of the treated acres.

Table 3. Summary of the sites and the management they received each year of the grant.

T-84-D-1 Public Lands Forest and Barrens SWG													
SITES													
TREATMENT FISCAL YEAR	MPSP	CRSP	SRSP	KSRA	HSSF	BDSP	SSSP	PMSP	WRNA	CDBLWR	CHNP	BSGNP	CGNP
<b>FY14</b>													
Rx Fire				X		X	X				X		
Invasive Woody Control						X	X	X					
Invasive Exotic Control				X		X	X	X		X	X	X	
Erosion Control													
Boundary Protection													
Planting													
Hydrologic Restoration													
<b>FY15</b>													
Rx Fire	X				X	X	X	X					X
Invasive Woody Control	X	X	X	X	X	X	X	X		X		X	
Invasive Exotic Control	X	X	X	X		X	X	X					
Erosion Control													
Boundary Protection													
Planting													
Vegetation Maintenance					X								
Hydrologic Restoration													
<b>FY16</b>													
Rx Fire	X	X				X	X	X	X			X	
Invasive Woody Control	X			X		X	X	X					
Invasive Exotic Control	X					X		X					
Erosion Control													
Boundary Protection													
Planting													
Hydrologic Restoration													
<b>FY17</b>													
Rx Fire		X	X			X	X	X	X				
Invasive Woody Control	X	X	X	X		X	X	X				X	X
Invasive Exotic Control	X	X	X	X		X	X	X					X
Erosion Control													
Boundary Protection													
Planting	X												
Hydrologic Restoration													
<b>FY18</b>													
Rx Fire		X	X		X	X	X						X
Invasive Woody Control	X	X	X	X	X	X	X	X	X	X			X
Invasive Exotic Control	X					X							
Erosion Control													
Boundary Protection													
Planting													
Hydrologic Restoration													
<b>FY19</b>													
Rx Fire	X				X	X	X	X					X
Invasive Woody Control	X	X	X			X	X	X					X
Invasive Exotic Control	X					X	X	X				X	X
Erosion Control													
Boundary Protection													
Planting	X												
Hydrologic Restoration													
<b>FY20</b>													
Rx Fire						X	X	X	X	X		X	
Invasive Woody Control	X		X	X		X		X	X	X	X	X	X
Invasive Exotic Control	X					X	X	X		X	X	X	X
Erosion Control							X						
Boundary Protection										X			
Planting													
Hydrologic Restoration													
<b>FY21</b>													
Rx Fire	X					X	X			X	X		
Invasive Woody Control	X			X		X		X		X			
Invasive Exotic Control	X			X	X	X	X	X		X			
Erosion Control							X						
Boundary Protection													
Planting													
Hydrologic Restoration													

**Legend:**

**MPSP = Mississippi Palisades State Park, CRSP = Castle Rock State Park, SRSP = Starved Rock State Park, KSRA = Kickapoo State Recreational Area, Hidden Springs State Forest, BDSP = Beaver Dam State Park SSSP = Siloam Springs State Park, PMSP = Pere Marquette State Park, WRNA = Wise Ridge Natural Area, CDNA = Cedar/Draper Bluff Land and Water Reserve, CHNP = Cretaceous Hills Natural Area, BSGNP = Berryville Shale Glade Nature Preserve, and CGNP = Collier Glade Nature Preserve**

The outcomes associated with the management actions that contribute to the maintenance and restoration of landscape process, natural community structure and habitat rehabilitation support the overall objectives of the grant. Hydrological restoration was activity allowed in this grant but not conducted and therefore this need remains. The continuation of these actions supported by this grant are required to maintain the areas improved. Many areas may require follow-up treatment and the continuation of a prescribed fire regime is a critical. These needs will be met through a combination of IDNR staff time, contractual stewardship projects, and future SWG grants.