

**Final Report to the:**  
Illinois Department of Natural Resources for Illinois Wildlife  
Preservation Fund Grant Agreement #12-017W

**Project Title:**  
Exotic Species Management Through Volunteerism at Allerton  
Park, Piatt County, Illinois

**Project Time Frame:**  
July 15, 2011 – December 31, 2012

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**ALLERTON**  
PARK & RETREAT CENTER

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## **PROJECT OBJECTIVE:**

Provide volunteers with the proper tools needed to control and eradicate exotic vegetative species that occur within Allerton Park and assist the Natural Areas Manager in habitat restorations

## **PROJECT DESCRIPTION:**

Allerton Park has long been recognized as one of Illinois' most significant natural areas. It is located in the Grand Prairie Natural Division and contains outstanding examples of old-growth floodplain and upland forests.

A major ecological threat to the integrity of the high quality natural areas and the park in general is exotic species invasion. Exotic species have become widespread and locally abundant. Species that occur in the park include, but are not limited to garlic mustard, multiflora rose, honeysuckle sp., oriental bittersweet, smooth buckthorn, winged wahoo, privet, osage orange, autumn olive, locust sp.

Historically, Allerton Park has provided the community an opportunity to experience nature, learn about ecologic function and biologic communities, and the problems of exotic invasion through volunteerism. Volunteers assist with exotic species control efforts and habitat restorations. This project will outfit volunteer groups the proper hand tools needed to effectively control the exotic species that occur within the park.

## **SUMMARY OF PROJECT ACCOMPLISHMENTS:**

Volunteer service within Allerton's natural areas is predominantly conducted by the Allerton Allies, a group of local citizens with an affinity for the park. Under the supervision and guidance of Allerton's Natural Areas Manager, the Allies would perform stewardship activities in areas as assigned. Exotic species controlled include multi-flora rose, privet, oriental bittersweet, Japanese honeysuckle, bush honeysuckle and Japanese barberry. Techniques to control these species included cut-stump application of a 25% solution of Roundup Pro Concentrate and basal application of a 17% concentration of Element 4 and Bark Oil blue. Grant funds purchased loppers, soil knives, hand saws, hatchets and handheld sprayers. Stewardship activities were conducted in areas throughout the park but were concentrated along trail ways for ease of access.

Restoration efforts were focused on the Allerton Prairie Restoration and a prairie restoration area near the maintenance shop. Volunteers assisted with site preparation and installation of individual plant plugs. Sites at the Prairie Restoration were 400<sup>2</sup> ft. circular plots. Plots were prepared by removal of all surface vegetation using a Stihl brushcutter. A 3% solution of glyphosate was applied to cut vegetation. After a two week waiting period, to insure that all sprayed vegetation was controlled, the plots were tilled to ease plant installation and promote faster root establishment. A preemergent herbicide was applied to each plot to reduce the abundance of weedy and undesirable vegetation growing within plots. Plant plugs were installed within the plots at one foot

centers, totaling ~400 plants/plot. A 4 to 5 foot border will be maintained around each plot to prevent undesirable vegetation from invading the plots.

Overall, the funds from this grant provided essential tools necessary for the maintenance and restoration of Allerton Park's natural areas. These tools will be used for the foreseeable future as Allerton grows and strengthens its volunteer base.

**PICTURES:**







## PROMOTION:

# Allerton gets DNR grants to survey snake population, remove plants

By **KELLEY HEANEY**  
*Journal-Republican correspondent*

Beautiful Allerton Park seems to be losing snakes, so it plans to conduct a survey to determine a more precise number of Eastern Massasauga Rattlesnakes and Kirtland's Snakes who live there. The park is using a \$2,000 grant funded by the Illinois Department of Natural Resources (IDNR) with contributions to the Illinois Wildlife Preservation Fund. This grant will allow the park to not only use a visual encounter survey method but also to build drift fence lines and use traps in an attempt to determine if these endangered snakes are still in the area.

Known as "the seldom seen snake," the non-poisonous Kirtland's snake has been found occasionally on the park grounds in recent years, including one run over by a car on the entrance road last fall. This snake has a diet consisting mostly of earthworms and likes to live in holes crawfish dig out along the edge of the water. It can flatten itself making it harder to see than most snakes. It is listed as endangered in Indiana and Michigan while it is considered threatened in Illinois and Ohio.

The Eastern Massasauga rattlesnake, however, has not been spotted in the park for the past four years. As an endangered species in the state of Illinois, it could soon be added to the Federal Endangered species list. If that happens,

Allerton Park could receive federal funds to help protect it if there is evidence that the snake still survives in the area. According to John Griesbaum, the Natural Areas Manager at Allerton Park, sightings of the rattlesnake in the past ten years have only been recorded at Allerton, Carlyle Lake, near St. Louis, and Warren County, in the northern part of the state. Although it is considered poisonous, there have been no documented human deaths caused by the snake in the past forty years in Illinois. It too likes to live along waterways but also inhabits wooded areas, bogs, and prairie marshes and are often found under logs and rocks.

Responsible for controlling the population of a number of small mammals, the rattlesnakes are an important part of the eco-system at the park, even if many people don't like them, and so they are worth trying to save. Griesbaum said that just being a native part of the local environment made it worth the work of counting and protecting them.

Counting the snakes, or a Visual Encounter Survey, will be done in the early spring following prescribed burns in the southern part of the park's prairie restoration area. The burns will clear debris and old foliage from the area and with little or no ground cover the snakes will be easier to find as they try to warm themselves in the spring sunshine. A second survey will come later in the

year with drift fence arrays, which is when a fence line is used to herd and funnel snakes to traps to be counted.

A second grant was also obtained by the park through the IDNR's Illinois Wildlife Preservation Fund. This one will be used to help eliminate exotic vegetation species and help restore the area to the natural plants that were found in the area prior to the arrival of settlers. Griesbaum plans to purchase hand tools such as soil knives, hoppers, and back pack sprayers for volunteers to use to reduce the number of foreign plants in the area. This will help to leave resources for the native vegetation. "This area has some of the highest quality bottom forest land in the state of Illinois with a lot of old growth in several areas. We want it to look like it would if no Europeans had settled in the area," said Griesbaum.

The park staff applied for the grants last spring and received notification they would receive them earlier this fall. The projects will begin in the spring as the weather clears and the prescribed burns can begin to clear away some vegetation. Volunteers will be needed for both projects.

Griesbaum, who has worked at the park for a little more than a year, says that this is the first time that the park has applied for these state grants. He believes the money will be put to good use and that the public will benefit from the results of the projects.



## **Allerton Park gets two \$2,000 IDNR grants**

Allerton Park has recently been awarded two grants from the Illinois Department of Natural Resources from contributions to the Illinois Wildlife Preservation Fund. The two grants are worth \$2,000 each. The grants will be used to purchase cages for the state-endangered eastern massasauga rattlesnake and the state-threatened Burmese snake found in various natural areas of the park.

The other grant will be used to purchase tools that volunteers will use for exotic species eradication at the park.