Restoration on the Douglas-Hart Nature Center Woodland Incorporating Management Techniques and Education Wildlife Preservation Fund Grant #12-007W

Marissa Grant
Douglas-Hart Nature Center, 2204 DeWitt Avenue East, Mattoon, IL 61938
(217)235-4644

mgrant@consolidated.net Grantee Representative: Marissa Grant

16 August 2011 to 31 December 2012

PROJECT OBJECTIVES

The overall goal of this project is to increase the awareness and familiarize citizens of Illinois with the woodland restoration project at D-HNC and the importance of removing invasive plants and planting native woodland plants thereby benefiting the habitat for non-game wildlife. Specific objectives of this proposal are:

- 1. To remove invasive and non-native trees, honeysuckle shrubs and herbaceous plants of garlic mustard using D-HNC staff and volunteers.
- 2. To plant native woodland plants with D-HNC staff and volunteer groups.
- 3. To create trail signs explaining why we are taking out invasive and non-native plants and descriptions of the plants we are replacing them with.

COMPLETED PROJECT DESCRIPTION

Before this project started, the two areas to be restored were over taken with garlic mustard, honeysuckle and invasive and non-native trees. With the help of volunteers second year garlic mustard was pulled, honeysuckle was cut, brush piles were made and bat boxes were erected. Douglas-Hart staff sprayed herbicide and cut non-native trees. After invasive and non-native vegetation were removed, native plants were planted. Eighteen different species of herbaceous plants were planted totaling 211 plants. Twenty-four shrubs were planted of 10 different species. Thirteen secondary trees were planted of 6 different species and 9 primary canopy trees were planted of 6 different species. The landscape of these 2 project areas changed for the better with the removal of non-native plants and the addition of native plants.

INTRODUCTION

The Douglas-Hart Nature Center (D-HNC) woodland was once an agricultural field. A wide variety of trees both native and non-native were planted in the 1970's and some of those trees such as black locust, black alder and Siberian elm are in need of removal. Honeysuckle was also planted as recommended by governmental agencies before its invasive qualities were known. Spring ephemerals have been planted in some areas, but are out competed by honeysuckle and garlic mustard.

The D-HNC is working on removing invasive plants and increasing the biodiversity of native plants so that the over 10,000 visitors a year can view a woodland pre-European settlement. The monies from this grant helped restore 2 areas in the woodland. The plants that were added to the D-H woodland are native to central Illinois and thrive with the moisture and temperature conditions. They support wildlife such as birds and butterflies.

In the early 1800's, before European settlement, approximately 40% of Illinois was woodland. The temperate deciduous forest was present in Illinois, a type of this forest in the Oak-Hickory. Oak-Hickory temperate deciduous forests get their name for the dominant, upper canopy trees present including oaks and hickories. The structure of most temperate deciduous forests includes three other layers. There is a secondary canopy layer of shorter trees including Ohio buckeye, redbuds, dogwoods and paw paw. Next there is a layer of shrubs such as wild hydrangea, Juneberry, buttonbush; and a fourth layer composed of herbaceous species. The fourth layer is Herbaceous species, that include spring ephemerals such as Jack-in-the-pulpit, dutchman's breeches, woodland phlox and yellow bellwort.

D-HNC has a good relationship with the community and has a number of volunteers of varying ages that helped with this restoration project.

The overall goal of this project was to increase the awareness and familiarize citizens of Illinois with the woodland restoration project at D-HNC and the importance of removing invasive plants and planting native woodland plants thereby benefiting the habitat for non-game wildlife.

Specific objectives of this project were to:

- 1. To remove invasive and non-native trees, honeysuckle shrubs and herbaceous plants of garlic mustard using D-HNC staff and volunteers.
- 2. To plant native woodland plants with D-HNC staff and volunteer groups.
- 3. To create trail signs explaining why we are taking out invasive and non-native plants and descriptions of the plants we are replacing them with.

MATERIALS AND METHODS

There were 2 areas that were restored as part of this grant project. Both areas are visible to visitors on the walking trial. The areas are 40X60 meters and 50X30meters. Before the award of this grant, some work had taken place on these 2 areas. This report will concentrate on what was done during the grant time-frame.

The first objective of this project was invasive removal. Removal was done from Summer 2011 to Spring 2012. Removal of plants was done by both D-H staff and volunteers. A number of different invasives were found in the area and their removal methods are as follows. All spraying of herbicide was done by D-HNC staff or volunteers who have an herbicide license. Garlic mustard first year plants were foliar sprayed with a 5% Glyphosate solution. Garlic mustard second year plants were pulled in the spring and early summer before seed set (Picture 1). These garlic mustard plants were placed in 55 galloon bags, a total of 54 bags of garlic mustard were pulled. Honeysuckle plants were cut and stump sprayed using a 30% Glyphosate solution, the amount of 30% herbicide used on the areas was not tracked. Smaller honeysuckle plants, where the stumps would have gotten lost before they could have been sprayed were foliar sprayed with a 5% Glyphosate solution. A total of 40 gallons of 5% herbicide was used for foliar spraying garlic mustard first year plants and small honeysuckle plants (Picture 2). While garlic mustard and honeysuckle were the main invasives present in both areas, there were a few autumn olive and multiflora rose plants in the areas, they were cut and sprayed with 30% Glyphosate. A tree survey of the 2 areas was done in Fall 2011 to identify the trees that were present in the area and to see which ones needed to be removed. Please see Table 1 and 2 for results.

In both areas there are undesirable trees, some of the trees are non-native, some are dead and could become a hazard and in some areas tree need to be thinned out. In both areas a total of

154 Russian mulberry trees (less than 5 inches in diameter), 12 Osage orange trees, 3 honey locust, 22 black locust, 2 black alders, 2 Siberian elm and 2 dead unidentifiable trees were cut. Trees were cut and bucked up and the stumps were sprayed with 40% Glyphosate. Brush piles were made for wildlife (Picture 3) and to burn. Burning of brush piles took place when weather conditions were favorable. 10 bat boxes made from a Boy Scout Eagle project were placed throughout both areas.

Planting of native plants was done in Spring 2012. Please see Table 3 for complete list of plants. Herbaceous plants purchased were either bare root or potted. Trees and shrubs were purchased from a Possibility Place Nursery located in Monee, Illinois that specializes in production of natives. Plants were purchased in containers that were 18 inches across and 8 inches deep. This size for trees and shrubs was chosen for several reasons. First the size of the plants made transport from the nursery to the site less difficult, because the plants could be lifted and placed where they needed to be planted, rather than having a tractor move all 46 trees and shrubs. When digging the holes, an 18 inch auger was used to pre-drill the holes. When it came time to plant, the dirt was loose enough that using a shovel, dirt could be removed from the hole, the plant placed in the hole and dirt packed around it. Lastly, the trees purchased were root pruned trees and so they have much more root growth than shoot growth and have better survivability than plants with less roots growth. Trees and shrubs were watered throughout the summer and fall, given the limited rainfall and high temperatures. In the fall deer guards were placed on the plants and they were sprayed every 2 weeks with liquid fence. a deer and rabbit deterrent.

To make monitoring easier, flags were used. A yellow flag was placed in the ground and 3 to 4 herbaceous plants were planted around it. Each tree and shrub had their own flag with the name of the plant written on it and growing conditions (sun and moisture requirements), blue flags were used for shrubs and green flags for trees.

In addition to plants that were purchased with grant monies additional plants were used. Grown in our onsite greenhouse, 392 tall bellflower, 12 button bush, 98 northern sea oats, 32 ironweed and 50 wild columbine plants. Plants that were donated to the nature center or received from the DNR free tree program planted in the project areas include; 20 bur oaks, 15 white oaks, 4 dogwoods and 1 redbud.

RESULTS

Throughout the grant timeframe we had a total of 131 volunteers giving 358 hours helping to complete this project. For some of the groups see Pictures 4-11. This does not include hours that interns and paid D-H staff worked in project area. We had many different volunteer groups help including, youth/high school volunteers, staff and students from Eastern Illinois University, Embrass Volunteer Stewards, boy scouts, girl scouts and clubs from Eastern Illinois University and Lake Land College. We had several community volunteer days and an Earth Day Celebration to involve community volunteers. Trees and shrubs purchased with grant monies were surveyed for mortality in September 2012. Of the 46 trees and shrubs, 41 were alive and 5 of them were dead, but could possibly come back from the roots in the spring. There is evidence that the brush piles that were created for wildlife are being used by wildlife.

Two signs were placed in the project areas. One sign explains the benefits of taking out non-native and invasive plants and shows pictures of the native plants that were planted. This sign is designed so that visitors will be able to tell that this area went through a transformation. The second talks about the Oak- Hickory temperate deciduous forest and the 4 layers. Labeled

pictures of plants are given for each of the layers. Please see documents entitled Restoration at Douglas-Hart for trial sign proofs.

DISCUSSION

This project provided benefits to visitors, volunteers and wildlife. Some of our regular visitors have commented on how the area has been transformed. Many visitors, especially during invasive removal where asking why were we taking out plants. This is was a great opportunity for us to explain the importance of invasive species removal. Visitors that are interested in gardening will commonly ask questions about the plants we choose to plant. The two areas that we choose as project areas were chosen because of their proximity to the trail and visibility. Volunteers played a big role in this project. Volunteers constituted such a big work force that we would not have been able to complete this project in the capacity that we did without them. We had many volunteers on this project comment that now that they know what honeysuckle looks like they seem to see it everywhere, even in their own backyard. Many volunteers where interested in understanding removal methods for invasive species so they could remove them on their own property. Once we got to the planting phase many volunteers commented on how they did not realize that there were so many different types of woodland native plants and that so many of them flowered. Volunteers also liked to learn about the different plants and the different types of growing conditions (sunlight and soil moisture) the woodland plants are grown in. The native plants that we planted support many types of wildlife such as birds, butterflies, and insects. The native plants offer a much more nutrient rich food than the non-native alternatives.

Continued monitoring of the project areas will be critical to the future success of this project. Some of these invasives were planted over 40 years ago, and so the area will need to be retreated for seeds in the seedbank that have germinated. By removing many of the invasives we hope be able to deplete the seedbank overtime.

When we started removing invasives from these areas, it looked like there was nothing but a wall of honeysuckle. As we worked our way through we found some good plants that we were able to rescue from the encroaching honeysuckle. We found lots of elderberry, a strand of Viburnum and a few bur and white oak plants (Picture 12). In addition to finding good plants we also uncovered a Douglas-Hart Nature Center sign that had been overtaken with honeysuckle (Picture 13 and 14).

Prior and during this restoration project, attempts to burn parts of the woodland have been unsuccessful. We could get the fire started but were unable to sustain it. Our woodland burns have been reduced to burning brush piles. With opening up the forest and adding more oaks, we are hopeful that in future we will be able to sustain a woodland burn.

SUMMARY

This project took 2 areas along the Douglas-Hart Nature Center trail and with the help of volunteers removed invasive species that had taken over the areas. The area was replanted with native plants. Brush piles and bat boxes were constructed in the area for wildlife. Trails signs explaining why we were removing invasives and examples of native plants were placed in the areas. Continued monitoring of these areas will be important so that the over 10,000 visitors to the nature center can enjoy a restored woodland and understand the importance of native plants.

PROMOTION OF PRJECT

To promote the public about the project, two articles were in the Journal-Gazette and Times Courier and one article in our quarterly newsletter, the Nuthatch News. Please see

attached articles. Pictures and updates also were placed on our website and Facebook page.

MISCELLANEOUS

Many more pictures were taken of the site before after and during the project with and without volunteers. Please let me know if you would like more.

Table 1: Tree Survey done Fall 2011 in the East Edge Woodland (30 X 60 meters).

Invasive/Exotic/Non-native trees to be removed

Alnus glutinosa (black alder)

Gleditsia triacanthos (honey-locust)

Maclura pomifera (osage orange)

Morus alba (white mulberry)

Morus alba var. tartarica (Russian mulberry)

Robinia pseudoacacia (black locust)

Ulmus parvifolia (Chinese elm)

Remaining tree species

Celtis occidentalis (hackberry)

Cercis canadensis (redbud)

Crataegus sp. (hawthorn)

Juglans nigra (black walnut)

Liquidambar styraciflua (sweet gum)

Platanus occidentalis (sycamore)

Prunus serotina (wild black cherry)

Quercus alba (white oak)

Quercus sp. (oak)

Ulmus sp. (elm)

Table 2: Tree Survey done Fall 2011 in the Red Bench Area in Woodland (50 X 70 meters).

Invasive/Exotic/Non-native trees to be removed

Maclura pomifera (osage orange)

Juglans nigra (black walnut)

Remaining tree species

Acer rubrum (red maple)

Acer saccharinum (silver maple)

Crataegus mollis (red haw)

Celtis occidentalis (hackberry)

Fraxinus americana (white ash)

Fraxinus pennsylvanica (green ash)

Juglans nigra

Liriodendron tulipifera (tulip poplar)

Picea sp. (spruce)

Platanus occidentalis (sycamore)

Prunus serotina (wild black cherry)

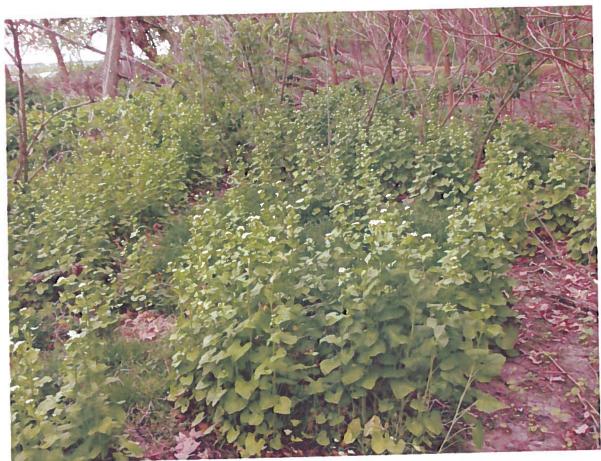
Quercus alba (white oak)

Quercus sp. (oak)

Catalpa bignonioides (catalpa)

Table 3. Native Plants used for planting in Spring 2012.

Name of Plant	Quantity
Herbaceous Plants	
Adiantum pedatum (Maidenhair Fern)	12
Aquilegia canadensis (Columbine)	12
Arisaema triphyllum (Jack-in-the-Pulpit)	12
Asarum canadense (Wild Ginger)	12
Chelone glabra (Turtlehead)	6
Dentaria laciniata (Toothwort)	12
Dicentra cucullaria (Dutchman's Breeches)	12
Dodecatheon meadia (Midland Shooting Star)	12
Erythronium albidum (White Trout Lily)	12
Fragaria virginiana (Wild Strawberry)	12
Geranium maculatum (Wild Geranium)	12
Hydrophyllum virginianum (Virginia Waterleaf)	6
Mertensia virginica (Virginia Bluebells)	27
Mitella diphylla (Bishop's Cap)	6
Polygonatumbiflorum (Solomon's Seal)	10
Polygonatum canaliculatum (Solomon's Seal)	12
Stylophorum diphyllum (Celandine Poppy)	12
Uvularia grandiflora (Bellwort)	12
<u>Shrubs</u>	
Amelanchier arborea (Juneberry)	2
Aronia arbutifolia (Red Chokeberry)	2 2 2
Rhus aromatica (Fragrant Sumac)	2
Hydrangea arborescens (Smooth Hydrangea)	2
Hydrangea quercifolia (Oak-Leaf Hydrangea)	2 2
Lindera benzoin (Spicebush)	2
Prunus virginiana (Chokecherry)	4
Staphylea trifolia (Bladdernut)	3
Symphoricarpos orbiculatus (Coralberry)	2
Viburnum acerifolium (Maple-Leaf Viburnum)	3
Trees	
Aesculus glabra (Ohio Buckeye)	1
Asimina triloba (Paw Paw)	2
Carpinus caroliniana (Blue Beech)	3
Carya illinoensis (Illinois Pecan)	1
Carya laciniosa (Kingnut Hickory)	1
Carya ovata (Shagbark Hickory)	1
Malus ioensis (Prairie Crab)	3
Nyssa sylvatica (Sourgum)	2
Quercus alba (White Oak)	
Quercus aibu (Winte Oak) Quercus palustris (Pin Oak)	2 2
Quercus patastris (1 in Oak) Quercus rubra (Red Oak)	2
Sassafras albidum (Sassafras)	2
sussifi is aiviain (sassanas)	-



Picture 1. Garlic mustard before removal.



Picture 2. The front of this picture shows an area were honeysuckle has been removed and the back shows an area were honeysuckle still needed to be removed.



Picture 3. Brush pile for wildlife.



Picture 4. Volunteers after removing honeysuckle on a community volunteer day in June 2011.





Picture 6. Volunteers from an Eastern Illinois University registered student organization removing honeysuckle in September 2011.



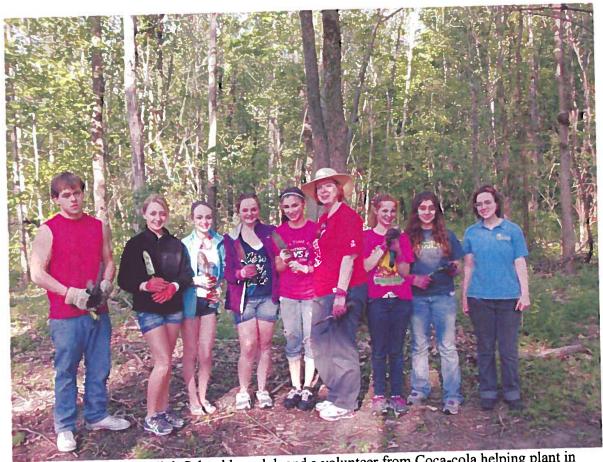
Picture 7. Embrass Volunteers Stewards after removing honeysuckle in October 2011.



Picture 8. Volunteers from an Eastern Illinois University registered student organization making fire breaks in November 2011.



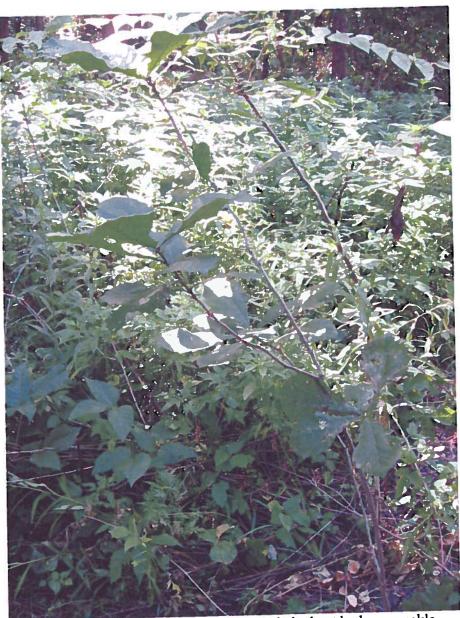
Picture 9. Volunteers from an Eastern Illinois University registered student organization planting in April 2012.



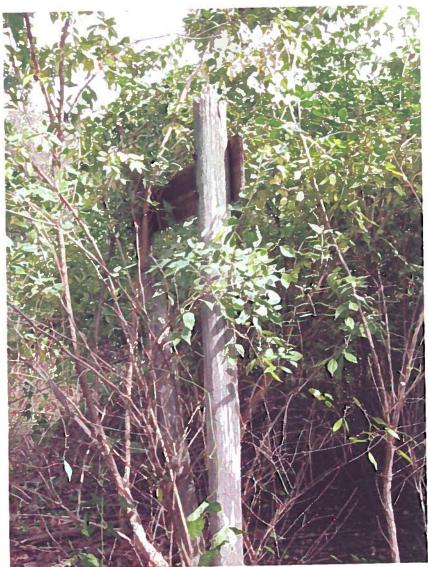
Picture 10. Charleston High School key club and a volunteer from Coca-cola helping plant in April 2012.



Picture 11. Volunteers planting on a community volunteer day in May 2012.



Picture 12. An oak seedling that was being choked out by honeysuckle.



Picture 13. A trail sign before removal of honeysuckle.



Picture 14. A trail sign after removal of honeysuckle.



Restoration at Douglas-Hart

Invasive species are altering the ecosystem. Douglas-Hart employees and

volunteers are removing invasive plants and restoring with native plants.

for moisture, light, space and

- Produce abundant quantities of seeds that are quickly spread by
 - regulate population numbers. that normally would serve to wind and wildlife

stnal9 9visavnl

The plant species pictured are ones that we are removing from the grounds of



















Herbaceous Layer







Coral Berry

Are a source of nutrient rich food to factors such as temperature and Can withstand unique climatic the plants pictured are part of the Enhance biological diversity Provide homes for wildlife. restoration project in this area moisture extremes sustain wildlife. stnaly evitaN sionill

Can you find them?





To volunteer with invasive removal and restoration Please call <mark>217-235-4644</mark> or email <mark>douglashartnc@consolidated.net</mark>



Restoration at Douglas-Hart

Invasive species have been removed from this area and are being replaced with native species. The temperate deciduous forest is the dominant forest of Illinois.

The Oak-Hickory is the dominant type of deciduous forest in Illinois. The primary canopy contains trees such as Oaks and Hickories. Below that is a layer of secondary canopy trees followed by a shrub layer and the fourth layer is composed of herbaceous species.

By enriching this area with native species we are putting in plants that support wildlife and have appeal during all four seasons. This unique combination of native species would naturally be found here.









To volunteer with restoration Please call 217-235-4644 or email douglashartnc@consolidated.net



/olume 18, Number 3

Family Festival 2011 set for Sat., Oct. 8

's time again for the Douglas-Hart Nature Center Family Festival, Sat., Oct. 8, from noon to 4 p.m. You and your mily are invited to come out for an afternoon of good, old-fashioned family fun and enjoy the Nature Center in its Ill fall glory. The festival is brought to you by the Douglas-Hart Nature Center and First Mid-Illinois Bank & Trust.

nis year's line-up of activities includes:

on to 4 p.m.

lefreshments Caramel apples, kettle corn, nd apple cider.

rts and Crafts Area for the little ones to ake and take a special fall craft umpkin decorating Come and decorate a ecial pumpkin for you to take home with you :arecrow decorating You and your family n decorate our scarecrows which will remain display at the Nature Center through fall. ng in your own items for decorating, too! mited supplies provided.)

ce Paintina rnival Games

eduled events:

p.m. Musical and eractive show for the whole family 30 p.m. Costume Contest Categories will Nature, Funniest, Most Original, Best Couple/ up, Best Male Character, Best Female Character Best Accessories/Make Up. Register at the ıt tables. Age groups 0-6 and 7-up.

i p.m. Storytime with the Scarecrow resident scarecrow will read a book

p.m. It's Like Finding a Needle in a Haystack with prizes!! Compete against your age group ab as many prizes as you can in ONE minute in nt haystack. Categories are ages 1-3, 4-6, 0-13 and 14-18.

It's fun. It's for the family. And it's FREE!

sponsored by



Volunteers are needed

the day of the event for a few hours.

Please call

217-235-4644

or email

volunteercoord@consolidated.net

to sign up and help us with our

FREE family event!









Grant awarded to D-HNC for woodland improvements

By Marissa Grant, Land Stewardship Director

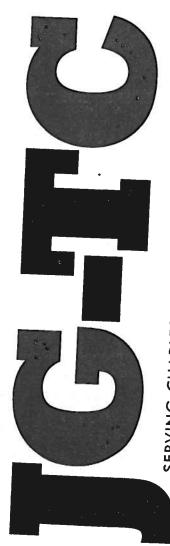
f you have been on the trails recently at the Douglas-Hart Nature Center (D-HNC) you may have noticed the removal of large shrubs. These shrubs are non-native honeysuckle. Honeysuckle is a plant that is native to Asia and has escaped into woodlands in Illinois. In the 1970s honeysuckle was planted at Douglas-Hart as recommended before its invasive and increasing aggressive qualities were known. The removal of honeysuckle as well as non-native trees black locust, black alder and Siberian elm, and the herbaceous garlic mustard are phase one in an Illinois Department of Natural Resources grant awarded to the Nature Center. The money for this \$2000 grant comes from the Wildlife Preservation Fund, a voluntary contribution check-off option on state income tax forms.

The second phase of the project starts in the spring with planting of native woodland trees, shrubs and flowers, typical of a temperate deciduous forest, the dominant forest type in Illinois. A healthy, native forest consists of four layers. Temperate deciduous forests get their name for the dominant, upper canopy trees (the tallest trees) present including oaks and hickories. The structure of most temperate deciduous forests includes three other layers. The secondary canopy layer of shorter trees includes Ohio buckeye, redbuds, dogwoods and paw paw. Next, there is a layer of shrubs such as wild hydrangea, Juneberry and buttonbush. The forth layer is composed of herbaceous species including spring ephemerals Jack-in-the-pulpit, dutchman's breeches, woodland phlox and yellow bellwort. Removing the invasive species and planting native ones will restore the original woodland habitat and improve food sources for birds and other species. Most non-native species are not good food sources or habitat for native species. Typically when an area is taken over with non-native species it becomes useless for our native animals. With the completion of this project the area will once again be valuable wildlife habitat.

Throughout both phases, D-HNC will be working with volunteers in the community. This fall work days have been scheduled with the Embarass Volunteer Stewards, a local conservation group, and a family community volunteer day sponsored by D-HNC to help with invasive removal. These dates are Sat., Oct. 22, and Sat., Nov. 5, from 9-11a.m. These work days are open to the public and anyone is welcome to help.

The completion of this project will be a valuable asset to the Nature Center and the over 10,000 visitors that walk the trails annually. There will be an increased number of woodland species and trail signs highlighting plants in bloom and giving facts about the temperate deciduous forest in Illinois. If you would like more information or to volunteer with this project please call the Nature Center at 235-4644 or email at douglashartnc@consolidated.net.

LIFESTYLES >> WINE 101: GET A TASTE OF ETIQUETTE, CI



RNAL GAZ

WEDNESDAY

04/04/2012

SERVING CHARLESTON, MATTOON & SURROUNDING AREAS IIII WWW.JG-TC.COM IIII 75 CENTS

Douglas-Hart to celebrate Earth Day; volunteers needed

MATTOON — The Douglas-Hart Nature Center will hold an Earth Day celebration on

April 14. The Earth Day celebration will kick off phase two of the by the Illinois Department of woodland restoration project started last year and funded Natural Resources' Illinois

was made to complete phase Wildlife Preservation Fund. bush honeysuckle and black one, in which hundreds of Last year, a huge effort invasive plants, including

the original woodland habitat and improve food sources for invasives do not return. The Now, native species must cleared ground so that the be planted to reclaim the ultimate goal is to restore section of the woodlands. birds and other species of wildlife.

morning to assist with plantwoodlands. The planting will A number of Girl Scout include several species of ng native species in the troops will be visiting in

will take place from 8:30 a.m. to 2 p.m. Volunteers can sign up for all or part of the time mass planting effort, which Adults are needed to be volunteer leaders for this spring ephemerals.

Adult volunteers will teach precious native seedlings. No quate success rate from our plantings, to ensure an adeskills or supplies are necesand lead the young Girl Scout volunteers in their

A few indoor planting jobs

those who are uncomfortable will also be available for or unable to work in the

Individuals or groups can involved in the community, use this opportunity to get improve the local environearn community service hours and to actively

4644 or volunteercoord@consolidated.net with questions Contact Dakota Radford volunteer coordinator and assistant educator, at 235-

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JANE

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nd Dave

Katie

To celebrate the extraordinary commitment and contribution made by Senior Corps volunteers, National Senior Corps Week is Sept. 19-23. The purpose is to recognize that service by older Americans benefits everyone. The Retired and Senior Volunteer Program will honor local volunteers by highlighting them in photos throughout the week. Pictured is RSVP volunteer Lou Marble leading the exercise class held at the LifeSpan Center on Tuesday and Thursdays mornings. Marble and RSVP volunteers Sidna Reavis, Doris McDonarnings. Marble and Barbara O'Brien have been certified to teach the Arthritis Foundation classes. For more information about RSVP or the class, call 639-5165.

Douglas-Hart Nature Center receives grant

MATTOON — Douglas-Hart Nature Center was recently awarded a \$2,000 grant from the Illinois Department of Natural Resources.

The monies will be used to restore a portion of the woodland that has been overtaken by invasive plant species. The first stage of the restoration is the removal of non-native species such as the invasive shrub honeysuckle, as well as the invasive trees black locust, alder and Siberian

The Embarrass Volunteer Stewards, a local conservation group, is helping the center's staff remove the invasive plants on Sept. 17 and Oct. 22. The work days are open to the public, and anyone is welcome to help.

Phase 2 of the project

starts in the spring with planting native woodland flowers, shrubs and trees. A healthy, native woodland consists of four layers: the upper canopy trees such as oaks and hickories, then the secondary layer of shorter trees including redbuds and dogwoods.

Beneath the secondary layer are the shrubs such as wild hydrangea and juneberry and finally on the woodland floor are the herbaceous species, including wild geranium, woodland phlox, dutchman's breeches and Jack-inthe puipit.

Removing the invasive species and planting native ones will restore the original woodland habitat and improve food sources for birds and other species. Most

non-native species are not good food sources or habitat for native species.

Typically, when an area is taken over with non-native species, it becomes useless for native animals.

With the completion of this project, the area will once again be valuable wildlife habitat. The money for this grant comes from the Wildlife Preservation Fund, a voluntary contribution check-off option on state income tax

For more information or to volunteer with this project, call the nature center at 235-4644 or email douglashartne@consolidated.net.



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Monday - Friday: Lunch Specials 11-4 1/2 Sandwich + Soup or Salad 5.99

Thursday After 4:

Weekly Specials

Find Out Your Nutritional Status. The Welfness Scan these Jost a 12% minutes. The best part is their fast freet. Bring the whole

1 Dollar Bananas Fosters at Action Stations | | | Saturday After 4: