The recruitment and use of volunteers to collect information on the distribution of invasive species in Southern Illinois

Project Final Report (#RC09L13W)

Submitted to IDNR by Christopher Evans, River to River CWMA Coordinator February 12, 2010

Illinois Department of Natural Resources Wildlife Preservation Fund -Project Report

Project Title

The recruitment and use of volunteers to collect information on the distribution of invasive species in Southern Illinois

Project Summary

The River to River Cooperative Weed Management Area, with the help of the DNR, Shawnee National Forest, and Sierra Club Illinois Chapter, developed protocols and a training manual for a volunteer invasive plant species monitoring project called the Southern Illinois WeedWatch Project. The project collects information on the distribution of invasive species in Southern Illinois, particularly within high quality natural areas.

Reimbursement Requested: \$9,254.30

Project Objectives Met

The Illinois Department of Natural Resources, the U.S. Fish Wildlife Service Crab Orchard NWR and Cypress Creek NWF, the Shawnee National Forest, The Nature Conservancy and the Sierra Club Illinois Chapter all worked together to develop a regional process for identifying invasive plants species distribution information in Southern Illinois.

Nineteen volunteers from the general public and five Fish & Wildlife Service and Forest Service staff and interns were trained in the identification of invasive plant species, trained in inventory protocol and online data entry, and assigned natural areas to monitor.

Each volunteer attended a full-day training session and received a copy of the training manual that was developed specifically for this project. Inventory training protocol included overall project purpose and need, invasive plant identification, learning GPS mapping techniques, data recording requirements, online database entry, and field safety.

Volunteers were offered an additional field day to practice plant identification and practice data collection. Other volunteers have met on a one-on-one basis with project coordinators.

As part of this project, the Nature Conservancy, Cypress Creek National Wildlife Refuge, and Illinois DNR partnered with the CWMA to host a "Weed Foray into the Cache" event where volunteers got together for a day-long intensive survey event centered on natural areas along the Cache River. Fifteen people were in attendance and portions of Grassy Slough, Tunnel Hill Trail, and Heron Pond were surveyed. In addition, volunteers adopted and surveyed natural areas throughout Southern Illinois. Two natural areas, in particular, were heavily surveyed by volunteers: Round Bluff and Ozark Hill Prairie. Other public lands and even some private lands were surveyed as part of this project. Southern Illinois Weed Watch has lead to several important populations of invasive species being found including tree-of-heaven at Round Bluff, Chinese yam at Ozark Hill Prairie, and the first known population of Amur

Corktree in Southern Illinois on private lands in Jackson County. (See attached success story on the Amur Corktree detection event)

Detailed Budget

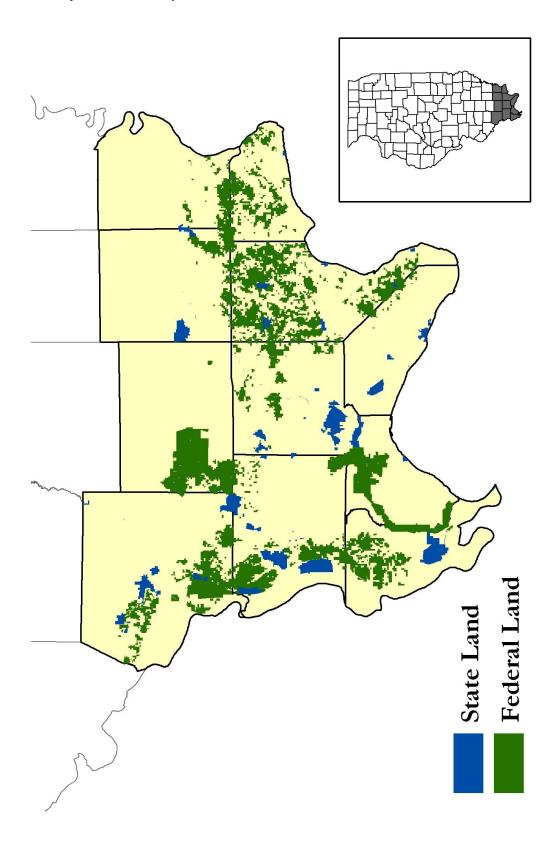
	PROJECT BUDGET					
	WPF Funds Cost Share Funds		Detail Total			
PERSONNEL						
Chris Evans, CWMA coordinator	28.65/hr		2,291.66	2,291.66		
Terri Treacy (contract with Sierra Club)		7,000.00		7,000.00		
TRAVEL						
To implement project		1,000.00	2,000.00	3,000.00		
EQUIPMENT						
Hand-held PDA/GPS for surveying	\$500/each		4,000.00	4,000.00		
MATERIALS/SUPPLIES						
Printing costs of educational materials		1,000.00		1,000.00		
CONTRACTUAL SERVICES			<u>, </u>			
Contractor/Vendor Name and Description						
OTHER			,			
Shawnee RC&D Admin Fee	(9%)	900.00		900.00		
Volunteer (~ 100 vol. hours expected)	10.00/hr		1,000.00	1,000.00		
Totals		9,900.00	9,291.66			
	TOTAL COST OF PROJECT \$19,161.66					

Actual Expenses

	PROJECT BUDGET					
	WPF Funds Cost Share Funds		Detail Total			
PERSONNEL						
Chris Evans, CWMA coordinator	28.65/hr		2,291.66	2,291.66		
Terri Treacy (contract with Sierra Club)		7,000.00		7,000.00		
TRAVEL						
To implement project		564.30	2,000.00	2,564.30		
EQUIPMENT						
Hand-held PDA/GPS for surveying	\$500/each		4,000.00	4,000.00		
MATERIALS/SUPPLIES						
Printing costs of educational materials		790.00		790.00		
CONTRACTUAL SERVICES						
Contractor/Vendor Name and Description						
OTHER						
Shawnee RC&D Admin Fee	(9%)	900.00		900.00		
Volunteer (~ 100 vol. hours expected)	10.00/hr		1,000.00	1,000.00		
Totals		9,254.30	9,291.66			
		TO [*]	TAL COST OF PROJECT	\$18,545.96		

Final Project Expenses and Reimbursement Needed: \$9,254.30

Appendix A: Project Location Map



Appendix B: Amur Corktree Success Story

See article: http://www.fs.fed.us/r9/ssrs/story?id=4931

Southern Illinois Weed Watch is working.

By: Sarah Calloway

Nancy Garwood, research professor at Southern Illinois University, identified several Amur corktree plants, Phellodendron amurense, on her property. Several were already mature and bearing fruit in the fall of 2008.

At a Southern Illinois Weed Watch training session in March of 2009, Nancy mentioned finding these trees to Chris Evans, River to River Cooperative Weed Management Area Coordinator. This species, while being listed as an invasive in other parts of the United States, had not previously been reported as present in southern Illinois. In early November 2009, Nancy updated Chris on new specimens she had found.

On November 5th, 2009, a site visit was made to check the cork trees. The following week, Nancy reported that she located more of these non-native trees on neighboring land, as well as several large specimens and many seedlings on the Shawnee National Forest. Chris and Nancy contacted the Forest to schedule a site visit to look at the trees.

In mid November, a site visit was made by Chris, Nancy and several Forest employees. Nancy had previously flagged and GPS'ed the cork trees on her property and those within the Forest. They decided to remove the cork trees by cutting them with a chainsaw or ax, and/or pulling the saplings and seedlings. The trees were removed at the beginning of December, 2009, by Shawnee National Forest employees. The stumps of the cork trees will be monitored for re-sprouts and the area will be monitored to remove seedlings or saplings.

Amur corktree is a deciduous tree named for its thick, corky bark that has a distinctive bright yellow layer of inner bark. It does especially well in forests and wooded areas that have been exposed to human disturbance, where it forms dense stands and crowds out native species, including oaks and hickories. The Amur corktree has been reported as invasive in Illinois, New York, Pennsylvania, Virginia and Massachusetts (www.nps.gov/plants).

The collaborative effort between the Shawnee National Forest and the River-to-River Cooperative Weed Management Area, developed over the past couple of years, has been highly beneficial not only to the Forest but to all of southern Illinois in protecting ecosystems across boundaries.

Illinois WeedWatch Project

This project has been made possible through an Illinois Department of Natural Resources Wildlife Preservation Fund Grant.





River-to-River Cooperative Weed

Management Area; Sierra Club;

Shawnee Resource Conservation and

Development Area; USDA Natural

Resources Conservation Service; U.S.

Forest Service; U.S. Dept. of Fish and

Wildlife; Illinois Dept. of Natural

Resources

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ABOUT THE ILLINOIS WEEDWATCH PROJECT

Illinois WeedWatch

Welcome to the WeedWatch volunteer citizen scientist team! Illinois Weed Watch is a volunteer, non-native invasive plants species monitoring program. Illinois citizens are trained to monitor and collect data on the distribution of non-native invasive species in Illinois, in particular in our Natural Areas.

A Natural Area is an area of land in public or private ownership, which either retains or has recovered to a substantial degree its original natural or primeval character, though it need not be completely undisturbed, or has floral, faunal, ecological, geological or archaeological features of scientific, educational, scenic or esthetic interest.

Project Development

This exciting new program has been made possible through an Illinois Department of Natural Resource Wildlife Preservation Grant. Shawnee Resource Conservation and Development was awarded a grant for the recruitment and use of volunteers to collect information on the distribution of invasive species in southern Illinois (Alexander, Gallatin, Hardin, Jackson, Johnson, Pope, Pulaski, Massac, Saline, Union and Williamson counties). Project coordination is through the River to River Weed Management Area (CWMA). The Illinois Chapter Sierra Club was contracted to write this volunteer training manual, to provide support in recruiting volunteers, and to assist with organizing the volunteer trainings.



The Illinois Wildlife Preservation Fund

The Illinois Wildlife Preservation Fund Grant Program is designed to preserve, protect, perpetuate and enhance non-game wildlife and native plant resources of Illinois through preservation of a satisfactory environment and an ecological balance. Projects proposed for grant funding must focus on management, site inventories or education. The Fund is financed through a voluntary check-off designation on Illinois State income tax return forms. All donations to the fund must be used to assist non-game wildlife and native plants in Illinois.



The Shawnee Resource Conservation and Development Council

Shawnee RC&D is a 501 (c) 3 not-for-profit organization covering the 16 most southern counties in the state. The RC&D works toward regional resource utilization and protection. The RC&D often serves as a fiscal agent to implement projects that are regional in scope. The Council either hires staff to carry out a project or contracts for services for a specific task or activity. The Shawnee RC&D is headquartered in Marion.

USDA NRCS is the nation's leading agency providing conservation technical assistance on private lands. Established in 1935 as the Soil Conservation Service, NRCS emphasizes voluntary, science-based conservation and technical assistance, incentive-based programs, and partnership conservation at the local level. NRCS provides technical support to the Shawnee RC&D.



River to River Cooperative Weed Management Area

The River to River CWMA is a grant funded, projects-based partnership between 12 federal and state agencies, organizations, and universities aimed at coordinating efforts and programs for addressing the threat of invasive plants in Southern Illinois. The CWMA and addresses both terrestrial and aquatic invasive plant species through collaborative projects and activities focused in the following areas:

- Education / Public Awareness
- Early Detection and Rapid Response
- Prevention
- Control and Management
- Research



Illinois Chapter of the Sierra Club

The Illinois Chapter is a statewide chapter of the national Sierra Club. The Illinois Chapter represents over 26,000 individuals committed to protecting the Illinois environment - for our families, for our future.

In 2008, the Club partnered with the Shawnee National Forest to develop a volunteer invasive species inventory project on 23 high priority Natural Areas. Due to the volunteer interest and potential for success of this project, the Club was asked to participate in the development of this new project that includes additional land management agency and organization partners.

Project Partners



The Illinois Department of Natural Resources

The mission of the Division of Wildlife Resources is to provide leadership with the restoration, management, and protection of wildlife populations and their habitats for the purposes of providing citizens and visitors of Illinois with a quality environment, a state rich in wildlife diversity, compatible recreational opportunities, and responsible oversight of the public's wildlife.



Shawnee National Forest

The Shawnee National Forest is managed to sustain the health, diversity and productivity of the forest. Balanced consideration of all resources requires the application of scientific knowledge, conservation leadership and prudent management. Invasive species threaten the sustained health, diversity and productivity of the forest.

Our invasive species program is designed to maintain viable native ecosystems. The cornerstone of this effort is an efficient integrated pest management program focused on the prevention and control of high-priority invasive species. Cooperative relationships with state, counties, organizations, and landowners are developed with an awareness of the value of native ecosystems.



The U.S. Fish & Wildlife Service

The mission of the U.S. Fish and Wildlife Service is working with others to conserve, protect and enhance fish, wildlife, plants and their habitats for the continuing benefit of the American people. The U.S. FWS is both a leader and trusted partner in fish and wildlife conservation, known for its scientific excellence, stewardship of lands and natural resources, dedicated professionals

and commitment to public service.



The Nature Conservancy, Illinois Chapter

The mission of The Nature Conservancy is to preserve the plants, animals, and natural communities that represent the diversity of life on earth by protecting the lands and waters they need to survive. The Nature Conservancy and its partners have protected more than 100 natural areas

in Illinois. In southern Illinois, restoration efforts are underway at the Conservancy owned Grassy Slough Preserve, once a forested wetland within the Cache River watershed. Because of their rich biological variety, the wetlands of the Cache River have been designated as one of only 15 "Wetlands of International Importance." The Conservancy also supports volunteers who are providing stewardship at high quality nature preserves across the state through the Volunteer Stewardship Network.

Why WeedWatch?

Invasive species -- organisms that evolved in one area of the world and become problematic in other areas – are becoming increasingly worrisome. Invasive species aggressively overtake or displace native species causing a drastic reduction in our native biodiversity. This can result in enormous ecological and economic impacts.

Discovering weeds before they become well-established is critical to reducing damage to ecosystem integrity, preventing the loss of habitat for rare plants and animals, and preventing costly natural resource management.

Benefits of WeedWatch

WeedWatch volunteers will deepen their understanding of the natural world while playing an important role in the protection of the unique resources in southern Illinois. In the role of citizen scientist volunteers, WeedWatchers will aid land managers to effectively slow the spread of harmful invasive species and reduce their environmental and economic damage. WeedWatch volunteers will help detect and collect data on the arrival and dispersal of non-native invasive species throughout southern Illinois. Data entered into a web-based data entry form will be used to create a comprehensive regional database of non-native invasive species locations. The database will be shared with managers for use in pest and weed management planning and eradication.

WeedWatchers will learn how to: identify invasive species, use global positioning system (GPS) devices, and enter data collected into an online form. Participation in this initiative will not only benefit Illinois, but will also contribute to national efforts to map the distribution and spread of invasive species.

WeedWatch Project Goals

The primary goals of Illinois Weed Watch are:

- to provide an opportunity for Illinois citizens to become involved in the stewardship of the state's natural areas;
- to increase public awareness about invasive species and the threats they pose to our natural landscape;
- to provide consistent high-quality data that can be used by scientists to track the distribution of non-native invasive species in Illinois.

Illinois Weed Watch volunteers directly participate in the collection of non-native invasive species distribution data used by botanists, project managers, policy makers, landowners, and citizens to gauge long-term trends, develop non-native invasive species management strategies, and assess the effectiveness of non-native invasive species control measures.

How the WeedWatch Project Works

Training

Illinois WeedWatch Project volunteers will attend a one-day training session. Volunteers will be trained by Illinois WeedWatch Project trainers. Weed Watchers will learn to identify invasive species in the field; procedures for photo documentation; instruction in the use of global positioning system (GPS) for collecting invasive species distribution data; and instructed in entering your detection data via the web. Training will take place in April & May after the growing season has commenced.

Volunteer Agreement

All Illinois WeedWatch Project volunteers agree to sign a Volunteer Services Agreement for Natural Resource Agencies (Appendix F).

Choosing an Area to Monitor

Each Weed Watch volunteer will have the opportunity to choose their monitoring area(s) from a list of pre-selected areas of special concern. The project will welcome and accept data from additional areas not included on the list with prior approval from the Illinois WeedWatch project—the volunteer will be given a form to record the accurate location of the area and in the case of an area on private land, the volunteer will be required to fill out a landowner permission form.

See Appendix J for a southern Illinois Natural Area location map.

Monitoring Basics

Volunteers will record distribution data from their area a minimum of once each year during the growing season. Very large areas may entail more than one visit to cover the entire area. Ideally, monitoring will take place during the late spring-early summer time period – late April through mid-June. However, if you are unable to monitor during at this time, please be assured that data will gladly be accepted later in the growing season.

One of the important as well as exciting aspects of having the volunteer-power of the Weed Watchers is that it will aid land managers in evaluating the effectiveness of various treatment options. Eradication treatments could include fire, herbicides, and/or hand-removal. To ensure a productive visit and good experience, volunteers should always check with the appropriate land manager regarding current status of management. For instance, visiting an area right after an agency has hand-pulled garlic mustard would not yield productive information—however, visiting that same area a month or two later may provide very valuable information.

While this specific program does not include the removal side of the non-native invasive species problem, land management agencies welcome volunteer help with non-native invasive species removal. Please refer to Appendix C for Land Management Agency contact information if this is something that interests you.

Volunteer Activities

Volunteers in the Illinois WeedWatch Project will be engaged in the following activities:

- 1. You will be trained in the identification and reporting of invasive species.
- 2. You will conduct surveys in the field to observe and record the presence of targeted species.
- 3. You will use global positioning system unit and digital camera to confirm location and identification of targeted species.
- 4. You will use the web to post data and images to an online database.

Volunteer Qualifications

In order to perform the activities cited above, volunteers should have or be willing to acquire the following skills:

- 1. Field experience: Hiking skills, field-worthiness, and ability to walk on uneven terrain and work in all weather conditions. Ability to handle all situations in the field, including map reading, trail-finding, and first aid situations.
- 2. Technical skills: Ability to use (or be trained to use) digital cameras, GPS units, and an online database.
- 3. Background: Some background in natural history with an emphasis on plant identification. Familiarity with Illinois ecosystems is helpful.
- 4. Other: A desire to help stop the spread of invasive species.

Beyond Detection and Reporting

Finally, we hope that you will share what you learn with friends, family, and neighbors and take your interest to new levels. For those whose interest extends beyond early detection and reporting, we encourage you to form local partnerships with institutions and agencies that are doing eradication projects so that you might assist in the management of some of the species we track.

INTRODUCTION TO INVASIVE SPECIES

What is an invasive plant species?

An invasive plant species is non-native to the ecosystem in consideration and causes or is likely to cause harm to the natural eco-system and biodiversity of the invaded area. An invasive species grows/reproduces and spreads rapidly, establishes over large areas, persists, and often displaces native plants. Species that become invasive succeed due to favorable environmental conditions and lack of natural predators, competitors and diseases that normally regulate their populations.

How did invasive species get here?

Plants and animals have been moving from one place to another for many millennia. These movements have been relatively slow, allowing for life forms to adapt to changes in habitat and species interactions. Humans have always been agents of dispersal for plants and animals either accidentally or intentionally. However, as humans began exploring the planet on a larger scale, rates of introductions of species to new areas accelerated. Now with our global economy and advanced technologies, these rates have reached a level never before seen in ecological history.

How did invasive species reach Illinois?

For more than 2,000 years, Native Americans moved plants and animals all over the continent. Early European settlers brought exotic agricultural crops and domestic animals from other parts of the world to America. By the early 1800s, as these people settled in Illinois the number of new exotic species as well as the speed at which they moved into Illinois increased. The new species introduced to Illinois between 1800 and 1900 were accompanied by changes in physical conditions in the landscape that accelerated the naturalization of these exotics. At the same time native species were declining. Clearing the land of timber, farming, and grazing significantly contributed to the spread of exotic species. The arrival of the railroad resulted in another increase in invasive species. With the development of roads, airlines, and global commerce, species can now travel from one corner of the world to another in a matter of hours.

What is an introduction?

When a species ends up in a new ecosystem, it is considered "introduced." Species do naturally change their ranges slowly over time, but it is not these "natural" events that we are concerned with. Most of the introductions that result in invasive species are human caused. In some cases, we deliberately introduce species. Examples of this include garden ornamentals, forage plants for cattle, animals and insects used to control other organisms (particularly in agriculture), and plants used for erosion control and habitat enhancement for wildlife. Other species are introduced accidentally on imported nursery stock, fruits, and vegetables, in ship ballast waters, on vehicles, in packing materials and shipping containers, through human-built canals, and through human travel.

How does a species become invasive?

It is not enough for a species to be able to exist in its new environment, although a close match between environmental conditions in the species' home environment and the environment to which it is introduced is fundamental to its survival there. Beyond this, the organism must be able to establish a viable and growing population. To do so, the new species must be capable of outcompeting and/or displacing native organisms.

Lack of natural controls in the new environment is also a factor in the establishment of invasive species. Without the diseases, parasites, and predators that regulated the invader's population in its homeland, it can spread rapidly.

Native species may also lack adaptations that allow them to resist competition from or predation by invasive species. If the invasion is coupled with other disturbances to the new ecosystem (e.g., roads and trails, earth moving, plowing, fire, livestock grazing, changes to surface and groundwater hydrology), the ecosystem is rendered more susceptible to an invasion.

Why do we care?

Invasive plants species are a form of biological pollution. They decrease biodiversity by displacing our native plants. In many areas of Illinois we have seen non-native invasive plants species invade and dominate our woodlands and prairies to the exclusion of our native wildflowers, shrubs, and trees.

What can you do to stop the spread of invasive species?

Volunteer - You have already taken the first step to help stop the spread. Becoming a volunteer in the Illinois WeedWatch Project is a great way to help invasive plant managers and eradication groups to successfully prevent and control invasions. You are also preparing yourself to be an educator of others in our community and beyond. You may also want to join an eradication program in your area.

Educate yourself and others - You will learn the basics of invasive species threats and issues during your citizen scientist training. There are many other sources of information available to you both in this manual and on the website. Take this opportunity to expand your knowledge and share it with your family, friends, and others in the community. If you come upon information sources that you think would benefit other volunteers, please let us know so we can share that information. We are relying on you as a citizen scientist to not only collect scientific data, but to actively participate in our invasive species community awareness campaign.

Participate in the Early Detection Rapid Response network – Always keep your eyes open for non-native invasive species and report your sightings to the River to River Cooperative Weed Management Area (CWMA). The early detection of a non-native invasive species invasion into a new area leads to a rapid response in management and the greater likelihood of success in getting rid of it. The CWMA will also respond to reports of non-native invasive species being sold at area businesses—the CWMA has had excellent cooperation from several local plant sources once they learned of the dangers in selling non-native invasive species.

Do not be a vehicle of dispersion - Most invasive species are introduced accidentally. Learn how to prevent carrying invasive species on your boats, cars, bicycles, motorcycles, farm equipment, horses' hooves, and socks and hiking boots.

Be PlantWise (www.beplantwise.org) - If you like to garden, follow the Be PlantWise guidelines and help prevent harmful invasive plants from invading our parklands and natural areas:

- 1. **Know your plants**. Find out which plants cause problems in parks or natural areas in your region to know which species to avoid.
- 2. **Use non-invasive alternatives**. Ask a nursery about native plants and non-invasive plant alternatives. Native plants often have similar characteristics to invasives without the damaging ecological side effects.
- 3. Watch out for invasive plant hitchhikers. Check clothes, belongings and vehicles for seeds and pieces of plants that attach and drop somewhere new.
- 4. **Have a care if you share.** Many invasive plants move around because they are attractive garden plants. Do not share cuttings, seedlings or plants that are invasive with neighbors and friends.
- 5. **Use only seed mixes that are invasive plant-free.** Check the ingredients of seed mixes to make sure invasive plants are not included. Buy seed mixes from reputable sources that guarantee the purity and content of their seed. Take your regional native plant list with you when you buy the mix.
- 6. **Use weed-free soil and mulch mix.** Some invasive plants are introduced because they were contaminants in landfill soil and mulch mixes. Purchase from reputable manufacturers that guarantee the purity or weed-free content of their soil and mulch mixes. Look for a tag that says "Certified weed-free."
- 7. **Be especially careful with aquatic plants**. Don't just dump them! Invasive aquatic plants are often introduced as attractive water garden and aquarium decorations.
- 8. **Keep an eye on new sprouts and volunteers**. Invasive plants can come from anywhere and spread very quickly. Some make attractive additions to our gardens but can spread very quickly by producing lots of seedlings. Control your invasive garden plants by hand pulling or mowing unwanted seedlings to prevent them from growing to maturity. Be aware of what is coming up in your yard and take care to control these new volunteers.
- 9. **Dispose of invasive plants carefully.** When disposing of invasive plant material consider whether there are any seeds, fruits or cuttings that could re-sprout. At a minimum, bag these materials to help prevent their spread. If it is permitted in your area and can be safely done, consider burning the plant material.
- 10. **Contain it, control it or cage it.** If you can't part with your invasive plant, take special steps to keep it in your garden such as inserting root barriers, trimming regularly or harvesting fruits or seeds before they are spread.

FIELD PREPARATION

Getting into the Field

The best way to learn a new skill is to get out there and use what you have learned. Illinois WeedWatch Project trainers will be available to assist volunteers in the field until the volunteer feels confident about the procedures and is ready to work on assigned sites independently.

Public and Private Land Issues

The goal of the Illinois WeedWatch Project is to have many eyes and ears detecting and reporting non-native invasive species in as many places as possible. However, we have to be mindful of both public land rules and regulations and the rights of private landowners.

Public Land – The Illinois WeedWatch Project is a partnership with federal and state land management agencies in southern Illinois. We will be working very closely with personnel of these agencies to make sure that all of the data collection and distribution is done according to proper protocol.

Private Land – It is important that we respect the rights of private landowners and do not trespass on their land without their specific permission. Keep in mind that Public Rights of Ways (ROW) like roads are not considered private land. Some of your surveys could be along these ROWs. In the Appendix I of this manual is a letter that you can present to landowners or the public should you receive inquiries while doing your fieldwork. This letter expresses assurance that our research project will not be conducted on their private property without consent and summarizes the goals and purpose of the Illinois WeedWatch Project.

Field Safety

Due to the field-oriented nature of the Illinois WeedWatch Project, your work will present you with the inherent physical risks posed by walking in a natural environment and getting to field sites. We recommend you follow these suggested safety precautions:

- Do not walk where you cannot see your feet. Thick vegetation may hide venomous animals or uneven terrain from view.
- When surveying on roadsides, pull vehicles far off the road, taking care to park on a firm surface. Be aware of passing traffic and stay clear of traffic lanes while collecting data.
- Bring a cell phone (but be aware that many remote areas are out of service range) and carry a topographic map or trails map of the area in which you are hiking.
- Do not hike alone (always take a companion).
- Inform someone not in your party of where you are going and when you plan to return. Please note: Your companion is not required to go through the Illinois WeedWatch Project training however, they will probably find the experience more enjoyable and their assistance more helpful if they have gone through the training. Plus, if they sustain injuries while assisting you, they will not be covered by the Volunteer Agreement.
- Bring sufficient water and sun protection.

- If you have known allergies or other medical conditions that might require that you take medications in the field, bring your medications with you--alert your team members of such conditions and about your medication.
- We would never ask you to perform a service that is beyond your comfort level. If you are ever concerned about field conditions on any outing, please tell your Illinois WeedWatch Project trainer.

Preparation for Field Work

Before you even go out into the field begin preparation for the survey by consulting the topographic quadrangle maps and any other pertinent maps or information about the area. Familiarize yourself with the roads leading to your area and to the topographic and geographic features in the area. Determine where you are most likely to find non-native invasive species plants. Keep in mind that invasive plants spread quickly along transportation corridors, waterways, roads and trails and from these vectors into adjacent landscapes.

- Check the weather before you head to the field site. You should not work in adverse weather conditions such as thunder and lightning storms. Be cautious of driving through water on roadways—water is extremely powerful and can easily sweep your vehicle downstream.
- Packing your gear--go over the Field Kit Contents listed below and make sure you have all of the
 items on the list. You will be mostly be walking off trails and roads so shorts and sandals are not
 recommended.
- Turn on your GPS units and cameras to make sure they are working properly and have good batteries in them. Bring extra batteries with you just in case.
- Make sure your pencils are sharpened and that you have a notebook with sufficient blank sheets for recording field data.

Field Kit Contents

- A well-equipped field kit/daypack should include the following:
- GPS unit
- Camera w/plenty of memory on the memory card
- Extra batteries
- Notebook or plenty of blank datasheets
- Species photo ID booklet
- Pencils/pencil sharpener
- Flagging tape
- Maps
- Compass
- Boot brush for seed removal
- Personal items to carry
 - First Aid kit
 - Flashlight
 - Whistle
 - Rain gear
 - Water
 - Food
 - Emergency shelter/space blanket
 - Pocket knife
 - Matches/lighter
 - Hat
 - Gloves
 - Insect repellent
 - Compass
 - Emergency phone numbers -- see Appendix D

SPECIES SELECTION

The non-native invasive species that the Illinois WeedWatch Project will focus on are separated into three categories—Priority Species, Other Non-Native Invasive Species and Watch List Species.

Priority Species

are those that have been identified to be of particular concern to our high-quality natural areas because they spread rapidly and once they get established are very difficult to eradicate.

Other Non-Native Invasive Species

are those that occur in our region, but are not the imminent threat to our high-quality natural areas as are the Priority species. Some of the others are species that have not invaded our natural areas in southern Illinois, but have the potential to become a threat—they need to be watched.

A list of these species is found in Appendix B. Photocopy this list and carry it with you into the field – you will need the information for data recording.

DATA COLLECTION

Collecting Data for the Illinois WeedWatch Project

Data collection for the WeedWatch project can be broken down into two basic questions: What is it and where is it? To answer these questions, you will survey the infested area and record the information you observe on the Illinois WeedWatch Project Invasive Plant Report Form.

Surveying

Develop a survey strategy. An Illinois WeedWatch Project trainer can be available to help with this step if desired. As part of the survey strategy, think about how best to divide the project area into logical survey units (if it is too large to survey in one trip) and prioritize according to the potential of each for harboring non-native invasive species plant species.

First identify the specific area to cover and determine a route that allows complete survey of the assigned area (walking and observing both sides of trails, roads, and streams in addition to a 20 foot swath away from the trail, road or stream). If full survey coverage of an area is possible, this is the best option. In areas that are too large for full survey coverage, break the area down into smaller sections to cover over a series of visits. Most non-native invasive species occur in disturbed areas, so use discretion and survey where the likelihood of encountering weeds is the greatest and work out from there. Concentrate on the pathways such as roads, trails and drainages that non-native invasive species are likely to follow to get into a natural area. Non-native invasive species are often brought into areas along these pathways.

If nothing is detected along these pathways or downslope/downstream from these areas the likelihood of finding non-native invasive species in areas of little disturbance is decreased. This is not a fool proof method, but in some cases, such as very large survey areas where complete coverage (100%) is not realistic, it's appropriate. However, in small survey areas try to accomplish a complete survey.

Record the extent of each population by using 1 of 3 methods: Point, linear or area. You will determine which method is used depending on the following circumstances as described below. Use your notebook to carefully record pertinent information for each population. Any additional notes that help provide a good description of the population to someone who is not there at the time of survey are essential.

Point

For individual plants, or areas less than 1/10-acre in size, record as a point. Estimate the square feet that the plant or cluster of plants occupies.

Linear

For recording along a trail or stream corridor, record as a single, linear track. Estimate the square feet that the invasive plants occupy along the corridor that you are mapping.

Area (Polygon)

For areas larger than 1/10-acre, survey around the perimeter of the area, returning to the same place you began. The size of each area will vary with on-the-ground circumstances--discretion will be important here. In some cases a population may be scattered over a large area—you may choose to treat this as a single population and record it on the form as "scattered plants."

Complete documentation for each new non-native invasive species population within the survey site includes collection of Global Positioning Systems (GPS) data, completion of the online Invasive Plant Report Form, and photo images (as described below).

If multiple non-native invasive species overlap at the site each species must be recorded on separate form using a unique observation number. Note differences in species population characteristics within the site using the "Abundance/Density" and "Canopy Closure" fields on the Invasive Plant Report Form.

GPS - General Setup Information

Your Illinois WeedWatch Project trainer will help you with initial GPS unit setup and teach you how to record information. The following instructions look really complicated, but keep in mind that this is intended as a refresher – once you've learned and practiced the procedure these steps will make sense and won't look nearly so intimidating!!

The "Quit" Button is Your Friend!

If you get "lost" roaming around the GPS unit, remember you can always hit the "Quit" button to back out and start over!

Setting Units

Units should be set to decimal degrees.

Use Page button to go to the Main Menu page.

Scroll to **Setup**, hit **Enter**.

Scroll to Units, hit Enter.

Scroll to Position Format, hit Enter.

Scroll to **hddd.dddd**, hit **Enter**, then hit **Quit**.

Setting Tracks

Use Page button to go to the Main Menu page.

Scroll to Tracks, hit Enter.

Scroll to Track Log Off option, hit Enter.

Scroll to **Setup**, hit **Enter**.

Scroll to **Record Method** – this should read **Distance** – if it doesn't, hit **Enter** and choose **Distance** from the drop-down list, hit **Enter**, hit **Quit** twice to return to **Main Menu**.

Finding your Natural Area:

Hit **Find** button Scroll to **Waypoints**—hit **Enter** Choose Natural Area—hit **Enter** Scroll to **Map**, hit **Enter**

Recording in your field notebook

For each new day, record the date you were in the field--this will be the date you enter online for each individual plant observation that day. Also record the time spent each day -- this includes travel time. Volunteer hours are of great benefit in using as matching for grants..

For each new observation record the following. You will depend on this information to accurately record the data into the online form.

- Record the Plant Observation ID: Each observation must be identified with a unique name. The name will be derived by using a set of unique letters (such as the field crew leader's initials or combination of initials and last name) followed by a sequential number. For example, field crew leader Jane Mary Doe would assign the ID jmdoe1 to the first observation her crew maps; jmdoe2 to the second, and so forth. Jane Mary will continue to use her unique numbers in sequential order *whenever* or *wherever* she maps for the Illinois WeedWatch Project.
- Habitat type: Study the choices from the online report form; but, also make note of additional
 features that are not included on the form--such as barrens, bluff top, dripline, user-made ATV
 trail, etc. There is a place on the form to include these comments.
- Species Name & Species Code: carry a copy of the species list and code names as a hand reference in the field.
- Patch type -- point, linear or polygon.
- Infestation -- record the number of acres (for polygons) or square footage of linear tracks and points.
- Plant description: in flower, in fruit, seedlings/rosettes, seeds, dormant/dead or unknown.
- Abundance/Density & Canopy Closure: Note the percentage of space occupied by the infestation with a description of the infestation (single plant, scattered plants, dense patch, etc.
- Any other notes that will helpful to you or others regarding the specific observation.

Recording Polygons

Go to Main Menu (use Page button)

Scroll to Tracks, hit Enter. Make sure "Track Log" is OFF

Hit Menu button--Choose Area Calculation, hit Enter.

Screen opens to map page – **Start** button appears--hit **Enter** (**Stop** button appears until you finish recording the track).

Walk around the perimeter of the area you are mapping until you reach your starting point. Stop calculating area, hit **Enter**.

Record number of acres in your notebook, then Save, hit Enter.

Plant observation ID: Scroll to **Name**, hit **Enter** (onscreen keypad appears—scroll over to **Clr**, hit **Enter**. Using the keypad, enter the plant observation ID. After you have completed the entry, scroll down to **OK** on the onscreen keypad, hit **Enter** – the keypad will disappear. Record this ID name in your notebook.!

This Observation ID is the only reference point between the GPS information you collect and the information recorded into the database and – DO NOT forget this step!!

Scroll to **OK** at the bottom of the screen and hit **Enter** to save the polygon.

Recording Linear Tracks

You will follow the same procedure as above for mapping linear tracks, except that you walk from the beginning of the linear track you are mapping to the end. Rather than recording acres, you will **record the distance**. You will also **record an estimate of the square feet of the infestation**-multiply the distance covered by the average width of the infestation.

Plant observation ID: Scroll to **Name**, hit **Enter** (onscreen keypad appears—scroll over to **Clr**, hit **Enter**. Using the keypad, enter the plant observation ID. After you have completed the entry, scroll down to **OK** on the onscreen keypad, hit **Enter** – the keypad will disappear. Record this ID name in your notebook.!

This Observation ID is the only reference point between the GPS information you collect and the information recorded into the database and – DO NOT forget this step!!

Scroll to **OK** at the bottom of the screen and hit **Enter** to save the linear distance track.

Recording Points

Hit the Mark button. Record an estimate of the square feet of infestation.

Scroll to Name, hit Enter (onscreen keypad appears—scroll over to Clr, hit Enter.

Using the keypad, enter the plant observation ID. After you have completed the entry, scroll down to **OK** on the onscreen keypad, hit **Enter** – the keypad will disappear. Record this ID name in your notebook.!

This Observation ID is the only reference point between the GPS information you collect and the information recorded into the database and – DO NOT forget this step!! Scroll to **OK** at the bottom of the screen and hit **Enter** to save the point.

Keypad Tips

Use the **rocker key** to scroll through the choices of letters and numbers--use the **Enter key** to make each selection. If you make a mistake, scroll to **DEL** and hit **Enter**--the letter/number to the left will be deleted--repeat as necessary.

The **Up** arrow toggles the keypad between upper and lower case, and between numbers and symbols.

The **OK** key in the center of the keypad is what you need to use to get out of the keypad when you are through. Simply scroll to it and hit the **Enter** key on the front of the unit to return to the regular screen.

Invasive Plant Report Form

Fill out an entire online form (Appendix A) for each individual population of non-native invasive species that you map. The form is located at: http://www.rtrcwma.org/report/index2.cfm

Species: select species from the drop-down menu.

Infestation:

Observation Date: The date you were in the field.

<u>Infested Area</u>: Enter data from your notebook, then choose acres or square feet from the drop-down menu.

<u>Habitat</u>: Select habitat type from drop-down menu--use the <u>Comment</u> box in the <u>Additional</u> <u>Information</u> section to add comments for habitats that are not completely covered by the list offered. For example, you might mention that you're area contains barrens/glade habitat.

<u>Canopy Closure</u>: Measurement of the % of space occupied by the infestation.

<u>Abundance/Density</u>: Description of the infestation (single plant, scattered plants, dense patch, etc <u>Patch Type</u>: The method used to record the population--select Point, Linear or Polygon from the list. <u>Plant Description</u>: The stage of growth of the target species.

Location

<u>County</u>: Select county in which the infestation occurs. In most cases this will be same for your entire area; though there may be ocassions when a natural area boundary crosses county lines.

<u>Latitude & Longitude</u>: Use information directly from the GPS unit. Here's how:

- Turn the unit on and hit the **menu** button--select **Use with GPS Off** and hit **Enter**.
- To find information for a **Point** hit the **Find** button.
- Scroll to **Waypoints** and hit **Enter**.
- Scroll to the Observation ID you're working on and hit Enter.
- In the middle of the screen you'll see the Latitude and Longitude coordinates.
- Type the Nxx.xxxxx into the Latitude box and the Wxxx.xxxxx into the Longitude box.
- Hit the **Quit** button to return to the Waypoint selection list.
- To find information for a **Track** (for both linear and polygon) hit the **Page** button until you get to the **Main Menu** page.
- Scroll to **Tracks** and hit **Enter**.
- Scroll to the Observation ID you're working on and hit **Enter**.
- Scroll to the **Map** button and hit **Enter**.
- At the top, left hand corner of the screen you'll see the Latitude and Longitude coordinates.
- Type the Nxx.xxxxx into the Latitude box and the Wxxx.xxxxx into the Longitude box.
- Hit the Quit button twice to return to the Track selection list.

<u>Site Name</u>: The name of the Natural Area, Nature Preserve or whatever name the land management agency or property owner calls the area.

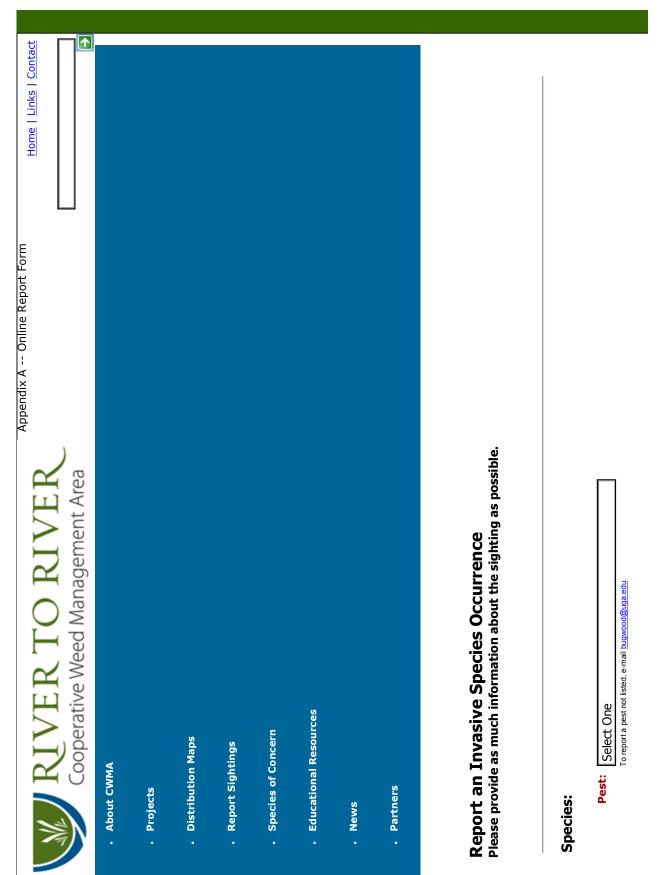
Ownership: Make the appropriate choice from the dropdown list. In the last section of the online form you will be asked to more specifically define the ownership--such as Shawnee National Forest, Cypress Creek NWR, IDNR, etc.

<u>Location description</u>: Add any helpful details that would enable others to find the exact location of the specific observation.

Upload Images with your Report

Please take a minimum of two digital photos of each **new** species observed in your area. One should be a close-up view that can be used to verify the identity of the species; a second photo should show the plant in its setting.

Appendices



Gross Area: Select One (?) Canopy Closure: Select One (?) Patch Type: Select One	Location Tools: Preview Location Choose Location Choose Location Choose Location Choose Location Convert from UTMs Convert from DMS	
Infestation: Observation Date: Infested Area: Habitat: Select One Abundance/Density: Select One	Plant Description: ☐ In Flower ☐ In Fruit ☐ Seedlings/Rosettes ☐ Seeds ☐ Dormant/Dead ☐ Unknown Location: Latitude:	

(.jpg, < 4 mb) (if you didn't identify) Browse... Browse... Browse... Browse... Browse... (provide as much detail as possible, include credit if image is not yours) (provide as much detail as possible, include credit if image is not yours) (provide as much detail as possible, include credit if image is not yours) (provide as much detail as possible, include credit if image is not yours) (provide as much detail as possible, include credit if image is not yours) 0 0 Voucher Specimen Made: O Yes Herbarium holding specimen: Additional Information: Caption: Caption: Caption: Caption: Caption: Identified by: Comments: Image: Image: Image: Image: Image:

For verification purposes, take at least two digital images, a close up of the species and one of the site.

Upload Images with Your Report:

SOUTHERN ILLINOIS
UNIVERSITY CARBONDALE EXTENSION Website developed by the University of Georgia - Center for Invasive Species and Ecosystem Health Last updated on Thursday, March 26, 2009 at 01:53 PM Other Field Crew Names: Landowner Phone: Stop Time: The Nature Conservancy Protecting nature. Preserving life. Report River to River Cooperative Weed Management Area WeedWatch Project: Illinots Agriculture Illinois Department of Transportation Field Crew Leader: Landowner | Name: | Start Time: Plant Observation ID:

Appendix B—Species List

Scientific Name	Common Name	Code
Priority Species		
Alliaria petiolata	Garlic Mustard	ALPE4
Celastrus orbiculatus	Oriental Bittersweet	CEOR7
Commelina communis	Asiatic dayflower	COCO3
Dioscorea oppositifolia	Chinese Yam	DIOP
Elaeagnus umbellata	Autumn Olive	ELUM
Lespedeza cuneata	Chinese Lespedeza	LECU
Lonicera japonica	Japanese Honeysuckle	LOJA
Lonicera maackii	Amur Honeysuckle	LOMA6
Melilotus officinalis	Yellow Sweetclover	MEOF
Microstegium vimineum	Nepalese Browntop	MIVI
Paulownia tomentosa	<u>Princesstree</u>	PATO2
Pueraria montana	<u>Kudzu</u>	PUMO
Rosa multiflora	Multiflora Rose	ROMU
Rumex acetosella	Sheep Sorrel	RUAC3
Vinca spp.	Common Periwinkle	VINCA
Other Non-Native Insvasive Species		
Achillea millefolium	Common yarrow	ACMI2
Albizia julibrissin	Silktree (mimosa)	ALJU
Bromus tectorum	Cheatgrass	BRTE
Carduus nutans	Musk Thistle	CANU4
Cirsium vulgare	Bull Thistle	CIVU
Dactylis	<u>Orchardgrass</u>	DAGL
Daucus carota	Queen Anne's Lace	DACA6
Dipsacus fullonum	Common Teasel	DIFU2
Dipsacus laciniatus	<u>Cutleaf teasel</u>	DILA4
Sorghum halepense	<u>Johnsongrass</u>	SOHA
Euonymus alatus	Winged Burning Bush	EUAL13
Glechoma hederacea	Ground Ivy	GLHE2
Hemerocallis	<u>Daylily</u>	HEMER
Humulus japonicus	Japanese Hop	HUJA
Imperata cylindrica	Cogongras	IMCY
Ipomoea cairica	Mile-a-minute vine, also see USDA	IPCA
Ligustrum spp.	<u>Ligustrum</u>	LIGUS2
Lysimachia nummularia	Moneywort (creeping Jenny)	LYNU
Lythrum salicaria	Purple Loosestrife	LYSA2

Ornithogalum umbellatum	Star-of-Bethlehem	ORUM
Perilla frutescens	Beefsteak Plant	PEFR4
Polygonum cuspidatum	Japanese Knotweed	POCU6
Robinia pseudoacacia	Black locust	ROPS
Solanum viarum	<u>Tropical soda apple</u>	SOVI2
Trifolium campestre	<u>Field clover</u>	TRCA5
Verbascum thapsus	Common Mullein	VETH
Wisteria sinensis	Chinese Wisteria	WISI

Appendix C--Partners Contact Information

CWMA – River to River Cooperative Weed Management Area

Chris Evans, Coordinator rivertoriver@gmail.com 8588 Route 148 Marion, IL 62959 618-998-5920; 618-364-7261 cell

Shawnee RC&D

Stephanie Brown, Coordinator 502 Comfort Drive Suite E Marion, IL 62959 (618) 993-5396 ext. 6 or 141

Sierra Club – Illinois Chapter

Terri Treacy, Conservation Field Representative terri.treacy@sierraclub.org
RR 1 Box 216A
Golconda, IL 62938
618-683-2161; 618-521-1030 cell

IDNR—Illinois Department of Natural Resources—Natural Heritage Biologists

Scott Ballard Bob Lindsay Mark Guetersloh

Jackson, Williamson CO. Union, Saline, Gallatin, Hardin, Pope CO. Alexander, Pulaski, Johnson, Massac CO.

Marion III 62959 Ferne Clyffe State Park 0139 Rustic Campus Drive

618-993-7023 Goreville IL 62939 Ullin, IL 62992

618-995-2568 618-634-2545

USDA Forest Service—Shawnee National Forest

Forest Supervisor's Office Hidden Springs District Mississippi Bluff District
Matt Lechner, Non-Native Invasive Elizabeth Shimp, Botanist Species Coordinator eshimp@fs.fed.us Scorey@fs.fed.us

mlechner@fs.fed.us 618-253-7114

US Fish & Wildlife Service

Crab Orchard NWR Cypress Creek NWR

Thomas A. Palmer, Forester Karen Mangan, Wildlife Biologist 8588 Route 148 0137 Rustic Campus Drive

 Marion, IL 62959
 Ullin, Illinois 62992

 618-997-3344 Ext 319
 phone: 618-634-2231

 Fax: 618-997-8961
 fax: 618-634-9656

 Thomas_Palmer@fws.gov
 karen_mangan@fws.gov

USDA NRCS & Southwestern Illinois Resource Conservation and Development, Inc.

Ed Weilbacher, Coordinator 406 E. Main St. Mascoutah, Il 62258 618 566-4451 ext. 11; 618 978-1836 (cell) ed.weilbacher@il.usda.gov

The Nature Conservancy Illinois Field Office

Karen Tharpe, Volunteer Stewardship Coordinator 139 Rustic Campus Dr. Ullin, IL 62992 618-634-2524; 866-876-5463; 618-614-4647 (cell) ktharp@tnc.org

Appendix D--Emergency Contact Information

Sheriff

Alexander County	618-734-2141
Gallatin County	618-269-3137
Johnson County	618-658-8264
Jackson County	618-684-2177
Hardin County	618-287-2271
Pope County	618-683-4321
Saline County	618-252-8661
Union County	618-833-5500
Williamson County	618-997-6541

State Police

Illinois State Police

District 13—DuQuoin	618-542-2171
District 19—Ullin	618-382-1911
District 22—Carmi	618-845-3740

Shawnee Forest Law Enforcement Officers

Ande Harris—Westside	414-731-1519
Becca Swaney—Eastside	414-731-1514
Weldon Young—Central	414-312-1389
Jim Shull—All	414-708-7601

Fish & Wildlife Service Law Enforcement Officers

Call 911 or the sheriff of the county in which you are located (see list above).

IDNR Conservation Officers

Call 911 or the sheriff of the county in which you are located (see list above).

Appendix E--Web Links to Invasive Species Web Sites and Information

Illinois Nature Preserve Management Guidelines

http://dnr.state.il.us/INPC/Management guidelines.htm

Excellent source for information on 42 species of invasive plants in Illinois; links to pdf files with good photos and management recommendations.

Midwest Invasive Plant Network

http://www.midwestinvasiveplantnetwork.org/index.html

Non-profit organization dedicated to reducing the impact of invasive species in the Midwest.

<u>Early Detection Rapid Response</u> (http://www.midwestinvasiveplantnetwork.org/detectionresponse.html) is one of the important functions of MIPN whereby new species or invasion of species into new areas is detected early and stopped before it spreads.

National Invasive Species Information Center (NISIC)

http://www.invasivespeciesinfo.gov/plants/main.shtml

United States Department of Agriculture National Agricultural Library

Invasive.org

http://www.invasive.org/weeds.cfm

The Source for Information and Images of Invasive & Exotic Species

A joint project of The University of Georgia's Bugwood Network, USDA Forest Service and USDA APHIS PPQ.

Bugwood Network

http://www.bugwood.org/

Center for Invasive Species and Ecosystem Health

The University of Georgia

Warnell School of Forestry and Natural Resources

College of Agricultural and Environmental Sciences

Mistaken Identity

http://www.nybg.org/files/scientists/rnaczi/Mistaken Identity Final.pdf

NatureServe has created a guide to invasive exotic plants and the native species that closely resemble them. This will be a good aid to help you correctly identify invasive plants in the field.

Be Plant Wise

http://www.beplantwise.org/

Be PlantWise guidelines help prevent harmful invasive plants from invading our parklands and natural areas.

Appendix F--Volunteer Agreement

OMB 0596-0080 (Expires 8/2010)

Please print when completing this form			
Site Name	Agency		Reimbursement (if any)
ame of Volunteer or Group Leader - Last, First, Middle	Home Phone	Cell Phone	Email Address
treet Address	City	State	Zip Code
VOLUNTEER IS UNDER AGE 18 - Name of Parent or Guardian	Home Phone	Cell Phone	Email Address
Street Address	City	State	Zip Code
ompensation, except as otherwise provided by law; and that to expression of the work the extraction of	at the volunteer will per	form.	unteer activity sponsored
y	at	olunteer Duty Station	
(Name of Sponsoring Organization, if applicable)	(Name of V	olunteer Duty Station,)
rom to (Date) (Paren	nt/Guardian Signature)		(Date)
mergency Contact Name	Home Phone	Cell Phone	Email Address
treet Address	City	State	Zip Code
GOVERNMENT OFFICE	IAL COMPLETES TH	HIS SECTION	
rief description of work to be performed. Include details si se of government vehicle, etc. Attach the complete job descri roup name, a complete list of group participants to be attached ander the age of 18.	ption to this form. If thi	is is a group agreeme	nt, the leader is to provide the
overnment Vehicle required? Yes No	alid State Driver's Licer		tional Driver's License
	a varify that the valunt	eer is in possession of	f one of these documents.

I understand that I will not receive any compensation for the above work and that volunteers are NOT of any purpose other than tort claims and injury compensation. I understand that volunteer service is not other employee benefits. I also understand that either the government or I may cancel this agreement party.	creditable for leave accrual or any			
I understand that my volunteer position may require a background investigation in order for me to perfo	rm my duties.			
I understand that all publications, films, slides, videos, artistic or similar endeavors, resulting from my volunteer services as specifically stated in the attached job description, will become the property of the United States, and as such, will be in the public domain and not subject to copyright laws.				
I do hereby volunteer my services as described above, to assist in agency-authorized work.				
(Signature of Volunteer) The above-named agency agrees, while this arrangement is in effect, to provide such materials, equipr available and needed to perform the work described above, and to consider you as a Federal employed claims and injury compensation. (Signature of Volunteer Manager/Coordinator)	ment, and facilities that are e only for the purposes of tort			
Termination of Agreement				
Volunteer requests formal evaluation Yes No Evaluation Completed	(Date)			
Agreement terminated on				
(Date) (Signature of Volunteer Manager/Coordinator)				

Public Burden Statement

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0080. The time required to complete this information collection is estimated to average 15 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) and U.S. Department of the Interior (USDI) prohibit discrimination in all programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA and USDI are equal opportunity providers and employers.

Privacy Act Statement

Collection and use is covered by Privacy Act System of Records OPM/GOVT-1 and USDA/OP-1, and is consistent with the provisions of 5 USC 552a (Privacy Act of 1974), which authorizes acceptance of the information requested on this form. The data will be used to maintain official records of volunteers of the USDA and USDI for the purposes of tort claims and injury compensation. Furnishing this data is voluntary, however if this form is incomplete, enrollment in the program cannot proceed.

Optional Form 301A (6/2007)

Appendix G--NRCS Volunteer Time & Attendance Form

Print Form Reset Form

Form Approved - OMB No. 0578-0024

U.S. Department of Agriculture Natural Resources Conservation Service



NRCS-PER-004 Exp. 03-31-2006

Natural Resources Conservation Service Volunteer Programs TIME AND ATTENDANCE

A. Volunteer Name		B. Location
C. Pay Period		D. Supervisor Name
C. 1. Month:	C. 2. Year:	

E. Calendar

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

F	Total	Number	Of Hours:	

OMB Disclosure Statement

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0578-0024. The time required to complete this information collection is estimated to average 1 minute per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information

Appendix H--Private Landowner Consent Form

Illinois WeedWatch Project Property Access Permission Form

Site ID Number

(Property owner or authorized manager)	
eed Managment Are or	access to my property listed
	d to RR-CWMA's Illinois WeedWatch Project non-nati
asive plant species inventory and monitoring	•
usive plant species inventory and momenting	detivities.
e above named individual or group has access	s to my property between the hours ofam
and am/pm on the date	or dates indicated under "Access Dates" below. The si
the group is not to exceed peop	le. I would prefer the group park at
and acc	cess the site by
edWatch Project and/or the individual or grouticipants of the terms of this agreement and for	is agreement at any time. I also understand that Illinois appropriate the my right as the contact listed below are responsible for informing all or ensuring adherence to those terms. Further, it is under is responsible for notifying me at least twenty-four hou
al owner/manager of the property to revoke the dwatch Project and/or the individual or grouticipants of the terms of this agreement and food that the individual or group contact below	his agreement at any time. I also understand that Illinoi up contact listed below are responsible for informing all or ensuring adherence to those terms. Further, it is under
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al owner/manager of the property to revoke the dedWatch Project and/or the individual or group cricipants of the terms of this agreement and for od that the individual or group contact below or to accessing the property. To be completed by land owner or manager Full name of property owner or manager Signature of property owner or manager Site Address (street address)	nis agreement at any time. I also understand that Illinois up contact listed below are responsible for informing a for ensuring adherence to those terms. Further, it is under its responsible for notifying me at least twenty-four how to be completed by individual or group accessing property Individual or gruop contact (name) Signature of individual Volunteer's Address (street address)

Appendix I--Landowner Assurance Letter



To Whom It May Concern,

The holder of this letter is a volunteer citizen scientist working on behalf of the Illinois WeedWatch Project. He/she is helping to track the distribution of invasive species of plants in our region. Invasive species are organisms that are non-native to the ecosystem and are likely to cause economic or environmental harm to our native plant species.

The volunteers have been trained in identification and field techniques and have been provided with a set of equipment to collect data on particular species' presence, relative abundance and kind of environmental conditions in which they are found. They are monitoring areas designated by the Illinois WeedWatch Project to help paint a comprehensive picture of invasive species spread in the region.

Once volunteers have completed field surveys, their data will be uploaded to a web-based database and made available to resource management entities and the general public. Their investigations are part of a regional and national effort to map target invasive species and assist land managers in their control and eradication. Results will be updated regularly on our website, www.rtrcwma.org. You can check here for more information or contact the Illinois WeedWatch Project director listed below.

Thank you,

Christopher Evans Illinois WeedWatch Project Director River to River Cooperative Weed Management Area 8588 Route 148 Marion, IL 62959

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Phone: 618-998-5920

Appendix J--Natural Area Location Map Fish and Wildlife Land National Forest Land Forest Boundary Major Highways Major Streams Natural Area State Land Interstate Municipal Solconda 20 **J**Miles Southern Illinois Natural Areas 16 Mound City Grand Tower

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