

Project title: Education of the public regarding best management practices for controlling invasive species through creation and printing of a guide, *Management of Invasive Plants of Southern Illinois*, and landowner workshops based upon this guide

Project Final Report (#14-025W)

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Project Outcomes:

The intent of the project was to provide a resource to assist land owners and land managers, who are knowledgeable in the identification of invasive species but lack the expertise to know how to manage the populations found on their land. This publication advises on control methods, including techniques and equipment, legal requirements (permitting and licensing) in making chemical applications, the timing of chemical control for each species, and the specific chemicals generally recommended for control with appropriate rates for each species. Additionally, there is a quick reference treatment calendar, based on plant phenology, in the front of the guide. There is also a table that provides the chemical names and corresponding products (brand names), as well as aquatic-safeness and manufacturer information. Colorful photos throughout the text will aid land owners and land managers in identification; however, the guide is best used as a companion to a previous publication, *Invasive Plants of Southern Illinois*, for identification of invasive species. This previous publication covered identifying characteristics of 24 of the priority invasive species threatening ecosystems in southern Illinois. The companion management guide covers management of five additional species (Callery (Bradford) pear, Japanese chaff flower, poison hemlock, winged burning bush, and purple wintercreeper) for a total of 29 species. However, two species covered in the previous identification publication were aquatic plants; for those species, only mechanical treatments were outlined in the management guide. Contact information for IDNR fish biologists was included in the guide to provide landowners with additional assistance in aquatic plant control with chemical applications. In the back of the guide, there are additional, online references listed for: invasive species mapping, control, spread prevention, and identification. There are a few pages for notes as well, where land managers can record treatment history, dates and herbicides used, or calculate herbicide mix rates and volumes. The inside page of the back cover features a Quick Reference Guide for Mixing Herbicides, with instructions on how to mix herbicides and the volume of chemical that should be used to reach commonly used treatment volumes. This guide synthesizes all the information that the CWMA covers in invasive species management workshops and is an extremely valuable publication to those interested in managing invasive plants in southern Illinois and beyond.

The information published in this guide was used in numerous workshops though out the grant period:

2013. Landowner Field Day for Invasive Plant and Forest Management. Trail of Tears State Forest, Jonesboro, IL. September 14. (Coordinated by the CWMA with NRCS, Shawnee RC&D, and National Wild Turkey Federation).

2013. Forest Restoration Event: Management of Winged Burning Bush and Other Woody Invasives. Dixon Springs Agricultural Center, Dixon Springs, IL. November 2. (Coordinated by CWMA, University of Illinois Forest Resource Center, SIPBA, and Illinois Forestry Association (IFA) – Jim Kirkland, IFA and University of Illinois, and Roger Smith, IFA).

2014. Landowner Workshop in Invasive Plant ID and Control. Cache River Wetlands Center, Cypress, IL. June 28. (Coordinated by the CWMA).

2014. Invasive Species on Your Farm: ID and Control. Dixon Springs Agricultural Center, Agriculture Field Day, Dixon Springs, IL. August 7. (Part of a larger workshop; Coordinated by IFA and University of Illinois Extension - Jim Kirkland, IFA and University of Illinois Extension, and Mike McMahan, IFA President).

2014. ID and Management of Invasive Species. Sustainable Living Expo. Dixon Springs Agricultural Center, Dixon Springs, IL. October 25. (Coordinated by University of Illinois Extension and Shawnee RC&D).

2014. Management of Invasive Plants in Habitat Edges. Goods From Your Woods. Jackson County Extension Office, Murphysboro, IL. November 15. (Part of a larger workshop; Coordinated by IFA (Jim Kirkland), University of Illinois Extension, NRCS, SIUC, CWMA, and IDNR)

Additionally, two management workshops are planned for February 14 and 21, 2015, with University of Illinois Extension and IFA. These workshops will target private landowners, SIPBA members seeking information on Integrated Pest Management with prescribed fire and chemical methods, and Master Naturalists and volunteers in need of training requirements to join the Forest Restoration Support Team (FRST). IFA Executive Director, Stephanie Brown, is also planning a webinar based upon this guide for Invasive Species Awareness Month in May.

This publication is currently available for free through the NRCS, Crab Orchard National Wildlife Refuge Visitor's Center, Giant City State Park Visitor's Center, and meetings of the IFA and Illinois Native Plant Society – or by contacting the CWMA for additional information. A digital copy can be found online at www.rtrcwma.org/Management_SILinvasiveplants.pdf.

Out of \$1800 budgeted for printing of the guide, the final cost for 1500 booklets (printing, shipping, and tax) came to \$1780.56. IFA representatives invested 40 hours at \$20/hour in assisting the CWMA with workshops and outreach (Jim Kirkland – 24, Roger Smith – 8, Mike McMahan – 8).

Thanks to the funding from the Illinois Wildlife Preservation Fund, this information is now available in an accessible form to a wide audience, targeting the geographic region and species of concern in southern Illinois. The availability of this guide enhances the public's ability to control invasive species and increases the ability of the CWMA to fulfill the goal of offering fee technical assistance to landowners and non-profit and government groups.

A hardcopy of the management guide is included with the mailed report.