

Title:

National Wildlife Control Training for Master Gardeners and Homeowners

PI:

Paul Curtis – Cornell University

Cooperators:

Raj Smith – Cornell University

Stephen Vantassel and Scott Hygnstrom- University of Nebraska, Lincoln

Abstract

Human-wildlife conflicts are increasing in urban areas and in particular they create problems for homeowners, backyard gardeners, and suburban farmers. Government wildlife agencies at every level, as well as programs run by NGOs, Cooperative Extension, and IPM, field questions about how to deal with nuisance wildlife. Effective wildlife damage management requires an understanding of wildlife biology, IPM methods, and research-based animal handling and control techniques. The National Wildlife Control Training Program (NWCTP) was created to address the need for professional training, coordinate a uniform training program across states, and to create national standards for nuisance wildlife control and wildlife damage management. Many of the wildlife problems occur in yards and gardens, and can be addressed by the Master Gardener volunteer workforce using IPM methods. This audience needed a user-friendly version of the professional training program, while maintaining high standards of humane pest control.

The results of this project – a wildlife control training guide for Master Gardener volunteers – is available nationwide through the eXtension system at no cost. In addition to the core training modules, we included important information for common species that create damage and nuisance problems around homes and gardens. Providing information to the general public with an optional online course will help reduce the number of questions fielded by extension professionals. We hope that raising the awareness of non-professionals to the use of IPM methods for wildlife control will result in fewer human-wildlife conflicts, less crop and economic damage, and better treatment and respect for wildlife as a resource in our environment.

Background and justification

Integrated Pest Management (IPM) is an effective and environmentally-sensitive approach that relies on a combination of common-sense practices. IPM programs for wildlife control use current, comprehensive, information on the life cycles of problem animals, and their associated interactions with the environment. This information, in combination with available control methods, is used to manage wildlife damage by the most economical means, and with the least possible hazard to people, property, and the environment.

There are few wildlife IPM programs, and even fewer geared to non-professionals. The goal of this project was to take a nationally-recognized program for wildlife control training and make it accessible

to Master Gardener volunteers, homeowner's, landscape professionals, and other individuals who occasionally deal with nuisance wildlife. By emphasizing IPM control methods and prevention, thereby reducing the need for lethal animal control, we have created a training program that is accessible to almost anyone who wants to perform basic management activities to reduce wildlife damage.

Objectives

1. Create a non-professional, wildlife control training program for Master Gardener volunteers and homeowners utilizing the IPM practices and researched-based techniques contained in the National Wildlife Control Training Program (published by Cornell University and the University of Nebraska).
2. Create workbook chapters and lectures appropriate for use in the Master Gardener Program.
3. Create web pages from the workbook for delivery on eXtension so the materials are available to regional and national audiences.
4. Work with the Master Gardener Community of Practice to implement an online webinar to train a distance-based and virtual audience.
5. Perform project evaluation using survey tools and social media to solicit feedback from people using the training program.

Procedures

1. The NWCTP was carefully reviewed for wildlife control techniques that can be safely and effectively applied by non-professionals. Most lethal control techniques were eliminated or modified based on the skill level needed. IPM practices were emphasized (e.g., exclusion, monitoring, and habitat modification), as well as adherence to state and federal wildlife control laws.
2. A core training guide was produced by carefully editing the professional version of the NWCTP with the intention to provide Master Gardener volunteers with a solid foundation in wildlife damage control methods. Individual modules may be selectively used for workshops and other educational programs.
3. An HTML format with appropriate links to web-based resources for use on the eXtension site was created, as well as an online training program. It is our hope that this material may also be available on the NYS IPM website.
4. We reached out to both NYS and national Master Gardener volunteers for their input on content and to prioritize problem species. We have been networking with the Cornell Master Gardener community, and the Master Gardener CoP on eXtension, and the Master Gardener community at the University of Nebraska-Lincoln.
5. Pre- and post-training survey tools will be used to assess the effectiveness of the guide and online programs that have been created. We will be able to determine user knowledge of WDM before and after completing the training program. We will be using social media to solicit user feedback on training practices on an ongoing basis.

Results and discussion

There is clearly a need for research-based, comprehensive wildlife damage control information. Human-wildlife conflicts are on the rise in suburban areas, and so is the enjoyment and sensitivity to backyard wildlife. Humane and ethical treatment of animals is important in our society. That means more emphasis needs to be placed on prevention of wildlife damage and nuisance situations. IPM methodology is well suited to solving and controlling many human-wildlife conflicts. Lethal control measures should be used as a last resort.

Master Gardener volunteers play an important role in helping homeowners and suburban gardeners grow vegetables and landscape plants. When wildlife cause problems volunteers should be prepared to respond with appropriate solutions. The training program that we have developed covers the most important aspects of wildlife damage management from basic principles, to safety and diseases, and animal handling and control methods. Lethal measures were discussed but not emphasized, and we make it clear when to call a professional for assistance.

We have fulfilled an important social need (urban wildlife control) by targeting education of Master Gardener volunteers. However, the material can be accessed by anyone, anywhere, with an internet connection in the hope that we can get other audiences thinking about using IPM methods to solve wildlife-pest problems.

Project locations

The National Wildlife Control Training program is regional and national in scope, and includes wildlife species responsible for conflicts in New York State and the Northeast. In addition, we have worked with Master Gardener volunteers from around the country to make this information more generally available. The core training modules for wildlife control are applicable everywhere; the species-specific information is applicable at the local level, so we have customized priority species for different regions of the country. Our training program will be available both on the national eXtension website and locally on the NYS IPM website.

Samples of resources

A draft version of the curriculum is available on the eXtension website (<http://extension.org>). The materials are still being reviewed and vetted by the Master Gardener community. A final version of the training program will be available in print in February 2014. At that time, the final material will be posted on eXtension and the NYS IPM website. In addition, an online training program will also be available on the eXtension Moodle server.