

2004 Northeast IPM Project Progress Report

A. Grant Data

Grant #: CSREES 2004-03870

Title: **Revision, Expansion, and Maintenance of the Internet Center for Wildlife Damage Management**

Type: Extension Project

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Collaborators:

This web site was collaboratively created with assistance from:

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State(s) involved: New York, Nebraska, Utah, South Carolina

Funding Year(s): 2004-2006

Funding amount: \$30,000

B. Nontechnical Summary. An overview of the project, briefly outlining its context and key components, written to a lay audience. You should cover what you were funded to do, why, and who did it.

Nearly all segments of society experience problems with wildlife. Row crops, forages, rangeland, fruits, vegetables, ornamentals, turf, and livestock are all susceptible to damage by wildlife at various stages of production. Agricultural producers lose an estimated \$45 billion dollars each year due to crop damage caused by deer, voles, blackbirds, and other wildlife species (Conover 2002). In addition, over 75,000 people are injured annually or become ill due to wildlife-related incidents (Conover et al. 1995). For most of these problems, IPM principles could be applied to reduce damage to tolerable levels (Hygnstrom et al. 1994). Pest monitoring is a critical aspect of managing wildlife damage and economic thresholds have been established for some vertebrate species. Pesticides are used occasionally to control problem wildlife, but alternative management systems including habitat modification, exclusion, frightening devices, repellents, trapping, and shooting are more commonly used. Unfortunately, the educational infrastructure for IPM has not

been as well developed for dealing with vertebrate species as it has been for other pests, commodities, and systems. As the number and significance of human-wildlife conflicts increases, so too does the need for efficient transfer of information and technology.

The world-wide web provides an excellent opportunity to consolidate existing and future information on IPM and wildlife damage management. In 1995, we developed the Internet Center for Wildlife Damage Management- ICWDM, (<http://wildlifedamage.unl.edu>), which serves as the clearinghouse for all information on wildlife damage management on the web. Our efforts were supported by grants from the Regional IPM Competitive Grants Program (North Central and Western regions) and the University of Nebraska IPM-Vertebrates Program. The ICWDM features current events, pages that describe damage issues involving more than 70 species of wildlife, and an on-line copy of the book, "Prevention and Control of Wildlife Damage." The ICWDM links to cooperative extension publications in wildlife damage management at 40 universities. As of June 2002, users could search a rapidly growing database of over 900 full text articles or abstracts from proceedings of scientific conferences involved in wildlife damage management.

The ICWDM has been tremendously successful since its inception in 1995. Results from on-line surveys of ICWDM users, however, indicate that a revision and expansion of the website would greatly improve the visibility, utility, ease of navigation and impacts of the website. So much information has been built into the current home page that it takes several seconds to scroll through all of the introductory information and links. We believe that a revised and expanded edition of the ICWDM will significantly increase public awareness and understanding of wildlife damage problems. Our proposed extension project will facilitate distribution of management information to the public and increase communication among resource providers. Ultimately, the ICWDM will increase implementation of IPM practices that will lead to increased economic and environmental benefits.

C. Objectives. Restate your project objectives. After each objective, provide a brief (1-3 sentence) narrative about whether you've achieved it; if it was modified, mention how.

Our measurable objectives include:

1) Increase public awareness of wildlife damage problems (identification and impacts) and management strategies (IPM and alternative approaches);

The ICWDM is accessed over 1,200 times per day by individuals from commercial industry (22%), networks (22%), educational institutions (17%), government institutions (2%), military facilities (2%), and nongovernmental organizations (1%). The scope is international, as the web site is accessed by users from over 40 different countries each month. This site is the number one hit in 9 of the top15 internet search engines when using "wildlife damage" as the key phrase.

A major goal of the redesign of the web site was to access wildlife damage management information through the model of IPM. The heuristic of identification of problems and understanding the ecology of problem is the gateway to the information on the site.

2) Increase public access to agencies, organizations, consultants, and vendors that provide information, materials, and assistance on wildlife damage management;

More than 150 web sites associated with state and federal agencies, private businesses, and organizations, have been linked to the ICWDM. In addition, 325 wildlife businesses from 43 US states and Canada have placed entries in the directory database. The new website has areas for collaborative access for vendors and professionals in the field of WDM to interact and share information in real time.

3) Increase communication among resource professionals associated with IPM and wildlife damage management on the Internet; and

The ICWDM hosts websites for the National Animal Damage Control Association, The Wildlife Society-Wildlife Damage Management Working Group, and the Western Coordinating Committee of Vertebrate Pests in Agriculture, Forestry, and Public Lands. Real time collaboration and access to archives of newsletters and other white papers on WDM make it easier for professionals to find information to create solutions for their stakeholders.

4) Increase adoption of IPM strategies and alternative pest management practices by producers, homeowners, and commercial pest management professionals.

The goal of the website is to use IPM as a lens to view information on WDM. A stakeholder survey needs to be completed to determine the success of using the IPM model for resolving wildlife conflicts.

D. Results.

The new ICWDM web site was announced to the primary audiences and list-servs on July 1, 2005. Our web design team created a new collaborative web site (<http://icwdm.org/>) based on readily-accessible HTML format. The new frames make information much easier to find, and includes expanded search capabilities. We have also added hundreds of pages of additional content from the regional wildlife damage management conferences, along with a searchable text feature.

New components that have been added to the ICWDM, include an interactive “ask the expert” feature, and an e-Zine news feature. We are in the process of developing a referenced wildlife damage photo library and creating searchable document libraries. New information and technologies such as collaborative workspaces, and peer to peer file sharing are being introduced slowly and experimentally to determine their impact on the stakeholders.

E. Impacts. Please answer the following questions to the best of your ability:

1) How many publications were delivered? To whom?

Our web design team created a new collaborative web site (<http://icwdm.org/>) based on readily-accessible HTML format. We have increased the “user-friendliness” of the site and included an instruction box on the front page. Also, information is categorized and readily-accessible in pull-down menus. A key component of the previous web site was the Prevention and Control of

Wildlife Damage. Previously these files existed only as PDFs. In the new website these files have been converted to HTML to facilitate linking the information to other parts of the website.

2) How many more people might adopt IPM practices as a result of your project?

The enhanced web site has only been available a few weeks, and this is too soon for a detailed use analysis. We plan to conduct an electronic survey of users during year 2 to assess the impact of site changes, and plan for further features and site enhancements.

3) Are there other ways in which your work might result in improved use or increased implementation of IPM strategies in the region?

We are looking at continuing to use the model of IPM to focus the stakeholder's approach to vertebrate pest management. Alternative approaches to wildlife control require the stakeholder to properly identify the pest, understand the biology of animal, and implement an ecological solution. Our goal is to make this the defining heuristic of the ICWDM.

We hope that our work serves as model for other agencies producing information on WDM. Our goal is to continue emphasizing the IPM approach, and work with USDA and other agencies or organizations to create educational modules that use the IPM philosophy to resolve WDM conflicts.