

eXtension: A New Opportunity for On-Line, Issue-Based Programming

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Abstract: Individuals and groups interested in educating the public about human-wildlife interactions should consider joining one of the various working groups (Communities of Practice) involved with eXtension. eXtension is a national Extension program designed to unify Extension's presence on the Internet. eXtension provides collaborative tools for the development and management of content that can be published on the world wide web. Experts can participate in several ways, including answering visitor questions, submitting content (including text, images, and video), and reviewing content. Currently, of the 21 identified Communities of Practice, only one, Wildlife Damage Management, is focused on fisheries and wildlife programming.

Key Words: distance education, Extension, eXtension, human-wildlife interactions, Internet

Proceedings, 11th Triennial National Wildlife & Fisheries
Extension Specialists Conference,
October 14-18, 2006, Big Sky, MT

For decades, Land-Grant Universities have "put knowledge to work" through location-based Extension Educators. Educators collected research-based information and adapted it to meet the needs of their particular constituencies. Educators distributed information in a variety of ways, such as by walk-in meetings, telephone, publications, workshops, seminars, and on-site consulting.

In recent years, public use of the Internet for obtaining information continues to rise. Surveys show that 70% of Americans spend 129 million hours per week online (*Internet World 2006*, <http://www.Internetworldstats.com/stats2.htm#north>; *Forbes 2006*, http://www.forbes.com/2006/03/31/china-Internet-usage-cx_nwp_0403china.html). Now that the Internet has become part of mainstream American culture, educators have rightly considered how they might use the Internet to better meet the needs of their constituencies. Many web-based applications have been developed by Extension personnel over the years, but Extension leaders in 2001 decided that Extension should enter the online world in a unified manner to reach this vast audience. This new initiative was named "eXtension."

eXtension

eXtension is an in Internet-based educational partnership of the Land-Grant University system that helps people improve their lives by providing access to research-based information and learning opportunities. Extension's vision was as simple as it was bold. It sought to:

- 1) provide educational products and programs 24/7/365 via the Internet;
- 2) utilize our national strengths to assist in resolving local problems;
- 3) complement the community-based Cooperative Extension System of the Land-Grant Universities by increasing visibility, expanding partnerships, and reaching new audiences; and
- 4) promote collaborative development of Internet-based educational materials that minimizes duplication.

It is important to note that goal of eXtension was not to replace traditional Extension programs. Instead, eXtension would provide educators ways to disseminate their information to new audiences and encourage collaboration in the development of new publications and programs.

eXtension is overseen by the national State Cooperative Extension System in conjunction with the Extension Committee on Policy, National Association of State Universities and Land Grant Colleges, and Cooperative State Research, Education, and Extension System. Communities of Practice (CoP) consist of individuals and organizations that share a common area of interest and have committed to work together to meet the needs of groups and individuals involved in that area (Table 1). The CoPs meet the needs of Communities of Interest (CoI).

Table 1. Communities of Practice funded by eXtension, 2005-2006.

2005	Building Local Economies of the Future Consumer Horticulture Extension Disaster Education Network Financial Security for All HorseQuest Imported Fire Ants Just In Time Parenting Wildlife Damage Management
2006	Beef Cattle Clearing House Caring for the Aged and/or Disabled Adults Corn and Soybean Production Family Caregiving eOrganic Map@Syst: Geospatial Solutions for Rural and Community Sustainability, and Diversity Across Higher Education Pork Information Group Urban Integrated Pest Management US DAIReXNET Youth Literacy in Science, Engineering, and Technology

CoPs are the workhorses of eXtension. Each CoP is responsible for three key areas of content development, namely frequently-asked questions (FAQs), Ask the Expert, and educational materials. The FAQs and Ask the Expert work in tandem as content is generated in response to specific questions submitted by visitors. For example, when a visitor asks a question, the FAQ database is queried to determine if the question has already been answered and registered by the CoP. A new question is then routed to designated members of the CoP who have expertise in that field. After answering the question, the expert decides whether this new question should be posted on the FAQ list.

The majority of the effort centers around the development and publication of educational materials. The CoPs are welcome to adapt and publish previously-created material as well as create new content. With more people gaining access to broadband, educators are encouraged to develop videos, podcasts, blogs, and other interactive training materials to enhance visitor learning. Since members of CoPs are distributed across the country, eXtension adopted Wiki software as the platform for member collaboration. The Wiki allows multiple authors to write, edit, and review content remotely. All authors have direct access to the same documents. The Wiki keeps track of changes in case the authors decide to omit modifications.

While Wiki programming has worked rather well for some educational sites (e.g., Wikipedia), it is unclear whether its advantages outweigh the disadvantages. First, the Wiki forces educators to learn yet another program. Second, the Wiki does not allow for easy conversion of data to the new format. For example, one cannot simply cut and paste content from a web site and place it in the Wiki, as editing of code

is still required. Third, the Wiki employs a flat architecture, meaning that it does not rely on subfolders to organize in a hierarchical way as websites have traditionally used, which forces content creators to find other ways to organize information. Finally, the Wiki lacks advanced site management tools, which would allow changes across multiple pages and bulk upload of images.

Wildlife Damage Management CoP

In 2005, we submitted a proposal to eXtension for funding a CoP in Wildlife Damage Management. Our objectives were to:

- 1) increase public awareness of wildlife damage problems, their impacts, and management strategies;
- 2) increase public access to agencies, organizations, consultants, and vendors that provide information, materials, and assistance on wildlife damage management;
- 3) increase communication among resource professionals associated with wildlife damage management on the Internet, and
- 4) increase adoption of integrated pest management strategies and alternative pest management practices by producers, homeowners, and commercial pest management professionals.

We were successful in receiving funding in 2005 as a “Pioneer CoP.” We received continued funding in 2006, and our eXtension website was launched in January 2007. To achieve the above objectives, we developed a site that incorporates accounts of over 70 species of wildlife that cause damage or nuisance problems. Accounts include links pointing to further control information and resources. We published over 300 FAQs to answer the most common questions regarding the management of wildlife problems. More recently, we posted a series of training videos pertaining to all aspects of wildlife damage management, such as euthanasia, disposal of carcasses, and trapping. Short-term goals include PowerPoint files on zoonotic diseases, and an on-line course on the principles and procedures involved in inspecting property for wildlife damage. Our CoP currently includes 20 experts on wildlife damage management from across the U.S. We anticipate increasing the number of members 5-fold with the incorporation of the new edition of the book, “Prevention and Control of Wildlife Damage” and the “Best Practices for Nuisance Wildlife Control Operators Training Manual.”

We encourage individuals and organizations interested in providing research-based information on wildlife damage management to join our CoP. Participants can assist us in answering FAQs, submitting content, editing and reviewing content, and more. We believe that by working together we can better serve the public.