

4. PROJECT DESCRIPTION

Sub-Project 1: PRONewEngland Pest Management Network

STATE NETWORK PROJECT

Activity 1a. PRONewEngland.org website

Goal 1a. Serve as the state network project hub for pest management communication in New England.

PROBLEM, BACKGROUND, AND JUSTIFICATION

The Internet continues to grow as a primary channel of information in the United States, and New England continues to be at the leading edge of this transition. In November 2004, over 87% of 12-17 year olds were internet users, and over half used it *daily* (Lenhart, 2005). The portion of adult American internet users increased 22% between November 2004 and March 2006. Between October 2005 and October 2006, Americans increased their monthly internet searches by 33% (Lipsman, 2006).

In 2002, over 75% of New England households used the Internet, the highest proportion among nine U.S. census regions (Schoener, 2002). In 2005, New England had the highest residential broadband penetration in the country, 28% above the national average (Anonymous, 2005a). New England farm Internet access is second highest in the nation, 49% above the national average (Anonymous, 2005b). Compared to farmers across the country, New England farmers are the most likely to say they use computers for their farm business (Rainford, 2005).

A majority of Americans say that the next time they need information from a government agency their first stop will be the Internet (Horrigan and Rainie, 2002). Among users who had ever been to a government web site, 74% said they would go to the Internet first for government information (Ibid). Cooperative Extension has recognized a profound transformation in how it communicates with clients, and has launched a major initiative to enhance its presence online (Hutchinson, 2004).

Through the **Pest Resources Online for New England** (PRONewEngland.org) website (<http://pronewengland.org>), the New England Pest Management Network is increasing pest management literacy and public access to pest management information for the 14.2 million citizens in the six New England states. PRONewEngland is unique. It complements and improves access to university and government pest management websites, while also providing original content not available elsewhere.

A question that arises is “Why not just use Google?” Google.com and other search engines are useful tools to find pages related to keywords of interest. But they do not distinguish the true and tested from the inaccurate or biased. The internet is awash with questionable information. In this context, the relationship between citizens and their land grant universities for the delivery of unbiased, reliable information is increasingly important. As one Internet critic stated: “With millions of users posting messages to the network, the valuable gets lost in the dross ... It's up to the reader to separate out the dregs. What's missing from the network are genuine editors.” (Stoll, 2002). PRONewEngland is an edited gateway to valid and regionally appropriate pest management information for New Englanders.

The land grant university brand helps citizens find credible information. But while universities have made great progress in developing solutions to pest problems, they have been less successful at mastering use of the Internet to disseminate information. A leading web usability analyst has stated “I never cease to be surprised at the miserable usability of university websites” (Nielsen, 2005). The pest management sites of the six New England states vary in coverage, quality, navigation, and style. PRONewEngland does not resolve that. But it does provide a single coherent access point to the best resources among the six states, and adds original content not found on those sites. Increasing client access to reliable IPM information through web pages appears at least five times in Northeastern IPM Center priority lists.

Website content, operations, development, and promotion:

INFO is the most visited section of PRONewEngland. It consists of selective directories to the best information available for specific New England pest topics areas: Crop & Livestock Pests; Health, Indoor & Structural Pests; Invasive Species and Natural Resource Pests; Integrated Pest Management; Organic Pest Management; Ornamental, Turf & Greenhouse Pests; and Pesticide & Biotechnology in Pest Management. The INFO section also features a searchable database of 1,077 pest fact sheets and other publications found on New England university and state government websites. Unlike an unrestricted Internet search that draws upon the entire internet, the PRONewEngland Fact Sheet Finder database provides focused access to a restricted pool of credible pest documents written specifically for use in New England.

The PEOPLE section has phone, email and web links to pest management topic contacts in each state. The FEEDBACK page gives visitors a quick and easy way to send comments and after their comments are sent, they are provided contact information for their state network liaison. State liaison contacts are also listed on the “About PRO” page describing the website and the other activities of the New England Pest Management Network.

The site currently has 491 pages and 15,694 hyperlinks. (These numbers do not include the 1,100+ publications in the Fact Sheet Finder database.) PRONewEngland balances breadth of content with clear and direct navigation. Anybody can put files online and call it a website. PRONewEngland does much more than simply meet the requirements for a state network project website. It is developing a brand identity for quality and efficiency as a bridge between the New England Land Grant universities and their pest management stakeholders.

From November 2005 to November 2006, PRONewEngland delivered 293,121 html page views and 275,495 document views (primarily PDF files). These totals only include files hosted directly on the PRO web server. They do not count files such as pest fact sheets, news stories, or other external links that site users located by using the PRONewEngland database and then followed links to those off-site documents.

During that twelve month period there were 108,846 visitor sessions (297 per day) and 20,631 unique visitors. Average visitor session duration was over 19 minutes. The number of unique visitors increased by more than 50% over the previous year. The full web traffic is online at:

<http://pronewengland.org/INFO/PROpubs/WebTraffic/PROWebTraffic.htm>

In January 2006 we began distribution of 240,000 full-color, glossy cardstock Pest ID cards with information about the website on the reverse side. Each state was provided a large three-panel display to use at meetings to promote the web site. Printing costs for these items was paid for by a separate EPA grant, design and distribution was handled as part of PRONewEngland development.

OBJECTIVES AND ANTICIPATED IMPACTS

Objective 1a. Continue development and operation of the PRONewEngland (Pest Resources Online for New England) website.

Objective 1a1. Upgrade the fact sheet database for more complete listings, better search engine performance, and more complete tracking of web traffic.

Objective 1a2. Maintain and continue development of the PRONewEngland.org information directories.

Objective 1a3. Validate the PRONewEngland.org People directories (“Pest Buster”, Interest Group, and University-State agency contact listings).

Objective 1a4. Conduct more detailed website traffic analysis.

Impacts: It is not possible to predict site traffic in the coming year, but with 1) increased number of pest fact sheets in the database, 2) a more powerful fact sheet search tool, 3) counting visits to those fact sheets as PRONewEngland traffic, 4) more regular news updates, 5) more complete event listings, and 6) continued increases in broadband penetration and internet use, it seems reasonable to anticipate another 30% increase in annual visitor sessions, unique visitors, page views, and document views in the year following these enhancements.

APPROACH AND PROCEDURES

Objective 1a1. Upgrade the fact sheet database for more complete listings, better search engine performance, and more complete tracking of web traffic.

Search New England university and state agency web sites for new documents to add to the database. Review of all existing database entries for link validity. Review keyword listings for each document to improve search efficiency. Build intermediate forwarding pages for each linked document to allow use of more sophisticated Google site-search utility for searches, and also to allow monitoring page views and visitor sessions to documents accessed via the fact sheets database.

Objective 1a2. Maintain and continue development of the PRONewEngland.org information directories.

Monthly checks of link integrity through the site analysis function of FrontPage 2003 and Microsoft Server 2003. Continue searching for alternative online sources pertinent to New England pest management concerns to improve the information directory page listings (see <http://pronewengland.org/proinfo.htm>). Expanding the lists is NOT the objective; the objective is to provide a concise list of the best resources available.

Objective 1a3. Validate the PRONewEngland.org People directories (“Pest Buster”, Interest Group, and University-State agency contact listings).

Contact each listed person to see if information is current or if another person is a more appropriate contact. Use the contacts to inform people how they and their programs are represented on the PRONewEngland site. Ask for reciprocal links to provide more feeder channels from related university and state agency websites.

Objective 1a4. Conduct more detailed website traffic analysis.

Reorganization of the site’s directory structure completed in 2006 and installation of more powerful web usage analytic software in 2007 will allow more accurate

measures of how the site is used and by whom. In addition to basic web traffic statistics, a detailed web traffic report will:

- 1) Identify visitor location at the state level,
- 2) Discriminate traffic by human visitors from that by other computers (web bots that scan websites to update search engine databases),
- 3) Characterize how visitors arrive at the site (most popular keywords, referral sites, direct connections from stored Favorites/Bookmark links),
- 4) Characterize how visitors leave the site (most common exit pages),
- 5) Identify which content areas are most visited in greater detail than is currently possible, and
- 6) Interpret web traffic analysis in terms of site strengths and weaknesses, with recommendations for improvement.

These activities will be conducted by Co-Director Glen Koehler, leveraging the infrastructure and experience gained in developing and operating the site since its inception. A supervised undergraduate worker will assist with fact sheets database validation, document recruitment, and link coding for more complete web traffic monitoring.

EVALUATION PLANS

1. Progress report. The end of year State Network Project progress report will include the completion date or status for each of the objectives 1a1 – 1a7.

2. Timeline. Activities will begin upon confirmation of funding. Completion expected by December, 2007.

Activity 1b. Stakeholder IPM Priorities

Goal 1b. Meet with pest management stakeholders in each of the New England states to assess IPM needs and opportunities and to represent the Northeastern IPM Center.

PROBLEM, BACKGROUND AND JUSTIFICATION

The PRONewEngland Pest Management Network (PRONewEngland) has established contacts with every known pest management stakeholder group in New England. Each of the state liaisons has longstanding and positive relationships with a broad range of stakeholders in their state.

The PRONewEngland Advisory Committee (AC) was comprised of 35 members from a variety of New England pest management constituencies. The AC met for a regional priority-setting workshop in April 2002, and for a "New England Pest Management Issues Conference" in December 2004 (along with invited guests from EPA, IR-4 and state agencies). The 199 organizations included in the stakeholder directories on the PRONewEngland website (<http://pronewengland.org/people.htm>) were contacted by a telephone survey to ask about their priorities in fall 2003. In 2006 a mini-survey was mailed to those stakeholder groups, and also to university and state agency program contacts. We followed this with a structured telephone survey. Responses to the mail/telephone survey are in the 2006 PRONewEngland State Network Project progress report.

OBJECTIVES AND ANTICIPATED IMPACTS & APPROACH AND PROCEDURES

Objective 1b. Engage New England stakeholders in identifying IPM priorities. Serve as liaison between the Northeastern IPM Center and the New England stakeholder community.

State Advisory Committees. With approval from the Northeastern IPM Center, we have decided that pooling feedback from meetings of single-state advisory committees will be more efficient than convening a single regional AC, and will allow greater total representation of interests. Each state liaison will organize a meeting of their state advisory committee to discuss current PRONewEngland and Northeastern IPM Center activities, and to identify state and regional IPM priorities. Each meeting will include an invited representative from the Northeastern IPM Center. State liaisons will be responsible for sending a summary of stakeholder comments to Glen Koehler for compilation into a regional stakeholder priorities report which will be included in the 2007 State Network Project progress report. State liaisons will also be asked to share topics and procedures to improve future committee meetings.

EVALUATION PLANS

- 1. Progress report.** The 2007 State Network Project progress report will include:
 - a) A list of the advisory committee meeting dates and participants in each state,
 - b) Compiled stakeholder feedback from the six New England states, and
 - c) Suggestions for future state advisory committee meetings.
- 2. Timeline.** State advisory committees will meet by November, 2007. The progress report with stakeholder feedback will be sent in December, 2007.

Activity 1c. Pest management query responses

Goal 1c. Represent New England in regulatory decisions through prompt regional responses to EPA and USDA pest management queries.

PROBLEM, BACKGROUND AND JUSTIFICATION

Through our state liaisons relationships with stakeholders and other key contacts in each New England state, PRONewEngland has the ability to acquire stakeholder responses to EPA and USDA queries.

**OBJECTIVES AND ANTICIPATED IMPACTS
& APPROACH AND PROCEDURES**

Objective 1c. Respond to all pesticide queries received from the Northeastern IPM Center, EPA or USDA.

Glen Koehler, University of Maine, will condense queries down to the essential elements in a standardized form and forward the revised queries to state liaisons. Each state liaison will send the query to appropriate contacts in their state, and follow-up with phone or email contacts if responses are not received by a day before the query deadline.

State network liaisons will document pesticide query performance with a year-end list of queries handled, showing persons contacted, summary of responses, due date, and completion date.

EVALUATION PLANS

- 1. Progress report** The 2007 State Network Project progress report will include
 - a) A list of queries handled by each state, and
 - b) The percentage of queries each state completed within the allotted time.

- 2. Timeline.** Pesticide queries are ongoing.