

SEMI-ANNUAL NARRATIVE PROGRESS REPORT FOR CALENDAR YEAR 2004
USDA APHIS PPQ EASTERN REGION: CONNECTICUT
BIOLOGICAL CONTROL
Cooperative Agreement Number 04-8209-0195-CA

Progress made toward accomplishment of calendar year 2004 work plan objectives during the period July 1, 2004 through December 31, 2004.

I. STATUS OF ACTIVITIES

Biological Control of Purple Loosestrife

2004 was an extremely successful year for the purple loosestrife (*Lythrum salicaria*) biological control program. Following the well-attended beetle farming workshop that was held in Yalesville in March, 100 new beetle farmers participated in the program in 2004. Mary Mushinsky and Illisa Kelman from the Quinnipiac River Watershed Association served as collaborators during the year. Approximately 300,000 *Galerucella* beetles, purple loosestrife biological control agents, were reared and released into 20 new wetland sites, as well as a number of supplemental releases that occurred in previously established locations. The total number of beetles is equivalent to the number that were reared and/or released in Connecticut during the previous eight years combined. The 2004 *Galerucella* population included 30,000 beetles reared by Donna Ellis at the University of Connecticut Plant Science Research and Teaching Facility. These insects were released in wetlands infested with purple loosestrife in Fairfield, Hartford, Litchfield, and Tolland Counties.

New generation *Galerucella* beetles reared by the beetle farmers were introduced into additional wetland habitats being overrun with the invasive plant purple loosestrife. Feeding damage by the beetles in the short time they were present on the plants during the 2004 summer following the releases was observed at all locations. Impacts by these biological control agents will become more evident over the next several years as the beetles become established and increase in population.

Participants in the beetle farmer program included individuals, families, schools, Scouts, and organizations that reared beetles, provided purple loosestrife plants on which to rear the beetles, and/or allowed the beetles to be released on their property. Partnerships established or continuing during 2004 included the Connecticut Department of Environmental Protection, Pratt and Whitney, the Quinnipiac River Watershed Association, the Girl Scouts of America, the Boy Scouts of America, Friends of Ball Pond, University of Connecticut faculty, Westmoor Park Staff in West Hartford, West River Memorial Park staff in New Haven, Wallingford Country Club, Lake Kenosia residents in Danbury, Danbury Department of Public Health, the Juniper Ridge Tax District in Danbury, the Still River Greenway in Torrington, Simsbury Conservation Commission, Covenant Village in Cromwell, and The White Memorial Foundation in Litchfield.

The beetle farmer program will continue in 2005, beginning with a workshop presented again in the spring. Beetlemania is catching on!

II. STATE SURVEY COORDINATOR ACTIVITIES

Websites

Additional materials were added to the “Beetle Farmer” section of the University of Connecticut Integrated Pest Management (IPM) website at www.hort.uconn.edu/ipm/ (Marilyn Chase, webmaster). Beetle Farmers are referred to the website to gather information on the program. Educational outreach continues to significantly increase for purple loosestrife biological control following a number of articles that have been published in Connecticut newspapers during the past year, and several of these are posted on the website as well. The IPM website contains a PowerPoint presentation with step-by-step instructions on growing purple loosestrife to rear the beetles, a detailed rearing guide, color images of the insects, consent forms for new release sites, newsletter and newspaper articles, and other relevant information.

Presentations

- Connecticut River Watershed Council Annual Meeting, Springfield, MA, January 14, 2005. Invited speaker for regional meeting. Presentation entitled, “Aquatic Invasive Plants.”
- New England Pest Management Issues Conference, Portsmouth, NH, December 9, 2004. Invited speaker for regional conference. The presentation, entitled “Invasive Species, was given during the session “New England Stakeholder Concerns.”
- Cornucopia-Fest 2004, Storrs, CT, October 3, 2004. Question-and-answer sessions on Integrated Pest Management, the new IPM curriculum, invasive plants, and purple loosestrife biological control.
- Four training sessions on purple loosestrife biological control were conducted for program participants in September in wetlands throughout the state.

Teaching

- Guest Lecturer, PLSC 204, Integrated Pest Management, November 9, 2004.
- Guest Lecturer, PLSC 257, Ecology and Control of Weeds, November 4, 2004.
- Loomis Chaffee School, Windsor, CT, November 2, 2004. Guest Lecturer for an Advanced Placement Environmental Science class.
- Guest Lecturer, SAPL 041, Plant Pest Control, September 17, 2004.

Curriculum Developed

- Integrated Pest Management (IPM) Connecticut Curriculum. 2004. A new science-based curriculum was developed for students in kindergarten and grade 1. The curriculum will also be available for 4-H and other youth groups. The curriculum, which includes 5 units and 22 lessons with supplemental materials, was developed by R. Ashley, D. Ellis, D. Schimmel and C. Kusmer through a grant from the Bingham Trust.

Magazine Articles

- “Invasive Patch is Spreading Inland!” Fall 2004. Article written for The Sou’wester Breeze by Andrea Jakiela based on the beetle farming project coordinated by D. Ellis. Page 13.
- “TMS Ecology Club Combats Purple Loosestrife.” September 2004. Article written for Tolland Monthly by R. Gavin based on purple loosestrife beetle farming project coordinated by D. Ellis. 1 page.

Commentaries

- Ellis, D.R. 2004. Invasive Plants - A Growing Concern. 2 pages. The commentary was written to present current issues on invasive plants and was disseminated to the news media via the University of Connecticut Communications Office.

Newsletter Articles

- “Did You Know?” University of Connecticut Home and Garden News, November/December 2004, page 4.
- “New IPM School Curriculum Offers Hands-on Learning.” July/August/September 2004. University of Connecticut College of Agriculture and Natural Resources Journal, Vol. 11(3):pp. 1 and 4. Article written by Kim Markesich based on interviews with D. Ellis and others regarding a new Integrated Pest Management curriculum recently developed for schools and 4-H groups.
- “Prevention Through Public Awareness.” September 2004. Article published in Roadsides [Federal Highway Administration, Vol. 11(3):10] that included information on the Connecticut Invasive Plant Working Group (D. Ellis, Co-Chair).

Newspaper Articles

- “Sellers Dispute State Approach to Invasives.” Article written by Luke Foster for the Journal Inquirer on September 14, 2004. Based on interviews with D. Ellis and others regarding invasive plants and an October 2004 invasive plant symposium organized by the Connecticut Invasive Plant Working Group.
- “Invasive Plants Plague State.” Article written by Gail Daly for the Willimantic Chronicle in September, 2004. Based on interviews with D. Ellis and others regarding invasive plants and new legislation.
- Editorial written by Jim Kevlin for the Norwich Bulletin on August 4, 2004. Based on interviews with D. Ellis and others regarding invasive plants.

- “Measure Will Ban Backyard Invaders.” Article written by Brittany Oat for the Norwich Bulletin on August 1, 2004. Based on interviews with D. Ellis and others regarding purple loosestrife and other invasive plants.
- “First Beetles Released in Yalesville.” Article written for The People’s Press, Mid/Late July, 2004. Based on information about the purple loosestrife biological control program and a Beetle Farming Workshop conducted by D. Ellis.
- “Ball Pond View.” Article written by Helen Obligado for the Citizen News on July 14, 2004. Based on the purple loosestrife biological control project and beetle farming.

*Submitted by Donna Ellis
31 March 2005*