

# *Beauty and the Beast: Purple Loosestrife Biological Control Update*



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**Purple Loosestrife**

*Lythrum salicaria*





# *Galerucella* Beetle Life Cycle



Adult



Eggs

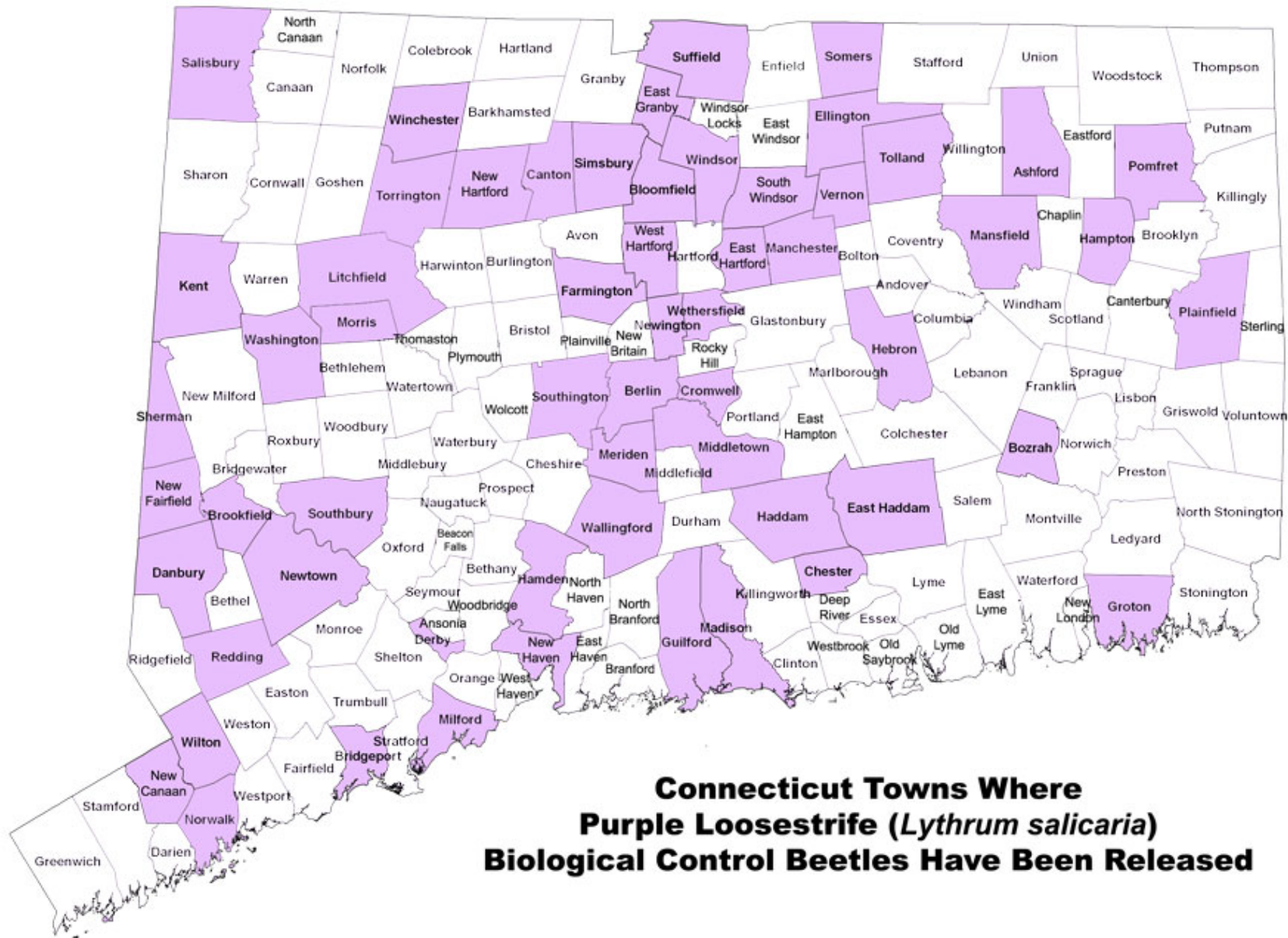


Larvae









**Connecticut Towns Where  
Purple Loosestrife (*Lythrum salicaria*)  
Biological Control Beetles Have Been Released**





**Danbury, CT  
2003**





# Danbury 2010





# Danbury 2016







**2001**

**Wethersfield**



**2015**



**2006**

**Manchester**



**2015**









**Cromwell**





### Purple Loosestrife Biological Control

UConn is proud to participate in a statewide management program for a non-native invasive plant, purple loosestrife (*Lythrum salicaria*). Biological control, the use of natural enemies to reduce an invasive plant's population, is a sustainable, low-input method to control purple loosestrife in wetlands, such as Mirror Lake on the UConn Storrs campus.

*Galerucella* leaf-feeding beetles are approved for biological control of purple loosestrife. These beneficial insects have been introduced into Connecticut wetlands since 1996. The beetles feed primarily on purple loosestrife leaves, stems, and flowers but do not prefer other kinds of plants. Feeding injury by the beetles helps to reduce purple loosestrife populations that invade wetland habitats in Connecticut and throughout the US and allow native plants to thrive. Since the statewide purple loosestrife biological control program began, approximately 2 million *Galerucella* beetles have been introduced into more than 100 wetlands in Connecticut where purple loosestrife control is needed.

The Beetle Farmer Program was initiated in Connecticut to enhance educational outreach for biological control and to increase the distribution of the *Galerucella* beetles in the state. For more information, please contact Donna Ellis, UConn Department of Plant Science & Landscape Architecture (phone 860-486-6448; email [donna.ellis@uconn.edu](mailto:donna.ellis@uconn.edu)) or visit the UConn Purple Loosestrife Program website at [www.purpleloosestrife.uconn.edu](http://www.purpleloosestrife.uconn.edu).

**UConn** COLLEGE OF AGRICULTURE,  
HEALTH AND NATURAL RESOURCES  
PLANT SCIENCE AND LANDSCAPE ARCHITECTURE  
EXTENSION





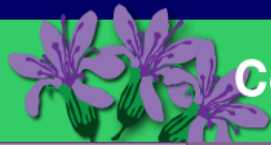
# UConn Purple Loosestrife Program

[www.purpleloosestrife.uconn.edu](http://www.purpleloosestrife.uconn.edu)



University of  
Connecticut

Connecticut Cooperative Extension System  
College of Agriculture and Natural Resources



## Connecticut Purple Loosestrife Program

[CT Purple Loosestrife Program](#)

[What is Purple Loosestrife?](#)

[Biological Control](#)

[Alternative Plants](#)

[Contact Info](#)

[Related Links](#)

[Monitoring](#)

### Connecticut Purple Loosestrife Program

Integrated Pest Management (IPM) methods can be used to control invasive plants in backyards, in parks, and in natural landscapes. IPM technologies include the use of biological, mechanical, cultural, and chemical controls. Biological control, the use of natural enemies to reduce an invasive plant's population below a biological or economic threshold, is a sustainable, low-input method to control a widespread invasive plant, purple loosestrife (*Lythrum salicaria*).

*Galerucella* leaf-feeding beetles have been approved for biological control of purple loosestrife, and these beneficial insects have been introduced into Connecticut wetlands since 1996. The beetles feed primarily on purple loosestrife leaves, stems, and flowers but do not prefer other kinds of plants. Feeding injury by the beetles helps to reduce purple loosestrife populations that invade wetland habitats in Connecticut and throughout the US.

The Beetle Farmer Program was initiated in Connecticut in 2004 to enhance educational outreach for biological control and to increase the distribution of the *Galerucella* beetles in the state. Raising beetles to control purple loosestrife through the Beetle Farmer Program is an exciting opportunity for community involvement for people of all ages, including K-12 teachers and students, conservation groups, Scouts, senior citizens, and families. If you know of a site invaded by purple loosestrife where biological control is desired, or if you would like to raise *Galerucella* beetles to release at a particular site, become a Beetle Farmer and start this successful program in your community.



Purple Loosestrife at Mirror Lake

To sign up for the Beetle Farmer Program, contact Donna Ellis at the University of Connecticut [phone (860) 486-6448; email [donna.ellis@uconn.edu](mailto:donna.ellis@uconn.edu)]. The primary vehicles we use for communicating information are the University of Connecticut Beetle Farmer website ([www.hort.uconn.edu/ipm](http://www.hort.uconn.edu/ipm)) and the Beetle Farmer List Serve (an electronic mailing list). The website contains photos and descriptive information about purple loosestrife and the *Galerucella* beetles, a PowerPoint presentation with step-by-step instructions on beetle farming, maps showing towns and counties where the beetles have been introduced, a rearing guide for the beetles, newspaper articles, program summaries, and much more. Beetle Farmers receive timely information about the program via the List Serve in an interactive setting.



# Connecticut Purple Loosestrife Program 1996-2016

- 725 Beetle Farmers trained
- 110 new wetland sites
- 2,000,000 biological control agents released
- Participants include:
  - Municipal staff, land trusts, landowners
  - Teachers and students
  - Scouts and Scout leaders
  - Master Gardeners



UConn Holster Scholar Project

Alyssa Matz

Investigating the Chemical Signals  
of *Galerucella* Spp.  
for Effective Biological Control  
of *Lythrum salicaria*







**For more information:**

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