



## Farming with Beneficial Insects for Pest Control: A Conservation Biological Control Short Course

Learn how to support native beneficial insects – predators and parasitoids of pests – in your farm, orchard, or garden.

**Monday July 16, 2018**

9:00 AM – 4:00 PM

The University of Wyoming SAREC

2753 State Highway 157

Lingle, WY 82223

**Course Registration Fee: \$45**

Space is limited! Pre-registration is required.

<https://tinyurl.com/wyomingcbc>

*Continuing education credits offered:*

*CCA (6 CEUs), SAF (5 CFE credits), TWS (5.5 contact hours), Pesticide Applicator (CEUs TBD)*

Conservation biological control is a science-based pest management strategy that seeks to integrate beneficial insects back into cropping systems for natural pest control. In this full-day course, learn about supporting beneficial insects that provide pest control, how common farm practices can impact beneficial insects, and how to assess and create farm habitat for beneficial insects.

Registration includes The Xerces Society's Conservation Biological Control Toolkit which includes Xerces' book, *Farming With Native Beneficial Insects*, as well as habitat management guidelines and relevant USDA-NRCS and extension publications.

Lunch is NOT provided. Please plan to bring a sack lunch and a refillable water bottle.

### SHORT COURSE TRAINING SKILLS AND OBJECTIVES

- The importance of beneficial insects—predators and parasitoids that attack insect pests.
- Overview of conservation biological control and integrated pest management (IPM).
- Become familiar with the most common beneficial insect groups.
- How to recognize the habitat needs of beneficial insects and identify habitat deficiencies.
- Planning for habitat improvements—site prep, insectary plantings, hedgerows, beetle banks...
- Best management practices to minimize potential negative impacts of farm practices on predators, parasitoids, and pollinators.
- USDA conservation programs—technical and financial assistance to enhance diversity on farms.

# Farming with Beneficial Insects for Pest Control

## Acknowledgements

This Short Course is made possible with the support of Western Sustainable Agriculture Research & Education. Special thanks to The University of Wyoming James C. Hageman Sustainable Agriculture Research and Extension Center (SAREC) for providing the venue and course support.

## Reasonable Accommodations

The Xerces Society & the USDA NRCS provides reasonable accommodations for special events with adequate notice. To request accommodation, please contact Thelma Heidel-Baker at 612-770-6793 or [thelma@xerces.org](mailto:thelma@xerces.org) by Friday, June 9, 2018.

## Photo credit

Ambush bug on black-eyed Susan *Rudbeckia hirta*, Thelma Heidel-Baker

## COURSE AGENDA (tentative)

Welcome

### Module 1 Farming with Beneficial Insects: Conservation Biological Control (CBC)

- Role of beneficial insects in conservation biological control
- Status of beneficial insect conservation & summary of conservation biocontrol case studies

### Module 2 Farm Practices for Beneficial Insects

- Overview of common farm practices and their impact on conservation biocontrol
- Mitigating potential negative impacts of farm practices on beneficial insects

Break

### Module 3 Designing and Restoring Habitat for Beneficial Insects

- Conservation practices that support beneficial insects (beetle banks, buffers, windbreaks, cover crops, field borders, hedgerows, insectary strips, wildflower meadows, and more)
- Habitat conservation methods (site preparation, propagation, and maintenance)

### Conservation biocontrol research in Wyoming– (Guest Speaker TBD)

Lunch Please bring your own sack lunch.

### USDA Farm Bill Programs Supporting Beneficial Insects (USDA NRCS, Speaker TBD)

- USDA Conservation Programs and Practices supporting pollinators, other beneficial insects, and other wildlife conservation

### Module 4 Common Beneficial Insect Groups

- Introduction to beneficial insects and the ecological services they provide
- Summary of beneficial insect biology and habitat needs
- Profiles of common predators and parasitoids and the insect pests they attack

### Module 5 Assessing Baseline Farm Conditions for Beneficial Insects

- Overview of habitat diversity values
- Introduction to the Beneficial Insect Habitat Assessment Guide

Field Activities

- Scouting and identification activity
- Habitat assessment for beneficial insects

Additional Resources and Wrap-Up

- Questions
- Evaluations
- Raffle

## INSTRUCTORS

Thelma Heidel-Baker, Conservation Biocontrol Specialist, Xerces Society

## GUEST SPEAKERS (TBD)