

# Integrated Weed Control Project Biocontrol Release Report (2005-2014) -San Juan County-

Washington State is facing an invasion of non-native, highly invasive noxious weeds, including knapweeds, purple loosestrife, St. Johnswort, Canada thistle, Scotch broom, and Dalmatian toadflax. Non-native noxious weeds destroy biological diversity, decrease forage, increase erosion potential, and decrease land values across the state and western USA. Washington State landowners and land managers often do not have the time, funds or expertise to implement an integrated control strategy. The Integrated Weed Control Project (IWCP) assists with implementation by providing biological control agents free of charge to those with appropriate release sites. In addition, our project further addresses this need by educating and engaging land managers and landowners for a better understanding of invasive weed issues and the importance of prevention, early detection/rapid response, integrated management tools and restoration to solve their weed problems.

#### 2014

- 1 release; 250 biocontrol agents (BCA)
  - 1 weed species
    - Purple loosestrife
  - 1 BCA species
    - Galerucella spp.

## 2013

- 3 releases; 600 biocontrol agents (BCA)
  - 1 weed species
    - Scotch broom
  - 2 BCA species
    - Bruchidius villosus, Exapion fuscirostre

#### 2012

- 2 releases; 500 biocontrol agents (BCA)
  - 1 weed species
    - Purple loosestrife
  - 1 BCA species
    - Galerucella spp.

# 2011

- 6 releases; 1600 biocontrol agents (BCA)
  - 2 weed species
    - Purple loosestrife, Scotch broom
  - 1 BCA species
    - Bruchidius villosus, Galerucella spp.

#### 2010

- 4 releases; 1340 biocontrol agents (BCA)
  - 3 weed species
    - Purple loosestrife, Scotch broom, Canada thistle
  - 3 BCA species
    - Bruchidius villosus, Galerucella spp., Urophora cardui

## 2009

- 5 releases; 3320 biocontrol agents (BCA)
  - 4 weed species
    - St. Johnswort, purple loosestrife, meadow knapweed, Canada thistle
  - 4 BCA species
    - Chrysolina spp., Galerucella spp., Larinus obtusus, Urophora cardui

#### 2008

- 12 releases; 4900 biocontrol agents (BCA)
  - 4 weed species
    - Scotch broom, purple loosestrife, meadow knapweed, Canada thistle
  - 4 BCA species
    - Bruchidius villosus, Galerucella spp., Larinus obtusus, Urophora cardui

#### 2007

- 20 releases; 6164 biocontrol agents (BCA)
  - 6 weed species
    - St. Johnswort, Scotch broom, purple loosestrife, meadow knapweed, tansy ragwort, Canada thistle
  - 9 BCA species
    - Agrilus hyperici, Aplocera plagiata, Bruchidius villosus, Chrysolina spp., Galerucella spp., Larinus obtusus, Longitarsus jacobaeae, Nanophyes marmoratus, Urophora cardui

## 2006

- 13 releases; 4648 biocontrol agents (BCA)
  - 4 weed species
    - St. Johnswort, purple loosestrife, meadow knapweed, Canada thistle
  - 7 BCA species
    - Agrilus hyperici, Aplocera plagiata, Chrysolina spp., Cyphocleonus achates, Galerucella spp.,
       Larinus obtusus, Urophora cardui

#### 2005

- 4 releases; 3869 biocontrol agents (BCA)
  - 2 weed species
    - Purple loosestrife, meadow knapweed
  - 2 BCA species
    - Galerucella spp., Larinus obtusus