

Sellwood Neighborhood Biocontrol Migration Event Fact Sheet From the Oregon Department of Agriculture

For more information please contact:

Oregon Department of Agriculture
Noxious Weed Control Program
635 Capitol St. NE
Salem, OR 97301
503-986-4621

- The *Galerucella* beetle migration is only expected to last a few more days, although with current unusual weather patterns it is difficult to predict exactly.
- While the beetles may feed on plants other than purple loosestrife, they are unlikely to reproduce on other plants and should not become established outside the wetland.
- The beetles do not bite and are not harmful to humans, pets or wildlife.
- The best course of action for residents is to maintain the health of their plants to the best of their abilities in order to give them the best chance at regeneration.
- If insect control products are desired, residents should consult with local home and garden or OSU extension personnel to find ones that are labeled for control of leaf-eating beetles and for the site used. Read and follow all label instructions.
- ODA has managed a safe, effective biocontrol program in Oregon for over 40 years using tested, federally-approved agents.
- After many years of testing and federal approval, *Galerucella californiensis*, a successful natural predator of purple loosestrife, was released in Oregon in 1992.
- The current *Galerucella* leaf beetle migration event in Sellwood is unprecedented and likely the result of a “perfect storm” of environmental factors that are very unlikely to occur together again.
- Purple loosestrife, the target exotic invasive weed, has the potential to cause over \$28 million in economic damages through disruption of wetland ecosystems.
- Managing purple loosestrife without biocontrol would require multiple herbicide applications over large amounts of sensitive wetland habitat.
- Because the purple loosestrife population has been hard hit by the beetles this year, there should be much less plant material available for food in subsequent years and biocontrol population explosions to this extent are not expected to happen again.

- This non-target mass feeding event was not anticipated, and very unfortunately negatively impacted residents in the Sellwood area. However, the huge reduction in the invasive purple loosestrife will give the wetland a huge boost toward returning to healthy ecological function, and achieving the same level of control of purple loosestrife without insects would have required broad application of herbicide.

Further information:

- Purple loosestrife, an exotic invasive plant that infests wetlands and riparian areas, has the potential to cause over \$28 million in economic damages if it were to spread to the 15 million plus acres of available habitat in the state. It negatively impacts water quality, recreation and species diversity through its disruption of the ecosystem.
- After extensive safety testing, the USDA-approved biological control agents *Galerucella californiensis* and *Galerucella pusilla*, or leaf beetles, were first released in the state in 1992 and first released in the Oaks Bottom wetland ten years ago – to ODA’s knowledge the first time they were released in Oregon on a large expanse of purple loosestrife so close to a residential area.
- After multiple failures to establish because of flooding patterns in the wetland, they finally established in 2013 and overwintered successfully in 2014.
- This year’s extreme population spike appears to be the result of a “perfect storm” of heavy purple loosestrife growth providing abundant food, favorable water conditions, and an unusual weather pattern which created an especially long growing season for the insects.
- Once the insects hatched they decimated their host food source and began to seek alternative sources before they overwintering; they migrated up out of the wetland into the Sellwood neighborhood on an unprecedented scale.
- They were most commonly found clustering and feeding on plants in the rose family and on crape myrtle, and were also observed on a plant in the waxweed family.
- *Galerucella californiensis* & *Galerucella pusilla* have one generation per year and deposit eggs on purple loosestrife from April to June. After laying eggs the adults begin to disperse to new areas during July - August, eggs are not normally laid again until the following spring. Adults feed on foliage before going into hibernation and overwinter in the adult stage.