

**INVASIVE SPECIES CONTROL PROJECTS (R1 SMALL GRANTS)  
2015 FINAL REPORT**

Project Title: Peregrine Marsh Restoration; Reed Canary-Grass

Station: Ankeny NWR

Contact Person: Graham Evans-Peters, Refuge Manager

Project Description:

Peregrine Marsh will be a focal point of the Ankeny Hill Nature Center, a joint partnership between USFWS and Salem Audubon Society (SAS), which is a planned environmental education and interpretive center that will serve an estimated 135,000 visitors annually. Peregrine Marsh offered the nearest term restoration opportunity that could be completed prior to the construction of the Nature Center in summer 2017. The marsh was originally created in the late 1990's but over the last 20 years reed canary-grass (RCG) has become a monoculture on over 50% of the wetland, warranting a restoration prescription. Restoration involved a variety of treatments to address RCG eradication including mowing, multiple herbicide applications, RCG sod removal, lowering pond bottom elevations in RCG dominated zones (i.e. 6"), heavy disking to promote desiccation of rhizomes, and heavy seeding of desirable native emergent species. These treatments will restore a diverse native plant community that will increase abundance and diversity of birds, thereby contributing to overall project objectives of SAS and the Refuge.

Invasive Species Targeted: reed canary-grass (*Phalaris arundinacea*)

Project Completion Date or Estimated Completion Date: 10/14/15

Project Results: Our goal was to achieve <10% cover of RCG within the first two years post-restoration via initial treatment and intensive spot herbicide applications which will be determined this spring. I am very optimistic we will have achieved that goal. Permanent control of a competitive invader like RCG is nearly impossible in the absence of active management, yet our approach was designed to limit annual maintenance. Our multi-faceted IPM approach that includes proper site preparation, earthwork that promotes deeper emergent habitat, annual spot herbicide treatment, and a cyclic disturbance regime (i.e. disking every 5 years) will best accomplish our goal. Project treatments were well timed and executed well. We initiated drawdown in April, mowed in early June, applied herbicide in late June and mid-July, disced the wetland 3 times from late July through August, completed dirt work in early Sept., and seeded in early Oct. Dirt work included lowering the berm by up to 8 inches in places, raising the spillway by 4 inches, excavating 3 swales 8-12" deep, and scraping reed canary sod (~ 6") in the most infested areas. We seeded these swales with wapato, bur-reed, and a few other deeper water emergents.

Number of Acres Treated: 15

Number of Acres Inventoried and/or Mapped: n/a

Number of Acres Restored: 15

Total Grant Amount: \$14,300

Breakdown of Expenditures:

<b>Category</b>	<b>Total \$ Spent</b>	<b>% of Total Grant</b>
Equipment/Supplies	6000	42%
Chemical	200	1%
Biocontrol Agents	n/a	
Travel (mobilization)	1000	7%
Biotech/Contractor Salary	4150	29%
Restoration Materials	1950	14%
Other (project admin, permitting)	1000	7%
<b>TOTAL</b>	<b>14,300</b>	