

Wyoming Bio Control Steering Committee  
450 N. 2<sup>nd</sup> St., Rm 325  
Lander, WY 82520



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## Perennial Pepperweed (PPW) Control Fact Sheet

### Reason for Concern:

- Highly invasive mustard of Eurasian origin
- Invades a wide range of habitats especially riparian and sub-irrigated areas
- Reproduces vegetatively and by seed to form dense monocultures
- Reduces bio-diversity, increases soil salinity and is toxic to livestock
- Wyoming has over 100,000 acres infested with PPW with 14 Wyoming counties report increasing or static PPW populations despite chemical control efforts.
- Costs to control PPW with herbicide average \$110 per acre (Fremont County data)

**Biological Control Progress:** Beginning in 2004, the initial surveys found 5 species identified as potential bio agents for release on PPW in North America. Currently 3 agents show good potential: *Ceutorhynchus marginellus*, a gall-forming weevil; *Melanobaris* sp. n. pr. *semistrajata*, a root-mining weevil; and *Metaculus lepidifolii*, an eriophyid mite species which stunts plants and inhibits flowering and seed production. Several years of testing are needed before any of these agents can be considered for safe and effective release in North America. The search for additional agents is ongoing in PPW's native range and new potential agents are being found.

**Program Costs & Funding:** Successful bio-control agents are a long term solution but can take many years to develop. For PPW the yearly funding needs have ranged from \$70,000 to \$96,000 for a total of \$660,500. The Wyoming Biological Control Steering Committee provided 68% of the funding during this period.

**Fiscal Partners:** There are continuing needs for financial support so effective, safe biological controls can be developed and approved for release. Currently the Wyoming Biological Control Steering Committee, the U.S. Department of Agriculture – Animal and Plant Health Inspection Service (USDA-APHIS) and the Bureau of Land Management (BLM) are paying for development of PPW biological control agents. In the past these efforts were partially funded by Idaho State Department of Agriculture and the Bureau of Indian Affairs (BIA) through the University of Idaho as well as the Californian Department of Food and Agriculture.

**Research Collaborators:** CABI, Switzerland; Biotechnology and Biological Control Agency (BBCA), Italy; USDA-APHIS

Wyoming PPW Consortia Chair:	Project Scientists:
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Uniting with  
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