

## HIGHEST PRIORITY INVASIVE SPECIES LIST

### Montana Department of Agriculture

(DRAFT ver 4, 7/15/2015)

**Department Mission "To protect producers and consumers, and to enhance and develop agriculture and allied industries."**

Invasive species can have a devastating impact on Montana rangeland, pastureland, cropland, forests, and wildlands. These lands are vital for agricultural production and protecting the integrity of healthy ecosystems in Montana.

Authority for the Montana Department of Agriculture: [MCA 80-7](#): Disease, Pest, and Weed Control; [MCA 80-6](#): Apiculture; [MCA 80-3](#): Montana Produce Act; Federal Plant Protection Act by memorandum of understanding with USDA-APHIS-PPQ (14-8100-0417-MU, 14-8530-1715-MU, 15-8530-1278-MU, 12-8530-1568-MU). In addition to the specific programs authorized above, the Department has broad rule making authority over plant pests and noxious weeds in the Montana Quarantine and Pest Management Act ([MCA 80-7-401](#)). Under this Act, the Department may adopt pest management quarantine rules in consultation with the Governor's office, Director, other state agency, local government, non-profit, industry representative, or other interested party to protect Montana from invasive species threats.

There are many, many plant and animal species that pose a threat to Montana. In prioritizing species for this list, the Department used the following criteria: **a)** non-native to Montana, **b)** absent from the state or limited to a small, contained range within the state, **c)** the likeliness of the species to cause significant economic losses for producers, **d)** ability to spread in habitats similar to those found in Montana, and **e)** the potential to impact trade in agricultural or natural resource products.

## Livestock Pests

| Invasive species   | Risk assessment available? | Where?                               | Threat to?          | Arrival pathway?     | Notes  |
|--|----------------------------|--------------------------------------|---------------------|----------------------|--|
| <b>Small Hive Beetle</b><br><a href="#">Aethina tumida</a><br><a href="#">Murray</a> | No                         | Widespread in US, sub-Saharan Africa | Beekeeping industry | Migratory beekeepers | Montana is a top 5 honey producer in the US and honey production is a top 10 source of agricultural income in Montana. 2013 Montana honey production value exceeded \$30 million. Montana beekeepers provide pollination services to a diversity of crops across the US. |

## Terrestrial Plants

| Invasive Species  | Risk Assessment Available ? | Where?   | Threat to?                                 | Arrival Pathway?                             | Notes  |
|---|-----------------------------|--|--|--|--|
| <b>Yellow Starthistle</b><br><a href="#"><i>Centaurea solstitialis</i> L.</a> | Yes                         | Surrounding states, western states                       | Crop systems, pasture and rangeland        | Contaminated products, recreational vehicles | No known infestations in Montana, has been eradicated when found. Priority 1A Montana Noxious Weed.  |
| <b>Dyer's Woad</b><br><a href="#"><i>Isatis tinctoria</i> L.</a>              | Yes                         | Surrounding states, western states and Montana - limited | Crop systems, pasture and rangeland        | Contaminated products, recreational vehicles | Infestations limited to small contained areas or are being eradicated. Priority 1A Montana Noxious Weed.   |
| <b>Rush Skeletonweed</b><br><a href="#"><i>Chondrilla juncea</i> L.</a>       | Yes                         | Surrounding states, western states and Montana - limited | Crop systems, pasture and rangeland        | Contaminated products, recreational vehicles | All infestations are limited to small contained sites and working to eradicate. Priority 1B Montana Noxious Weed.                                      |
| <b>Blueweed</b><br><a href="#"><i>Echium vulgare</i> L.</a>                   | Yes                         | Alberta, Montana - limited areas                         | Crop systems, pasture and rangeland        | Contaminated products, recreational vehicles | Infestations are localized in a few counties; counties are containing or eradicating known infestations. Priority 2A Montana Noxious Weed.             |
| <b>Medusahead</b><br><a href="#"><i>Taeniatherum caput-medusae</i> L.</a>     | Yes                         | Oregon, Montana - limited area                           | Crop systems, pasture and rangeland        | Contaminated products, recreational vehicles | One known infestation in Montana found in 2013 - area is being treated and contained.  |
| <b>Witchweed</b><br><a href="#"><i>Striga</i> spp.</a>                        | No                          | Africa, Asia, Australia - SE US                          | Crop systems, pasture and rangeland, trade | Trade, contaminated products                 | Federal noxious weed. Parasitic plant that can attack cereal grains and legume crops. Quarantine weed seed for several international trading partners. |

## Plant Pests

| Invasive species  | Risk assessment available? | Where?                               | Threat to?   | Arrival pathway?                     | Notes  |
|---|----------------------------|--------------------------------------|--|--------------------------------------|--|
| <b>Karnal Bunt</b><br><a href="#"><i>Tilletia indica</i> Mitra</a>  | Yes                        | SW US, Asia                          | Grain industry                                     | Contaminated grain                   | Karnal bunt is a Quarantine pest in many countries around the world. Montana exports about 80% of total wheat production overseas.   |
| <b>Potato Cyst Nematodes</b><br><a href="#"><i>Globodera</i> spp.</a>   | Yes                        | ID, NY, Canada                       | Potato industry                                    | Transport of infested plants or soil | Montana supplies top-quality seed potato tubers to other states and countries through adherence to rigorous testing and inspection requirements.   |
| <b>Japanese Beetle</b><br><a href="#"><i>Popillia japonica</i> Newman</a>   | Yes                        | MT: Yellowstone Co.                  | Nursery and specialty crops                        | Nursery stock                        | The most widespread and destructive insect pest of turf, horticulture, and nursery crops in the eastern US.  |
| <b>Siberian Silk Moths</b><br><a href="#"><i>Dendrolimus</i> spp.</a>   | Yes                        | Asia                                 | Natural resources, forestry products               | International trade                  | Severe defoliators of many species of coniferous trees.  |
| <b>Plum Pox Virus</b><br><a href="#"><i>Plum pox potyvirus</i> (PPV)</a>  | Yes                        | Eastern North America                | Cherries, specialty crops                          | Nursery and garden trade             | A virus of stone fruits transmitted by aphids. Infection results in severely reduced fruit production. There is no cure once a tree is infected.   |
| <b>Terrestrial Snails</b><br><a href="#"><i>Cernuella</i>, <i>Theba</i>, <i>Xerolenta</i>, <i>Monacha</i>, etc.</a> | Yes                        | Mt: Cascade Co, Europe               | Grain industry, specialty crops, natural resources | Nursery stock, international trade   | Agricultural pests that feed on a wide variety of plants. Can be intermediate hosts and vectors of mammalian parasites. Serious grain pest in parts of Australia.  |
| <b>Khapra Beetle</b><br><a href="#"><i>Trogoderma granarium</i> Everts</a>  | Yes                        | Worldwide detection (not in Montana) | Grain industry                                     | International trade                  | Feeds on grain and cereal products. Very serious worldwide grain pest. Khapra beetle is a Quarantine pest in many countries around the world. Montana exports about 80% of total wheat production overseas.  |
| <b>Old World Bollworm</b><br><a href="#"><i>Helicoverpa armigera</i> Hübner</a>                                     | Yes                        | Asia, Africa, South America          | Grain industry, pulse industry                     | Nursery stock, international trade   | Highly polyphagous and can attack many field and horticulture crops. Considered to be among the most damaging insect pests in Australian agriculture, costing approximately \$225.2 million per year to control. Fifty percent of pesticides used in China and India target this pest. |