Prevent Weed Spread from Donated Hay

Hay donated to wildfire areas can contain noxious and invasive weed species, insect pests, and plant diseases from other locations in Montana and from states where it was grown. Use the following resources to identify unknown plants, insects and disease and prevent their spread.

United States Department of Agriculture



Best Management Practices

- Use donated hay in an area that can be easily monitored for new weed species.
- Document where new weed species are located, then follow-up with weed control and monitoring; monitor for several years.
- Treat weeds before they produce seed.
- Remove and dispose of weed seed that become established.
- · Defer moving livestock through an

area with a new weed species until it is removed or contained.

- Ask where the hay was grown/donated from, if possible.
 - View distribution maps of weeds in Montana and the West to get an idea of potential weed threats from donated hay. <u>https://www.eddmaps.org/west/</u> <u>distribution/</u>
- Use certified weed free forage, if available.
 - Collect unknown plants for identification (collect the entire plant and roots). For help with identification, take the plant to your county weed district, Natural Resources Conservation Service office, Extension agent, Montana Range Partnership, or submit a sample to Montana State University Schutter Diagnostic Lab for identification. This is a free service for Montana residents. Find contact information, submission instructions, fee information, and forms online at www.diagnostics.montana.edu.
 - Insect pests and plant diseases can also be sent to the Schutter Diagnostic Lab for identification.
 - Identify Montana Noxious Weeds. See this guide to Montana Noxious Weeds as a reference. <u>http://</u> <u>msuextension.org/publications/</u> <u>AgandNaturalResources/EB0159.pdf</u>



For More Information

Natural Resoures Conservation Service field office in your county. https://www.nrcs.usda.gov/ wps/portal/nrcs/main/mt/ contact/

County Weed District http://mtweed.org/findweed-coordinator/

County Extension Agent http://msuextension.org/ localoffices.cfm

Montana State University Schutter Diagnostic Lab http://diagnostics.montana. edu/

Hay Hotline, Montana Department of Agriculture 406-444-3144, agr@mt.gov or <u>http://agr.mt.gov/Hay-</u> Hotline

Montana Weed Seed Free Forage 406-444-7819 or http://agr.mt.gov/Noxious-Weed-Seed-Free-Forage

Montana Rangeland Partnership estandley@macdnet.org cschuldt@macdnet.org www.montanarangelands partnership.org



Black henbane, a poisonous plant, has been found in donated hay.

Left photo by Steve Dewey, Utah State University, Bugwood.org. Baby's breath, musk thistle, and field scabious are county-listed weeds in western Montana that could spread in hay and persist in eastern Montana.



Baby's breath photo by Julia Scher, USDA APHIS ITP, Bugwood.org.

Musk thistle photo by Wendy VanDyk Evans, Bugwood.org.

Field scabious photo by Steve Dewey, Utah State University, Bugwood.org.

Medusahead, rush skeletonweed, and blueweed are only found in a few western Montana counties. However, hay has been donated from these counties to eastern Montana. Know your weed identification!



Medusahead photo by Steve Dewey, Utah State University, Bugwood.org.



Joseph M. DiTomaso, University of

California - Davis, Bugwood.org.

Blueweed photo by Rob Routledge, Sault College, Bugwood.org.



Sulfur cinquefoil photo by USDA Agricultural Research Service, Bugwood.org.



Perennial pepperweed photo by Leslie J. Mehrhoff, University of Connecticut, Bugwood.org.



Hoary alyssum photo by John M. Randall, The Nature Conservancy, Bugwood.org.



St. Johnswort photo by Becca MacDonald, Sault College, Bugwood.org.

Watch for sulfur cinquefoil, hoary alyssum, perennial pepperweed, and St. Johnswort moving with hay from western Montana. Weeds currently found in eastern Montana may also spread. Watch for leafy spurge, knapweeds, and toadflax.



Leafy spurge photo by Montana NRCS.



Spotted knapweed photo by Rob Routledge, Sault College, Bugwood.org.



Dalmatian toadflax photo by Utah State University, Bugwood.org.





Montana Natural Resources Conservation Service mt.nrcs.usda.gov