### Monthly Weed Post <sup>1</sup> March 2016

## Rush skeletonweed (Chondrilla juncea L.)



#### Identification tips:

- Deep-rooted, perennial forb in the sunflower family (Asteraceae) (Fig. 1)
- Grows 1-4 feet tall and produces milky latex when broken
  - Highly branched stem, few leaves = "skeletal" appearance
- Stiff, downward-pointing hairs near the base of stem (Fig. 2)
- Small, yellow flowers at ends of stems, either individually or clusters (Fig. 3)
- Overwinters as rosette which resembles common dandelion

<u>Habitat</u>: Roadsides, rangelands, pastures, grain fields, disturbed sites (e.g., recent wildfire or cheatgrass-invaded sites). <u>History</u>: Rush skeletonweed is native to Asia, the Mediterranean, and North Africa. It was first reported in the United States near Spokane, Washington in 1938. A small

infestation was found in Sanders County, Montana in 1991 and has subsequently been reported in Lincoln, Flathead, and Treasure counties as well. Most recently, rush skeletonweed has been reported in Beaverhead and Ravalli counties. It is listed as a Priority 1B noxious weed in Montana. **Spread:** Rush skeletonweed primarily disperses by seeds; established plants are capable of producing 15,000- 20,000 seeds. The small, lightweight seeds can spread far distances by wind and water and can also attach to animals and clothing. Rush skeletonweed can also reproduce vegetatively from fragmented taproots.

**Impacts**: Rush skeletonweed competes for soil moisture and nutrients with grains in cropping systems and desired plants in rangeland. It rapidly spread



Figure 3. Small, yellow flowers.



throughout the wheat-growing area of southeastern Australia and caused significant yield reductions. It can form dense monocultures on rangeland, reducing forage for cattle and wildlife.

Management: Rush skeletonweed is a high priority species for Montana due to its limited presence here and our close proximity to large infestations in Idaho. Furthermore, rush skeletonweed could have devastating impacts on agriculture in Montana if it becomes well-established. Management priorities for rush skeletonweed include monitoring, early detection, and treatment of newly invading plants. Hand-pulling is an option for small infestations, but this requires control 2-3 times per year for more than five years. Fall or spring applications of herbicides (picloram, aminopyralid, or clopyralid) provide control for a year or more; however, the level of effectiveness can depend on the presence of biological control agents and percent cover of competitive perennial grasses. Three biocontrol agents of rush skeletonweed are established in the western US including 1) rust fungus (Puccinia chondrillina), 2) gall mite (Eriophyes chondrillae), and 3) gall midge (Cystiphora schmidti). Recent research has shown that the rust fungus is very host-specific, preferring certain genotypes of rush skeletonweed; this may be a limiting factor in biocontrol success because there are three different rush skeletonweed genotypes in the western US.<sup>1</sup> Prescribed burning is not recommended for rush skeletonweed areas, unless follow-up management is planned. Planting competitive crops that emerge before rush skeletonweed can form a dense canopy and suppress the weed. Integrating various management techniques such as prevention, monitoring, reseeding, and herbicides can help reduce the invasion of rush skeletonweed. If you think you have found rush skeletonweed, contact your Extension agent or county weed coordinator immediately.

<sup>1</sup> See March 2014 Weed Post for more information.

Photo credits: Gary Piper, Wash. State Univ., bugwood.org (Fig. 1); Richard Old, xidservices.com (Fig. 2); Utah State Univ., bugwood.org (Fig. 3)

## Monthly Weed Post <sup>2</sup> March 2016

# Test your knowledge of rush skeletonweed

NWID	Primary method of seed dispersal
DARNSES	First Montana county that reported rush skeletonweed
ACCUINPI	Very host-specific rust fungus of rush skeletonweed
SEALLTKE	Structural appearance of a plant that has few leaves
BBGSDENEPRNUICIRR	
	Control strategy NOT recommended for rush skeletonweed (2 words)
SIOHATGWNN	First U.S. state that reported rush skeletonweed
NLNEODIAD	Rosette of rush skeletonweed resembles this plant's rosette

Solutions are posted to the MSU Extension Invasive Plants website: http://msuextension.org/invasiveplants/monthly\_weed\_post.html



