Identification and Impacts

Category C—Low

Bald brome (Bromus racemosus)



Photo credit: P. Rothrock



Photo credit: P. Rothrock



Photo Credit: M. Licher

Key ID Tips

- Relatively short inflorescence with 6-10 seeds.
- Single awn on each seed, 0.5 inch in length.
- Hair grows down on the leaf sheath.
- 3-5 veins on each seed.

Origin Native to Eurasia

Description

Bald brome is a winter annual. that grows in pastures and disturbed sites. It grows upright and can be 3 feet tall.



Photo credit: S. Holiday

Its identified by the pubescence on its leaves and how the hair on its leaf sheath grows backwards (VT 2023). The seedhead forms a panicle 4—8 inches long that begins upright but droops as it matures. They have a single awn on each lemma, or floret, about a half inch in length. The seedheads can appear slightly compressed and can have 3-5 visible veins running vertically (SEINet 2023). The ligule is a thin membrane, usually 1-2mm in length, and auricles are not present.

Biology

Bald brome prefers rangelands and disturbed sites and is one of many annual brome species that impacts rangelands on the Navajo Nation. It can be grazed by livestock but dries up and loses much of its nutritional value in the summer and winter.

Locations

It has been detected in Canyon de Chelly.

Ecological Threat and Management Concerns

Bald brome is one of many annual brome grass species that have altered rangelands on the Navajo Nation, by replacing preferred perennial grasses and forage. While it can be grazed by livestock, over time, it can accumulate dry thatch which can increase fuels and fire risks. It also replaces preferred perennial grass species, which can increase soil erosion and top soil loss, especially in pastures and rangelands (Redsteer et al. 2011). Bald brome is included as part of several non-native annual brome species that have spread in rangelands in the region.

Category C—Low

Bald brome (Bromus racemosus)

Additional safety measures and limitations may apply for each method. Refer to the <u>Navajo Nation Integrated Weed Management Plan</u> for more information.

Mechanical/Manual Removal

Small infestations can be hand pulled or hoed in the early spring before seed maturation. Mowing is not recommended as it can initiate flowering if done before seeds mature. If necessary, repeated mowing should be done every 3 weeks to reduce seed production and followed with herbicide. Shallow tilling in the fall or early spring can also suppress bromes and facilitate perennial grass establishment.

Biological

No biological control organisms are available.

Cultural Control

Targeted grazing is not recommended as disturbance can increase germination. However, bald brome is not harmful to livestock. Burning can be effective if done before seeds mature, but should be monitored closely.

Chemical

Use of herbicides can be effective. Refer to the product labels for information application rates, timing, and approved application methods.

Recommended herbicides include:

- Glyphosate
- Indaziflam
- Metribuzin

References

DiTomaso, J.M., G.B. Keyser et al. 2013. *Weed Control in Natural Areas in the Western United States.* Weed Research and Information Center, University of California. 544 pp.

Redsteer, M.H., R.C. Bogle, and J.M. Vogel. 2011 Monitoring and analysis of sand dune movement and growth on the Navajo nation, Southwestern United States. U.S. Geological Survey Fact Sheet 2011-3085. 2 pp.

Virginia Tech University (VTU). 2023. Weed Identification: Bald Brome. Available online at: https://weedid.cals.vt.edu/profile/504.

SEINet Portal, Arizona—New Mexico Chapter. 2023. *Bromus commatatus*. Available online at: https://swbiodiversity.org/seinet/taxa/index.php?taxon=1821&clid=2947



Bureau of Indian Affairs Navajo Region 301 West Hill Street Gallup, NM 87301 Phone: (505) 863-8314 www.bia.gov/regionaloffices/Navajo-region