

## **Medusahead (*Taeniatherum caput-medusae*)**

**Identification** Medusahead, an annual exotic grass, has slender, bright green leaves. The stems are wiry and contain a few short, narrow leaves. It has long awns that emerge from the seed head and point outward and upward (right, top). Awns take on a twisted appearance, by which the plant is customarily identified, as the plant dries out in mid-summer. The native grasses bottlebrush squirreltail (*Elymus elymoides*) and foxtail barley (*Hordeum jubatum*) look similar to medusahead (see drawings), but the mature inflorescence of these species fall apart easily when handled, while medusahead inflorescences stay intact.

**Impacts** Medusahead usually behaves as a winter annual, and seedlings initiate re-growth early in the growing season, reducing moisture for perennial grasses. It has high silica content so it is slow to decay, leaving a dense layer of litter which limits recruitment of other grass seedlings (right, bottom). However, medusahead seeds can germinate within the litter. Nutritive value is similar to other grasses, but coarseness due to high silica content makes it unpalatable. Seed heads contains stiff glumes and awns that can injure eyes and mouths of grazing animals.

**Habitat** Medusahead is native to Spain, Portugal, southern France, Morocco, and Algeria. It was first found collected in the U.S. in southwestern Oregon in 1884. It thrives in regions with warm, dry summers and cool, moist weather from fall through spring. It's most common in inland valleys of California, the Intermountain West including the Great Basin, and the Columbia Basin. It tends to thrive in clayey soils.

**Spread** Seeds drop within 2m of the plant, meaning tall grasses and shrubs can provide barriers to spread, but the long-awned seeds can cling to the coats of grazing animals or attach to machinery, vehicles and clothing. Healthy intact plant communities resist medusahead invasion, but lands with a high disturbance regime and low perennial plant cover and diversity are prone to medusahead invasion. It has been observed to take over previously established weeds like cheatgrass.

**Management Priorities** Medusahead is not a state-listed weed in Montana but is listed in CA, CO, NV, OR, and UT. It has only recently been confirmed in Montana, so it is important to be able to identify this grass so that infestations can be detected when they are still small and manageable. Disturbance increases susceptibility to invasion on rangeland, so do not overgraze perennial grasses. Researchers in OR found that an increase of one perennial bunchgrass per square yard resulted in a 15-20% decline in medusahead establishment. Spring burning to remove litter followed by a fall application of a pre-emergent herbicide like imazapic has been shown to be the most effective method for managing established populations. If little to no desirable vegetation remains, revegetation should be integrated with burning and herbicides.



Medusahead

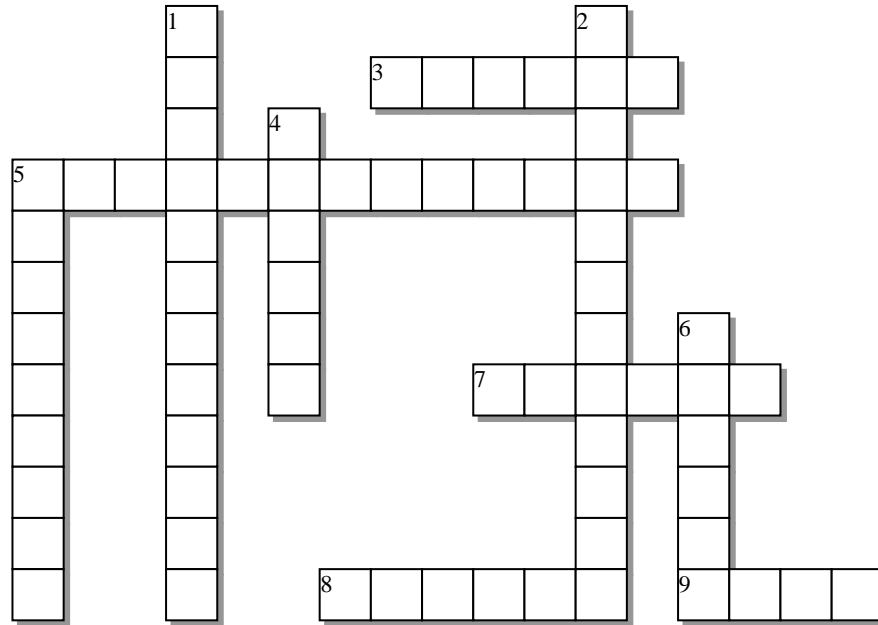


Bottlebrush squirreltail



Foxtail barley

## Test your knowledge of: Medusahead



**Across:**

- 3 - Dense layers of \_\_\_\_\_ build up after medusahead invades based on its slow rate of decomposition
- 5 - Bottlebrush squirreltail and \_\_\_\_\_ may be mistaken for medusahead (two words)
- 7 - Be especially alert for medusahead in areas with this type of soil
- 8 - Medusahead was first found in this western state in the late 1800s
- 9 - Long stiff \_\_\_\_\_ can injure eyes and mouths of grazing animals

**Down:**

- 1 - Like cheatgrass, medusahead has this life cycle (two words)
- 2 - This should be integrated with prescribed fire and herbicides where infestations are especially dense
- 4 - Medusahead contains this crystalline compound
- 5 - Unlike native grass look-a-likes, mature medusahead seedheads do not \_\_\_\_\_
- 6 - Long twisted awns resemble the snakes covered head of this mythic Greek figure

*Solutions are posted to the MSU Extension Invasive Rangeland Weed website:*

<http://www.msuextension.org/invasiveplantsMangold/extensionsub.html>

