

# LAKE COUNTY WEED MANAGEMENT AREA WEED CONTROL PROGRAM ALERT

## Medusahead

*Taeniatherum caput-medusae*

Grass Species

### Non-native Invasive Weed\*

#### Identification Tips

- Matures later than most other annuals, often bright green when other annuals are brown
- Previous year's growth creates a thick carpet
- As it matures, it turns shades of purple and eventually tan

#### Biology

- Medusahead is a winter annual
- Germinates in the fall, undergoing root growth in the winter and early spring
- Roots develop early and reach deep soil outcompeting native plants for moisture
- Stand density range from several hundred to 2,000 plants per square foot

#### Impacts

- Displace native and beneficial plants and crowds out native plants
- Imports fire into riparian areas, native plants take much longer to regrow after fire
- A very aggressive winter annual grass that is changing the ecology of rangelands in North America
- **Uses water at a much higher rate than native vegetation**

#### Distribution

- Found throughout Lake County, including riparian areas, rangelands, pasturelands, parks, nature preserves, other wildlands and along roadsides and right-of-way
- Thrives in full sun



Ranges in height from 8 to 23 inches, has weak stems that often break at the base. As the awns dry, they twist and spread in all directions, similar to the snake-covered head of the mythological Medusa.



Medusahead creates a mat of dead grass, outcompetes native vegetation, reduces land value, and creates a wildfire hazard.

\*Control is not required for Lake County by the State of California, but it is recommended wherever feasible.

Questions? \_\_\_\_\_  
Lake County Agriculture Dept.  
707-263-0217

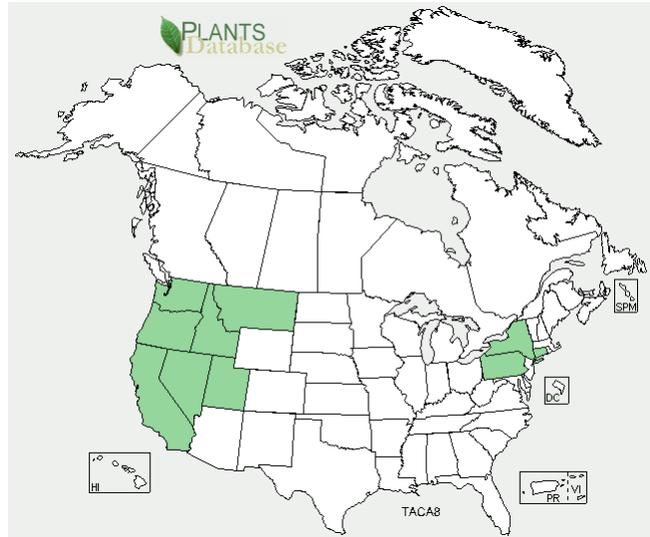
## What You Can Do

There are no legal requirements to control Medusahead in Lake County, but control is recommended as part of forestry, pasture, and natural area management. Since seeds are often spread by adhering to humans, animals, and vehicles, it is recommended to restrict these kinds of traffic in infestations to prevent the spread. Narrow containment zones of around 3 meters would successfully suppress the invasion to surrounding areas.

## Control Methods

No single control method will eradicate Medusahead. For best results, it is often necessary to use a form of integrated pest management that combines two or more of the following methods.

**MECHANICAL:** Since Medusahead seeds are often spread by adhering to humans, animals, and vehicles, it is recommended to restrict these kinds of traffic in infestations to prevent the spread. Narrow containment zones of around 3 meters would successfully suppress the invasion to surrounding areas



Range of infestation

**GRAZING:** Grazing alone is not a good method of control. For best results, grazing is used as part of an integrated program. It is an efficient management tool as long as the timing and duration of grazing are controlled properly. If livestock grazing is a method used to control mature stands, the livestock must be moved to a holding area for 10 days to two weeks and fed weed-free feed before they are moved to weed-free areas. This will prevent the seeds that pass through the animals from germinating in areas that are free of Medusahead.

**CHEMICAL: Follow labels exactly as written and only use products appropriate and legal for the site. Herbicides should only be applied at the rates specified on the label.**

Chemical control can be effective if used in conjunction with other control methods. Glyphosate (Roundup) applied at 0.375 lbs/acre in the early spring before seeds are produced can provide good results. This timing will also limit the damage to nontarget species that develop later in the growing season. Research suggests that burning before chemical application is more effective than chemicals alone. For questions about herbicide use, contact the Lake County Agriculture Department.

**RESTORATION:** Revegetation should be a part of any Medusahead management plan. If it is not first controlled, reseeding an infested area will not be successful. The existing Medusahead has to be controlled and especially not allowed to produce more seed, and the seed bank in the soil also has to be reduced. This usually takes two or three years, depending on soil moisture and growing conditions. After this, seedling of desirable species can become established. Combining a tillage treatment followed by herbicide is most effective in controlling the weed and promoting desirable plant growth. Squirreltail, bluebunch wheatgrass, crested wheatgrass, intermediate wheatgrass, Thurber's needlegrass, needle and thread, Indian ricegrass, sandberg bluegrass, and sheep fescue are all competitive grasses that work well when renovating an area previously infested with medusahead.