Hello from the Humboldt Watershed CWMA! The HWCWMA was developed to address the invasive weed problem and subsequent decline in water quality within the entire 16,843 square mile watershed, which covers most of Northern Nevada. The primary function of HWCWMA has been to provide land managers, owners and weed control groups assistance in the areas of funding, agency and weed group coordination and cooperation.

This month we would like to introduce you to one of Nevada’s state listed noxious weeds, hoary cress (*Carderia draba*). Hoary cress, commonly known as whitetop, is native to western Asia and eastern Europe and is an invasive species in North America, introduced by contaminated seeds in the early 1900s. Hoary cress is found throughout the U.S. except from southernmost California across to the southernmost Mississippi, and is extensive in Idaho, Nevada and Oregon.

Hoary cress is a perennial forb in the mustard family that can grow up to 2 ft. (0.6 m) tall. The leaves are soft, gray-green, 1.5-3 in. (3.7-7.6 cm) long with fine hairs and heart-shaped bases. The lower leaves tend to have more hairs than the upper leaves. The upper leaves clasp to the stem of the plant. Flowering occurs in early spring to early summer, when white, four-petaled flowers develop in clusters at the apex of the stem. The fruit are heart-shaped seed pods. Hoary cress invades rangelands, pastures, streambanks, and open forests primarily in the western United States, although it does occur in the East. It can form large infestations that can displace native species and reduce grazing quality.

**INTEGRATED WEED MANAGEMENT OF HOARY CRESS**

No single control method should be used in managing weeds. A combination of methods (IPM) should be used. An integrated pest management plan deals with prevention as well as control. Eradication of weed species is not usually a practical goal but reducing infestation to manageable levels should be the objective.

**Cultural**

Plant competition is an effective way to prevent the invasion of hoary cress. Proper management of perennial grasses will inhibit the establishment of this weed. Overgrazing is a major cause of perennial weed invasion.

A general rule of thumb to prevent overgrazing is the take-half, leave-half principle. A stand of grass will maintain or even improve its condition if no more than one-half of its annual production is used. In other words, animals could graze until, on average, fifty percent of the grass has been utilized. Animals would then be removed until the vegetation recovers its original height.

Other cultural methods include:

• fertilization when necessary

• water management

• where the perennial vegetation has been depleted, reseeding adapted varieties is recommended

• disturbed areas should be revegetated as soon as possible to prevent weed invasions

**Biological**

Insects are being utilized as a means for long-term management of weeds. In Nevada, insects have been released on an experimental basis to control hoary cress. At this time, none are available to the general public.

**Mechanical**

One season of intensive tillage from spring until freeze-up will usually eliminate over 90% of hoary cress. Cultivate every 14 to 21 days. Persistence and proper timing are important. Mowing would weaken the plant, but not kill it. Mow at least as often as the suggested tillage treatments.

**Herbicidal Treatments:**

**Shallow water table, areas adjacent to water & marshy areas:** 2# of 2,4-D spring and fall (repeated for 3 years).

**Non-sensitive rangeland roadside areas:** Escort @ 1oz/acre + Vanquish in the spring at 2pts/acre.

**Turf:** 2,4-D amine 2#/acre (three applications may be needed), or 1.5#/acre of glyphosate. Corsair @ 1 gram + 2,4-D amine @ 1.5 tablespoons /1000 sq ft. in the spring at the bloom stage or in the fall.

**Always read and follow the instructions as listed on the label!**

Please notify the HWCWMA if you see hoary cress growing along the Humboldt River. Our [staff](http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/program-information/who-we-are.aspx) can provide the property owner or appropriate public agency with site-specific advice on how best to remove it. We have an opportunity to stop it from spreading if we act quickly. We [map](http://www.kingcounty.gov/environment/animalsAndPlants/noxious-weeds/maps.aspx) all known locations of regulated noxious weeds such as hoary cress in order to help us and others locate new infestations in time to control them.

The Humboldt Watershed CWMA has also developed a website to serve as a clearinghouse for information on weeds in the Humboldt Watershed. Our website (http://www.humboldtweedfree.org) contains fact sheets for state listed noxious weeds in Nevada, Board of Director’s information, funding partner’s links, and many more features including a detailed project proposal packet that you can print, fill out and mail back to us at your convenience. We are looking to expand our project area outside of the Humboldt River and always welcome new funding opportunities.

If you have any questions, please feel free to contact Andi Porreca, HWCWMA Coordinator at (775) 762-2636 or email her at aporreca@humboldtweedfree.org. Or you may speak with Rhonda Heguy, HWCWMA President at (775) 738-3085, email: hwcwma@gmail.com.