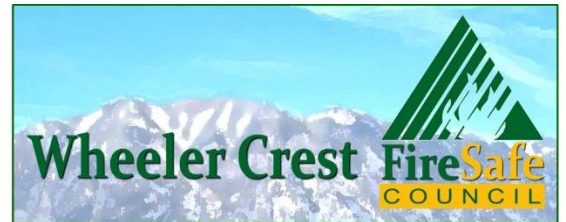


## Fact Sheet #2

# Firewise Weed Management



Invasive weeds are a common and persistent problem in the Great Basin scrub (“sagebrush”) community that dominates the landscape in Swall Meadows. Originally from Europe or Asia, these fast-growing annuals compete with native perennial shrubs, grasses, and forbs, and provide poor or unusable browse for native wildlife, including the Round Valley mule-deer herd. Moreover, they often shorten the natural fire frequency, resulting in fast-moving fires that are difficult for firefighters to contain, while also destroying the native scrub vegetation.

In the aftermath of the 2015 Round Fire, it is particularly important to control and, whenever possible, eliminate these invasive weeds. This fact sheet is intended to assist property owners in correctly identifying the most significant weed species found in Swall Meadows, and to provide guidance for effective removal and control.

### **Cheatgrass (*Bromus tectorum*)**

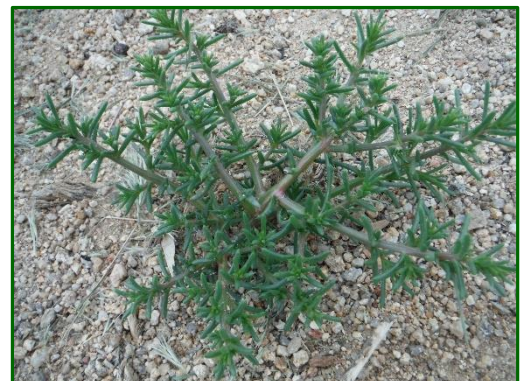
Native to Asia and introduced via Europe, cheatgrass (or downy brome) is an easily recognizable bright green annual grass that emerges early in the spring (and sometimes in the fall). It has distinctive “droopy” seed-heads that turn reddish and then light brown as they mature. Unlike the native perennial grasses, it is shallow-rooted and comes up very easily when pulled. It rapidly spreads into both disturbed and undisturbed areas, and produces huge numbers of seeds that will remain viable in the soil for up to five years.



**Management:** Hand pulling and removal with a well-sharpened “hula” hoe are most effective. With very dense stands, a string-trimmer (“weed whacker”) can be used to knock down cheatgrass before the seeds are fully developed, but the remaining plant crowns can regrow, especially if there is any summer rainfall. Although there are no herbicides that are 100% selective for cheatgrass, there are both pre- and post-emergent herbicides that have shown excellent promise. When their application is properly timed (November through April), there is little or no damage to desirable native plants.

### **Russian Tumbleweed (*Salsola tragus*)**

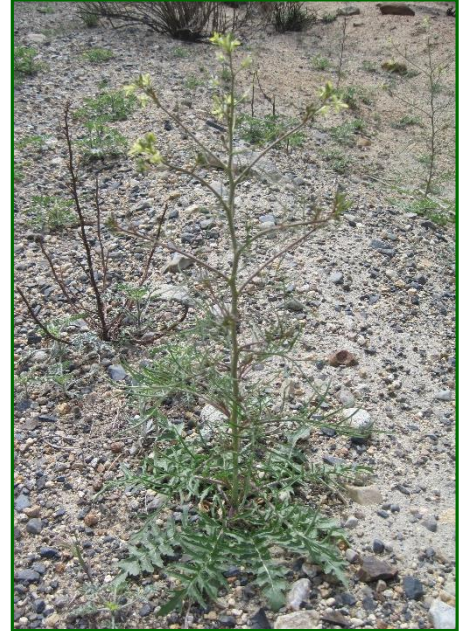
Also known as Russian thistle, this native of Eurasia is easily recognized when mature: we have all seen the large, skeletal “balls” blowing across the highway. As it does so, tumbleweed naturally disperses its seeds, often 250,000 per plant or more. More difficult to identify early, the seedling and juvenile plants have deep green, fleshy, grass-like leaves, and the stems usually have red-purple stripes. As it matures, it quickly becomes very prickly and hard, making it unpalatable for all wildlife.



*Management:* As with cheatgrass, the low-growing crowns of tumbleweed tend to rapidly resprout if cut back with a string trimmer. Hand-pulling or use of the hula hoe is more effective in removing the crown and taproot. Postemergent, broad-spectrum herbicides such as glyphosate (Roundup) can help to control tumbleweed, but must be applied in its early growth stages before the appearance of spiny branches.

### **Tumble mustard (*Sisymbrium altissimum*)**

Native to Europe and/or Eurasia, tumble (or Jim Hill) mustard is an annual or biennial weed that can be found in all 50 states. As a seedling, it forms a low-growing, bright green rosette of deeply lobed leaves. The tall, relatively slender stalks have much finer leaves, are branched, and terminate in yellow flowers with four petals. It is larger, more branched, and more robust than tansy mustard. Like Russian tumbleweed, it disperses its seeds by detachment at the crown and transport via wind.



*Management:* The low-growing rosette is very difficult to remove with a string-trimmer; regrowth is likely. Hand pulling or hoeing is again most effective in removing the growing point in the crown. As with Russian tumbleweed, broad-spectrum herbicides may help if applied at the seedling stage.

### **Other Weeds of Note**

**Tansy mustard (Flixweed) (*Descurainia sophia*):** An annual or biennial weed with lacy leaves and yellow flowers that bears some resemblance to tumble mustard. Not as much of a fire-hazard, but it can displace native plants. *Management:* Hand-pull or hoe.

**Woolly mullein (*Verbascum thapsus*):** Annual or biennial weed with large, woolly leaves and a distinctive, tall spike of yellow flowers. More common in wetter areas. Displaces native plants and acts as a host for insect pests. *Management:* Hand-pull.

**White sweetclover (*Melilotus albus*):** An annual or biennial legume that is native to Eurasia, and introduced to North America as a forage crop. It can reach 4+ feet in height, has alternate leaves with three leaflets, and white flowers. Also more common in wetter areas, where it often outcompetes native species. *Management:* Hand-pull.

### ***For Additional Information:***

University of California Statewide Integrated Pest Management Weeds Gallery  
([http://www.ipm.ucdavis.edu/PMG/weeds\\_intro.html](http://www.ipm.ucdavis.edu/PMG/weeds_intro.html))

California Invasive Plant Council (<http://www.cal-ipc.org>)