

Timing is Everything with Stubborn Pasture Weeds

by Debbie Williams, Walla Walla County WSU Extension

Reducing stubborn pasture weeds requires correct timing no matter which method of control you consider. Effective methods include grazing management, mechanical and chemical control. Proper grazing management provides a good stand of forage that competes against weeds and reduces bare spots where weeds can take hold. Mechanical control can help. Timing of mowing, clipping, and hand pulling is critical to eliminate seed production, especially in annuals and biennials. Mechanical control can also help with some perennials around the time of prebud to early bud because it taxes the energy the roots need.

Chemical control is usually needed for most of our tough pasture weeds. The best control is through a specific plan for each problem weed. However, follow label directions and do not overtreat a specific area. If you delay herbicide application beyond the optimum growth stage, weeds will become increasingly competitive with grasses and harder to control. Conditions such as herbicide sensitivity, adequate spray coverage, decreased herbicide absorption due to stressed plants or not using the proper surfactant will decrease effectiveness.

For annual weeds, you get the best control when herbicide is applied to small plants growing under good environmental conditions when products are applied in enough water to adequately cover plants. Typically, you don't mow within three days before or after spraying to ensure adequate movement of the herbicide through the plant. If possible, irrigate the weeds to ensure active growth and that they are dust free before spraying. Multiple applications may be necessary to control repeated flushes of annual weeds. Some annuals will behave like biennials in the right conditions. Common troublesome summer annual pasture weeds include mustards (spray before bolt), pigweeds (spray when very small, can accumulate N to toxic levels, resistance to some herbicides has been reported), and spikeweed (spray when rosettes are less than 3" in diameter). Troublesome winter annuals include yellow starthistle (spray seedling to mid-rosette stage), puncturevine (spray when small and often), and hare barley (spray in the fall or spring prior to heading).

For perennial weeds, your best control is often obtained when systemic herbicides are applied to taller plants that are in the reproductive growth stage, just prior to bloom. At this time the herbicide will be translocated or moved throughout the plant resulting in more complete control than just burning off the tops with earlier applications. Simply burning off the above ground foliage is usually not adequate to kill root and other plant parts that can re-emerge. For perennials, herbicides are least effective during rapid growth in the spring. However, spraying the regrowth of some weeds during the late fall period can provide some of the most effective control. Weeds that are particularly vulnerable to fall applications include Canada thistle (spray fall rosettes or wait until prebloom), curly dock (spray before bolt), plantains (spray before seed stalk bolt), and field bindweed (multiple applications are needed, best during flowering).

For biennial weeds, you get the best control when herbicides are applied to rosettes in the fall and spring. Pasture weeds such as scotch thistle, bull thistle, and common mullein are problematic biennial weeds. Fall is the preferred time to spray biennial plants but anytime prior to bolt can be effective. Mallow (spray before 3 inches wide, tolerant to many common herbicides) is considered an annual but frequently acts like a biennial in pastures.

Make sure you have correctly identified your weed and then explore the correct timing and herbicide products for the best control plan. Carefully follow herbicide label directions. Keep up with your plan until the weed is controlled. In most cases, control must be uninterrupted for more than three years to eliminate the weed.

WSU Extension Walla Walla County Bulletin #152

Extension programs and policies are consistent with federal and state laws and regulations on nondiscrimination regarding race, sex, religion, age, color, creed, national or ethnic origin; physical, mental or sensory disability; marital status, sexual orientation, or status as a Vietnam-era or disabled veteran. Evidence of noncompliance may be reported through your local Extension office.