Controlling Weeds in Horse Pastures

Weeds are plants that are considered to be undesirable or unpalatable. Some weeds can be mildly toxic (buttercups) while others can be severely toxic (nightshade). Good pasture and grazing management is the best defense against weeds in horse pastures.

Why do weeds occur?

- Overgrazing
  - Broadleaf weeds are opportunistic and grow in thin or bare areas
    - Competition lacking from desirable plants
- Under-grazing
  - Proper grazing keeps plants in vegetative (growing) state, lack of grazing pressure can allow undesirable species to move in
    - Grass weeds can take over
- Low soil pH (acidic)
- Poor soil fertility
- Thin forage stands

Weed Identification

Proper plant ID and understanding lifecycle required to manage weeds

Broadleaf and Grass or Grass-like Weeds

- Annuals: Complete life cycle in one growing season
  - Nightshade, Mares Tail (Horseweed), Pigweed, Lambsquarter (common), Smartweed, Ragweed
- Biennials: Complete their life cycle in two growing seasons
  - Bull Thistle, Burdock, Knapweed, Wild Carrot (Queen Annes Lace), Wild Chervil, Wild Parsnip
- Perennials: Usually live for three or more years
  - Bedstraw, Buttercup, Horse Nettle, Canada Thistle, Curly Dock, Chicory, Dandelion, Cinquefoil species, Hemp Dogbane, Goldenrod, Hoary allysum, Milkweed, Plantains,
Pokeweed, Leafy Spurge, Grass/Grass-like weeds (Sweet Vernal Grass, Red Hard, Sheep Fescue, Yellow Nutsedge, Rush species)

Methods for Controlling Weeds

Prevention: Proper grazing, seed selection, clean equipment

- Mechanical: Mowing and clipping
- Cultural: Over-seeding, no till, frost seeding, cover crops, mulching
- Chemical: Herbicides

Controlling Annual Weeds

- Mechanical control effective prior to flowering and seed production
- Herbicides are most effective when applied in the spring to actively growing

Controlling Biennial Weeds

- Mechanical is not an option in the first year of growth because plants too close to the ground
- Mowing can be effective in the second year before flowering and seed production
- Chemical control most effective when applied during the first year’s growth
- In second year, early season application before the flowers bloom

Controlling Perennial Weeds

- Integrated management
  - Mechanical, cultural and chemical often necessary
  - Early season herbicide applications (i.e. August 15 to September 15 and March 15 to May 15) provide the most effective perennial weed control
  - Herbicides alone, or a single herbicide application, likely will not eradicate perennial weeds
  - Mowing alone over several growing seasons
  - Over-seed to outcompete weeds, but depends on weed pressure

Tips for Using Chemical Weed Control (Herbicides)

While mechanical and cultural control are often preferred, broadleaf herbicides may be a necessary component of pasture management

There are several herbicides than can be used on grass pastures to control weeds broadleaf including:

- 2,4-D (sold under many different names by various manufacturers), dicamba (ex. Banvel), Cimarron, Clarity, GrazonNext etc.
- The type and amount of herbicide, as well as the timing of application, depend on the type of weed
- Herbicides are only effective when weeds have emerged, but before they flowering and seed production. This is usually in the fall or early spring.
- Herbicides should be applied after at least three days of air temperatures above 60°F, when winds are calm and there is no chance of precipitation within 24 hours
- Removal of horses from pasture is usually not required for most broadleaf herbicides, but it's important to always follow label instructions and recommendations for your pastures