

## Weed focus: Horse nettle

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Horse nettle (*Solanum carolinense*) is not a true nettle and is sometimes known by the names thorn apple, devil's tomato, wild tomato, and bull nettle. It is a member of the nightshade family and is common throughout temperate North America, its native home. While there are other nightshade species, this is the most common.



Horse nettle is a warm-season perennial and can grow just about anywhere. It prefers sandy or loamy soils. Plants can reach 40 inches in height, but generally do not. Instead,

they appear more often as shorter shrubs. They can become the dominant plant in disturbed sites, out-competing more desirable plants. They are recognized by their spiny leaves and stems, their pale purple and yellow flowers, and their tomato-like fruit. They have extensive root systems which make control a challenge.

On the positive side, this plant attracts pollinators, including bumble bees. The fruit is a food source for numerous animals including ring-necked pheasants, bobwhite quail, turkeys, and skunks. Insects also munch on this plant and, in some cases, reduce fruit production therefore aiding in controlling its spread. The Colorado potato beetle eats this plant, as do the eggplant flea beetle and the tobacco hornworm.

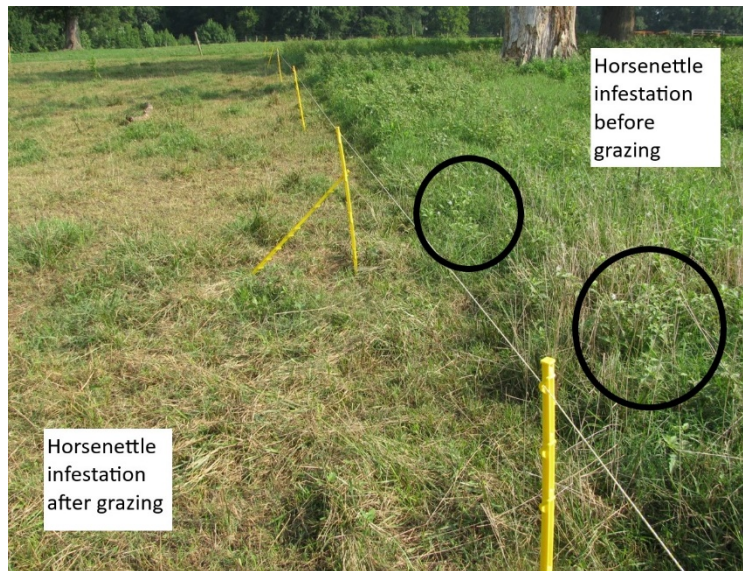


Photo credits: Matt Poore



Pasture owners generally do not consider horse nettle as a source of feed for stock and grazing animals tend to avoid it, presumably because of the thorns; however, animals can be taught to eat it and will readily consume the leaves, which are of decent nutritional value. On the negative side, this plant contains solanine like all the members of the solanum genus, so it can be toxic if consumed in large quantities or if it becomes the majority of the animal's diet. Livestock, however, will generally not eat enough of this plant to cause problems when there are other forages available. Symptoms of toxicity include dilated pupils, staggering, and weakness. Death can follow in extreme cases and is the result of paralysis. Pregnant cows may abort as a result of toxicity.

#### Control of horse nettle in pastures:

The keys to control are preventing fruit (seed) formation and killing the root system. If the infestation is not extreme, training livestock to graze

the leaves off the plants can help control its spread by forcing the plants to use root reserves to produce new leaves rather than fruit. Likewise, frequent mowing can prevent flowering. These may be good options to prevent herbicide use that could kill beneficial plants along with the horse nettles. When herbicides become the choice for control, GrazonNext® HL and Chaparral® have greater impact than 2, 4-D since they do damage to the root system as well as the above ground parts of the plant. Optimal application times are when plants are growing and flower buds are forming.

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