

MEMORANDUM

From: Alan Carpenter, Land Stewardship Consulting, Inc.
Re: Noxious Weed Management Recommendations for Shanahan Ridge HOA Open Space
Date: October 1, 2009

During our tour of the Shanahan Ridge HOA Open Space area on September 17, 2009, I observed five species of noxious weeds. Here are my recommendations for managing them.

Myrtle spurge (*Tithymalus myrsinites* = *Euphorbia myrsinites*) – This is a List A noxious weed in Colorado, i.e., it is mandatory for landowners to eradicate this species. This is the highest priority for control at Shanahan Ridge. Given the tiny size of the single occurrence that I observed, eradicating it should be easy. Simply dig up the plants (especially the roots) and dispose of them in the trash. Do not place them in a compost container. Myrtle spurge has milky sap that is very caustic and which can cause severe irritation to skin and eyes. Therefore, I strongly advise using disposable latex gloves and wearing eye protection while handling this plant. I recommend noting the location of the occurrence in your 2010 calendar and re-visiting the site of the occurrence in late April 2010 and digging up any remaining myrtle spurge plants. I recommend repeating this process in 2011. Myrtle spurge is pictured below.



Hoary cress (low whitetop) (*Cardaria draba*) – This is a List B noxious weed in Colorado, which means that landowners are obligated to control it so it does not spread to neighboring lands. Hoary cress is rhizomatous and spreads readily. The single small occurrence we found can probably be eradicated over a several-year period with modest effort. Hoary cress produces small rosettes in the early spring from which flower stalks arise in late spring. I recommend spraying the rosettes in the early spring (April) with 2, 4-D herbicide before flower stalks have appeared. A variety of formulations of 2, 4-D based herbicides are available at McGuckins. Note that 2, 4-D kills other broad-leaved plants so be careful to spray the herbicide only on the hoary cress rosettes. Wear gloves and eye protection when working with herbicides. I recommend applying herbicide early in the morning when the air is still to minimize drift of the herbicide on to non-target plants. I recommend noting the location of the hoary cress occurrence in your 2010 calendar and re-visiting the site of the occurrence in early April 2010 and spraying up any remaining rosettes with 2, 4-D herbicide. I recommend repeating this process in 2011. A flowering stalk of hoary cress is pictured below.



Canada thistle (*Borea arvensis* = *Cirsium arvense*) - This is a List B noxious weed in Colorado, which means that landowners are obligated to control it so it does not spread to neighboring lands. Canada thistle is rhizomatous and spreads readily. We observed a number of small occurrences on our site visit. There are several ways of controlling Canada thistle. The most commonly recommended is to cut or pull the flowering stalks in late August (in any event before the end of flowering) and to spray the resprouts with herbicide. Given that you have pulled the Canada thistle flowering stalks in the past, you could spray the Canada thistle resprouts this fall before the first hard freeze. Remember that 2, 4-D kills other broad-leafed plants so be careful to spray the herbicide only on the Canada thistle leaves. I recommend using the same 2, 4-D based herbicide you use for eradicating hoary cress. I recommend applying herbicide early in the morning when the air is still to minimize drift of the herbicide on to non-target plants. I recommend noting the locations of the Canada thistle occurrences on an aerial photograph (e.g., from Google Earth) and re-visiting the occurrences in late August 2010 and pulling any flowering Canada thistle stalks then spraying any resprouts in September 2010 with 2, 4-D herbicide. I recommend repeating this process in 2011. Flower heads of Canada thistle are pictured below



Absinthe wormwood (*Artemisia absinthum*) – This is a List B noxious weed in Colorado. Landowners in Boulder County are obligated to eliminate absinth wormwood plants prior to seed development. Absinthe wormwood is a perennial forb that smells like sagebrush. I observed one plant of this species. Given its apparent local rarity, I recommend digging up absinthe wormwood plants, especially the roots, in the summer prior to flowering. If the dug plants have flowers, I recommend placing them in the trash; otherwise, they can be composted. I recommend noting the locations of all absinthe wormwood plants in an aerial photograph and revisiting occurrences after the plants have been dug to remove any absinthe wormwood plants that were not killed by previous digging. Leaves of absinthe wormwood is pictured below



Field bindweed (*Convolvus arvensis*) – This is a List C noxious weed, root-sprouting weed that spreads rapidly. Landowners are encouraged to control this species. It tends to grow intermingled with desirable broad-leaved plants, making control of field bindweed challenging with herbicides. I recommend attempting to control field bindweed with gall mites (*Aceria malherbae*) which are available from the Colorado Department of Agriculture’s Biological Pest Control facility in Palisade. Place a request for bindweed mites in April 2010. The cost in 2009 for a packet of mites was \$35. The web site is <http://www.colorado.gov/cs/Satellite/Agriculture-Main/CDAG/1167928159775>. The Pest Control Program will mail a packet of field bindweed leaves infected with bindweed mites. The infected leaves are then wrapped around field bindweed leaves at Shanahan Ridge. Flowers of field bindweed are pictured below.

