

Winter: The Perfect Time to Rid Your Property of Russian olives.

So you have made a commitment to rid your property of those pesky Russian olives (*Elaeagnus angustifolia*). Proper removal methods combined with periodic monitoring will be the key in the success of your removal project. Performing this work in the winter while the ground is frozen has the added plus of limiting any ground disturbance that may occur from the removal project. We all know that such disturbances foster weed infestations!

Russian olive reproduction from seeds that remain viable for up to 3 years, sprouting from buds on the root crown, and suckering. Roots systems of the Russian olive are extensive, and they have well-developed lateral roots. After injury to the above ground portion, re-sprouts from the roots and root crown are common. Digging the root ball can be a time consuming process and in many instances requires heavy equipment. If all the roots are not removed, new shoots will emerge with a vengeance!

There are several effective treatment methods to rid your property of these thorny pests. Using an integrated approach is the best strategy. This method of including prevention, cultural/mechanical controls, chemical treatment, revegetation, and monitoring ensures greater success.

There are generally **3 common practices** that are widely used to treat Russian olive. They may involve a combination of mechanical and chemical treatments. Exact herbicide recommendations are not listed as you should contact your local Weed and Pest District or other distributor to best determine the proper herbicide for your particular project. Typical products for this species may include triclopyr, imazapyr, 2,4-D, glyphosate, or a combination of these.



1. **Foliar treatment**-this method is done late spring to early summer after target specimens have fully “leafed” out and are actively growing. This can be used for any size specimen but you will be limited by your ability to effectively cover the entire surface. This method may also have the greatest off target damage as herbicides of choice are “broadleaf” varieties so any other broadleaf plant species in the area that come into contact with the herbicide will be susceptible. (This can be minimized by following label directions on the herbicide container). You will need a spray unit-backpack or an ATV or truck mounted unit depending on size of infestation and resources (time, money) available. You must treat the entire tree. Spray the herbicide solution (herbicide, adjuvant, water) until the point of runoff. Follow up treatments may be necessary.
2. **Basal Bark treatment**- this treatment method can be done anytime during the year as long as the stems and immediate area surrounding them are not covered in snow. This works best on specimens that are less than 3.5 inches in diameter (as trees mature, the bark becomes thicker making it more difficult for the herbicide to penetrate past the bark into the cambium layer). You will need at least backpack sprayer. If available a larger spray unit can be used should you have larger infestations. Using the herbicide solution (herbicide plus basal bark oil), spray stems from the crown (where the stem meets the ground) up 18-30 inches. Be sure to completely cover the entire circumference of each stem. The product should be visible on the stem. This method chemically girdles the tree. You will have to monitor treatments as it may take over one year for the specimen to die off. Re-treatments may be necessary.

Basal bark application.



- 3. Cut stump treatment-**This method is best for those mature and/or well-established populations with specimens over 3.5-4 inches in diameter. It involves mechanically cutting, mowing, or shearing each tree. Once the tree is felled, you have only fifteen minutes to apply your herbicide (herbicide plus bark oil) as the tree will begin to heal itself immediately. Using a spray apparatus or a paintbrush with the herbicide mixture, immediately treat the entire cut stump surface. Thoroughly wet the entire cut surface, outside of the stump, and pay special attention to the area just inside the bark (cambium). Monitor the following season for re-sprouts.

Re-sprouting: If you should see this happening the season following treatments, the foliar method will be your best option. Treat when the sprouts have leafed out and are actively growing-preferably when they are about 2-3 feet tall to increase the leaf surface area. This will allow more herbicide to contact the sprout and to be metabolized (carried) to the roots. Treated when small, this follow up treatment should require less of your time and resources. Locating

new individual infestations of plants and treating while they are young should be a high priority after initial treatment, thus continued monitoring is important.

Once removal is complete, revegetation may be necessary to prevent new infestations of Russian olive and other weedy species-both noxious and nuisance from taking over again. In many instances; however, the removal of the Russian olive alone is enough to trigger regeneration of desirable native species should they be present in the removal area. Of course, this may not always be the case, in which you should seek out a reliable source (UWCES, NRCS, WY Game and Fish, local Conservation Districts, etc.) for revegetation suggestions.



Large scale removal projects may require the use of specialized equipment. While the cost may be considerably higher, the yield is much greater. In many areas of Wyoming, there are programs available to offer technical and/or financial assistance with your removal project. Program guidelines vary depending on the parameters set forth by the grantor. Both producers and small acreage landowners should be able to find cost share opportunities in your area. Check with your local Weed and Pest District and/or NRCS.

Whether you are regaining the productivity of your pasture or removing these invasive species from wetlands or riparian areas, your domestic animals and wildlife will benefit from this project. Most participants of removal projects are quick to note that they actually see an increase in not only the number of wildlife but also a greater variety of wildlife species after Russian olive removal has taken place. Weed control is a long term commitment and requires vigilance and is a part of any good land management practice.



Pre Russian olive removal



Post Russian olive removal

