



# WINTER:

## The perfect time

By Mary McKinney

Proper removal methods and periodic monitoring is the key to removing pesky Russian olives (*Elaeagnus angustifolia*).

These methods are often performed different times of the year, including fall and winter. Performing this work in winter while the ground is frozen has the added plus of limiting any ground disturbance that may occur. Such disturbances foster weed infestations!

Russian olive spreads via seeds that remain viable for up to three years, sprouting from buds on the root crown, and suckering. Root systems are extensive, and Russian olives have well-developed lateral roots. Re-sprouts from roots and the root crown are common after injury to the aboveground portion. Digging the rootball can be time-consuming and, in many instances, requires heavy equipment. If all roots are not removed, new shoots will emerge with a vengeance!

### An Integrated Approach

An integrated use of several treatment methods is the best strategy to rid property of these thorny pests. This method includes prevention, cultural/mechanical controls, chemical treatment, revegetation, and monitoring.

There are generally three widely used practices to treat Russian olive and may involve a combination of mechanical and chemical treatments. Exact herbicide recommendations are not listed – contact your local weed and pest control district or other distributor to best determine the proper herbicide for a particular project. Typical products for this species may include triclopyr, imazapyr, 2,4-D, glyphosate, or a combination of these.

**Foliar treatment** – The whole tree is sprayed late spring to early summer after the target trees have fully leafed out and are actively growing. Any size tree can be treated, but you may be limited in effectively covering the entire surface of a large tree. This method may also have the greatest off-target damage as the herbicides of choice target broadleaf plants. Any other broadleaf plant species that come into contact with the herbicide will most likely be injured or killed. This can be minimized by following label

# to rid property of Russian olives

directions on the herbicide container. A spray unit – a backpack sprayer or an ATV or truck-mounted unit depending on size of infestation and available resources (time, money) – can be used. The entire tree must be treated. Spray the herbicide mix (herbicide, adjuvant, water as listed on the label) to the point of runoff. Follow-up treatments may be necessary.

**Basal bark treatment** – This can be done any time as long as the stems and immediate area surrounding them are not covered in snow. This works best on trees less than 3½ inches in diameter (more mature trees have thicker bark that can hinder herbicide penetration into the cambium layer just inside the bark). A backpack sprayer at minimum is needed. A larger spray unit can be used for 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. Completely cover the entire surface of each stem – the product should be visible. This method chemically cuts off the supply of water and nutrients to the tree. Treatments should be monitored because trees may take more than a year to die.

**Cut-stump treatment** – This method is best for mature and/or well-established populations with trees more than 3½ inches in diameter. Mechanically cut, mow, or shear each tree. The tree will begin to heal itself immediately, and the herbicide (herbicide plus bark oil) should be applied within 15 minutes. Using a spray apparatus or a paintbrush, thoroughly coat the entire cut surface, outside of the stump, and pay special attention to the cambium area. Monitor the following season for re-sprouts.



*A Russian olive trunk is treated.*



*Mechanical removal of Russian olives.*



*Herbicide should be applied within 15 minutes to a cut stump.*



*Herbicide is sprayed from the crown up 18 to 30 inches completely covering the surface of each stem.*

## More about Russian olives

The Park County Weed and Pest Control District is engaged in an ongoing fight with Russian olives. To read more, go to [barnyardsandbackyards.com](http://barnyardsandbackyards.com), click the Magazine link on the left-hand side of the page, then 2010 Archives, then the "Neighbors team ..." article under Summer 2010.



Lower Horse Creek pre-removal of Russian olives (left) and post-removal (right).

## Resprouting

If there is resprouting the season following treatments, the foliar method is the best option. Apply the herbicide when sprouts are about 2-3 feet tall, have leafed out, and are actively growing. The increased leaf surface area allows more herbicide to contact the sprout and be carried to the roots, which is essential for maximum effectiveness. Finding new individual infestations of plants and treating while young should be a high priority after this initial treatment. Continued monitoring is important.

## Consider Revegetation

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; however, in many instances, the removal of the Russian olive alone is enough to trigger regeneration of desirable native species should they be present in the removal area. If not, seek out a reliable source, such as the University of Wyoming Cooperative Extension Service, the Natural

## Wyoming noxious weed

Russian olives are a designated noxious weed in Wyoming.

To see the complete list of noxious weeds, see

<http://1.usa.gov/piMbSP>.

Resources Conservation Service (NRCS), the Wyoming Game and Fish Department, or local conservation districts for revegetation suggestions.

Large-scale removal projects may require specialized equipment. While the cost may be considerably higher, so is the number of trees removed. In many areas of Wyoming, there are programs offering technical and/or financial assistance with a removal project. Program guidelines vary depending on the parameters set by the grantor. Producers and small-acreage landowners should be able to find cost-share opportunities in their areas. Check with your local weed and pest control district and/or NRCS office.

Whether regaining the productivity of your pasture or removing these invasive species from wetlands or riparian areas, domestic animals and wildlife benefit. Most participants of removal projects are quick to note they see an increase in not only the number of wildlife but also a greater variety of wildlife species.

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