



RUSSIAN OLIVE

Elaeagnus angustifolia

CONTROL

Hand Pulling

Pull out small trees (<3.5 inches diameter) by hand or with weed wrench in the spring or early summer.

Mowing

If sapling stems do not exceed 1 inch in diameter, use tractor fitted with brush mower to trim plants close to surface. This cut material should be piled for shredding or burning. Mowing alone will not kill the plant, and must be done annually to prevent growth. Combination with glyphosate is additionally helpful.

Tilling: Russian Olive is sensitive to tilling, and tillage should be done in combination with reseeding and pasture renovation.

Biological control

There are no known biological agents currently available for management.

Grazing

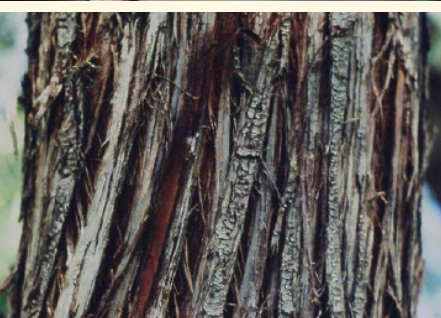
Goats will selectively graze Russian olive seedling and young agents. This will not eradicate the population, but help as part of an integrated approach.

Ideal Timing for Treatment Options		
Spring	Summer	Fall
Foliar Spray*		
Pulling		
Mowing		
Grazing		

*foliar spray varies per chemical, per season.

Herbicide

Most sites will need to be revisited for several years. Herbicide use will vary depending on population density, site accessibility, time of year, etc. Proximity to desirable species will also choose how to proceed. The herbicide chart on the back lists approved controls for russian olive. Always consult product labels and read them carefully to ensure correct species/land management usage and chemical application.



Russian Olive Life Cycle

Life Cycle	Root	Leaves	Stems	Flower	Seed/Fruit
Perennial shrub or small tree	Taproot	1 to 4 inches long and ½ to 1½ inches wide with smooth edges and arranged alternately. Upper leaf surface green-gray and lower surface silver-gray.	Dark reddish-brown with silvery scales. Thorns 1 to 2 inches long, alternate, and numerous. Reaches 10 to 30 feet in height with trunk up to 20 inches in diameter.	4 yellow sepals resemble petals. Bell-shaped and arranged in clusters.	Clusters of ½ inch, hard, olive-shaped fruit that each contain 1 seed. Immature fruits silver and ripen to tan or brown. Brown, oval seeds ¼ to ½ inch long.

Herbicides for Russian Olive, *Elaeagnus angustifolia*

Active Ingredient	Rate	Efficacy	Comments
Glyphosate	Rodeo: 3-7.5 pints/acre Roundup: 1.5-3.3 quarts/acre	Foliar: Spring Injection/Frill: Winter	This is a nonselective herbicide; care must be taken to avoid application onto non-target and native species. Injection should be at 50-100% concentration. Mix according to label.
Imazapyr	2-4 pints/acre	Summer/Fall: actively growing and fully leafed	Foliar best on seedlings and saplings. Habitat is okay for riparian use. Though non-target species may be killed or injured through root transfer.
Imazapyr + glyphosate	1.5 qt. + 1.5 qt./acre	Same as imazapyr	Same as imazapyr.
Triclopyr	1-3 qt./acre	Foliar: early summer actively growing and fully leafed	Selective broadleaf herbicide, low soil activity. Garlon 4 volatilizes above 86 Fahrenheit.
Triclopyr + 2,4-D	2 gallon/acre	Foliar: Late spring to early summer after full leaf	Low volatility, must wait about 3 weeks to reseed so that new germination is not inhibited
Aminopyralid + triclopyr	7 oz + 2 qt./acre	Foliar: Spring/Summer	Treatments can be made to smaller trees <6 feet in height or to root and stem previously cut.

Information on diagnostic identifying characteristics adapted from "Montana's Noxious Weeds" by Pokorny and Mangold, Montana State University Extension Bulletin EB0159.