PAHRANAGAT VALLEY COOPERATIVE WEED MANAGEMENT AREA
FACT SHEET SERIES #2

RUSSIAN OLIVE

(Elaeaganus sp.)

Quick Facts

- *Native to East Asia and Russian; introduced in 1830s*
- *A tree-like shrub with extensive root system*
- *Produces many fruits or olives per plant that are dispersed by birds and other animals*
- *The key to Russian olive control is to kill the root system with herbicides or continual mechanical treatments*
- *The best management plan includes mechanical and chemical treatments with replanting of native trees and shrubs for competition and prevention of secondary invaders.*

Russian olive flowers

Distinguishing Characteristics

Structure: Large, multi-stemmed tree-like shrubs with dark brown bark and may grow more than 25 feet high.

Leaves: 2-4 inches long and 1/4-1" wide and a dull green with silvery-white undersides. Possesses large thorns along the stems.

Flowers: Small, light yellow flowers with strong fragrance or aroma.

Seeds: Produce fruit that are round about 1/2" in diameter with seed located inside fruit or olive.

Roots: Extensive root system that can colonize dry, saline soils. Roots are extremely resilient and can easily re-establish root system after treatment.

Pahranagat Valley Cooperative Weed Management Area

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Russian Olive Fact Sheet

Impacts

1. Out competes native trees and willows which decreases the plant diversity along rivers, springs, and other waterways.
2. Replaces native tree canopies which negatively impacts nesting and brood rearing habitats for birds.
3. Can uptake large amounts of water and prevent understory grasses and flowering plants from growing which can increase soil erosion.
4. Can affect nutrient cycling in the soil preventing native plants from establishing.

Weed Management Recommendations

Hack-n-squirt or Frill Cut Treatment Method

Use hatchet, machete, or similar device to make frill or cut at a downward angle at proper spacing, following label recommendations. Angle should be 45-60 degrees. After strike, pull the hatchet backwards to produce a "cup" to hold the herbicide. Cuts should penetrate through the bark into living cambium tissue (the wood next to the bark). Be careful not to girdle the tree. Alternate the cuts around the trunk. Spray herbicide (Garlon 4 or Rodeo) mixed with JLB oil, according to label, into cuts using squirt bottle or sprayer. Limit the amount of material running out of cut. Not recommended for use during heavy sap flow in spring and **g**enerally used to control individual trees greater than 5 inches in diameter.

**This method is best for the protection of wildlife habitat due to no immediate canopy removal or disturbance.

Cut-stump Treatment Method

The cut-stump technique involves cutting the trees and shrubs to ground level and spraying stumps with the herbicide (Garlon 4 or Rodeo) and JLB oil. Use chain saws, brush cutters, lopping shears and other hand tools. Stumps are then sprayed using hand-held spray bottles, sprayers, or "painted on". The herbicide must be applied to the stump immediately following cutting to maximize the herbicide soaking into the trunk. The treatment should be applied after the plant has bloomed and prior to dormancy. Cutting the tree outside of this time frame is effective in removing the above ground biomass but the resprouts will need to be treated with chemical the following year to in order to kill the plant.

**This method will remove all of the canopy structure and requires immediate revegetation with native trees and shrubs.

Basal Bark Spray Treatment

Great method for maintenance and follow-up treatments from the prior methods. Best for younger plants with stems no larger than 6 inches in diameter. Spray herbicide 12-15 inches of bark around entire stem near the base of the plant. Spray until bark is wet, but do not let it runoff. Do not apply to bark that is wet.

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