

Montana Audubon
Russian Olive Policy Guidance Document
Adopted by Montana Audubon Board on January 21, 2006, Update September 21, 2010

History:

Russian olive is native to southern Europe and western Asia (Little 1961). It was intentionally planted beginning in the early 1900's as an ornamental, and for windbreaks, erosion control and wildlife enhancement purposes (Christiansen 1963; Little 1961). Since its introduction, it has become naturalized throughout the western United States from North Dakota to Washington and south to Texas and California (Olson and Knopf 1986) in addition to several Midwestern states, and three provinces in Canada.

Legal Status:

Sale of Russian olive is prohibited in Montana (effective September 10, 2010). It is considered a noxious weed in Colorado (see: <http://www.colorado.gov/cs/Satellite/Agriculture-Main/CDAG/1174084048733>), New Mexico (see: <http://www.nmda.nmsu.edu/animal-and-plant-protection/noxious-weeds>), Wyoming (Wyoming Department of Agriculture press release, February 12, 2007), and 7 Utah Counties (Carbon, Duchesne, Grand, San Juan, Sevier, Uintah, and Wayne) (see: Additional Noxious Weeds Declared by Utah Counties at <http://ag.utah.gov/divisions/plant/noxious/index.html>). It is also listed as a noxious weed by Treasure County, Montana. The plant has no special federal status. In August 2008, Russian olive was petitioned for inclusion on the Montana state noxious weed list by Montana Audubon and the Montana Native Plant Society. Instead of adding this species to the noxious weed list, on September 10, 2010, the state of Montana adopted regulations banning the sale of this plant statewide. This action will help prevent the spread of this plant, while ensuring that it does not have to be removed from wind breaks and other such plantings.

Invasion Potential:

Russian olive is invasive due to high seed production and viability, seed longevity, seed dispersal by birds and mammals, vegetative reproduction following injury, drought and salt tolerance, and the ability to establish in the absence of disturbance in late successional communities. In the spring of 2007, the Natural Resources Conservation Service (NRCS) took Russian olive off its preferred list of plants for the state of Montana. Because of the invasive nature of Russian olive on the Yellowstone River, in 2007 the Yellowstone River Conservation District Council (YRCDC) began recommending that, "Russian Olive should not be planted in the Yellowstone River valley, and where it currently exists, Russian Olive should be controlled or eradicated" (YRCDC 2007). In 2008 the Montana Dept. of Natural Resources and Conservation nursery destroyed their stock of Russian olive and committed to not selling this plant.

Impacts:

- Russian olive is said to displace and/or have the potential to displace native climax species in many parts of the western US.
- Once established, Russian olive hinders recruitment of native cottonwood and willow on some sites.
- Russian olive's dominance may lead to reduced plant species diversity.
- The impact of Russian-olive invasions upon wildlife species is variable, site specific, and often debated.
 - Although Russian olive has been promoted for use in wildlife habitat plantings, there has been relatively little research on its use by native animals.
 - Some authors suggest that the displacement of native floodplain forest by Russian-olive can result in loss of habitat for species such as cavity-nesting and insectivorous birds

- Wildlife species richness, abundance and density were greater in willow than in Russian-olive habitats, and all foraging guilds avoided Russian olive in the breeding season along the Snake River in Idaho (Brown 1990).
- Russian olive provides habitat for predators such as hawks, magpies, skunks, and raccoons, which prey on nests of ducks and grouse (USF&WS).
- Native beavers primarily use cottonwood trees while rarely using Russian olive or tamarisk along several rivers in eastern Montana (Lesica and Miles 1999, 2001; Pearce and Smith 2001). This favors dominance of Russian olive in riparian sites.
- Insects, including honey bees, are found only at low densities on Russian-olive and fruit is not consumed by insects
- Russian olive can block flow of irrigation ditches and increase difficulty for moving livestock (Lesica and Miles observations).

Policy:

Montana Audubon believes that Russian olive should be considered a noxious weed so that all sales could be prohibited in Montana. We also believe that Montana state agencies should not encourage its sale and planting (Montana FWP should stop recommending it for wildlife plantings). Montana Audubon also believes Russian olive should be listed on a “Priority 3” list as proposed by the Montana Department of Agriculture, which would prohibit its sale, but not require eradication. When the Montana Dept. of Agriculture adopted Russian olive as a “Priority 3” regulated plant on September 10, 2010, Montana Audubon achieved its policy goals.

Literature Cited:

Brown, C. R. 1990. Avian use of native and exotic riparian habitats on the Snake River, Idaho. M.A. Thesis. Colorado State University, Fort Collins, CO.

Christiansen, E. M. 1963. Naturalization of Russian olive (*Elaeagnus angustifolia* L.) in Utah. *American Midland Naturalist* 70: 133-137.

Lesica, P. and S. Miles. 1999. Russian olive invasion into cottonwood forests along a regulated river in north-central Montana. *Canadian Journal of Botany* 77: 1077-1083.

Lesica, P. and S. Miles. 2001. Natural history and invasion of Russian olive along eastern Montana rivers. *Western North American Naturalist* 61: 1-10.

Little, E. L. 1961. Sixty trees from foreign lands. *USDA Forest Service Agriculture Handbook* 212, Washington D.C.

Olson, T. E. and F. L. Knopf. 1986a. Naturalization of Russian-olive in the western United States. *Western Journal of Applied Forestry* 1: 65-69.

Pearce, C. M. and D. G. Smith. 2001. Plains cottonwood’s last stand: can it survive invasion of Russian olive onto the Milk River, Montana floodplain? *Environmental Management* 28: 623-637.

Yellowstone River Conservation District Council. 2007. Best Management Practice: Russian Olive Management in the Yellowstone River Valley. Adopted June 21, 2007, 2 pp.