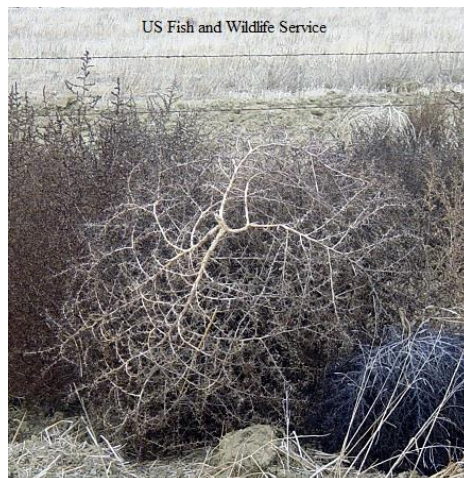




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RUSSIAN THISTLE MANAGEMENT TIPS

Russian thistle, a member of the Goosefoot family, is a rounded, bushy, much branched annual that grows $\frac{1}{2}$ to 3 feet tall. The flowers are green and hard to recognize, and grow near the upper leaves. A pair of spiny, floral bracts accompanies each flower. Reproduction is only by seed. Seeds are scattered as mature plants break off at ground level and tumble along with the wind. Russian thistle is well adapted to dry environments. Rapid germination and establishment occur after only minimal amounts of precipitation. Russian thistle is commonly found in dryland agriculture fields, overgrazed rangeland and waste areas. It competes with crops throughout the growing season, reducing crop yields.



Management must be planned over several consecutive growing seasons at a site and should focus on preventing seed production and dispersal. The area should be monitored for new growth until the seed bank is depleted and any new plants that emerge from seeds should be controlled appropriately.

Effective control measures for the management of Russian thistle include:

1. **Mechanical (mowing):** Mowing before plants flower can reduce seed production.
2. **Herbicide: Always follow directions on the label. The label is the law!** Calibrate your equipment to ensure that you are adding the proper amount of herbicide to your tank. The following herbicides are commonly used to control Russian thistle. **DO NOT use these herbicides on lawns, turf or ornamental sites - read the label.** *For the most effective control, apply herbicides in the seedling to very young plant growth stage.*

Mixing rates in small backpack or hand sprayers are as follows:

Clarity:	½ - 1 oz herbicide to 1 gallon of water (seedlings/young plants).
Curtail:	1 - 2 oz herbicide to 1 gallon of water (seedlings/young plants).
Glyphosate:	1 - 2 oz herbicide to 1 gallon of water (seedlings/young plants).

Glyphosate will kill grasses as well as forbs.

Rates in large sprayers are as follows:

Clarity:	1 – 2 pints herbicide per acre (seedlings/young plants).
Curtail:	1 – 2 quarts herbicide per acre (seedlings/young plants).
Glyphosate:	1 – 2 quarts herbicide per acre (seedlings/young plants).

Glyphosate will kill grasses as well as forbs.

NOTE: Adding a surfactant to your tank mix may enhance the performance of your herbicide and is required for certain herbicides (read the label). Add 0.5 - 1 oz per gallon of water for backpack sprayers or 1 – 2 pints per 100 gallons for large sprayers.

3. **Cultural (revegetation):** Avoid tilling as this may aggravate the situation. Planting and maintaining desirable, competitive species will help slow the spread. Russian thistle does not compete well in regular, irrigated soils.
4. **Integrated management:** Management of Russian thistle is more effective when more than one strategy is used.