Whitman County Extension
Weeds

Washington State University
WHITMAN COUNTY EXTENSION

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# STEVE'S Weed of the Month

## Saltcedar

**Also Known As:** salt cedar, tamarisk, tamarix, tammies, pink cascade

**Saltcedar** is a **Class B Noxious Weeds**: Non-native species that are either absent from or limited in distribution in some portions of the state but very abundant in other areas. The goals are to **contain** the plants where they are already widespread and **prevent** their spread into new areas.

**Saltcedar** ***( Tamarix ramosissima*** **Ledeb. ),** native to Eurasia and North Africa was introduced as an ornamental species from Eurasia to North America in the early 1800's and subsequently escaped cultivation. Saltcedar is a deciduous, loosely-branched shrub or small tree that grows 5 to 20 feet tall or taller. Trunks of the trees are slender, upright or branched, and covered with smooth, reddish-brown bark that becomes ridged and furrowed with age. Its leaves are small, alternate and scale-like, resembling cedar. It has large sprays of small, pale pinkish flowers that are clustered in spike-like racemes. The flowers are most abundant between April and August, but may be found during other times of the year.

A mature saltcedar plant can produce 600,000 minute seeds each year. The short-lived seeds are readily dispersed by wind and water and can germinate within 24 hours of contact with water. Early seedling growth is slow, but older seedlings grow rapidly and are tolerant of submergence, saline soils and drought. Not only does saltcedar reproduce by seed, but it can propagate from buried or submerged stems.

The plant's primary root descends 10 feet or more, until it reaches water, then it spreads laterally. Tamarisk is a facultative phreatophyte, meaning that it uses but does not depend on ground water. It is capable of transpiring over 200 gallons of water a day. This can reduce water flow and lower ground water levels for native vegetation, potentially drying up springs and riparian areas.

This aggressive colonizer displaces willows, cottonwoods and native riparian vegetation, forming monotypic stands. The plant can inhibit native plant species from reestablishing by increasing salinity of surrounding soil. It does this by concentrating salt in its leaves; over time, fallen leaves deposit salt in the soil. Not only does saltcedar displace native riparian plants, but it can alter animal habitats. Native birds and animals generally will not feed on the seeds or the plant's leaves. Saltcedar stands that have displaced native vegetation also cause a sharp decline in species diversity.



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The main enticements to saltcedar are alkaline soils, soil moisture, and sufficient disturbance of native vegetation to enable its invasion. Such disturbances include clearing, plowing, off-road vehicles and logging. Saltcedar is known to establish along waterways, streams, river banks and drainage areas. It is not shade tolerant, however, and shaded plants experience reduced reproduction.

**Distribution:** Invasive saltcedar occurs in Whitman County in small populations in controlled ornamental settings. Washington State has implemented an extensive control program to eradicate its 500-600 acres of saltcedar.

## Control Methods

When selecting an appropriate control method, consider the size of the area where saltcedar is to be controlled, restrictions on the use of herbicides, the presence or absence of desirable vegetation in the area, whether water is a factor, adjacent land uses, and cost of treatment.

**Mechanical:** Mechanical control methods include mowing, chaining or ripping, disking and bulldozing. Because of saltcedar's ability to resprout, these methods are generally not successful over the long term. Mechanical control can be labor intensive, expensive, destructive to native plants, and may not be feasible depending on the infestation's size and location. Of the listed methods, root plowing is most commonly used. Root plowing 40 to 60 cm deep with a cutting blade and fins works best under hot, dry conditions and when used in conjunction with herbicide treatments.

**Chemical:** Herbicides are most effective on saltcedar when applied to new growth. Since saltcedar generally grows in wet areas, caution should be used when applying herbicides. Imazapyr provides very effective control, but also kills most other plant species except legumes. Triclopyr is effective when used with the cut stump method. The cut stump approach involves cutting saltcedar as close to the ground as possible, then applying herbicide immediately (within one minute) to the cut surface. This treatment appears to be most effective in the fall when plants are translocating materials to their roots. Follow-up treatment of resprouts is necessary. While this method is relatively slow and labor-intensive, it spares desirable woody plants. On the other hand, it may be more cost-effective to kill all

woody plants at the site and reseed with a desirable species. Revegetation is always important to prevent reinvasion of an undesirable plant.

**More information can be found in the PNW Weed Management Handbook**

**Use pesticides with care. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.**

**Biological:** To date, two insect species have been tested and permitted for limited release by the USDA. One is a mealybug, ***Trabutina mannipara*****,** from Israel and the other is a leaf beetle, ***Diorhabda elongata*** (see photo), from China. The leaf beetle has been released in Washington. It feeds on the plant foliage during both the adult and larval stages. Several other insect species are currently in various stages of being tested.

**Trabutna mannipara**

**Diorhabda Elongata**

Cattle will graze young saltcedar plants if desirable vegetation is not present, although the plant has little nutritional value. Grazing by livestock on seedlings and new sprouts may repress regrowth and seedlings of saltcedar in some areas.

**Questions:** contact Steve Van Vleet or phone ( 509 ) 397 - 6290