



Figure 1. Saltcedar.

Saltcedar

(*Tamarix* spp.)

Identification and Control

STOP THE SPREAD

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Figure 2. Saltcedar leaves and flowers.

Saltcedar is the common name for several introduced species of shrubs or small trees including *Tamarix chinensis*, *T. parviflora*, and *T. ramosissima*. Saltcedar invades riparian habitats and displaces native flora and fauna. Saltcedar was first introduced in the U.S. to reclaim eroded areas and prevent further loss of stream banks, primarily in the southwest. Saltcedar has been sold in the horticultural industry, primarily for its wide adaptability and pink flowers.

How do I identify this plant? Saltcedar, or tamarisk, is a shrubby bush or tree that can range in size from 5 to 20 feet tall (Figure 1). The bark is a reddish brown, especially on younger branches. The leaves are small and flat and resemble evergreen shrubs such as arborvitae (Figure 2). Flowers are pink to white in color, five-petaled, and appear from mid to late summer. The seeds are extremely tiny and similar in size and color to pepper. Each seed has a pappus which allows it to float long distances in water or move in the wind. Seeds are short-lived and usually germinate within a few months after dispersal.

What is saltcedar's growth cycle? Once saltcedar seed germinates it can grow rapidly to a small flowering shrub in one to two years. The plant is very hardy and horticultural varieties are advertised to grow "in sun or shade, and in wet or dry areas" from USDA hardiness zones 2 to 7. The plant quickly establishes a long, woody taproot (Figure 3) to support a voracious thirst for water. The root system is capable of producing many new shoots if the top growth is removed by mechanical control methods or fire.

Why is this plant a concern? Saltcedar can quickly become a monoculture along lakes and waterways. A single plant has been reported to transpire over 200 gallons of water per day. In the early morning and evening moisture with high salt content is exuded from the foliage, causing the soil to become saline. Saltcedar can choke waterways and has even



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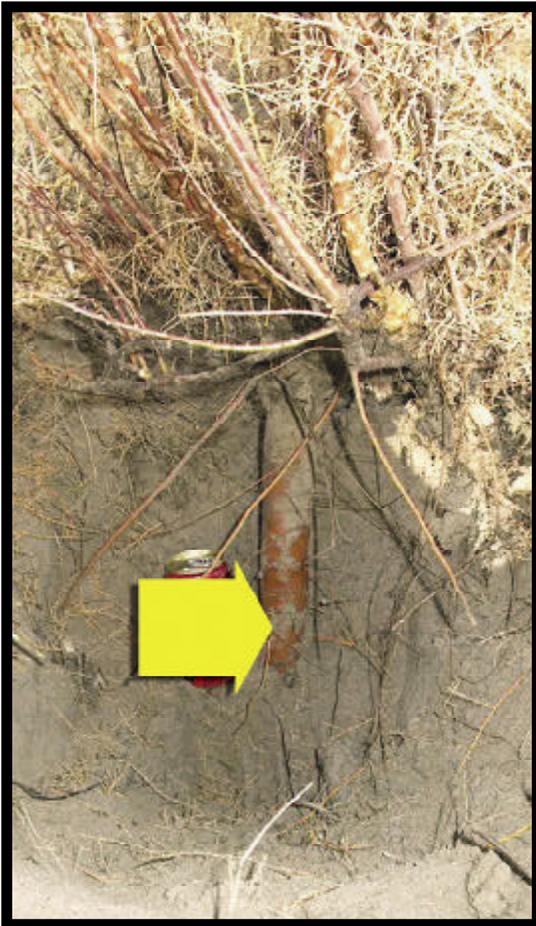


Figure 3. Long, woody taproot of saltcedar.
(Dean Cline, N.D. Dept. of Ag.)



Figure 4. Saltcedar displaces native plants and wildlife. (Keith Duncan, New Mexico State Univ.)

dried up entire lakes (Figure 4). Native riparian species are quickly displaced by saltcedar, which in turn causes displacement of native birds and animals that generally do not feed on the leaves or eat the saltcedar seeds. Saltcedar, even in the seedling stage, will tolerate short-term flooding and can establish away from waterways when seeds are washed in during flooding. Once established the plants can become so thick cattle will not graze the area.

Where in the state is this plant found?

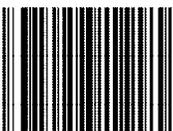
Saltcedar has been sold in North Dakota for many years as various tamarisk species, also called tamrix. Homeowner plantings can escape to waterways. However, the largest infestation is from a vigorous wild type of saltcedar which is spreading into western North Dakota along the Yellowstone and Missouri Rivers from Montana. These plants have been found along the rivers and on the banks several hundred yards away from the rivers. The latter were likely established during spring flooding. Saltcedar has also been found along the shores of Lake Sakakawea and in a wildlife management area in Sargent County. Saltcedar was collected in Benson County in 1968 and in Belfield in Billings County in 1970. Both sources were likely from ornamental plantings. Saltcedar is also likely to occur in Slope and Bowman Counties in the southwestern corner of North Dakota.

How do I control this plant? Prevention is the best method to keep saltcedar from invading North Dakota wetlands and wildlands. Arsenal is the most widely used herbicide to control saltcedar and should be applied alone at a 1% solution to the foliage or at 12 ounces per gallon of water as a cut stump treatment. Arsenal can also be applied with a glyphosate formulation labeled for use in water such as Rodeo or Glypro. Do not remove saltcedar topgrowth for 3 years following herbicide application or resprouting will occur. Consult the label for recommended use rates and locations. Cultural control methods such as burning or bulldozing have not been successful. Biological control is in the beginning research stage and is not recommended in North Dakota because of the limited saltcedar acreage.

**If you find this weed, report it
to your local weed officer.**

HELP STOP THE SPREAD

For more information on this and other topics, see: www.ag.ndsu.nodak.edu



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