



# *Tamarix* spp. - Saltcedar

## A Canadian Concern

*Tamarix* is native to Eurasia and Africa. It is an aggressive, woody invasive plant. It was planted in North America in windbreaks, by government agencies for stream bank stabilization, and as an ornamental. By the 1930s it had naturalized and invaded many western river systems in Arizona, New Mexico and western Texas eventually spreading north into Wyoming, Montana, and North Dakota. Natural and human transport mechanisms contribute to its rapid spread. While it has not naturalized in Canada, portions of the Canadian Great Plains are highly susceptible to invasion by saltcedar. The invasive populations of saltcedar in North America include a complex of five very similar species and their hybrids (*T. chinensis*, *T. ramosissima*, *T. canariensis*, *T. gallica* and *T. parviflora*).

### BIOLOGY

Saltcedar spreads by seed but can also re-sprout vigorously from roots if the plant is damaged or removed. It can also be readily established from cuttings, if buried in moist soil. A single mature saltcedar may produce up to 500,000 seeds between April and October. The tiny, hairy, pollen-sized seeds are readily and widely dispersed by wind and water throughout the growing season. The seeds will germinate within 24 hours after coming in contact with water. Early seedling growth is slow, but older seedlings grow rapidly and are tolerant of being submerged in water, saline soils, and drought. In the early spring seedlings may grow up to 25 cm a month. Once saltcedar becomes established it often forms dense thickets.



### THE PROBLEM

Saltcedars extremely high water usage can lower water tables to levels below the root zone of native trees and it excretes excess salts through leaf glands killing saline intolerant plants. A single mature plant can use up 200 gallons of water a day. Saltcedar invasions displace native plants, trees and wildlife.



In some cases as much as 80% of the total cover consists of saltcedar resulting in the dramatic decline in native woody and herbaceous plant composition and abundance. Saltcedar glands excrete numerous salts and minerals that increase soil salinity.

### DETECTION

Saltcedar can be found in and along the banks of streams, rivers, creeks, drainage ditches, artificial waterbodies, wet pastures or rangelands and other natural wet areas where seedlings have access to extended periods of moisture. These are all ideal environments to scout for this invader. Saltcedar can also grow on highly saline soils but can tolerate alkali conditions.

### IDENTIFICATION

**Roots:** Saltcedar is deep-rooted (up to 30 m). The tap roots grow down to the water table but not into the water, then spreading laterally for up to 50 m. **Stems:** Saltcedars are small deciduous trees or shrubs, often multi-stemmed, 2-5 m tall depending on water availability, latitude and elevation. The young branches are smooth, flexible and willowy. The bark of young branches varies from reddish-brown, to brown, blackish-brown, dark purple, grey or black. Older branches, reach 10-15 cm in diameter, have thick grey or brownish bark which is often shredded.

**Leaves:** The leaves are small and scale-like, resembling those of *Juniperus*. At times they may be encrusted with salt secretions. The foliage remains green into the late fall before turning a golden-orange colour. **Flowers:** The flowers are small, pale pink to white, with petals 1-2 mm long and appear in dense masses on long spikes at the tips of branches in mid to late summer.

**Please Report Any Saltcedar Sightings in Manitoba to (204) 745-5651;  
Saskatchewan to (306) 668-3940; and in Alberta to (780) 415-9930**