

Saltcedar (*Tamarix ramosissima*)



Photo credit: J.M. DiTomaso



Photo credit: L.J. Mehrhoff



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Navajo Name
K'eilichii'its'óóz

Origin
Native to the Eurasia and Africa

Description
Saltcedars are tall woody shrubs to shrub-like trees with scaly leaves, similar to junipers or cedars. However, their leaves are deciduous, turning yellow to brown in the fall before falling off. Saltcedar flowers can be white to pink with five petals, sepals, and stamens. They grow in dense plumes or spike-like racemes that bloom throughout the growing season. When in bloom, their exerted anthers give the flowers a feathery appearance. Their fruits form a capsule with many feathery hairs. Saltcedars are phreatophytes with deep taproots that can reach the water table.



Photo credit: Bureau of Indian Affairs

Biology
Tamarisk species prefer riparian corridors with saline soils and can grow in arid conditions due to their deep taproots. Their root systems are able to extract water from unsaturated soil layers, which gives them a competitive advantage over native phreatophyte species (Zouhar K. 2003). They also accumulate salt in glands in their leaves that they excrete from the leaf surface, which can accumulate in soils. They can tolerate a range of environmental conditions and are able to outcompete native vegetation to form dense monocultures.

Locations
Saltcedar is common along washes, roadsides, homesite leases, and business site lease areas.

Ecological Threat and Management Concerns
Saltcedar is more common than other tamarisk species and tend to form more dense stands and monocultures. Saltcedar, similar to other tamarisk species, can increase erosion and stream incision, which affects floodplain dynamics. Their deep roots and salt excretions can make it difficult for native plants to survive and can alter soil salinity. They also affect wildlife habitat for several avian species, such as the Southwestern willow flycatcher. They can also increase fire risk in riparian habitats.

Key ID Tips

- Deciduous scaly leaves.
- Five petals, sepals, and stamens in dense, spikelike plumes.
- Fruits are covered in feathery hairs.

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Additional safety measures and limitations may apply for each method. Refer to the [Navajo Nation Integrated Weed Management Plan](#) for more information.

Mechanical/Manual Removal

Most mechanical and manual cutting methods are only good at suppressing growth and not for eradication. Hand pulling of small seedlings is feasible for small populations. Grubbing and bulldozing to remove the entire plant are the most effective, but often expensive. Mechanical removal or felling trees is most effective when paired with herbicide treatments to prevent resprouting.

Biological

No biological control organisms are available for use on the Navajo Nation.

Cultural Control

Cattle and goats will graze on young tamarisk or resprouts, but they have little nutritional value. Burning is not recommended for eradicating or controlling tamarisk as it can resprout from its adventitious root system. Burning is recommended for treating removed material. Once removed, restoration of native plant communities is highly recommended to prevent reestablishment.

Chemical

Use of herbicides can be effective. Refer to the product labels for application rates, timing, and approved application methods.

Recommended herbicides include:

- Imazapyr

References

DiTomaso, J.M., G.B. Kyser et al. 2013. *Weed Control in Natural Areas in the Western United States*. Weed Research and Information Center. University of California. 544 pp.

USDA, NRCS. 2023. PLANTS Database. Available at <https://plants.sc.egov.usda.gov/>. National Plant Data Team, Greensboro, NC 27401-4901 USA.

Zouhar, K. 2004. *Tamarix* spp. In: Fire Effectives Information System [Online]. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station, Fire Sciences Laboratory. Available at <https://www.fs.usda.gov/database/feis/plants/tree/tamspp/all.html>.



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