Management & Control Methods

Mechanical: Young Scotch broom can be eradicated by hand pulling, if the infestation is relatively small. Hand pulling is easily done after a rain when the soil is loose. This facilitates removal of the root system, which may resprout if left in the ground. Mowing is also effective when broom is under drought stress. Cutting Scotch broom shrubs to ground level at the end of the dry season can help reduce resprouting from the crown. Minimize soil disturbance as much as possible.

Biological: Although insects exist that impact Scotch broom, no biological agents are yet approved for release on Scotch broom. Several are under going investigation.

Chemical: There are many herbicides available to control Scotch broom. Always carefully read and follow the label directions. Proper timing and rate are important, and varies depending on the product. Contact the Department of Agriculture to determine the best herbicide for your situation.

Cultural: Planting native trees and shrubs in and around broom stands can eventually help minimize infestations by shading.



For More Information:

- Plumas-Sierra County Department of Agriculture (530) 283-6365
 Website: www.countyofplumas.com
- Plumas-Sierra University of California Cooperative Extension (530) 283-6270 Website: <u>ucce-plumas-sierra.ucdavis.edu/</u>

Photos, and text provided by:

- ➤ Lassen County Special Weed Action Team
- ➤ LeBlanc, John. W, University of California Cooperative Extension
- California Dept. of Food & Agriculture, Integrated Pest Control Branch
- University of California Cooperative Extension Plumas-Sierra Counties
- Plumas-Sierra County Department of Agriculture
- Whitson, Tom, et. Al. 1991 Weeds of the West. University of Wyoming.

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Scotch Broom

AKA: Cytisus scoparius



The Broom is sweeping through our land!

Plumas-Sierra
Noxious WEEDS*
Management Group

"We Eradicate Exotic and Detrimental species"*

www.cdfa.ca.gov/wma

(530) 283-6365

History

Scotch broom is native to the British Isles and central and southern Europe. It was initially introduced as an ornamental, and later to control erosion and stabilize coastal dunes. Established infestations are difficult to eliminate because large, long-lived seed banks typically accumulate.



Distribution

Scotch broom is estimated to infest more than 60,000 acres in California. Distribution of Scotch broom in the south and central valley is limited by dry conditions. At higher elevations, cold winter temperatures limit them.

Caution

Flowers and seeds of brooms contain quinolizidine



alkaloids and can be toxic to humans and livestock when ingested.

Lifecycle

Scotch broom may reproduce vegetatively or by seed. Six to eight years of growth is followed by degeneration accompanied by an increase in the ratio of woody to green material, reduction in seed production and finally death. Bushes rarely die in one year, but as "the habitat begins to disintegrate", a mosaic of

dead, partly dead and living plants form. Broom bushes can live up to twentyfive years. However, they have an average lifespan of seventeen years.

What does Scotch broom look like and how does it grow?

HABITAT: Scotch brooms have a high tolerance for most soil conditions, as a result of their ability to fix nitrogen from the atmosphere. They grow best in dry sandy soils in full sunlight. Brooms initially invade open sites such as logging roads, landings, roadsides, skidtrails, and harvest areas.

GROWTH: Brooms grow rapidly. Scotch broom has an aggressive root system that consists of a taproot that may exceed 2 feet in length, with a large shallow lateral root system. The stems grow erect, woody, green to brownish green, and are star shaped when cross-sectioned. Leaves grow singly or in clusters, with hairs surrounding the leaflets. As plants grow, the inner stems die back providing a highly flammable fuel.

FLOWERS: Young plants usually do not flower until their third year. Scotch broom's flowers are pea-like, bright yellow, sometimes with red markings in the center and on short stalks. April to June is the peak flowering time.

HEIGHT: Scotch broom is an upright evergreen shrub growing to 12 feet but 3 to 6 foot high plants are more commonly found.

SEEDS: The seeds are green to yellowish-brown when ripe. Each pod contains 5 to 20 shinny, rounded or slightly flattened seeds.





The pods at maturity can split noisily, ejecting the seeds some distance from the plant. The seeds stay viable up to 80 years!

What Can You Do?

- Recognize Scotch broom plants.
 Understand the lifecycle so you can manage accordingly.
- Proper timing of prescribed burning, specialized cultivation, and plant competition are effective non-chemical tools for managing Scotch broom.
- ✓ If you choose to use chemical control, work with the Agriculture Department to apply the right kind at the correct rate, time and stage of growth.
- Drive on established roads and trails so as not to transport weed seed from infested areas.
- Remove weed seeds from vehicle and bicycle tires as well as shoes, clothing and animals. Dispose of properly.
- ✓ If you see a few plants, pull them. Pulled plants should be burned or tightly bagged prior to disposal. Do not put them in your compost.
- Maintain good vegetative cover of land to minimize infestation of noxious weeds.
- ✓ If a weed-infested area is found, inform the landowner or manager so they can take steps to control the weeds (or notify the Agriculture Department).
- ✓ If you would like to help in designing your personal weed strategy, please contact the Agriculture Department or Cooperative Extension.
- ✓ As with most things, diligent persistence and hard work reaps the greatest rewards.

