Scotch Broom (*Cytisus scoparius)*

Scotch brooms (*Cytisus scoparius)* are upright shrubs that grow 3 to 10 feet tall. They generally produce bright yellow, pea-shaped flowers on green stems from April to June.

1 Shown here is Scotch broom, Cytisus scoparius

Scotch Broom is not a native Pacific Northwest species; it's originally from Western Europe. Scotch Broom was first planted as an ornamental shrub on the east end of Canada's Vancouver Island in 1850, by Captain Walter Grant. He planted broom at his farm as an ornamental shrub, quickly spread to the rest of Vancouver Island. From there, it spread to the mainland in British Columbia, and Western Washington state, especially in the Puget Sound area. The shrub's tolerance for sun, deep roots, and ability to thrive attracted the attention of state and province highway departments, and they planted Scotch Broom along roads as a soil-retention measure. Brooms may lose their leaves during hot, dry summer months, creating a whisk broom appearance.

Unfortunately, Scotch Broom has no natural enemies in its North American habitat, and it has not only thrived but it is pushing out the native plants. It's a nitrogen fixer, like most legumes, which means it can thrive in very poor soil, and it changes the chemical composition of the soil, making it difficult for many native species to thrive. It spreads rapidly because a single shrub produces thousands of fertile seeds, which remain viable for decades. The seeds form in pods and ripen in late summer, when they split their pods and are ejected as much as twenty feet away. Scotch Broom rapidly began to take over where it was planted, and essentially choked out native vegetation. Efforts to control the shrub by chopping it down prove ineffective because the deep roots allow the plant to resprout. The very rapid growth means that the shrub easily overtakes native plants that feed wildlife who do not eat the seeds or stems of Scotch Broom.

Mechanical Control

You can use hand pulling or mechanical grubbing—using a shovel, pick, or Weed Wrench—to physically remove smaller infestations in wildlands or urban areas. Remove plants in early spring or late fall when the soil is moist and it is easy to dislodge roots. Some tools, however, are difficult to use in soils that are too moist, and hand pulling can create soil disturbance that can lead to rapid reinvasion, however, recently sprouted plants can often be easily pulled out cleanly, roots and all, when the soil is wet. Grubbing when the soil is dry and hard usually will break off the stems, leaving rootstalks that will vigorously resprout.

2 Seed pods: slightly inflated, entirely covered with long hairs

Other forms of mechanical control have not proven successful. Brush rakes and bulldozers often leave pieces of rootstalks that readily can resprout. In some cases, brush removal in late summer, when plants experience moisture stress, can slow their ability to recover. However, using large equipment to clear land creates a perfect environment for new seedling establishment, making follow-up control essential.

Mowing broom plants gives poor control, unless you perform it repeatedly throughout the growing season. Within a couple months of germination, young plants usually have produced underground

rootstalks large enough to recover from a single mowing. Use extreme caution when mowing during spring and summer because of the potential for wildfires. Mowing later in the season also can spread seeds.

Lopping mature plants near the base will provide some control; you'll want to do this when plants are moisture stressed in late summer or in late spring following a winter with little rainfall. Lopping at other times can lead to vigorous resprouting.

Biological Control:
Insects and fungi: Two USDA approved insects, a stem miner, Leucoptera spartifoliella, and a seed beetle, Apion fusciostre, were introduced in the 1960s as biocontrol agents, but have had limited success in California. New insect biocontrol agents are being tested in England and France for use on broom in Australia and New Zealand (Hoskings 1994). If proved safe and effective in California, these insects may ultimately become available for use as biocontrol agents in California

http://ipm.ucanr.edu/PMG/PESTNOTES/pn74147.html
http://northwestspecialties.com/article/scotch-broom
http://www.cal-ipc.org/resources/library/publications/ipcw/report39/