

Harvesting and Marketing Scotch Broom (*Cytisus scoparius*)

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If you are a landowner or land manager in Oregon or Washington, you already may know that Scotch broom is designated by law as a noxious weed. However, you can control it if it grows on your land, and in fact sell its stems for profit.

This publication provides a framework for understanding Scotch broom, then discusses techniques for cultivating, harvesting, and marketing it.

History

Scotch broom found in the Pacific Northwest originated in southern Europe. It was moved to Scotland by humans. In Scotland, it was called "brom," an Anglo-Saxon word meaning foliage. Brom applied to shrubs used for making "besoms," which were bunches of twigs used as brooms.

Around 1850, European settlers of the Pacific coast introduced Scotch broom as a garden ornamental. The plant also was imported to be used as a soil binder on highway cuts, mine tailings, and utility rights-of-way. It quickly spread beyond the bounds of the cultivated areas.

Range

In North America, Scotch broom's range extends from British Columbia to northern California. It is most invasive west of the Cascade Mountains, but also grows on the eastern slopes and in the Blue Mountains of southeast Washington and northeast Oregon. It has been found in isolated wet areas of northeast Washington.

Growth habit

A young plant often will spend 2 to 4 years in a grass-like state until it establishes an extensive root system. Once established, it can grow from 12 to 30 inches a year and attain heights of over 8 feet. Most plants have a single base with many upward spreading branches.

Shade-intolerant when young, Scotch broom grows best in open areas with at least 12 hours of full sunlight.

Scotch broom is a member of the *Leguminosae* family, which includes beans, peas, clover, vetch, locust, lupine, acacia, and alfalfa. These plants convert nitrogen from air into a form they can use for growth, making them hardy and able to invade and flourish in harsh sites.

Leaves

Scotch broom is easy to recognize because of its leaves. They are small, resembling those of other plants in the *Leguminosae* family, dark green, and spiral up the plant's stems. Scotch broom develops new leaves by mid-March in the southern part of its range, and by late April in the northern part. Most leaves fall off after a frost or during a severe drought.



Stems

The stems are dark green, waxy, smooth, and five sided. Branches are composed of numerous 6- to 12-inch stems. These stems group together to form a single branch cluster (or shoot) 20 to 40 inches in length. Stems grow from 2 to 18 inches per year, depending on site quality and moisture availability.

Flowers

The flower resembles that of a garden pea or sweet pea. It ranges in color from light yellow to orange with crimson wings. The flower has an irregular shape, with a top banner petal, two side wings, and two keel petals on the bottom. Flowering occurs on plants as young as 2 years old, but is most abundant on plants more than 4 years old.

Fruit

Scotch broom fruit is black, hard-shelled, and pealike, and is encased in a flattened seed pod that is covered with fine soft hairs and is 2 inches long. When the pod dries at maturity, its two halves warp in different directions, eventually opening with a snapping sound and throwing the seeds from 4 to 12 feet away.

Seeds can remain viable for more than 50 years because of their hard shells. This long-term viability enables Scotch broom to reinvade forest plantations after clearcutting or fire—even when no plants are visible on the site.

Controlling Scotch broom

Scotch broom can invade forest stands where mineral soils are exposed by road work, slash disposal, weed suppression, or cultivation.

A Class B noxious weed under state law, Scotch broom is designated for control in most counties in Washington and Oregon. Local county and state weed boards may have regulations controlling movement and harvest.

If unwanted Scotch broom is on your land, you can control it naturally by providing shade trees, by mowing it several times per year, or by pulling it out. Herbicides applied in the spring when new leaves are present are another effective control tool. Before applying herbicides, however, check with

your local Extension office, county weed control board, or consult the *Pacific Northwest Weed Control Handbook* (see page 3 for ordering information).

Cultivating, pricing, and marketing Scotch broom

You can view Scotch broom as a nuisance plant to be cleared from your land, or use its hardy, fast-growing nature to your advantage.

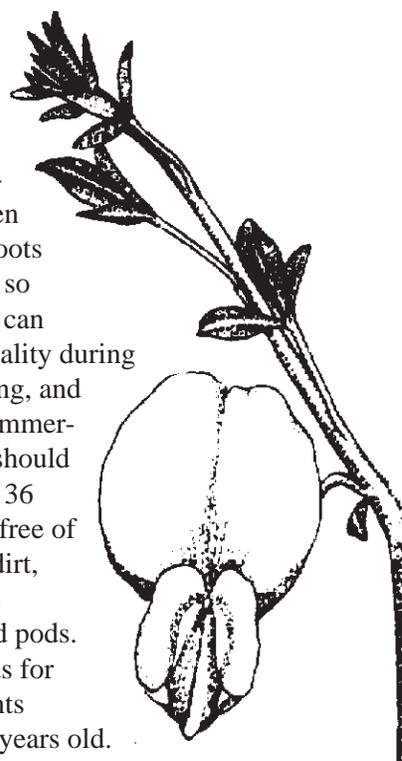
According to folklore, Scotch broom leaves have been made into wine and its seeds ground as a coffee substitute. Despite the folklore, *do not consume Scotch broom in any form*. It contains toxic alkaloids that can depress the hearing and nervous systems.

Scotch broom is best marketed to the fresh and preserved floral arrangement industry. The plant's deep green color and waxy stems provide an ideal accent to flowers. The stems are in demand domestically, particularly for floral decorations on Mother's Day, Father's Day, and Easter, as well as in Europe and Asia throughout the year.

Cultivating desirable characteristics

Scotch broom should be harvested between September and May when it is dormant. Shoots must be dormant so floral companies can maintain their quality during storage, processing, and shipment. For commercial sale, shoots should be straight, 26 to 36 inches long, and free of leaves, flowers, dirt, blemishes, insect damage, and seed pods.

The best stands for harvest have plants between 2 and 5 years old.



Older plants become woody, grow slowly, and have more blemishes.

You can maintain an active, healthy, and salable Scotch broom stand by regularly performing various cultural activities including:

- Burning with a hot fire to destroy old plants completely. Burning also exposes mineral soil and releases dormant seeds that restock the site. Within 5 years after a burn, new plants will have grown to the point where their stems are commercially valuable.
- Pruning and mowing to rejuvenate an old stand of Scotch broom. If you prune during the dormant season, young shoots will grow the following summer, and a small commercial harvest will be possible after the summer's growth, with a full harvest after two growing seasons.

Pricing

Scotch broom sells by the pound, in bundled units containing approximately 2 pounds of fresh stems. Its commercial value is highly dependent on the season. Between September and December, prices are only \$0.22 to \$0.55 per pound because of high supply and relatively low demand. Between late February and mid-April, prices increase to \$0.90 to \$1.67 per pound because of low supply and high demand.

Growers with fresh, dormant supplies in May can obtain the best prices. These supplies generally come from cool, high-elevation sites in the northern part of the plant's range.

Marketing

If you are a commercial harvester or landowner with large acreage, you may want to market to wholesalers in urban areas. Check phone books under "Florists, Wholesale."

For smaller producers, retail direct markets are viable outlets. These include farmer and craft markets, flower and home shows, and festivals, where Scotch broom typically is sold fresh by the stem, bunch, or in floral arrangements. Dried flower arrangements and preserved floral products also use Scotch broom.

Another direct market opportunity is to establish a fresh floral route. This is a new way of marketing Scotch broom stems directly from the family forest. By going directly to where people work, park-and-rides, and their homes, you can provide consumers with easy access to high-quality product directly from the forest owner.

Direct marketing to florists also is rewarding, although time-consuming to establish. It's best if you can supply a variety of floral products from your land, not just Scotch broom. Florists will help you learn about product quality, quantity, and product specifications.

The best method of learning about markets for Scotch broom is to visit craft shows, home and garden shows, and florist shops.

If you have access to a computer, you can visit one of the many Web sites found under one of the following subject areas: florist, retail; florist, wholesale; floral crafts; nature crafts; and fresh flowers.

For more information on control

Pacific Northwest Weed Control Handbook

(Oregon State University, Corvallis, revised annually). \$25.00

Scotch Broom, PNW 103, by B. Parker,

G. Miller, and L. Burrill (revised 1994). 50¢

See page 4 for ordering information.

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