

APRIL 2010

STEVE'S

Weed of the Month

Butterfly Bush

Also Known As: summer lilac or orange-eye

Butterfly Bush is a Class B Noxious Weeds: Class B noxious weeds are non-native species that are either absent from or limited in distribution in some portions of the state but very abundant in other areas. The goals are to contain the plants where they are already widespread and prevent their spread into new areas.

Butterfly Bush (Buddleja davidii Franch), native to china, is a perennial woody shrub with arching branches that grows up to 12 feet tall and 15 feet wide. The stems are green when young, but become coarser with maturity and develop a gray-brown bark that splits and peels. The stems and leaves are typically hairy. The oppositely-arranged leaves are lance- or oval-shaped and have toothed margins; they range from 4-10 inches long and 1-3 inches wide. The upper leaf surfaces are dark green or gray-green, while the undersides appear whitish due to a dense covering of fuzzy hair. Small fragrant flowers are 4-petalled and bell-shaped; they are borne in long, erect or nodding

spikes (similar to lilac clusters) at branch ends. The coneshaped clusters can be so abundant and heavy that they cause further arching of the branches. Flower colors vary by cultivar, but are often purple with orange centers (hence the common name "orange eye"). In the Pacific Northwest, the flowers of butterfly bush bloom between mid-summer and the first frost. The fruit of the plant, a 2valve, elliptical capsule, ripens in late summer and fall, then splits open and releases lightweight, winged seeds that are easily dispersed by wind and water. This species is quick to mature and often produces seed during its first

year. Butterfly bush is a prolific producer of seed—up to 40,000 per flower head—and has a germination rate that can exceed 90%, depending on cultivar. Photo by: Richard Old, XID Services Inc., Bugwood.org



Seeds remain viable in the soil for 3–5 years. Although butterfly bush reproduces mainly by seed, it can also re-sprout from a damaged or cut rootstock. In addition, stem fragments can form adventitious buds that give rise to new plants.

Butterfly bush is most vigorous in well-drained soil and full sun, and is drought-tolerant. Commonly cultivated as a garden ornamental, butterfly bush can colonize both disturbed and natural areas, including roadsides, railroad corridors, pastures, riparian areas, and newly logged or burned forests. It can form dense thickets that displace native vegetation. Although butterfly bush attracts butterflies, it may not suit certain native butterfly species and may attract pollinators away from native nectar sources according to some scientific findings.



Photo by: Stevens County Noxious Weed Control Board



Photo by: Forest & Kim Starr, US Geological Survey, Bugwood.org



Photo by: Richard Old, XID Services Inc., Bugwood.org



Photo by: Robert Vidéki, Doronicum Kft., Bugwood.org



Photo by: Forest & Kim Starr, US Geological Survey, bugwood.org



Free Use

Control Methods

Prevention: For landowners having ornamental butterfly bushes in areas where they have been known to escape, consider replacing them with a different species or at least make sure that they do not go to seed—remove spent flower heads before they disperse seeds and properly dispose of them. Planting competitive vegetation will help inhibit spread. Regular monitoring of one's property is crucial so that new plants can be detected early and destroyed.

Manual Control: New infestations of young plants can be hand-pulled. Larger bushes can be dug out, although removal may be difficult. Plant removal should ideally occur before seed set; all plant remains should be removed from the site to prevent regrowth. Again, it is always a good management strategy to revegetate disturbed soil with a competitive perennial species.

Chemical Control: Herbicidal treatment tends to be most effective when applied using the cut-stump method—simply brush the herbicide (such as glyphosate) onto stems freshly cut low to the ground. Foliar treatments are also effective if properly applied. Retreatments are often necessary.

More information can be found in the PNW Weed Management Handbook

USE PESRICIDES WITH CARE. Apply them only to plants, animals, or sites listed on the label. When mixing and applying pesticides, follow all label precautions to protect yourself and others around you. It is a violation of the law to disregard label directions. Store pesticides in their original containers and keep them out of the reach of children, pets, and livestock.

Biological Control: No biocontrol agents for butterfly bush control are available for release in the United States.

Grazing: Goats will eat and damage butterfly bush, but will not eradicate it. Goat grazing is most effective when integrated into a management plan that includes other methods of control.

Questions: contact Steve Van Vleet or phone (509) 397 - 6290