

# BUTTERFLY BUSH: Options for control

**Butterfly bush**, a class-B noxious weed in Lincoln County, Washington (*Buddleja davidii*) is of the Buddlejaceae family. Other common names for Butterfly bush are, Orange eye, and Summer lilac. A perennial woody shrub with a weeping form that can grow 3-12 ft. in height and has a spread of 4-15 feet, it is native to Northwestern China and Japan.

Although the blossoms of the Butterfly bush are aesthetically pleasing and provide a food source for butterflies, this beauty has a dark side to it. *Buddleja davidii* is considered a serious invasive plant in many parts of the world. In Washington state, it is currently experiencing explosive growth that warrants attention. Because it is already widespread, at least in western Washington, it was added to the Noxious weed list in 2005.

Butterfly bush is a large, deciduous shrub with arching branches that can reach a height of fifteen feet, with fragrant, cone-shaped flower spikes. The leaves are oppositely arranged, lance-shaped with either finely or coarsely toothed edges,

and are usually between 4-10 inches long and 1-3 inches wide. The upper leaf surface is dark green or blue-gray, the lower surface appears whitish, due to the dense covering of small, branched hairs. The four-parted, bell-shaped flowers occur in dense clusters in flower-heads at the tips of branches. They are typically purple with orange centers, giving the shrub the common name "orange-eye". The fragrant flowers bloom between mid-summer and the first frost.

Butterfly bush reproduces by producing copious amounts of extremely lightweight, winged seeds that easily disperse to distant areas by wind and water. A single flower head produces 40,000 seeds! Quick to mature, a butterfly bush can begin producing seed during its first year.

Butterfly bush likes well drained, average soil.

It thrives in fairly dry conditions once established. Some research shows roots may perish in wet soil. It prefers open areas, but will tolerate light shade.



The flowers are typically purple, with an orange center, hence the nickname "orange-eye".



The flowers are borne in long, 8-18 in. cone-shaped clusters. The clusters can be so profuse that they cause the branches to arch.

## Key identifying traits

- **Leaves** are long and narrow with a finely-toothed pointed tip, dull green above, grey-white and hairy below.
- Arching **branches** reaching heights of 10 to 15 ft. tall.
- **Flowers** are individual, small with four petals.
- **Fruits** are two-valved capsules that split in two to released winged seeds.

## Biology and ecology

- **Perennial** deciduous, semi-evergreen shrub.
- **Spreads** by producing abundant viable seeds, which remain viable for 3-5 years.
- **Flowers** mid-summer until early fall.
- **Colonizes** in disturbed areas, such as roadsides and riparian areas.
- **Excels in burn sites** in reforested regions.
- Approximately 3 million **seeds** per plant!
- Widely used as an ornamental in states where is **not** classified as a noxious weed.

Leaves are dark green or blue-gray, with the bottom side looking whitish, due to the dense covering of small hairs.



The flower cup is funnel or tube-shaped, and is 9-12 mm long.



Although young stems are green, mature stems develop scraggly, peeling, gray-brown bark.

For this and other publications, see our website at: [www.co.lincoln.wa.us/weedboard](http://www.co.lincoln.wa.us/weedboard)



Butterfly bush can re-sprout from the rootstock after it has been cut down to its base.

# CONTROL MEASURES:

For this and other publications, see our website at: [www.co.lincoln.wa.us/weedboard](http://www.co.lincoln.wa.us/weedboard)

## Prevention:

- Minimizing soil disturbance and preventing overgrazing is important. **Early detection** is vital to prevent invasion.

## Biological:

- Goats will eat this plant.
- Two insects are being studied in New Zealand.

## Cultural:

- Healthy competitive vegetation helps lessen chance of invasion, but doesn't preclude it.

## Mechanical:

- Hand pick seedlings or **young** shrubs can be dug

up, although this is not recommended for well established populations. The plant thrives in recently disturbed areas, so re-check often for new seedlings beginning to emerge.

## Chemical:

- **Stump treatment** works best. Cut the stems off at the base, dispose of them properly, (as they can sprout roots) and apply the appropriate herbicide, such as Glyphosate, to the cut stump.
- **Re-treatment** for several years will most likely be required.
- **Read the label** instructions before applying.



Leaves are opposite and up to 4" long and less than 1/2" wide with small serrations on the margins and grey pubescence underneath. Has an attenuated tip.

The very fragrant flowers vary in color, but usually have an orange "eye". The flowers are very attractive to butterflies, bees, hummingbirds, and other nectar drinkers, out competing most native plants.

See how the mature bark is scraggly, and grey-brown in color.



*In Washington state, butterfly bush has spread into natural areas in at least Clallam, Whatcom, Skagit, Snohomish, King, Thurston, Lewis, Cowlitz, Skamania, and Clark Counties.*

*There are many non-invasive, showy, butterfly-attracting alternatives to butterfly bush, such as California lilac, red-flowering currant, Chilean potato vine, chaste tree, orange-ball butterfly bush, weyeriana hybrid butterfly bush, or fallowiana butterfly bush.*



Photos and references courtesy of: Photos: Rich Old; Gerald D. Carr; Louis M. Landry (Callphotos); James B. Gratiot; WSNWCB, Written findings; Washington State University Extension; Virginia Tech, Dept. of Forestry.

Lincoln WA 99122  
509-725-3646  
County Noxious  
Weed Control Board  
405 Ross St.  
Davenport,