

INVASIVE PLANT PROFILE

Butterfly bush *Buddleia davidii* Family: Loganiaceae Zone 5



EVERGREEN
Imagine your city with nature

What makes *Buddleia davidii* a problem?

Originally from China, this plant can be found in the Lower Mainland in roadside and riparian areas, river gravel bars, pastures and logged areas. It is sold as an ornamental shrub.

B. davidii produces large quantities of extremely lightweight, winged seeds – up to three million seeds per plant, and in one cultivar, an estimated 40,000 seeds per single flower head – that are dispersed by wind and water. These seeds can remain dormant in the soil for three to five years. This shrub can also reproduce vegetatively, as cut stems can sprout roots and grow into new plants. Its variety of reproduction mechanisms and rate of spread as well as tolerance for a range of soil conditions, has meant that Butterfly bush has established in disturbed and natural areas.

Buddleia davidii:

- forms dense thickets which crowd out native vegetation
- may alter soil nutrient concentrations
- can begin producing seeds during its first year, which helps it spread rapidly

B. davidii is commonly planted to provide habitat for butterflies. However, the Washington State Noxious Weed Control Board has found that it is rarely used by butterflies as a host plant and may in fact displace the native plants needed by butterflies for reproduction.

B. davidii is currently seen predominantly in West Vancouver.

How is *Buddleia davidii* controlled once a site is invaded?

Most invasive plant species pose significant challenges to control and containment once established. If attempting to control *B. davidii* by plant removal or hand picking, make sure to always follow-up by establishing a ground cover with a desired species that will inhibit re-sprouting.

When removing by hand, note that:

- it will quickly re-sprout when merely cut
- young shrubs may be hand picked, though this may result in increased disturbance and increased populations due to its preference for highly disturbed sites
- hand picking is not recommended for well-established populations.

Manual or hand pulling can be effective if care is taken to extract all the stump and roots, minimize soil disturbance, and prevent seed spread. The following techniques are typically used.

- Pull or dig up plants and remove as much of the root as possible for small infestations. Remove all mature plants to prevent new seed production.
- Mature shrubs can also be cut down. Mowing does not work on young, green plants. Cut near the ground where the stem is more yellow than green, this is best done while the plant is flowering. Cutting when the seeds are set can lead to unintentional seed dispersal.
- If full removal of the plant is not practical, cut off flower heads in June-July, before the seeds set.

***Buddleia davidii* is listed as an invasive plant by the City of West Vancouver. To address invasive plant problems, the city is now offering technical assistance with eradication techniques and will help with disposal (roadside pick up for projects).**



Alex Boston

Plant Description

B. davidii is a deciduous shrub with arching branches. It grows between two to three metres tall. It has showy flowers that bloom in mid to late summer. Flowers are commonly lilac with orange in the throat (also pink, red, purple and white). Leaves and stems are typically hairy. Young stems are green; mature stems develop scraggly, gray-brown bark that peels off. While *B. davidii* prefers moist, well-drained and fertile soils, it will tolerate alkaline soil. It prefers full sun.

Market Alternatives

There are other shrubs that offer similar benefits to *Buddleia davidii* (attractive flowers and a bushy hedge) without becoming invasive and a threat to local ecosystems.

- 1 **Red flowering currant** *Ribes sanguineum* This large deciduous shrub produces numerous pink draping blooms that attract hummingbirds and butterflies. The berries are edible but not palatable. Suitable in gardens as a specimen or at the back of the garden. Also used in large commercial plantings.

NATIVE SPECIES, SUN/PART SHADE, DRY, 1-4M TALL



- 2 **Ninebark** *Physocarpus capitatus* The white spring flowers and the peeling bark of this tall deciduous shrub provides interest in a garden. It is also suitable for riparian restoration or as an informal screen.

NATIVE SPECIES, SUN/SHADE, MOIST, 3-4M TALL X 2-3M WIDE



- 3 **Lilac** *Syringa spp.* The fragrant flowers of lilac are very similar to those of the butterfly bush. This is a hardy shrub with many varieties and cultivars. Suitable as a specimen, at the back of a border and as an informal hedge.

SUN/PART SHADE, MOIST, SIZES VARY



- 4 **Red Elderberry** *Sambucus racemosa* Birds and butterflies are attracted to the flowers and fruit of this large deciduous shrub. The white flowers bloom in spring followed by large clusters of bright red berries. Suitable for large plantings including restoration, as a background plant in large gardens, woodland settings or as an informal screen.

NATIVE SPECIES, SUN/SHADE, DRY/MOIST, 3-6M TALL X 2-3M WIDE



- 5 **Oceanspray** *Holodiscus discolor* This tall deciduous shrub attracts butterflies. The spring flowers are large showy creamy white plumes. It is suitable for large plantings including restoration and as a background plant in large gardens.

NATIVE SPECIES, SUN/PART SHADE, DRY/MOIST, 2-4M TALL



www.evergreen.ca

Vancouver Office
#404-134 Abbott St. Vancouver BC
V6B 2K4, Canada
infobc@evergreen.ca Tel: 604-689-0766

Thanks to our project sponsors

Vancity



VANCOUVER
FOUNDATION