

# Daphne laureola

DAPHNE

ENGLISH NAMES	daphne, daphne-laurel, spurge-laurel, olive-spurge, laurel-leaved daphne
SCIENTIFIC NAME	<i>Daphne laureola</i>
FAMILY	Thymelaeaceae (Daphne)



Photo Credit: DOUGLAS JUSTICE

Daphne is a small evergreen shrub with dark, waxy leaves and pale yellowish-green flowers.

## RANGE/KNOWN DISTRIBUTION

Daphne is native to southwestern Europe and has been introduced as an ornamental plant to many parts of the world including parts of North America. It has naturalised in the Pacific Northwest and is of concern in Washington and Oregon States because of its potential to spread. It is listed as an exotic pest plant in Florida. It has also naturalised in parts of the east coast of Canada.

In British Columbia, daphne is found in some parts of southern Vancouver Island, the Gulf Islands and Lower Mainland, and appears to be spreading quickly in suitable habitats.

## IMPACTS ON GARRY OAK AND ASSOCIATED ECOSYSTEMS

Daphne will invade the shadier, moister areas of Garry oak and associated ecosystems, replacing native vegetation and sometimes creating a shrub layer where none existed before. It can form a dense canopy that blocks light to the ground, eliminating herbaceous species and leaving the ground bare. It is thought that daphne alters the soil chemistry and acidity, preventing the re-establishment of native plant species. Together, these changes reduce the habitats available to native plants and animals that once flourished at these sites.

Daphne has not become a problem in more open sites, as it prefers shady areas.

## FIELD DESCRIPTION

Daphne is a small shrubby plant, 0.5–1.8 m tall with dark evergreen leaves at the tip of its stems. The pale yellowish-green flowers are sweetly honey scented and clustered at the top of the branch. The small fruit (drupes) are deep purple or black.

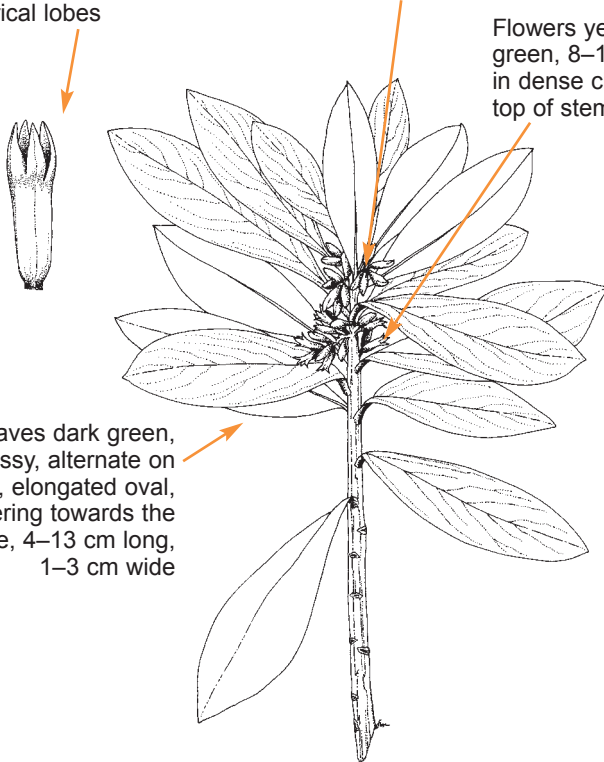
# DAPHNE LAUREOLA

Flowers lack corollas (whorl of petals). Calyces (outer part of the flower) are pale green with cylindrical lobes

Fruit fleshy, single-seeded, egg-shaped, black, 8–11 mm long

Flowers yellowish-green, 8–10 mm long, in dense clusters near top of stem

Leaves dark green, glossy, alternate on stem, elongated oval, tapering towards the base, 4–13 cm long, 1–3 cm wide



The publisher thanks the University of Washington Press and the Province of British Columbia for permission to reprint illustrations from Vascular Plants of the Pacific Northwest by C.L. Hitchcock et al.

## LIFE HISTORY

Daphne grows from seed, flowering in its second year. Flowers are produced in winter to early spring, towards the ends of the previous year's growth. Large numbers of purple or black fruits (drupes) develop in early summer. These are poisonous to humans but highly palatable to various birds and rodents, which disperse them widely. It is a long-lived, evergreen perennial.

Daphne will also sprout from lateral roots, spreading in all directions from the original plant.

## HABITAT

Daphne prefers well-drained locations in medium–heavy soils that are acid or neutral. It prefers partial shade or partial sun, but can also grow in full shade. It inhabits woodlands, forest and waste areas where soils are moist.

## MANAGEMENT

Information on the control of daphne in Garry oak ecosystems is still relatively limited. The highest priority is early removal of individual daphne plants before they can seed or become an infestation. Gloves should be worn when working with daphne, as the bark, sap and fruit all contain toxins that can cause skin irritation. Avoid transporting plants in a closed vehicle as airborne plant toxins can concentrate in an

Develop a long-term, realistic program for invasive species removal before undertaking any work. Before taking action, expert advice should be obtained. Please refer to the introductory section of this manual.

unventilated space and cause eye and throat irritation.

**PHYSICAL CONTROL:** Seedlings and young plants should be pulled by hand or with weed wrenches (for larger stems). This should be done when the soil is moist, to minimise soil disturbance. Roots should be removed as much as possible to reduce resprouting. Younger plants (stems less than 1 cm diameter) are very likely to resprout from the root crown and lower stem and will need repeated treatments. Daphne has a tenacious tap root and it is easy to leave pieces in the ground.

Older plants should be cut at soil level using loppers. Brush cutters are not recommended as they result in the plants' toxins being discharged into the air, causing throat irritation. Resprouting from roots seems to be less common in older plants especially if the plant is cut at the stem base when it is in flower or the fruit are still green, or when it is stressed during summer drought. Topcutting the flowers and developing fruit may also help to stress the plant and reduce seeding.

**BIOLOGICAL CONTROL:** Some studies have found that daphne is susceptible to the daphne leaf distortion (Daphne S carlavirus). There are no known biological agents in British Columbia.

For more information contact the Garry Oak Ecosystems Recovery Team, or see the website at [www.goert.ca](http://www.goert.ca)