About English Hawthorn

English hawthorn can grow up to twenty feet in height, with clusters of white flowers in mid-spring and red berries from autumn to late winter. The small leaves are divided into three to seven lobes. The branches have stout spines and the smooth, pale-grey bark develops rough, longitudinal fissures with age. Normal growth rate is up to two feet a year, mostly occurring in spring and early summer. Plants shed lower branches and become treelike in forest settings, but plants in the open may retain branches to ground level. Although shade tolerant, it will fruit more heavily in full sun. Seeds are primarily spread by birds. Originally introduced for use as farm hedgerows.



English Hawthorn flowers and leaves

Why control English Hawthorn?

English hawthorn poses serious threats to our oak savannahs, open meadows, agricultural land, and wetlands by overtaking and replacing most desirable vegetation. English hawthorn can be exceedingly difficult to control once established, forming vast, impenetrable thickets if left unmanaged. Capable of hybridizing with other hawthorns such as native black hawthorn (*C. douglasii*) and Suksdorf's hawthorn (*C. suksdorfii*), it further threatens local native populations.



English hawthorn infestation, San Juan Island

If you would like weed identification, site-specific control recommendations, or additional noxious weed information, contact the San Juan County Noxious Weed Control Program.



San Juan County Noxious Weed Control Program 2020

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https://extension.wsu.edu/sanjuan/noxious/

Special thanks to the Washington State Noxious Weed Board, Garry Oak Ecosystem Recovery Team (GOERT), and California Invasive Plant Council.



Class C Noxious Weed

(Control encouraged, but not required by law)



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English Hawthorn Control

By law, herbicides must be used in strict accordance with label instructions.

Research on effective and safe herbicide use is on-going and often contradictory. For more recent information contact the San Juan County Noxious Weed Control Program.

Timing

Removal is best done in early summer, when most of the plant's energy is devoted to flowering and fruiting. Attention should be given to ensuring that seeds are not scattered or carried offsite during removal.

Tools for English Hawthorn Removal

Due to the sharp, numerous spines and whiplike nature of young stems and branches, we highly recommend always using proper protective equipment when working with this plant. The spines pose a serious threat to eyes and can puncture leather gloves.

Heavy leather gloves, protective clothing and eyewear; including a hardhat if falling trees, plus chaps if operating a chainsaw

➢ Brush cutter, chainsaw, handsaw, loppers, claw mattock, shovel, weed wrench, backhoe

> Appropriate herbicide and equipment, if needed.

Removing the above-ground biomass first makes plants easier to dig out and reduces the amount of herbicide necessary, if applied. When digging, removal of the root crown and upper roots will provide acceptable control.

Manual & Mechanical Control

Pulling: Uproot seedlings and very young plants when the soil is moist and loose. Firmly grab the stem near its base or use a weed wrench to extract the crowns. Pull with care, as English hawthorn readily snaps at ground level.

Hand digging: Use a claw mattock or shovel to loosen the dirt around roots of younger plants before pulling. Extracting roots from loamy, sandy or damp soil is easier and less damaging to the surrounding area than trying to remove them from rocky or dry soil.

Machinery: Dig out root crowns and major roots of shrubs and trees using a backhoe with mechanical thumb or claw, or pull with a chain.

Cutting: Although effective in halting seed production and reducing biomass, English hawthorn readily suckers and stump-sprouts. Cutting may not be successful in achieving eradication unless augmented with mechanical removal or an herbicide.

➤ For young plants, use a mower, brush cutter, pruning shears, or loppers to repeatedly remove above-ground vegetation.

➢ For shrubs and trees, a chainsaw, sturdy handsaw, or falling axe is ideal. Use caution when cutting trees, as English hawthorn's dense and often top-heavy branching pattern can occasionally cause it to fall unpredictably. The best time to cut is when the plant is in bud or flower stage, before it has produced seeds.

Cultural Control

Mulching & Barriers: Sheet mulching can be effective in smothering and suppressing seedlings before plants have time to establish. Cover with newspapers or cardboard, and apply 3 inches or more of weed-free mulch.

Burning: Repeated torching of re-sprouting stumps is effective. Effects of fire on English hawthorn are not well understood. Repeated burning over time may gradually reduce the density and slow expansion.

Biological Control

There are no approved biological control agents for English hawthorn. The spines typically deter most grazing animals, although goats can safely browse young plants.

Chemical Control

Always follow label instructions to find the correct herbicide concentration and timing for your site and the method you plan to use.

Timing: In general, systemic herbicide applications are more effective in early spring or in the fall, when soil is moist. Avoid using herbicides when soil is dry or plants are stressed. Adding a dye marker will help you reduce and focus the amount of herbicide used.

Cut-stump: In spring or fall, cut as close to the ground as possible and apply triclopyr or glyphosate directly to the cambium, located on the outer edge of cut stumps or stems. Application should be made immediately after cutting to ensure efficacy.

Frilling: Make deep 45-degree angle cuts into the bark every 3" around the trunk. Immediately apply herbicide to the cuts.

Spot Spray: Not reliable or recommended, and more likely to affect off-target species. Attempting to spray larger shrubs or small trees is not advised. In spring or fall, apply imazapyr, triclopyr, or glyphosate to mature leaves of smaller plants. Adding a dye marker can help reduce the amount of herbicide used.

Follow-up

Site Restoration: Immediately re-seed bare ground with native or non-invasive perennial grasses after any ground-disturbing removal to reduce erosion and subsequent weed invasions. Continue to monitor the area and pull any new seedlings. A broadleaf-selective herbicide may be used as follow-up treatment to protect newly planted grasses.

Debris Removal: Woody debris can be chipped, burned (if permitted), or left in place. Take care not to use chipped material that may contain seeds as mulch. Brush piles left in place can provide shelter for birds and wildlife. English hawthorn is also widely accepted to be a highquality firewood.

Native Hawthorn Species

If you enjoy English hawthorn, please consider instead planting a native hawthorn such as Black Hawthorn (*C. douglasii*) or Suksdorf's Hawthorn (*C. suksdorfii*). Both are large shrubs or small



deciduous trees, differing from English hawthorn by having a typically upright habit, purpleblack fruit, and ovate, mostlyunlobed leaves with serrate margins. Both will provide showy white flower clusters in spring, as well as food and shelter for pollinators, birds, and other species of wildlife.

Black hawthorn (Crataegus douglasii)