

# **Natural Yard Care**

Manage Weeds Naturally

Tips for managing common weeds in Western Washington using natural methods

**Ann Star** 

# Steps for Weed Management

You can grow a healthy, attractive landscape without using chemical weed killers. Rainwater runoff (stormwater) carries these harmful chemicals through storm drains into local waterways, harming salmon and other aquatic life. Protect the health of people, wildlife, and waterways by following these five steps of natural weed management:

- ACCEPT a few weeds

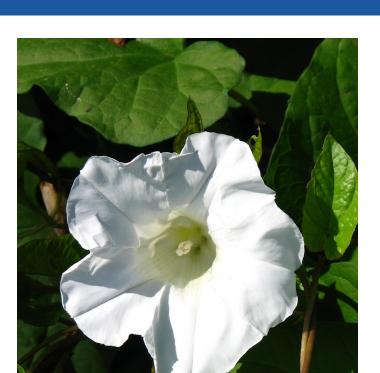
  It may not be realistic to expect a perfectly weed-free yard. Decide which weeds you can tolerate and focus on removing the rest.
- Pigure out which weeds you have, then learn how they spread and the best strategies for controlling them.
- PREVENT weeds from spreading.

  Weed seeds love bare soil and sunlight. Don't give weeds a chance to grow by covering bare soil and shading weeds out.
- Once you've identified your problem weeds, pick your strategy for removing the weeds. Tools like weed pullers or burners can help.
- ONLY USE chemicals as a last resort

  If a weed problem persists, use the least toxic solution. Check the Grow Smart Grow Safe Guide for the lowest risk products.

Learn tips for how to manage specific weeds that are commonly found in Western Washington in this guide.





## Identification and growth habits

Deciduous perennial. Hedge Bindweed produces vining stems that climb or form dense mats on the ground. Produces white flowers late June through summer. Extensive, deep, and persistent fleshy root system.

#### Pesticide use

Due to growth habit of Hedge Bindweed, herbicide sprays are difficult to use where bindweed surrounds valuable plants. Chemical herbicides can have unintended consequences - harming or killing desired plants, human and pet health, negatively impacting water quality of nearby streams, lakes and Bellingham Bay.

### Suppression

Repeated removal of vines before they flower is most effective way to eradicate weed. Mulch bare soil with a minimum layer of 3 inches to stop seeds from germinating.

# Hedge Bindweed

Also known as Morning Glory. Commonly found along fence lines and in ornamental plantings.

#### Removal

Hand pull or use hori-hori to pull weed out of the ground, this technique will be more effective if you also remove fleshy roots. The more roots you can pull out, the less there is to grow back.





Hand pulling

Hori hori

### Critical timing

Pull roots out of moist soil in early spring when the first shoots appear. Remove roots and shoots before you see flowers; flowers only bloom for 24 hours then produce seeds which can remain viable for decades.

## How to manage naturally

Persistence pays off in managing Hedge Bindweed: repeated removal of roots and shoots throughout the growing season over several years offers the best potential for eradication. Beginning in spring, as shoots start to appear, remove both shoots and roots with hori-hori or spade fork. Repeat throughout the growing season to deplete energy reserves. Attempt to remove Hedge Bindweed before it blooms as flowers only bloom for one day before they start developing seeds. Place vines or roots in commercial compost or trash. Apply coarse textured mulch (shredded leaves, wood chips) over bare soil by the end of April to discourage seed germination.

#### How Bindweed spreads

Can reproduce from seeds or root segments. Prevent spread of root pieces to other areas when digging and transplanting in the garden by removing any thick white spaghetti-like roots. Keep Hedge Bindweed out of backyard compost.

# Creeping Buttercup



Identification and growth habits

Basal rosette with tenacious roots. Often produces long, horizontal runners that root and form new plants at the node. Bright yellow flowers April through August. Tolerates mowing and can persist in lawns. It's vigorous growth competes with nearby plants; it depletes soil potassium, which can weaken other plants. Grows in moist and/or poorly drained sites, sun to shade. Tolerates compacted soils and traffic or trampling.

#### Pesticide use

Organic contact sprays, which kill leaves but not roots, are not useful because Buttercup can grow back from roots. Chemical herbicides can have unintended consequences - harming or killing desired plants, human and pet health, negatively impacting water quality of nearby streams, lakes and Bellingham Bay.

## Suppression

Uproot plants and runners when soil is moist and roots can be readily pulled from the ground. In lawns, maintain strong turf growth by aerating, thatching, and adjusting irrigation for deep, infrequent watering.

Commonly found in gardens and lawns, favoring damp conditions.

#### Removal

Uproot with Grandpa's Weeder or hori-hori from lawns. For whole patches, uproot with spade fork.







Grandpa's Weeder

Hori hori

Spade Fork

## Critical timing

Remove whole plant, including roots and runners when soil is wet; fall through spring.

## How to manage naturally

In gardens, uproot plant when soil is moist; i.e. fall through spring. Remove all root fragments and runners, place in commercial compost or trash. Use a spade fork or hori-hori to fracture and loosen the ground next to the rosettes to allow easy extraction of plants. A spade fork works well for removing Buttercup crowns from between desired plants while preserving the desired plants; insert the fork next to the Buttercup rosette and tilt it back to fracture the soil and lift the rosette. Pull the Buttercup out then gently tamp the soil back down In lawns, dense Buttercup patches indicate poor soil conditions or drainage too damp and shady for strong turf growth. Maintain strong turf growth through aeration, thatching and fertilizing or top dressing. Consider replacing Buttercup-ridden lawn with landscape beds.

### How Creeping Buttercup spreads

Spreads by seeds and long branching stolons (runners.) Seeds mature quickly after bloom, each seed head contains 20 to 50 seeds which can remain viable in the soil for 20 years. Buttercup can grow back from root fragments; when manually pulling from the ground try to get all roots and don't place in backyard compost.

# Himalayan Blackberry



Identification and growth habits

Semi-evergreen woody canes with sharp thorns. Trailing canes can grow more than 30 feet long and blackberry stands can grow eight or more feet tall.

#### Pesticide use

Thickets and large stands of Himalayan blackberry cannot be effectively subdued by herbicides and should only be used to supplement other control tactics.

Organic herbicides kill top growth, similar to clipping or mowing. Chemical herbicides, such as glyphosphate, kill tops and roots.

Chemical herbicides can have unintended consequences - harming or killing desired plants, human and pet health, negatively impacting water quality of nearby streams, lakes and Bellingham Bay.

#### Suppression

Root crown needs to be removed or Himalayan Blackberry will continue to grow back. Once root is removed, cover with coarse woody mulch (three to four inches deep) and plant plants that will provide shade will help suppress blackberry. Monitor every two weeks. Commonly found in vacant lots, degraded riparian areas, and fence lines.

#### Removal

Uproot with shovel, spade fork, or hori-hori. It can be helpful to cut canes first.







Shovel

Spade Fork

Hori hori

## Critical timing

Uprooting is easiest when ground is moist. Cutting or mowing down canes in early summer before flowers appear will help prevent new seed.

### How to manage naturally

Remove root crown and at least six inches of roots with a shovel. At times when soil is moist, a spade fork or hori-hori can be used to help fracture the ground and uproot plants. Place all plant fragments in commercial compost or waste; do not attempt to compost at home as this may cause spreading of weed.

Prevent blackberry from returning through shade suppression. Apply three to four inches of mulch and consider adding trees to areas prone to blackberry. New seedlings are less likely to germinate in full shade.

For large spaces, repeated mowing can suppress blackberry. Repeated mowing in spring through summer for flat areas can exhaust energy reserves in root. Mulch thickly (eight to 12 inches) before planting.

### How Himalayan Blackberry spreads

Seeds spread by birds, wildlife and water. Tips of long arching canes will root when they touch the ground. Plants can sprout from pieces of green canes and from knobby, woody root crowns.

# Horsetail



Image shows the two horsetail stem types; the brown stem on the left contains spores, the green stem on the right is the typical green foliage.

## Identification and growth habits

Green waxy stems that are high in silica grow upright. In early spring, brown stems with fruiting cone-shaped heads produce spores. Can grow one to two feet tall. Rhizome root structure, also known as creeping rootstalks, can penetrate soil to great depths, up to six feet. Foliage dies in the winter.

#### Pesticide use

Topical herbicides are not effective on Horsetail because the waxy silicone stems repel the spray. Granular herbicides have limited effect due to roots and rhizomes living far below treatment zone.

Chemical herbicides can have unintended consequences - harming or killing desired plants, human and pet health, negatively impacting water quality of nearby streams, lakes and Bellingham Bay.

Commonly found in damp soil, woodlands, stream sides, roadsides and gardens.

#### Removal

Clip plants at ground level to suppress growth. Avoid digging up the roots as this is likely to stimulate new growth.



Clippers

### Critical timing

Spring through fall, clip stems at base of ground to weaken the rhizome (creeping rootstalks) system.

### How to manage naturally

Do not attempt to dig Horsetail roots, this can lead to spreading root fragments and increasing your weed problem.

Weaken the plant system by cutting horsetails before they reach eight inches in height. Repeated clipping will interrupt the plant's ability to replenish energy to the rhizomes and thus weaken the plant over time. It will take a minimum of two years to eliminate Horsetail this way.

Improve drainage or add plants well adapted to damp soil. Horsetails thrive in wet soil, it can help to determine the cause of your wet soil and improve drainage. Alternatively, you can plant ornamental plants that thrive in wet soil such as ferns, hosta, and ninebark. These will shade out and camouflage horsetails.

#### How Horsetail spreads

By creeping rhizomes and small tubers in the root system and spores. Small fragments of tubers and rhizomes can remain vital when moving soil from one place to another and sprout new stems.

### Suppression

If poor drainage is promoting Horsetails and suppressing garden plants, determine and fix cause to improve drainage. Plant plants that are well adapted to wet soil which can compete and shade out horsetail.

# Dandelions



## Identification and growth habits

Dandelions produce rosettes of foliage and have a deep taproot. Their bright yellow flowers, which bloom spring through summer, open during the day and close at night.

#### Pesticide use

Spot treatment with organic or chemical herbicides may provide some short-term suppression, but overall will not be as effective as increasing a lawn's density and proactive manual weed removal.

Chemical herbicides can have unintended consequences - harming or killing desired plants, human and pet health, negatively impacting water quality of nearby streams, lakes and Bellingham Bay.

#### Suppression

Maintain lawns for good vigor and density. Plant garden beds for density with different layers of plants that will shade soil. Mulch bare soil with 3 inches depth of coarse woody mulch.

Commonly found in lawns, meadows, gardens, pavement cracks and abandoned landscapes.

#### Removal

Uproot the entire taproot with hori-hori or Grandpa's Weeder. In concrete cracks or gravel, burn plant with torch.







Hori hori

Grandpa's Weeder

Flamethrower

## Critical timing

Fall through spring, remove entire root. Late spring through summer, remove flowers before they go to seed.

### ttow to manage naturally

Manually uproot Dandelions using hori-hori or grandpa's weeder; the taproot stores lots of energy and can produce more leaves and flowers if the full root is not pulled. The best time to pull Dandelions is when the soil is wet. Put roots and root fragments in commercial compost or trash.

When Dandelions grow in concrete cracks or gravel, use a flame weeder weekly until root energy is exhausted.

Prevent Dandelions from going to seed by removing plant before it flowers or mowing flower heads off. This will help reduce future dandelions. Discourage seeds from germinating by shading them out. Increase lawn density – raise your mower to two to three inches and mulch grass clippings (not recommended in Lake Whatcom watershed). Cover bare soil with three inches of coarse woody mulch.

#### How Dandelions spread

By seeds: 200+ seeds per flower are dispersed by wind. A single plant can produce up to ten flowers; for every Dandelion that is uprooted before it goes to seed can prevent 20,000 seeds from spreading.

# Seasonal Weed Control Calendar

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
	winterin weeds	P	Spring erennials new seed	and			eds flowe to seed	r and		ll germin f some w	
		Replenis	sh mulch					mı	plenish ulch afte st rains		
Remo	ove woo	dy weeds		We	eed-befo	re-they-s	eed	Upr	oot perei	nnial wee	eds
			Treat s	mall see	dlings in	pavemer	nt cracks				

### Weed cycles

Some weeds, like dandelions, can produce thousands of seeds. Those seeds can remain viable for up to 20 years in the case of Hedge Bindweed.

Preventing flowers from going to seed, and seeds from germinating, are top priorities to successfully managing weeds without chemical herbicides.



Each dandelion head can produce 200+ seeds. A single plant can produce 10 flowers, for every dandelion that is pulled before it goes to flower is preventing 20,000 seeds.

#### Mulch

Mulch suppresses weeds by shading the soil and as a physical barrier to germination of annual weed seeds. Mulch is most effective when applied immediately after weeding.

Mulch comes in different textures and materials, there is no single "best" mulch for all situations.

For weed suppression, coarsetextured mulch applied 3-4 inches is optimal.



Coarse bark and coarse wood chips (pictured here) help prevent weeds from germinating.

#### What to focus on

Fall through spring, when the soil is moist, it is easiest to pull weeds. Focus on uprooting perennial weeds once the ground softens with fall rains such as Creeping Buttercup. In the winter, it will be easier to remove woody weeds like Himalayan Blackberry.

During the summer, weed before they seed; this will help maintaining weeds in future years.



Hori-hori, spade fork, mattock and gardening bag or bucket are all helpful tools in managing weeds without using chemical herbicides.

# Weed Control is a Year Round Job

# Winter

When conditions are warm and dry enough to work comfortably outside, this can be an effective time to remove perennial and smaller woody weeds like Himalayan Blackberry. Roots pull more easily from damp soil. Don't work on the soggy soil, as it can harm soil by compaction.

#### What:

English Ivy, Creeping
Buttercup, seedlings
of English Holly and
Cherry Laurel, Himalayan
Blackberry, Dandelion and
tree seedlings that crop up
in the wrong place. Hedge
Bindweed roots can be
forked from beds where
they grew last summer.

#### How:

- Spade fork to uproot perennial and small woody weeds.
- 2. Hori-hori soil knife, grass scythe, trowel for smaller weeds.
- 3. A weed wrench is useful for woody weeds with up to 3-inch stem diameter.
- 4. Apply coarse textured woody mulch over exposed soil right after weeding.

# Spring

All weeds begin rapid growth, along with garden plants. Focus on weeds while they are small. Follow the flowers to remove those weeds before they have time to go to seed. Spot mulch to cover soil exposed during weeding.

#### What:

Emerging shoots on perennial weeds such as Hedge Bindweed, Horsetail and Creeping Buttercup. Woody weed seedlings. New weed seedlings.

#### How:

- Spade fork to uproot perennial weeds, small woody weeds and other emerging weeds.
- 2. Use a hori-hori, grass scythe, or trowel for smaller weeds. Many annual weeds pull easily by hand.
- 3. Use a flame weeder to burn weeds in driveways and gravel. Repeat two to three times in a week or two; this will deplete energy reserves in roots.
- 4. Apply coarse textured woody mulch over exposed soil right after weeding. Tiny weed seedlings with just two to four leaflets can be smothered with coarse woody mulch.

# Summer

Weed seed is spread at this time of year, as seed heads and berries mature. Weed seeds travel in different ways: some are blown in with the wind, others are deposited by birds and other wildlife. It can be more difficult to uproot weeds from dry soil. Focus on cutting away the top growth and flowering stems to subdue weeds.

#### What:

All weed types.

#### How:

- Weed before they seed: remove flower heads as they appear, especially for annual seeds. This can be done with string trimmer for large areas.
- 2. Avoid disturbing the soil. Use a hori-hori soil knife, grass scythe, or a sharp shovel edge to shave weeds off at grade. Cover with mulch afterward.
- 3. Repeated defoliation will weaken and kill weeds over time. Use hand tools or spot treat small weeds with organic weed sprays. Flame weeders can be used on paved areas.

# Fall

As fall wetness returns, several types of weeds will germinate and then overwinter as seedlings, ready to resume growth in spring. Weed and mulch in fall for fewer weeds in spring.

#### What:

Annual weeds like Herb Robert and Nettle, perennial weeds like Dandelion, Creeping Buttercup and others.

#### How:

- 1. Wait until after the first good rains to mulch bare ground and smother weed seeds. Mulch can also be applied directly over seedlings that are less than an inch tall.
- 2. Hori-hori, grass scythe, hand trowels, and a spade fork are good fall weeding tools.

#### Questions?

Call the Garden Hotline (206) 633-0224 or visit gardenhotline.org.



Weed calendar and Manage Weeds Naturally copy created by Christina Pfeiffer for City of Bellingham, Adapted from original content created by E.J. Hook, Woodland Park Zoo & David McDonald, Seattle Public Utilities for the Local Hazardous Waste Management Program in King County, WA.