

Invasive Knotweeds

Polygonum bohemicum, *P. cuspidatum*, *P. polystachyum*, *P. sachalinense* Buckwheat Family

Non-Designated Noxious Weed: Control Recommended

Identification Tips

- All invasive knotweeds such as giant, Japanese, Himalayan and Bohemian are similar in general appearance:
 - * Grows into large, dense thickets
 - * 4 to 12 feet tall
 - * Bamboo-like reddish-brown canes
 - * Hollow stems with thin, papery sheaths
 - * Flowers are small, white/green and grow in showy plume-like branched clusters
- Oval or heart-shaped leaves on all but Himalayan which has an elongated, tapered shape; giant knotweed leaves often exceed 12 inches long, twice the size of Japanese knotweed leaves



The hybrid Bohemian knotweed is the most common invasive knotweed in King County.

Biology

- Non-native, herbaceous perennial
- Invades moist soils, but can also grow in dry areas
- Spreads mostly vegetatively from rhizomes and roots and sometimes by seed
- Rhizomes can be 30 feet long or more
- Flowers in late July
- Plants die back at end of growing season but dead canes persist over the winter



One key difference between species is size and shape of the leaves. From left to right: giant, Japanese and Himalayan knotweed leaves. Bohemian is intermediate.

Impacts

- Thickets can completely clog small waterways
- Displaces native plants due its aggressive growth
- Creates bank erosion problems and is considered a potential flood hazard
- Lowers the quality of riparian habitat for fish/wildlife

Distribution

- Found throughout King County, especially along roadsides and streambanks
- Can grow in partial shade or sunny sites



Invasive knotweeds quickly invade valuable riparian areas.

Questions?

King County Noxious Weed Control
Program Line: 206-296-0290
www.kingcounty.gov/weeds

What You Can Do

Prevention of new infestations is the key to controlling invasive, non-native knotweeds. Preventative techniques include eradication of small, newly established sites, monitoring stream corridors for new infestations and long-term follow up of controlled sites. Since knotweeds are now so widespread in King County, control is not legally required, but strongly encouraged.

Control Methods

Most control methods need to be applied over several years to be successful. Combining manual control with herbicide control typically proves most effective.

Prevention: Non-native knotweeds were introduced from Asia as ornamentals, but over the years have escaped into the natural landscape. Never dispose of knotweed plants or plant parts into waterways, wetlands or other wet sites. Do not compost crowns and rhizomes. Instead, discard with the trash or take to a transfer station for disposal. Knotweed stems can be composted, but they will root on moist soil so they need to be completely dried out before composting.



Inspect for new growth.



Small infestations should be dug up and removed from the site.

Manual: Individual plants can be dug up if done carefully and completely. Plants can re-sprout from rhizomes so be sure to remove the entire root system and inspect for new growth. For small stands of knotweed, cutting once or twice a month during the growing season will keep the plants from flowering and weaken the roots and rhizomes. Another option for control is cut and cover. Cut down the knotweed and cover area with heavy duty black plastic or geotextile fabric, weighted down with heavy rocks or blocks, but kept loose so knotweed doesn't break through. Stomp down re-growth under covering as needed, usually every 2-4 weeks; remove any new growth

around the edges. Leave covering on until there is no more growth, usually 3 to 5 years. Repair and replace covering as needed.

Chemical: Follow label directions and use extra caution when applying near sensitive areas and their buffers. Herbicides with the active ingredients glyphosate (such as Rodeo, Aquamaster, Roundup), dicamba (such as Banvel, Clarity) and imazapyr (Habitat, Arsenal) can be effective either separately or in combination. Spray the leaves evenly and do not allow herbicide to fall onto desirable plants. It is best to spray plants when they are at least 3 to 6 feet tall from summer to fall.



Stem injector gun.

Plants can be cut in early summer and then sprayed when they have grown back to at least 3 feet tall. Plants controlled later in the season can be cut to 5 feet immediately before spraying, although effectiveness is somewhat reduced. Regardless of herbicide choice, rate or spray timing, a large patch of knotweed with hundreds of stems will require foliar treatments over multiple years.

Knotweed stems may also be injected with glyphosate, nearly eliminating the risk of drift. This can be done with a large needle or with a stem injector gun. The injection method is labor-intensive, but it may be preferred where knotweed is mixed in with desirable plants or growing

next to water. For more information on injector guns, contact the manufacturer at <http://www.jkinjectiontools.com/>.

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King County

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