

Invasive Knotweeds

Fallopia x bohemica, *F. japonica*,
F. sachalinensis, *Persicaria wallichii* Buckwheat Family

Identification Tips

Invasive knotweeds such as giant, Japanese, and Bohemian are similar in general appearance:

- Grows into large, dense thickets
- 4 to 13 feet tall (depending on species)
- Bamboo-like green–reddish canes that die back every year
- Hollow stems with thin, papery sheaves at nodes
- Flowers are small, white/green and grow in showy plume-like branched clusters
- Large, woody roots; dark brown exterior and orange-yellow interior

Biology

Invasive knotweeds are non-native, clone-forming, herbaceous perennials. They invade wet soils but can also grow in dry areas. Plants spread mostly vegetatively from rhizomes and roots, and rarely by seed. Rhizomes can be 7 feet deep and 30 feet long or more. Plants flower in late July and stems die back at the end of the growing season. Dead canes persist over the winter. New shoots grow from root crowns and rhizomes in early spring or whenever cut or damaged.

Impacts

Knotweed thickets can completely clog small waterways. They displace native plants due to their aggressive growth, and lower the quality of riparian habitat for fish and other wildlife. They also create bank erosion problems and are considered a potential flood hazard. In residential areas, they damage pavement as well as drainage and septic systems, and can even grow into foundations.

Distribution

Invasive knotweeds are found throughout King County, especially along roadsides and streambanks. They can grow in partial shade or sunny sites. Introduced from Asia as ornamental plants many decades ago and have escaped into the natural landscape.

What You Can Do

Prevention of new infestations is the key to controlling invasive 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 only required in selected areas—but encouraged everywhere.

**See the King County Noxious Weed List for current requirements.*

**Class B Noxious Weed:
Control Required in
Selected Areas***



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



Invasive knotweeds can quickly dominate valuable riparian areas.



Digging is not recommended for larger plants, as knotweed mostly spreads vegetatively via rhizomes and roots.

Questions?

King County Noxious Weed Control Program: **206-477-WEED** kingcounty.gov/weeds

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. For long-term success, replant cleared areas with suitable native or noninvasive species.

Prevention:

Never dispose of knotweed plants or plant parts in waterways, wetlands, or other wet sites. Do not compost root 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 need to be dried out beforehand.

Manual:

Individual plants growing in loose soil can be dug up if done carefully and completely. Plants can resprout from rhizomes, so be sure to remove the entire root system and inspect the area for new growth for at least a few seasons. For small knotweed stands, cutting twice a month during the growing season will keep plants from flowering and weaken the roots.

Another control option is cut and cover. Cut down the knotweed and cover the area with heavy duty black plastic or geotextile fabric, weighted down with heavy rocks or blocks, but kept loose so the knotweed doesn't break through. Stomp down regrowth as needed, usually every 2-4 weeks; remove any new growth around the edges. Leave covering in place until there is no more growth, usually 7 or more years. Repair and replace covering as needed.

Chemical:

Follow label directions, as well as state and local rules, and use extra caution when applying near sensitive areas and their buffers.

Chemical control is most effective on plants that have not been cut in the same season. Avoid spraying plants in full bloom when bees are active. Choose an herbicide with the active ingredient glyphosate or imazapyr that is labeled for the site you will be working on (residential, aquatic, etc.). The lowest effective rate for knotweed with most glyphosate products is a 4% solution in water and with most imazapyr products is a 1% solution in water. The label of the product will tell you if you need to add a surfactant for better uptake. Most effective August to early October (until the first frost). Spray actively growing plants (don't cut them first).

Knotweed stems may also be injected with concentrated glyphosate with a large needle or a stem injector gun. This method is labor-intensive, but may be preferred where knotweed is mixed in with desirable plants or growing next to water. Stem injection is most effective July to September. Not recommended for large infestations of knotweed. For information on using and borrowing injector guns, visit kingcounty.gov/weeds.

Note: **Do not** cut knotweed before or directly after chemical application. The herbicide needs to be moved into the roots of the plant. We recommend waiting two weeks or more before clearing any stalks.

For more information, contact the Noxious Weed Control Program.



Covering knotweed with black plastic or geotextile fabric is an effective control option, but leave the covering loose to prevent the knotweed from breaking through.



Knotweed stem injector guns provide another control option.

Could be confused with:

Invasive knotweed's hollow, cane-type stems look similar to those of some bamboo species (in the *Poaceae* family).

However, bamboos tend to have narrower leaves than knotweeds. Bamboo species fall into two growth types: clumped and running. The latter spread much like knotweed and are more likely to be invasive.



Fargesia robusta is a clumping bamboo that serves as a non-invasive alternative to knotweed.