

Japanese Knotweed: Options for Control

Japanese Knotweed (*Polygonum cuspidatum*), a class-B, non-designate, noxious weed in Lincoln County, Wash., also known as **Japanese bamboo**, **Mexican bamboo**, **Japanese fleecflower** and **huzhang**, is a perennial species with spreading rhizomes and numerous reddish-brown, freely-branched stems. The scientific name, *polygonum*, is a reference to the swollen nodes or “knots” along the stem of the plants in this genus. *Cuspidatum* means “sharp-pointed,” likely a reference to the leaf morphology. Japanese Knotweed’s native range is Asia, particularly Japan, Taiwan and Northern China. It was introduced to North

America in the 1880’s for use in estate gardens after receiving wide horticultural attention in Europe. Japanese Knotweed was added to the Lincoln County Noxious Weed list in 2007, after three sites were located along **Lake Roosevelt** and another on **Bald Ridge Road** north of **Davenport**. Japanese Knotweed grows quickly and often forms large thickets. The roots are rhizomes extending 30 feet from the parent plant and grow as much as seven feet below the soil. Buds along the length of the rhizomes may develop into new stems depending



upon environmental conditions. Japanese Knotweed spread mainly by rhizomes and stem fragments;



Watch out! Japanese Knotweed grows quickly. It can spread and over take vehicles.



Leaves of the Japanese knotweed can be 6-inches long.



Flowers of the Japanese Knotweed are minute, and greenish-white. Its seeds have low viability.

Key Identifying Traits

- Stout **stems** are smooth (bamboo-like) and swollen at the joints where the leaf joins the stem.
- **Flowers** are minute, greenish-white and occur in branched sprays followed by small winged fruit.
- The broadly-ovate **leaves** are petiolate, truncate and a little triangular; their tips are pointed, some 2-6 inches long, and 2-5 inches wide.

Biology and Ecology

- **Perennial** species with spreading rhizomes and numerous reddish-brown, freely branched stems.
- Tolerates a variety of **adverse conditions** including:
 - ▲ Full shade
 - ▲ High temperatures
 - ▲ High salinity
 - ▲ Drought
- Found near water sources, in low-lying areas, waste places, utility right of ways, and around old home sites.
- Very susceptible to spring and fall frosts.
- **Dense colonies** can produce **11 to 16 ton per acre** of dry matter and **rhizome** weights of **5 to 14 ton per acre**.



Japanese knotweed can grow up to 10 feet tall.



Japanese knotweed rarely establishes colonies by seed.



This root fragment can extend 60 feet from the parent plant and seven feet below the soil.



Japanese knotweed hiding amongst trees.



Shady, moist areas are where Japanese knotweed grows best; photos are along Lake Roosevelt, in Lincoln County.

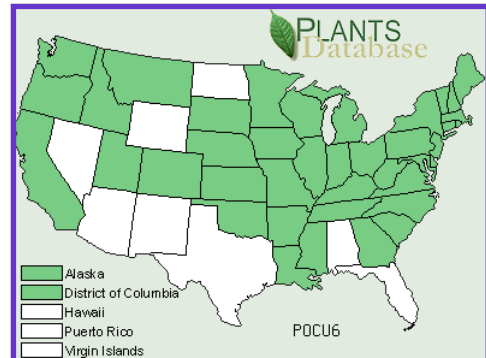


Lincoln County Noxious Weed Control Board
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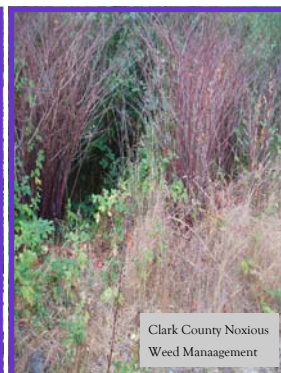
Control Measures

- **Prevention:** Learn to identify plants; know your property.
- **Biological:** None known at this time.
- **Cultural:** Do not mow, the seeds will spread.
- **Mechanical:** **Not effective!** Cutting the stems once will result in new shoot emergence. Cut each plant 6 inches tall and at a minimum cut at least 10 times per season (twice a month in April through August).
- **Chemical:**
 - ⇒ **Foliar Application Roundup, Aquamaster, Habitat and Arsenal** can result in 68%-94% control.
 - ⇒ **Stem Injection/cut stem treatment Aquamaster or Roundup Concentrate.** An **injection gun** is needed to get herbicide into the stems.
- **Read the label** instructions before applying any herbicides.
- Continue to monitor the site.

Protykin® is a high potency 200:1 standardized extract of Japanese Knotweed (root), a powerful antioxidant and cardioprotectant that contains 50% phytoestrogens (natural plant estrogens). As a phytoestrogens, **Protykin®** helps maintain normal estrogen activity, reduce hot flashes, balance mood swings, and promote healthy bone density. **Resveratrol**, the active ingredient in **Huzhang**, is an antibiotic produced by several plants including Japanese knotweed (roots). A number of beneficial health effects, such as anti-cancer, anti-aging, anti-inflammatory effects in non-human species



Japanese knotweed infestation before injection treatment.



Post-treatment of 6ml injected resulting in 100% control after 42 days.



Once in bloom, Japanese knotweed should stand out showing its aggressive habits.

Photos and information courtesy of: University of Weed Science, USDA Plants Database, InterHealth, EFG Biodiversity Image Gallery, Clark Co. Noxious Weed Management, Thurston Co. Noxious Weed Control and Washington State Noxious Weed Control Board.