NOXIOUS WEEDS ARE EVERYONE'S CONCERN

Noxious weeds compete with pastures and crops, reducing yields substantially. Some noxious weeds are directly poisonous or injurious to man, livestock and wildlife. The losses resulting from noxious weed infestations can be staggering, costing residents of Nebraska millions of dollars due to production losses. This not only directly affects the landowner, but erodes the tax base for all residents in the State of Nebraska.

The business of noxious weed control is everyone's concern, and noxious weed control benefits everyone. The support of all individuals within the state is needed and vital for the control of noxious weeds within Nebraska. It is the duty of each person who owns land to effectively control noxious weeds on their land.

If you have questions or concerns about noxious weeds, please contact your local county noxious weed control authority or the Nebraska Department of Agriculture.

Material derived from *Weeds of the Great Plains*, published by the Nebraska Department of Agriculture.

For more information, visit **nda.nebraska.gov**.

KNOTWEED
(GIANT & JAPANESE)

NEBRASKA NOXIOUS WEED

PREPARED BY THE
NEBRASKA DEPARTMENT OF AGRICULTURE
AND THE
NEBRASKA WEED CONTROL ASSOCIATION

KNOTWEED FACTS

Common Name: Japanese, Giant, Bohemian knotweed

Growth Form: Forb

Life Span: Perennial

Origin: Asia

Flowering Dates: July–October

Reproduction: Rhizomes, stem and root fragments, and rarely seeds

Height: 1.5–5.0 m (4.9–16.4 ft)

Inflorescences: Clusters in paniclelike or racemelike arrangements (4–11 cm long), terminal and axillary, erect or spreading, drooping; peduncles puberulent (to 3.5 cm long); most plants are male

Flowers: White to greenish-white or pink perianths (4–6 mm long); tepals obovate to elliptic, tips obtuse to acute; outer 3 tepals winged

Fruits: Achenes (2.5–3 mm long, 1.4–1.8 mm wide), included in the sheath; fruiting perianth wings flat to undulate, without hair, dark brown, smooth, lustrous

Seeds: Small

Stems: Erect, usually clustered forming dense colonies, bamboolike, profusely branched,arching near the top; internodes hollow; glaucous, without hair, reddish-brown at maturity

Leaves: Japanese knotweed has alternate, leathery, thick, oval-shaped leaves that are sharply tipped and square across the base. The leaves have few hairs, are 4-5 inches long on the stalks, and are sometimes reddish. Giant knotweed has alternate, leathery, lanceolate shaped leaves (pointed at both ends) with a heart-shaped base. These leaves are 12 inches across and 18 inches long on stalks but can reach up to 2.5 feet long. There are few hairs on the underside veins and on the margins. Bohemian knotweed leaves have characteristics of both Japanese and Giant. They are bluntly tipped and usually have a square base.

Underground: Rhizomes, long

Where Found: Roadsides, meadows, river banks, flood zones, and disturbed sites. It is not well known in the Great Plains but may become a significant weed in the region.

Uses and Values: Limited value to livestock and white-tailed deer.

Poisoning: The rhizomes are reported to be toxic.

Other: Bohemian knotweed is a hybrid between Japanese knotweed (*Polygonum cuspidatum* Sebold & Zucc.) and giant knotweed [*Fallopia sachalinensis* (F. Schmidt) Ronse Decr.].

IMPACT OF KNOTWEED

An assessment was made of Japanese and giant knotweed and was found to be high risk to establish, spread and cause harm in Nebraska. Knotweeds have the potential to invade riparian areas as well as establishing in 55% of the state's upland areas that receive over 20 inches of rainfall per year. It threatens open and riparian areas where it spreads rapidly and forms dense monoculture stands by reducing species diversity, altering habitat for wildlife, increasing the risk of flooding and riverbank erosion. Its preferred habitat is like common reed, and if not eradicated as it enters the state, it has the potential to invade areas previously controlled for common reed. Wild and planted knotweed plants have been found in the Omaha area. Planted knotweed plants have been found in Lancaster and Garfield Counties. There are likely planted sites throughout the state as well as additional sites with wild plants.

Stems are bamboolike with hollow internodes.

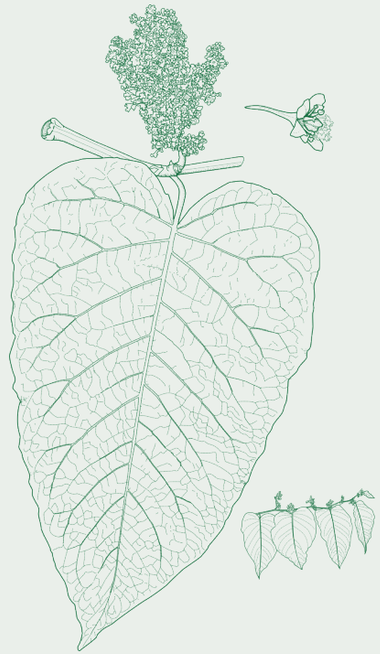
CONTROLLING KNOTWEED

Mechanical and Cultural Control

Cutting knotweed only removes the aboveground portion and only serves to stimulate the below ground rhizomes. In some cases, weekly mowing can eventually draw down enough of the plant's reserves to suppress it. The best approach to control is through a combination of cutting and herbicide application. A late spring/early summer treatment followed by an early fall re-treatment is needed. Several years of treatment may be needed for well-established populations. The plant will not resprout from the cut cane but removing them may aid in finding and treating resprouts in an infested patch. The area will also be more conducive to revegetation if the cut canes are removed.

Biological Control

Currently there is no known biocontrol available.



Knotweed Control Summary

The key to successful knotweed control is persistence. Multiple control methods may be necessary to achieve acceptable control. Previous infestations need to be monitored as well as scouting for new infestations.

Herbicide Control

Consult with your local county weed control authority at **neweed.org** or refer to the Nebraska Cooperative Extension EC130 (*Guide for Weed, Disease, and Insect Management in Nebraska*).

Leaves have a rounded tip with an abrupt point.