To Encourage and Develop Better Weed Control Practices in Nebraska

FACT SHEET: KNOTWEED "ALLIANCE"

All potentially invasive members of the Knotweed "Alliance" have been designated a Nebraska noxious weed. These invasive weeds are considered to be some of the worst in the world. They now occupy a site(s) in every 10km of England. There has been a more rapid spread in US. They are now found in 42 states with only a few sites detected in Nebraska. This early designation in Nebraska will allow us an opportunity to eradicate the small infestations detected and to stop the sale of plants on the ornamental market to prevent major infestations of riparian areas and streambeds across the state.

This designation includes Japanese knotweed and Giant knotweed and their hybrid Bohemian knotweed and all cultivars and hybrids. There are several Japanese knotweed cultivars developed for the ornamental market included in this designation since they can contribute to the Japanese knotweed invasion by providing pollen necessary for Japanese knotweed to produce viable seed.

This designation includes the following:

Japanese knotweed, Fallopia japonica





Winter

Whole Plant may be over 10 feet tall. Stems are stout, cane-like, hollow between the nodes, reddish-brown, and profusely branched. Leaves are spade shaped, about 6 inches long by 3 to 4 inches wide attached alternately to a zigzag branch. Leaf characters are most reliable when looking near the middle of a branch. Stems die back in the fall are reddish through the winter (a good time to spot it).

Giant knotweed,





Bohemian knotweed

Fallopia bohemica 7 to 15 feet tall, Zig zag stems, leaves heart-shaped with size between Japanese knotweed and giant knotweed.

Fallopia sachalinensis 8 to 12 feet tall and branches sparingly leaves are thin heart shaped, 6 to 12 inches long and two-thirds as wide

Two of the cultivars that are being sold in Nebraska: **Pink Fleece Flower**, Fallopia japonica, 'Revnoutria'

Vigorous ground cover, Red veined leaves; showy clusters of red buds open to pale pink flowers.



Variegated Fleece **Flower**, *Fallopia* japonica, 'Variegata', Three feet tall with coral-pink flushed leaves have splashes of white variegation, red stems and bottlebrush spikes of white flowers.

There are several more cultivars available across the country including Compacta, Crimson Beauty, Devon Cream, Milk Boy and others. If you have any of these cultivars, they are included in the noxious weed designation and are required to be controlled.

Weed risk assessment

An assessment was made of Japanese knotweed and it was found to be very high risk to establish, spread and cause harm in the state. It has the potential to invade all riparian areas in the state as well as establishing in 55% of the state's upland areas that receive over 20 inches of rainfall. It threatens open and riparian areas where it spreads rapidly and forms dense near monoculture stands by reducing species diversity, altering habitat for wildlife, increasing the risk of flooding and river bank erosion. Its preferred habitat is similar to phragmites, and if not eradicated as it enters the state, it has the potential to invade areas previously controlled for phragmites, i.e., see the river infestation above in the state of Washington. 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. There will be planned ongoing surveillance across the state.

Prevent new infestations by blocking invasion pathways

Small segments of the plant are able to regenerate into new plants. These plant segments are commonly transported by water and regenerate new plants on the banks of streams. These plant segments may be transported to new sites by foot traffic, equipment, mowing and improper disposal of vegetation. Sexual reproduction is also possible in the US as evidenced by viable seeds collected from two Japanese knotweed sites in Lincoln. The seeds move easily by water and wind.

Eradicate any plants found or report to a local weed control authority

For small sites and ornamental plantings

<u>Treat from July 1 to first killing frost when carbohydrates produced in the leaves are moved to the rhizomes</u> for growth and storage. Foliar applied herbicides move through the plant with the carbohydrates.

1. Cut the stems about 2 inches above ground level. Immediately apply a 25% solution of glyphosate (*e.g., Roundup®, or use Rodeo® if applying in or near wetland areas*) and water to the cross-section of the stem.

For larger sites

- 1. Apply 2 quart per acre of imazapyr (e.g., Arsenal®, has aquatic label if applying in or near wetland areas), use non-ionic surfactants or MSO (consult label) or,
- 2. Apply 2 quart per acre of Garlon 3A, use non-ionic surfactants (consult label) or,
- **3.** Apply 1 quart per acre of glyphosate (*e.g., Roundup*®, or use Rodeo® if applying in or near wetland areas), use non-ionic surfactants (consult label).

<u>Read and follow label directions</u> DO NOT COMPOST ANY GREEN PORTIONS OF THE PLANT, IN RESIDENTIAL AREAS PUT IN PLASTIC BAGS FOR REGULAR GARBAGE PICKUP.

Provide follow-up

To prevent re-establishment continue with follow-up maintenance annually. It is very important that all planted and wild sites be controlled and kept controlled.

We need everyone's cooperation

Everyone's cooperation is needed in preventing new infestations, spotting new infestations, taking actions needed to assure eradication with follow-up to prevent re-establishment. This early vigilance and action will prevent the potential harm and huge cost of controlling large established stands of the Knotweed "Alliance". Contact your local county weed control authority for assistance and information.

References:

Peters, Amy, 2006 Japanese Knotweed Management Trial in Coos County, Extension Service Coos County, Oregon State U., 631 Alder ST, Myrtle Point, OR 97458. <u>http://extension.oregonstate.edu/coos/sites/default/files/agriculture/documents/JKfactsheet2_000.pdf</u>

Southeast Exotic Pest Plant Council Invasive Plant Manual- Japanese knotweed, The Bugwood Network – The University of Georgia www.se-eppc.org/manual/knotweed.html

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