

## Managing Japanese Knotweed

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WEEDINAR #1  
July 30, 2020



## JAPANESE KNOTWEED

**Common name:** Japanese knotweed - BEST  
might hear -

Japanese bamboo  
Mexican knotweed  
Mexican bamboo

**Scientific name:**

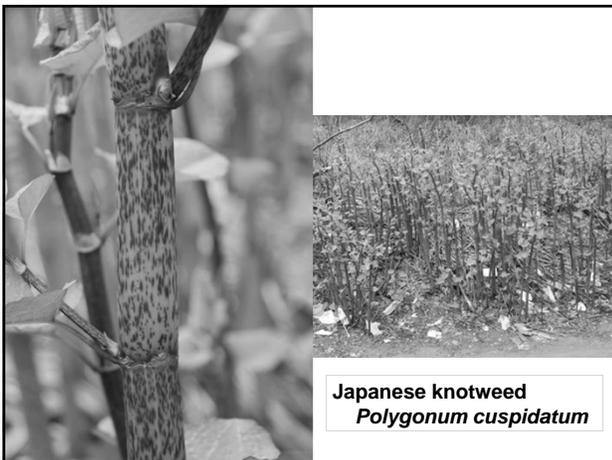
- *Polygonum cuspidatum*
- *Reynoutria japonica*
- *Fallopia japonica*

## JAPANESE KNOTWEED

Native to Japan & other parts of Asia,  
not Mexico

Japanese knotweed is NOT a grass, it is a  
broadleaf in the knotweed or  
smartweed family (*Polygonaceae*),  
same family as rhubarb and buckwheat

JAPANESE  
KNOTWEED



Japanese knotweed  
*Polygonum cuspidatum*

## Other knotweed relatives:

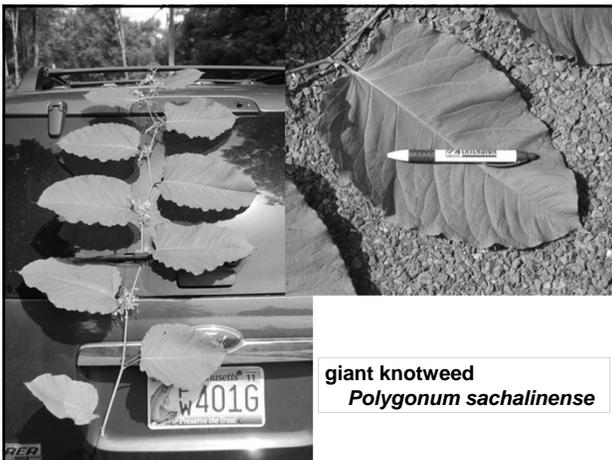
**giant knotweed:**

- *Polygonum sachalinense*
- *Fallopia sachalinense*
- *Reynoutria sachalinense*

**bohemian knotweed:**

- *Fallopia* × *bohemica*, suspected hybrid  
(*P. cuspidatum* & *P. Sachalinense*)

**Note:** increasingly more common in NE



## Means of reproduction

- asexually (primary) : vegetatively propagated by rhizomes
- sexually: by seed, significantly less important than vegetative propagation by rhizomes

## Habitat

- moisture or wet soils
- often associated with wet areas
  - wetlands
  - stream & river corridors
  - forest edges
  - roadsides
  - abandon agricultural land
- management areas are commonly WPA jurisdiction, require Con. Com. approval

## Non-chemical Japanese Knotweed Control

- frequent cultivation or digging (equipment often required)
- repeated cutting/mowing - slow spread & reduced vigor

### Carbohydrate Starvation:

- prevent photosynthesis
- deplete stored energy for rhizomes



### Japanese knotweed plant material disposal

- contractors bagged & landfilled
- on site:
  - pile and dry on site (tarp below)
  - composted on site
  - deep bury

Japanese knotweed management without herbicide is very difficult.

**Disturbance is a major factor in invasive plant establishment!!!**



**Disturbance can be problematic!!**

Do your best to prevent the disturbance of soil and leaf-litter layer!

Herbicides might be a better option in some situations or attempts can be made to cover the disturbed area.

### Non-chemical Japanese Knotweed Control

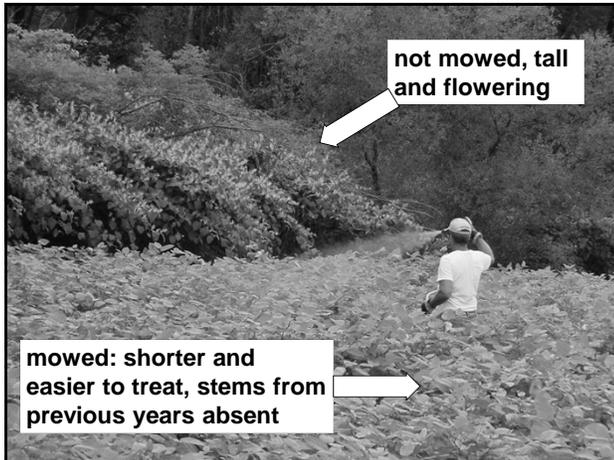
- new emerging strategies - MeshTech
- Japanese Knotweed Solutions Ltd,  
Itadori House, Melton Street,  
Radcliffe, Manchester, UK



### JAPANESE KNOTWEED CONTROL

- glyphosate - flowering (late summer)
- cut to ground in late May to early June
- reasons for spring cut to ground:
  1. remove previous years dry stems
  2. remove some plant energy
  3. shorter height as treatment time
- other herbicides???
- imazapyr: Arsenal
- aminopyralid: Milestone





## Glyphosate Products Formulations

Not approved for near water:

- Roundup Pro - turf & ornamentals
- other post-patent generics

Approved for near water:

- Rodeo (Corteva formerly Dow)
- Roundup Custom for Aquatic and Terrestrial Use
- GlyphoMate 41 Weed & Grass + Aquatic Herbicide
- Glyphosate 5.4

### JAPANESE KNOTWEED CONTROL

- stem injection:

- increase in herbicide
- increase in labor costs
- easy to go off-label



# Milestone®

SPECIALTY HERBICIDE

\*Trademark of The Dow Chemical Company ("Dow") or an affiliated company of Dow

- For control of annual and perennial broadleaf weeds including invasive and noxious weeds, certain annual grasses, and certain woody plants and vines, on:
  - rangeland, permanent grass pastures (including grasses grown for hay), Conservation Reserve Program (CRP)
  - non-crop areas for example, airports, barrow ditches, communication transmission lines, electric power and utility rights-of-way, fencerows, gravel pits, industrial sites, military sites, mining and drilling areas, oil and gas pads, non-irrigation ditch banks, parking lots, petroleum tank farms, pipelines, roadsides, railroads, storage areas, dry storm water retention areas, substations, unimproved rough turf grasses; and
  - natural areas (open space) for example, campgrounds, parks, prairie management, trailheads and trails, recreation areas, wildlife openings, and wildlife habitat and management areas;
  - including grazed areas in and around these sites.

aminopyralid - MILESTONE

### Invasive knotweeds: Japanese, Bohemian, giant knotweeds:

Optimum suppression of invasive knotweeds with Milestone herbicide is obtained when applications are made to plants that are at least 3 to 4 feet tall. Results of field trials conducted in the western U.S. indicate that high volume applications (100 gpa or greater) of Milestone at 7 fl oz/A or a spot treatment rate up to 14 fl oz/A applied in summer will provide good control of invasive knotweeds. In the upper Midwest, mowing in summer followed by fall application of Milestone (prior to frost) provided the best control. Infestations of invasive knotweed that are mowed should be allowed to regrow to at least 3 feet in height prior to herbicide treatment. Monitoring and follow-up herbicide treatments on regrowth will be necessary to control resprouts and achieve long-term control.

### JAPANESE KNOTWEED CONTROL

All strategies will likely require multiple years of implementation for long term effect control.

**DILIGENCE IS CRITICALLY IMPORTANT!!!!!!**

