

Knotweed Party on the Badfish: a Grant and a Plan

Japanese knotweed is the party guest you wish you hadn't invited. Once planted as an ornamental, this big leafy shrub has turned out to be an aggressive, unwelcome invader. It's fast growing and hard to get rid of. It spreads rapidly by rhizomes and stem fragments. It shades out all other plants. It's originally from Asia, so native insects, animals and diseases don't touch it. It's a classic invasive species.

Although knotweed is a problem wherever it spreads, it's especially damaging along streams. The bare ground under knotweed plants results in increased stream bank erosion. It grows in such dense tall woody thickets that access to the water for humans and animals is eliminated. It is spread downstream whenever high water carries fragments of stems and roots.

About nine miles south of Stoughton, where Riley Road crosses Badfish Creek, a large patch of this troublemaker is spreading along the stream banks. A local group, the Friends of Badfish Creek Watershed, plans to begin eradication of the 5,000 square foot stand this spring.

The Friends, a chapter of the Rock River Coalition, recently received a grant of \$1600 from the Wisconsin DNR's Aquatic Invasive Species (AIS) Grant program to fund the first year of the knotweed eradication project. The Friends have worked closely with the Wisconsin DNR on their eradication plan.

FBCW is also partnering with the River Alliance of Wisconsin. The organization's Project RED (Riverine Early Detectors) trains canoeists to spot new occurrences of invasive species while floating their favorite streams. This innovative program, coordinated by Laura MacFarland, has recently drawn national attention in the EPA's *Volunteer Monitor* newsletter and regional attention in the *Plants out of Place* newsletter of Invasive Plants Association of Wisconsin (IPAW).

FBCW is seeking volunteers for its first knotweed workday on **Saturday, April 18, from 10 am to 2 pm**. The goal for the day is to clear away last year's dead knotweed stalks. Gloves, equipment and refreshments will be provided. If enough volunteers show up, the work should be done by noon. If you think you can help or want more information, please contact Lynne Diebel at (608) 873-7910.

Knotweed Eradication Project Underway on the Badfish

The Japanese knotweed (an invasive species) growing next to the Riley Road bridge over Badfish Creek took a big hit on Saturday, April 18. An energetic group of 22 volunteers, organized by the Friends of Badfish Creek Watershed (FBCW), cut and hauled about 5,000 square feet of ten-foot high knotweed stalks.

Volunteers from Stoughton Boy Scout Troop 167, the Dane County Conservation League, and the Mad City Paddlers, as well as several individual volunteers, lopped and dragged knotweed stalks for about two hours. Sue Graham of the DNR, Jerry Doll of Invasive Plants Association of Wisconsin (IPAW), and Laura MacFarland of the River Alliance helped with the work and gave expert advice.

Clearing the site was the first step in a project which will take FBCW (a local chapter of the Rock River Coalition) two to three years to complete. The work is funded by a grant from the Wisconsin DNR's Aquatic Invasive Species (AIS) program.

In early June, FBCW will spray new knotweed growth (already visible—it looks like pink asparagus shoots) with glyphosate. Because spraying the newly leafed-out plants gets the chemical down into its rhizomes, the knotweed will begin to die off, but not completely. In August, FBCW will cut, haul and spray again. In September they'll plant the site with annual grasses to prevent erosion. In 2010, they'll repeat the whole process. During 2011, they'll continue to monitor the site, treating as needed. Knotweed doesn't give up easily, but the goal of the project is complete eradication of the stand.

The reason for all this work is that knotweed is a perennial invasive species that's especially damaging to stream banks. Knotweed spreads aggressively, shades out all other plants, increases stream bank erosion when it dies back in winter, and blocks access to streams for humans and animals. If left unchecked, this stand of knotweed would continue to spread downstream and along the road.

For updates on FBCW's project, visit their Web site www.geocities.com/badfish_creek .

Photo Captions:

(troop167cropped.jpg)

Knotweed Warriors from Stoughton Boy Scout Troop 167: Front row - Levi Huvila, Connor Roisum, Colin Davis. Back row: Russ Darling, Brett Darling, Dayna Flores, Andy Flores, Russ Melland. Not pictured: Joe Roisum and Gunnar Goetz (*photo by Lynne Diebel*)

(DCCLcropped.jpg)

Dane County Conservation League members: Rob Raether, Tony Allhands, Jean Mazzara, Russ Doman, Donna Gregory (*photo by Lynne Diebel*)

(knotweedharvestcropped.jpg)

In front of the knotweed harvest: Jerry Doll (IPAW); Laura MacFarland (River Alliance), Lynne Diebel (FBCW), Sue Graham (DNR), Scott Taylor (FBCW), Ted Keehn (landowner) (*photo by Bob Diebel*)

Badfish Knotweed Eradication Update

The Friends of Badfish Creek Watershed (FBCW) held another knotweed party on June 13, 2009. On a drizzly Saturday morning, eleven volunteers gathered at the Riley Road bridge over Badfish Creek to chop and haul the invasive Japanese Knotweed that covers the stream banks at that crossing.

In less than three hours, 5,000 square feet of knotweed had been cut and hauled on hay wagons to landowner Ted Keehn's barnyard. The cut stalks will dry on a concrete slab until ready for burning. It's important to prevent the stalks from re-sprouting, which they will do if left in a brush pile or damp place. Repeated cutting weakens knotweed. Spraying the leaves and injecting the stalks with glyphosate (Roundup) in the fall weakens it further. But the plant grows from deeply rooted rhizomes and it may take three years of repeated cutting and spraying to clear the area of knotweed.

The project began with the River Alliance of Wisconsin's Project Red (wisconsinrivers.org), which trains canoeists to identify riverbank invasive species while paddling. The work is funded by an AIS (Aquatic Invasive Species) grant from the Wisconsin DNR. FBCW's first knotweed event was held in April and drew 22 volunteers. Anyone interested in volunteering for the upcoming knotweed party in August should contact Lynne Diebel (608-873-7910; lsdiebel@gmail.com)

Photo captions:

(badfish knotweed 6-13-09 093-1):

Volunteers at the June knotweed party, left to right: Zander Gunderson, Stoughton Boy Scout Troop 167; Greg Diebel of Stoughton; Christine Schelshorn of Cooksville; Bob Diebel of Stoughton; Sharon Beall, FBCW; Cathy Royer of Cooksville; Scott Taylor, FBCW. *(photo by Lynne Diebel)*

Photo caption (badfish knotweed 6-13-09 097-1):

Volunteers at the June knotweed party, left to right: Scott Taylor, FBCW; Christine Schelshorn of Cooksville; Henry Royer of Cooksville; James Danky, FBCW; Lynne Diebel, FBCW; Sharon Beall, FBCW. *(photo by Cathy Royer)*

(DCCLcropped.jpg)

Volunteers at the April knotweed party, left to right: Dane County Conservation League members Rob Raether, Tony Allhands, Jean Mazzara, Russ Doman, Donna Gregory *(photo by Lynne Diebel)*

Educational Programs:

11-4-09 Public program in Stoughton. Laura MacFarland spoke. Three citizens attended.

5-11-13 Wheels Against the Weeds. Invasive species eradication sites on an organized bike ride route. Four members of FBCW had posters, handouts, and a demo and hands-on educational program at Riley Road. At least forty bike riders stopped, talked, learned to identify knotweed and garlic mustard plants, and learned about the knotweed project and our eradication methods.

9-20-14 Wheels Against the Weeds II. <http://www.tacr.cd.com/wheel-against-the-weeds.html> Even more riders, more interest.

Restored condition:

When we started in 2009, the site was about 5,000 square feet of Japanese knotweed on both sides of the road. The plants grew to eight feet or more and the growth was so thick that nothing else grew there. After two years of treatment, the knotweed was small enough that garlic mustard emerged. And after six years of treatment, only scattered small knotweed sprouts remain and we've really pushed back the garlic mustard. Some reed canary grass has moved in (about ten sq ft) but last fall we planted 1200 native grass plugs to try to compete with the few remaining invasives. All are still firmly rooted though they haven't sprouted yet. We plan to control the remaining JK and GM by cutting and pulling each year in June, July and Sept.

Knotweed log:

2009

4/18/09 – scattered 2" high sprouts (that was the day our volunteer group cleared, hauled and burned the dead stalks)

5/14/09 – heavy growth, stalks up to 7 feet tall and 1 inch in diameter (there's a yardstick against the clump in photo 5-14-09 001), almost fully leafed out

6/13/09 – we cut the fully leafed stalks (1 photo) and hauled to Ted Kuehn's for burning

7/7/09 – sprayed (1 photo)

8/13/09 – looking weaker

9/15/09 – sprayed and injected

2010

3/23/10 – observed Riley Road site – nothing visible yet (IMG-1250, 1251, 1252)

4/14/10 – observed site with Scott – tallest on east side (4" tall, placed flag) and mixed with garlic mustard; almost nothing on west.

4/16/10 – observed east side flagged sprout now 6" tall

4/21/10 – observed east side flagged sprout now 9" tall and some stalks are 2' tall; garlic mustard is dying. On west side growth is very sparse and spindly

4/29/10 – observation with photos

1. small clump NW of bridge (injected last year) where no new sprouts are visible

2. isolated patch SE of bridge (injected last year) where largest sprouts are 36" high and re-growth is thinner than east side of bridge with most sprouts 12" tall (Photos 1,2,3)

3. SE corner of bridge (triclopyr last year), flagged sprout is 17" tall, largest sprouts are ½" diameter and 36" tall, density much less than last year; garlic mustard looks dead (Photos 4,5,6,7,8)4.

4. SW corner of bridge (glyphosate last year), about 20 sprouts total, all spindly with tallest 15" (Photos 9,10,11)

6/5/10 – cut new growth and hauled to Ted Kuehn's farm where he will burn (4 photos from bridge)

7/9/10 – glyphosate foliar spray on both sides of bridge (lots of green-headed coneflower on west). Scott recommends Milestone early September.

8/16/10 – observation of west side showed small growth; north, none; east, moderate 3' high; SE, more.

9/30/10 – Milestone foliar spray on both sides of bridge

10/21/10 – injected two sites, the isolated clone SE of the bridge and the clone on the steep ravine side. 10ml of Milestone VM/container water

2011

4/13/11 – observed Riley Road site – nothing visible yet

4/28/11 – observed Riley Road site - no photos because camera battery was dead :-)

- On the east side of the road by the bridge, a few scattered short (3" tall) thin sprouts have emerged. Scattered garlic mustard persists.
- On the west side, almost no sprouts, and those few were only 1-2" tall. Scattered garlic mustard persists.

- Up the road in the isolated clone SE of the bridge, thinly scattered sprouts are about 8” tall. (Numerous Dutchman’s breeches and skunk cabbage emerging.)
- Further up the road, on the side of the steep ravine on the west side of the road, the stalks are about 12” tall and more numerous than any of the 3 other sites.

5-16-11 – pulled and bagged garlic mustard on both sides of bridge. Sowed oats, spread straw.

10-8-11 – sprayed both sides of bridge with glyphosate (AquaNeat), injected the other two clones with glyphosate.

2012

4-17-12 – pulled and bagged garlic mustard. Sowed oats again.

9-23-12 – Sprayed the stragglers on both sides of and under the bridge with Glyphosate (AquaNeat). Injected the more persistent isolated clones up the road.

2013

6-15-13 – sprayed knotweed, pulled garlic mustard, dug wild parsnip

9-23-13 – sprayed knotweed

2014

6-3-14 – sprayed everything (knotweed, dames rocket, garlic mustard, wild parsnip, brambles) with 2% glyphosate (AquaNeat) per Scott Taylor’s advice.

9-25-14 – sprayed everything with 2% glyphosate (AquaNeat)

10-19-14 – mowed brush and foliage with power brush cutter, dug holes with planting augers (powered by cordless drill) and planting bars, planted 1200 native grass plugs: (switch grass, side oats grama, little bluestem on dry slopes (25%) and cord grass, Virginia wild rye and switch grass in lower moister areas (75%).