



Knot in Hyde Park

Season 3

Notes from the Field

October 24, 2023

Another Knotweed Management Season has come to a close in Hyde Park.

Before we tell you about the Season, let's step back and be reminded why this work matters: Knotweed ("KW") left un-checked will create a solid mono-culture in an area and crowd out all other plants. So, if there is some KW in a location you can be sure, if we do nothing, that there will be -- eventually and with certainty -- a big solid mass of it. But most importantly, a single patch of KW is the birthplace of more patches of KW -- any part of the plant can be moved along through road works, mowing, flooding events, or any kind of excavation activity. Pieces of the plant will take root and take over.

EDRR (early detection, rapid response) matters! It doesn't just stop a small patch of KW from becoming a LARGE one; it stops it from becoming MANY patches.

Now, onto our Notes from the Field. This was our third season. We started on June 2, 2021 with our first cut of a 50' x 20' patch of Knotweed ("KW") at the north end of McKinistry Hill Road.

We've learned a lot since that day. Our management work so far has been almost exclusively what is called "mechanical control." For us that has meant repeated and persistent cutting and pulling of the KW. As often as 10 times a season, as few as 3 times. Essentially, this method of controlling KW forces the plant's rhizomes to 'run out of gas': the plant uses up energy re-sprouting in response to our repeated and persistent assault.

It is worth restating -- if there are still doubters -- repeated cutting and pulling of KW works! On every site we started in 2021 we have noted a massive reduction in the presence of KW; and a flourishing of other plants. It only took Wendy (who tends the original McKinistry Hill site) a total of 1½ hours -- 5 visits at approximately 20 minutes each visit -- to cut the KW that re-sprouted this summer. Driving by now you wouldn't even know it's a KW site were it not for the "KiHP" sign.

That doesn't mean we can declare the KW eradicated. Of course not. But it does mean that with very little on-going labor – persistent showing-up is absolutely key – we can say we have stopped that patch from thriving and being at risk of spreading to new locations.

We use 'drying stacks' and pallets to dispose of the cut material. **The 'drying stack' method is extremely effective and safe.** Separating the green stalks from any rhizome/root masses is critical. (See our website hydeparkvt.com/knot-in-hyde-park/ to learn about making a drying stack). The green stalks/leaves treated properly will die and compost in a single season. "Root Masses" and rhizomes are a different story. They are the "promiscuous" part of the plant, wanting to make new plants whenever and wherever. But they will die – if they are left to dry in the hot summer sun (we lay them out on pallets in a flat, sunny spot), stripped regularly of any growth that sprouts out of them, and then exposed to the freezing temperatures of winter.

We have also experimented with "smothering". At the beginning of 2022 (Season 2) we laid re-cycled "rubber roofing" at several sites (it does not degrade in the sun/cold like black plastic). We don't expect that this will kill the rhizomes beneath (maybe eventually over time?), but we do expect it will weaken them. The plants continue to work to send growth out toward the light at the edges. That clearly uses up stored energy, albeit less than if we let the entire patch grow and get repeatedly cut. But **it does 'buy us time' in that we can stop the patch of KW from getting larger, or being at risk of spread, with a lot less labor; allowing us to get more sites under management for any given number of person-hours.** All we have to do is cut whatever KW comes up around the edges, not the whole footprint of the site (perimeter vs. area). Next season we plan to begin removing some of the smothering material at a few sites to see how the plant responds – **how much has the loss of light + microbial activity in the soil depleted the vigor of the rhizomes' stored energy?**

It doesn't have to be people repeatedly cutting the KW: thanks to a generous goat-keeper we were also able this season to put three goats at work on KW (and Multi-flora Rose) that thrives on a parcel of land in North Hyde Park Village. We are aware of two other landowners in town who have successfully used goats to beat back their KW over several years.

Machinery can also do the job. We don't want to say much about mowing here. It can work. But it matters what equipment you use, how you mow it, and how often. **A bladed hand-held brush cutter with a tri blade is a great tool for cutting KW.** But a single mow once a year will never solve a KW problem. And, yes, road-side mowing can spread KW if the mower scrapes up live plant material and drops it along the road. Witness the "plops" of KW along Route 12 just south of Lake Elmore. Hence the need to work to eliminate patches of KW along the roadside.

This September we started a pilot program to commence managing 7 new patches of KW with an application of herbicide. These sites were not otherwise

readily or safely going to be manageable by purely mechanical means. Glyphosate is the herbicide that is known to kill KW if it is applied properly and at the right time of year (a single late season application, at least 2-3 weeks before the first frost). This pilot program required us to seek a permit from the VT Agency of Agriculture, procure the services of a licensed applicator, and get permission from each landowner. It took a lot of time educating and organizing. We are very grateful to everyone who helped us, including the licensed applicator who was beyond patient and especially the landowners who took the time and interest to allow this pilot to come to fruition.

Other Important Highlights from Season 3

- Check out our work on our new **Instagram** page (knotinhydepark) where you can see pics of everything we're talking about here.
- **Friends of Green River Reservoir** took the lead on managing two patches of KW along the Dam Road. **We are super grateful to them.** If you want to help next year, please get in touch with Friends or us and we'll put you on the list.
- After an initial cut of a **big patch of KW at LUHS on Cricket Hill** last October, science teacher Chris Whitlock delivered groups of hard-working and curious students for follow-up cuts in May, July and September. This site has the largest drying stack in Hyde Park – a real beauty. Check it out, and the great sign they made for the site.
- The devastating **floods of July displaced a lot of KW.** We are grateful to some switched-on owners of the hayfields near the Lamoille River who got in touch with us to help guide them on how to respond to the spread of KW across their fields. Lots of people came together to pick-up the sprouting rhizomes. A great effort.
- We have been **contacted by many people** looking to take on KW in their own areas: Waterbury, Cambridge, Eden and Stowe. Someone from Lake George NY saw our work on the LVRT this summer and was inspired to take on KW there which is pretty cool.
- Of course, we are **SO grateful to all the other people who have come out to help us this year in ways big and small.** The list is long: people who quietly work on patches of KW near them or on their own property; people who e-mailed to let us know about KW they've discovered; people who have come to our Wednesday Evening KW Pull on the LVRT; everyone who stopped by our Info Table at the Ice Cream Social and Hyde Park Home Day events to ask questions, give and take advice and sign up to volunteer; and everyone who cheered on Knot-Mobile candy-throwers in the Hyde Park Home Day Parade.

Ways to get involved in Season 4 (2024)

- Think about taking on a site near you, or on your travelling path. We will get you started. All you need to do is be the one who gives the patch “persistent attention” thereafter. It really does not take that much time!
- Can't do it yourself but you know someone who might be interested? Pass this note along, please.
- If you live near one of our existing sites, you could put your hand up and take one of those on. They take very little time as they are already well on their way to 'running out of gas'.
- Interested in goats and goat tending? Get in touch.
- Want to be part of a 'group cut' on a larger patch – let us know. We'll let you know when one is happening.
- Come to our meetings. We're on sabbatical just now. But will resume Zoom Meetings on January 17, 2024, 5:30 PM. Notice is posted on the Town Website Agenda page and on FPF.

**Thank you for taking the time to be interested in this issue.
Special thanks this Season to:**

**The Hyde Park Selectboard
Road Foreman Mark French and his fantastic crew
and
Ron Rodjenski our (now interim) Town Administrator**



**Many Hands Make
Light Work**