

Knot in Hyde Park

a Committee of the Town of Hyde Park Request for Permit to Conduct Terrestrial Invasive Plant Pesticide Application Supplemental Information August 23, 2023



Knot in Hyde Park is a volunteer committee of the Town of Hyde Park. We have been working since May 2021 to stop the spread of Japanese Knotweed ("KW") in Hyde Park. **This year (2023) is our third season of work**.

Background. All of our field work to date has involved "mechanical control" – namely, repeat cutting/pulling of KW and/or smothering with recycled EPDM ("rubber roofing") combined with repeat cutting and pulling at the edges. Our work is almost exclusively along the town roads in the ROW because that is one of the main arteries of KW spread -- through water movement and various types of roadworks. We currently have nearly 60 sites under management with an emphasis on "early detection" – stopping small patches from becoming established. Our aim is to build an understanding in the community that management of invasive plants should become part of the routine work we do as a town.

Pilot Application. The purpose of this Application is to pilot the use of glyphosate at 7 sites in the town ROW.¹ This is a "pilot", not in the sense of testing whether glyphosate works on KW – there is ample evidence of that – but in the sense of it being deployed by us in our town as part of our existing KW management program. We want to establish whether this is something we should have in our toolkit as our management program evolves.

We have selected 7 sites for treatment.² The sites meet some combination of the following criteria: (1) they are small but on the way to becoming 'too big to manage' and therefore ripe for tackling *now*; (2) they are on relatively steep or tricky terrain making mechanical control difficult/impractical; (3) they are located in areas where "doing nothing" may have material future consequences; and/or (4) eliminating these patches will make a significant stretch of a road KW-free, and thus establish that stretch of road as "early detection/maintenance" territory.

Next season as part of our regular KW management fieldwork we will monitor the treated sites and decide whether (a) a second application is required/desired; (b) any regrowth can be mechanically controlled without a second application; or (c) there is no re-growth and the site can merely be monitored/maintained.

We will have secured written agreement to participate from landowners before any treatment takes place.

¹ We intend also to treat an 8th site, but this is on Town-owned property and not in the ROW; so not subject to permit review.

² Site Numbers 1 and 2 are opposite ends of a culvert, so they are essentially one site with two loci. The same is true of Sites 3 and 4.

Application section B, 2. Our effort to stop the spread of KW is designed and intended to minimize the need to use herbicide to control it:

(1) We already have established "early detection" protocols: if we see a small patch of KW (identified either by our committee members, citizens of Hyde Park, or our Town road crew), we dig it or cut it, mark it with a small sign, enter it onto our Arc/GIS digital map, and return throughout the season to pull/cut any regrowth. This is already stopping small patches from taking hold, which means herbicide will never be required to manage those sites.



Barnes Rd early detection site

(2) We already have established safe and effective protocols for mechanically controlling larger patches of KW. It requires presence and persistence and will take years, but that should stop the KW at these sites from maturing unchecked, from spreading, and hopefully from ever needing an application of herbicide.



An EPDM smothering site with drying stack

- (3) By reducing the <u>number and size</u> of patches of KW in Hyde Park through mechanical controls, we are also reducing the <u>total systemic risk</u> of KW spread, which again obviates the need for herbicide use in future.
- (4) Finally, we are following the protocol of a single late season application of glyphosate, which has been proven to be most effective against KW.

A tactical and conservative use of glyphosate should support and fortify the mechanical control work we are already doing and will continue to do.

More information about our work:

- Our website: https://hydeparkvt.com/knot-in-hyde-park/
- Our Instagram (new 2023): https://www.instagram.com/knotinhydepark/
- A copy of our submission for the 2023 Town Report is appended to this Supplemental Note.
- In 2021 VT Dept. of Ag approved a Management Plan authorizing us to transport KW when required. (Contact: Judy Rosovsky, Dept. of Ag.)
- We have a Special Use Permit with VTrans to manage (using mechanical controls) a 250-foot stretch of KW along the Lamoille Valley Rail Trail at Black Farm Road in Hyde Park (Contact: Jackie Cassino, VTrans).

Knot in Hyde Park Committee



The Knot in Hyde Park (KiHP) Committee is a volunteer-based effort dedicated to stopping the spread of Japanese Knotweed ("JKW") in our beautiful town. If you don't yet know how to identify JKW or how pernicious it is please do visit our website. An important part of our mission is to make sure people know this plant when they see it and know what to do about it. We want to encourage everyone to "Act Early and Persist".

KiHP began its work in May 2021, working on about 27 sites over the season, ranging from single plants to a very large stretch of JKW on the Lamoille Valley Rail Trail on Black Farm Road. In 2022 we added

30 sites. Of our 57 sites, 48 are under active management, 4 are being managed by the property owners, and 5 are on our radar but not yet under management. We capped off the season by cutting a very large stand of knotweed on Cricket Hill Road near the Lamoille Union High School rec fields, making that site ready for management beginning next May. Big thanks go to science teacher Chris Whitlock and his two classes of students. A fantastic effort by them!



We have five priority areas of work:

- 1. <u>Stopping small patches from becoming mature established ones</u> through our "Early Detection/Rapid Response" (EDRR) work. Of our 57 sites, 10 are EDRR. Spot the plant early, dig it up, safely dispose of it, mark the site, monitor it for regrowth; pull the regrowth, repeat. <u>This is easy but critically important work.</u>
- 2. <u>Managing larger sites and taking on more of them.</u> To manage more sites we need more hands on deck. This season, we hosted "Wednesday Evening Knotweed Pulls" at Black Farm Road, our largest site. Many of you showed up to pull for an hour, which was great -- thank you! Many more stopped to swap knotweed tales or just to say 'thanks'. Hope to see more of you in 2023.
- 3. <u>Coordinating with our Road Crew</u>, who are determined to keep knotweed out of our gravel pit and sand supplies. They are on the lookout for new patches as part of the EDRR program and they are taking care to reduce the risk of spread from summer mowing. The single most common cause of knotweed spread (after flooding events) is contaminated gravel and fill. If you are having material brought onto your land please make sure your contractors use only clean gravel or soils, uncontaminated by invasive plants.
- 4. Exploring methods and techniques to expand our management tool-kit. All our sites are currently managed "mechanically" which means repeat cutting/pulling/mowing and smothering. We have experimented with mesh and "girdling" (not a good method in our experience). In 2023 we hope to pilot (a) the use of goats if we can find willing goats and goat-tenders; and (b) the use of glyphosate for sites that are not suitable for mechanical or animal controls, like those with dangerously steep slopes.
- 5. <u>Mapping/Data Collecting</u>. We are grateful to Liam Paus, a GIS specialist, who donated his time to make a digital map of our sites. We'll be loading that onto our website soon. We're also collecting data on each of our sites so we know how much time it takes to achieve success.

<u>There are many ways you can help:</u> * join our e-mail list * attend one of our events * write or call to let us know you support this work * help the EDRR effort by reporting new plants * spread the word about invasive plants and our work * adopt a patch of knotweed near you * join the crew!

Website: https://hydeparkvt.com/knot-in-hyde-park/

Email: knotinhydepark@gmail.com

Phone: call the Town Office on 802 888 2300 and they can put you in touch