



AGENCY OF AGRICULTURE, FOOD & MARKETS
 Public Health and Agricultural Resource Management Division
 Steve Dwinell, Director

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REQUEST FOR PERMIT TO CONDUCT TERRESTRIAL INVASIVE PLANT PESTICIDE APPLICATION

Pursuant to 6 V.S.A. Chapter 87 and the Vermont Rule for Control of Pesticides (the Rule), a request is made for a permit to conduct a pesticide application for terrestrial invasive plant species within the State of Vermont to control terrestrial invasive plant species in a right-of-way for purposes other than clearing or maintaining a right-of-way.

A. General information

1. Title of organization: Town of Kirby

2. Address: 346 Town Hall Rd, Kirby VT 05851

3. Telephone number: (802)626-9386

4. Contact person: Keith Isham - Select board
Erin Patoine - Town Clerk

5. Terrestrial invasive plant species:
 - a. Japanese Knotweed (*Polygonum cuspidatum*)
 - b. Common Barberry (*Berberis vulgaris*)
 - c. Japanese barberry (*Berberis thunbergii*)
 - d. Common buckthorn (*Rhamnus cathartica*)
 - e. Glossy buckthorn (*Frangula alnus*)
 - f. Purple loosestrife (*Lythrum salicaria*)
 - g. Honeysuckle (*Lonicera sp.*)
 - h. Other - describe

6. Type of treatment

- a. Selective basal
- b. Stump treatment
- c. Dormant cane (broadcast basal)
- d. Soil applications (soil sterilant)
- e. Ground broadcast stem-foliage
- f. Stem injection (frill treatment)
- g. Other - describe: low-volume directed foliar spray

B. Site-specific information

1. Town receiving an application: Kirby, VT
2. Please explain your plan demonstrating how you will either be able to eradicate or otherwise further control the spread of the invasive species with a reduction in any continued chemical applications. Past treatments of similar knotweed infestation have reduced population by 90% or more after first year, with minimal herbicide use in subsequent years. See attached plan for detail.
3. Total acreage to be treated Total acres:
Ground application Acres: 0.2 acres (estimated total of several small patches)
4. Anticipated starting date: August 1, 2023

C. Special Needs - Treatment Within Buffer Strips

1. Specific Areas where Application is to be Made:
Patches of Japanese knotweed in 49.5 foot town road ROW
2. Type of Vegetation to be Controlled:
Japanese knotweed
3. Pesticide(s) to be Applied (List Here and in Section E):
Glyphosate-based herbicide labelled for wetland use (Corteva Rodeo, Bayer Roundup Custom, or Alligare Glyphosate 5.4 herbicide)
4. Rate of Application (List Here and in Section E):
Maximum application rate based on label; 2 gallons/ac/year for products listed above
5. Application Technique to be Implemented:
For scattered low-density stems: injection of 5mL into each stem
For dense patches: pre-cutting in early summer followed by foliar spraying in late summer (August)
6. Application Equipment to be Used:
Backpack sprayers, syringe stem injectors

7. Explain how this Request will Protect Sensitive Areas, Sensitive Crops, Site Conditions, Wells, etc.:

All treatment areas will be reviewed for proximity to wells, wetlands and other sensitive areas, observing relevant pesticide rules, Vermont Wetland Rules and Drinking Water Protection Rules. No treatment will occur within 100-200' of drinking water wells (based on well type) without written landowner permission.

No treatment areas occur in known wetlands.

Foliar spraying will occur only when knotweed is not flowering to prevent non-target impacts to pollinators and honey bees.

D. Applicator information

1. Applicator's name: Sam Perron

2. Applicator's company name: NorthWoods Stewardship Center

3. Applicator's company address: PO Box 220, East Charleston VT 05833

4. Applicator's Vermont Applicator Certificate Number: 1539-5005

5. Applicator's company telephone number: (802)723-6551 ext 302

E. Control details

Pesticide(s) to be used and rate(s) to be applied. If more than one chemical is listed, then a summary of the uses intended for each chemical must be provided. The summary should state whether the chemical will be mixed or applied separately, specifying which chemicals will control what types of vegetation. *Please Note: A copy of a label, must be supplied for each chemical to be used.*

Trade Name	Common Name of Active Ingredient(s)	EPA Reg. Number	Applic. Rate Product/Acre	Vegetation to Be Controlled	Type of Application and Equipment to be Used
Example: GARLON 4	Triclopyr	62719-40	0.25-1.25 gal/acre	Undesirable Tree Species	Low Volume Basal & Stump Backpack Sprayer
Corteva Agriscience Rodeo Herbicide	glyphosate	62719-324	maximum 2 gal/ac	invasive Japanese knotweed	stem injection and foliar spray syringe injector and backpack sprayer
Bayer Roundup Custom Herbicide (alternative when unable to source Rodeo)	glyphosate	524-343	maximum 2 gal/ac	invasive Japanese knotweed	stem injection and foliar spray syringe injector and backpack sprayer

F. Other information to be submitted with application See attached

1. Current labelling for each pesticide to be used.
2. Plan demonstrating how the permit applicant will either be able to eradicate or otherwise further control the spread of the invasive species with a reduction in any continued chemical applications in accordance with Rule Section 6.08(d).

The Applicant certifies that, to the best of their knowledge, the provided information is true and accurate.

The Applicant further understands that weekly spray and dusting operations must be reported to the Vermont Agency of Agriculture, Food and Markets on forms furnished by the Agency, sent to the Agency electronically and not later than the close of business on the Monday following the week's operation.



Signature of Applicant

7/10/23

Date

(NOTE: Additional sheets may be attached to include further information.)

~~NORTHWOODS~~ STEWARDSHIP CENTER

Connecting people and place through science, education and action

Town of Kirby Knotweed Control Plan

June 26, 2023

The following treatment plan will be implemented to reduce the abundance and spread of invasive knotweed in Kirby, with a goal of reducing the amount of herbicide and labor required in each subsequent year.

We propose two different strategies for the town: one for Mud Hollow and one for the rest of the town areas. The knotweed in Mud Hollow has taken over large areas, and would be extremely difficult to control, hence the separate treatment strategy.

MUD HOLLOW RD

From a brief survey of landowners in Mud Hollow, conducted by volunteer residents in Kirby, there was not much interest in treating knotweed on private property. Because the infestation is extensive on the property owner's land, treating knotweed just along the road edge would be a losing battle. If a group of interested landowners should form to motivate a concerted landowner effort, this could of course change.

Recommendation:

No chemical treatment in Mud Hollow.

To avoid further spreading the knotweed:

- After ditching or mowing in Mud Hollow, do not use contaminated machines in a new area until they have been thoroughly cleaned.
- To avoid spreading fragments on the way back to the Town Hall, use a broom to clean clinging mud and plant fragments from the machines before leaving the Mud Hollow area.
- Before using a contaminated machine in any non-contaminated area, clean machines thoroughly at the Town Hall with a pressure washer.

OTHER KIRBY AREAS

Roadside knotweed that was monitored in 2021 appeared to be mostly in relatively small patches, and control will be feasible if done soon. Treatments by private landowners in some areas in recent years have proven successful, and provide an example for future successful treatments.

Recommendation:

- Treat knotweed along roadsides where control is likely to be successful, using chemical treatment where site conditions allow (not near private wells, not in wetlands unless approved by Wetlands Program, etc.)

Strategy:

- Flag knotweed along roads so it is visible (*to be done by NorthWoods and/or volunteer residents of Kirby*)
- Send out a letter from the Town and NorthWoods to landowners with knotweed on their property asking if they would be interested in treating it on their property (at their own expense), adjacent

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to roadside treatment areas. NorthWoods and volunteers can identify these landowners and draft this letter.

- Town road crews will avoid mowing roadside knotweed. Instead, a group of volunteers, led by Northwoods Stewardship Center would hand-cut the knotweed on the right of way in July (or earlier if it begins to be a sightline problem). *This is important because it reduces the spread of knotweed by mowing equipment, and is timed to be most effective in combination with a later chemical treatment.*
- In late August, NorthWoods will treat the knotweed on the right of way and any adjacent land where the landowner has expressed interest.
- For the infestation at the Town Hall, and other areas that can not be chemically treated, the proposal is to hand-pull small knotweed plants and smother the rest. This is a long-term, 3-5 year process of covering the knotweed with several layers of mulch and thick plastic. NorthWoods and volunteers can do this work.

Follow Up Treatments

- Control of 90% or more of treated knotweed is expected after the first year
- In each subsequent year, residual knotweed should be treated using a similar plan, until knotweed is eliminated in those areas. Minimal herbicide use should be required after 3 years of consecutive treatments

Landowner Permission and Permitting

- See attached Permit Application for Terrestrial Invasive Control in Rights-of-Way for details on herbicide application
- A letter will be mailed to landowners where treatment is proposed, describing the treatment plan. If landowners do not want to allow treatment on a right-of-way over their land, they must notify the Town of Kirby by a date specified in the letter (allowing at least 2 weeks for landowners to respond to the letter)

To avoid further spreading the knotweed:

- After ditching or mowing in contaminated areas, do not use contaminated machines in a new area until they have been thoroughly cleaned.
- To avoid spreading fragments on the way back to the Town Hall, use a broom to clean clinging mud and plant fragments from the machines before leaving the Mud Hollow area.
- Before using a contaminated machine in any non-contaminated area, clean machines thoroughly at the Town Hall with a pressure washer.

Prepared by:

Sam Perron
Director of Forest Stewardship
VT Licensed Forester 148.0122394
VT Certified Pesticide Applicator 1539-5005