

Van Vliet Hemlocks State Natural Area Hemp Nettle Management Report

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2018 Control Efforts

Contracted Work

The Wisconsin Department of Natural Resources (WDNR) contracted 4-Control Inc. to treat hemp nettle at Van Vliet Hemlocks State Natural Area (VVH), and the Friends of VVH agreed to pay the contractor's fees. 4-Control worked at the site on May 22, 2018 for a total of 20 person-hours, focusing on the hemp nettle found along the trails and the extensive infestation around the northern end of the Sugarbush Trail. They treated approximately 23 acres of hemp nettle (see Attachment 1) with a spot application of Garlon 4 (triclopyr), a broad-leaf specific herbicide, at a 1% application rate in water with surfactant.

The cost of 4-Control's efforts was \$1,100. There is still \$500 left in their contract, and they plan to check on their treatment again during the week of August 20 and do any follow-up control that is deemed appropriate.

4-Control also established a number of experimental plots in which they tried several different herbicide application mixtures to determine if they can establish better or residual control in treating hemp nettle. They will be following up on their treatment plots, free of charge, during their next visit.

Control of early germinants of hemp nettle was successful on the Sugar Bush Trail, but there are some areas where additional plants apparently germinated after treatment. As such, there are still areas of hemp nettle present on the northern end of the property around this trail. It is likely that the treatment date (May 22) was too early to control all of this year's crop of plants; WDNR typically recommends treating the plant after it has germinated but before it starts flowering, usually in the second half of June.

WDNR Crew Work

A WDNR work crew based in Rhinelander spent approximately 160 person-hours over 5 days, excluding travel time, treating hemp nettle at VVH in late June and early July, focusing on the eastern portion of the property other than the Sugarbush Loop. The crew treated approximately 50 acres (see Attachment 1) using a combination of hand-pulling, cutting with a weed whip, and spot application of Garlon 4 (triclopyr) at a 1% application rate in water with surfactant.

The WDNR's control efforts appear to have been largely successful. A check-up visit in August revealed little to no hemp nettle present on or near the trails that were treated (Bog Loop, Hemlock Lake Loop, Yellow Birch Loop, and Lake View Loop). It appears that cutting is an effective treatment strategy that is faster, less expensive, and with lower collateral damage to non-target species than herbicide application or hand pulling.

Volunteer Work

One volunteer has recently begun hand-pulling hemp nettle at VVH along the Sugar Bush Trail. She has worked a total of 3 hours thus far and plans to continue working on a semi-regular basis this summer/fall. She has indicated that she would like to continue working at VVH in the future.

Future Work

It remains to be seen how much hemp nettle persists in the seed bank at VVH, and monitoring in 2019 will show what sort of additional efforts are needed. If the seed bank persists for multiple years, then it is likely that additional contract and WDNR efforts will be warranted for the next several years until the hemp nettle population is significantly reduced.

Attachment 1: Map – Van Vliet Hemlocks SNA 2018 Hemp Nettle Treatment