



# KNOCKOUT KNOTWEED 2024 UPDATE



The MRBA has witnessed Japanese knotweed spread rapidly since its first emergence on our river banks many years ago. Starting with our mapping project in 2020, the MRBA has spent the previous four summers monitoring the success of varied mechanical removal strategies on two knotweed plots in Montgomery and North Troy.

As we have continued our project, we have furthered our learning of the dynamics of knotweed and its growing environment, while observing the effectiveness and achievability of complete eradication using mechanical the three methods: smothering with plastic pond liner, smothering with metal mesh, and monthly cutting. We have found that each method has varying pros and cons, yet all depend on an active land management strategy and consistent care. The MRBA has seen persistent success on the monthly cutting plots and the pond liner plots, but each year there is still consistent growth at the beginning of each growing season. However, the plots that have established shade from native plants have shown to have less abundant and healthy knotweed patches.

Building off of this knowledge, and on the previous four years of treatment, MRBA staff will be planting native trees on the treated plots. The intent is to establish native plants that will be able to shade out the treated knotweed area and grow faster than the knotweed. With this strategic addition of natives, we intend to create a long-term natural shade that will inhibit knotweed regrowth for a more resilient river ecosystem.

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# PROS & CONS OF EACH METHOD

Each of the three methods have pros and cons that may help determine which method to pursue. The best way to combat knotweed is to restrict its access to sunlight and to stress the plant during the growing season.



**Monthly Cutting**

## PROS

- Other plants can continue to grow
- Cutting decreases as season continues

## CONS

- Requires the most labor of the three methods
- Have to have a drying or compost method to get rid of cut knotweed



**Pond Liner**

## PROS

- Denies sunlight and conducts its heat
- Able to leave deployed for growing season

## CONS

- Requires the most labor of the three methods
- Kills knotweed AND all surrounding plants



**Metal Mesh**

## PROS

- Other plants can continue to grow (*somewhat*)
- Able to leave deployed for growing season

## CONS

- Least effective of the three methods
- Not effective for established robust plots
- Mesh requires replacement year after year



The Missisquoi River Basin Association will continue to track the progress of our knotweed plots, as well as update our community as we further our knotweed knowledge. Check out our website for the most up to date information on our knotweed project!

[www.mrbavt.com/knockout-knotweed](http://www.mrbavt.com/knockout-knotweed)