CT DEEP FORESTRY DIVISION

Miyawaki-style forests

Miyawaki-style forests, otherwise known as micro-forests, contain diverse species of native trees that are planted densely in a very small area. These forests are often planted in small urban spaces that would otherwise remain unforested. This method was originally developed in Japan in the early 1970's by plant biologist Akira Miyawaki. The first Miyawaki-style forest in northeastern United States was planted in Cambridge, MA in 2021.

As one of many approaches to increasing forest cover in the Northeast, it is important to recognize that this innovative approach will require careful monitoring in the coming years to assess its long-term effectiveness. The list below is intended to help community members gauge the viability of this approach in the areas where they work and live.





Pros

- Increase tree cover by converting an otherwise unforested area to forest.
- Miyawaki forest takes less time to mature than a traditional forest due to the inclusion of early and late successional species.
- · Increase native species diversity.
- Planting densely allows for improved tree form with natural 'training' of shade trees.
- May require less watering in the long-term.
- Density of plants reduces pressure from invasive plant species.

Cons

- More expensive than other reforestation methods.
- Relatively new approach with limited sciencebased evidence regarding long term success in the Northeast.
- Tree density increases risk of pest and disease issues.
- Some trees and shrubs will be lost due to competition for light and other resources.
- Tree density limits access for human use unless a trail can be established.
- Practical only in areas less than 1 acre in size.



