## Forest Restoration Strategic Project 2021

With the significant loss of Ash and Beech trees in Pilgrim, there is an urgent need to restore our forest with native trees that are better adapted to our future climate... on both CSA common and private properties. Our goal is to set up model forest restoration projects on the CSA grounds to illustrate active management of our forest, test different techniques, protect the integrity of our existing resource, and educate Assembly members about how they can be engaged in forest restoration.

During the 2021 season, Frankfort resident, Evan Hammon, worked as Forest Care Fellow. He consulted with Leelanau, Benzie and Grand Traverse Conservation Districts Regional Forester, Kama Ross, and Maddy Baroli, who runs the Assisted Tree Range Expansion Project (ATREP.net) a community science project focused on supporting the resilience of Northern Lower Michigan's forests by planting tree species that are projected to be better adapted to our future climate.

## VIDEO 1: 2021 CSA FOREST RESTORATION PROJECT (Click this link to watch video)

The 2021 Forest Care team was busy during the 2021 season planning and executing a reforestation project on common grounds. Watch as Forest Care Fellow Evan Hammon guides you through the whole process of buying trees, planting large trees as well as bare root saplings, and tips to enhance the longevity of their survival after being put into the earth. Watching this video will give you a view into the behind-the-scenes moments of how the new trees around the CSA came to be!

## VIDEO 2: THE ASSISTED TREE RANGE EXPANSION PROJECT (ATREP) AT THE CONGREGATIONAL SUMMER ASSEMBLY (Click this link to watch video)

Learn more about the collaboration between the Forest Care team and Madeline Baroli, founder of ATREP. Maddy guides us through the origins of the project, why we need to help the trees expand to new lands, and a brief look at climate change projections for the state of Michigan. This information-packed video hopes to help you understand why we at the CSA undertook a reforestation project, encourages expanded thinking to properly address the shifting ecology of Northwest Lower Michigan, and to advocate for more community science projects!

## VIDEO 3: CREEPING MYRTLE MANAGEMENT AT THE CSA (Click this link to watch video)

While the aesthetic of Creeping Myrtle (also referred to as Periwinkle) is enjoyed by many, it is also classified as a non-native and aggressive species by the Invasive Species Network. It can limit the growth of new saplings, overpower the space and limit other roots, decrease nutrient uptake from other plants, and spread across the forest floor in rapid time. It is also hard to effectively remove this plant from our landscapes after it has developed for many years as is the case at the CSA. It sure is beautiful, but it's important that we keep its beauty contained. Learn from our community members Sasha Nieman about her studies with Myrtle and from Evan Hammon on how to manage the removal!



The 2021 Forest Restoration Project entailed creating two environmental models. One addressed an undeveloped forest floor where trees have been lost. Evan and CSA volunteers planted trees along Alden Edwards west of the Meeting House and on Lyon Lane below the Crystal Knoll. Within this environment are sub-models – one with myrtle, an invasive species, and one without. Myrtle is so successful that no natural saplings and young trees can make their way through it. Where it was necessary, we used techniques to control the myrtle which involve digging it back and then smothering it prior to planting replacement trees. This model is located along Alden Edwards. The second environment is a park-like setting on the west edge of the ball field toward the Meeting House with grass and large mature trees that deliver desired shade, but no younger trees growing to replace existing trees when they die.

We provided a wide variety of trees in all environments so that we can: 1.) observe what is most successful, and 2.) allow our community to determine what they might like to plant. Based on expert advice, we planted Dogwood, White Cedar, Hop Hornbeam (Ironwood), Witch Hazel, Paw Paw, Bladdernut, White Pine, Blue Beech (Musclewood), Swamp White Oak, Hackberry, Tulip Poplar, Burr Oak, Red Oak and Pin Oak. Large container trees and shrubs for planting were purchased from local native plant nurseries, Four Season in Traverse City and Black Cap Farm in Onekama. The less costly, bare root trees were obtained from the Fall sale at Benzie County Conservation District. Not all trees and shrubs will survive, but many of the newly planted trees will go dormant over the winter, and hopefully grow roots and be successful in their new environments. Signage within the environmental models will provide information on the species planted, explain why these trees were selected, and highlight fun facts about them.