



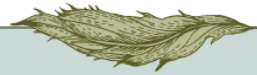
City of Summit's Tiny Forest

Presented at the
2026 ANJEC Environmental Congress

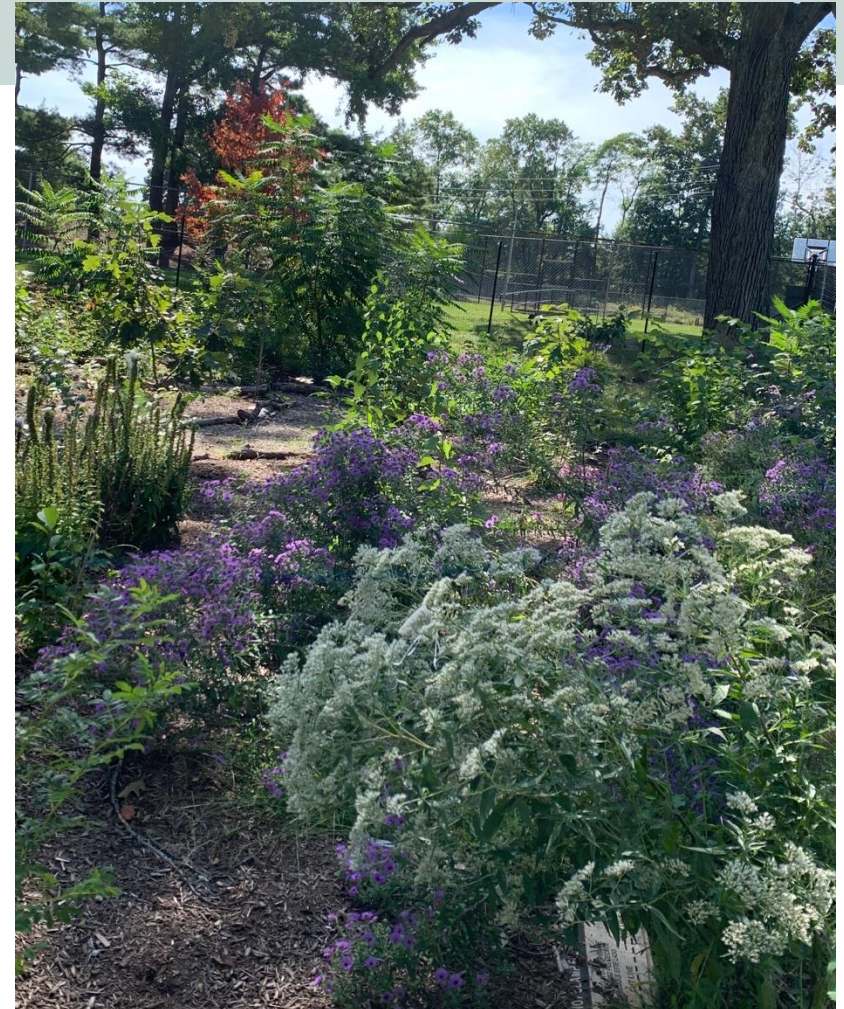
Donna Goggin Patel
Chair, Summit
Environmental Commission



What Is a Tiny Forest?



- Densely-planted, native species microforest
- Expected to be a fully-formed forest in 20-30 years
- Provides biodiversity, stormwater management, carbon capture and can alleviate heat island effect



Native Wildflowers



Anise
Hyssop



Summersweet



Dense Blazing Star

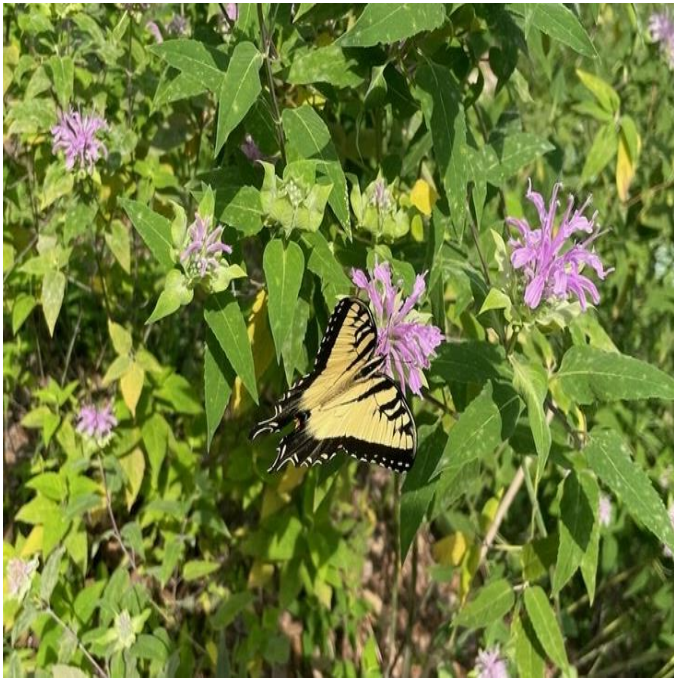


Rattlesnake
Master

Pollinators at Work in the Tiny Forest



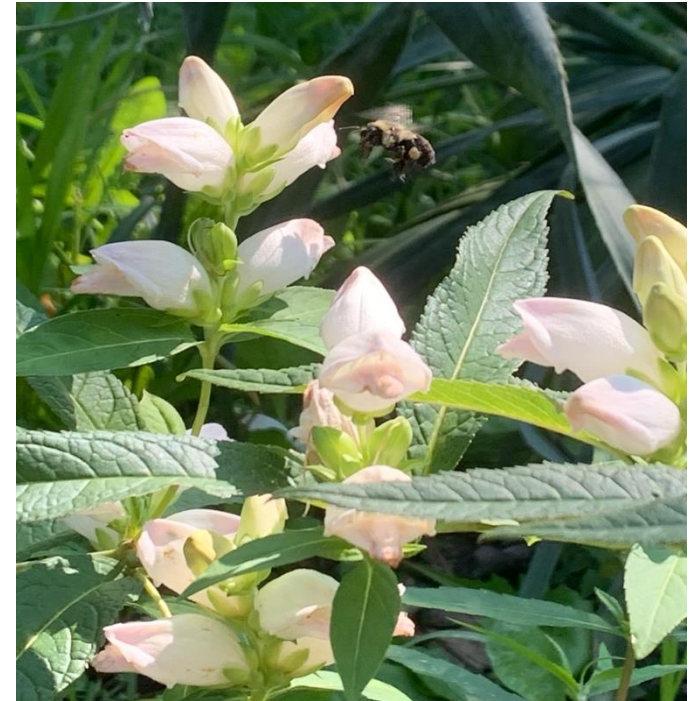
Swallowtail Butterfly



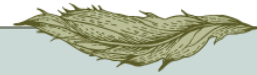
Hummingbird Moth



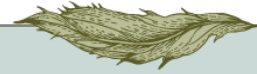
Bee



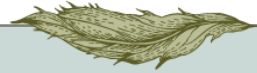
Tiny Forest Timeline



Location – Behind Summit's Community Center (100 Morris Ave)



Tiny Forest Site Before Planting



Preparing the Ground for Planting



Applying Biochar



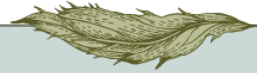
Laying Cardboard on Topsoil



Adding Mulch and Sand



Tiny Forest Site Over Time

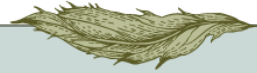


As of October 2022

As of September 2026



Tiny Forest Site Over Time



As of August 2023

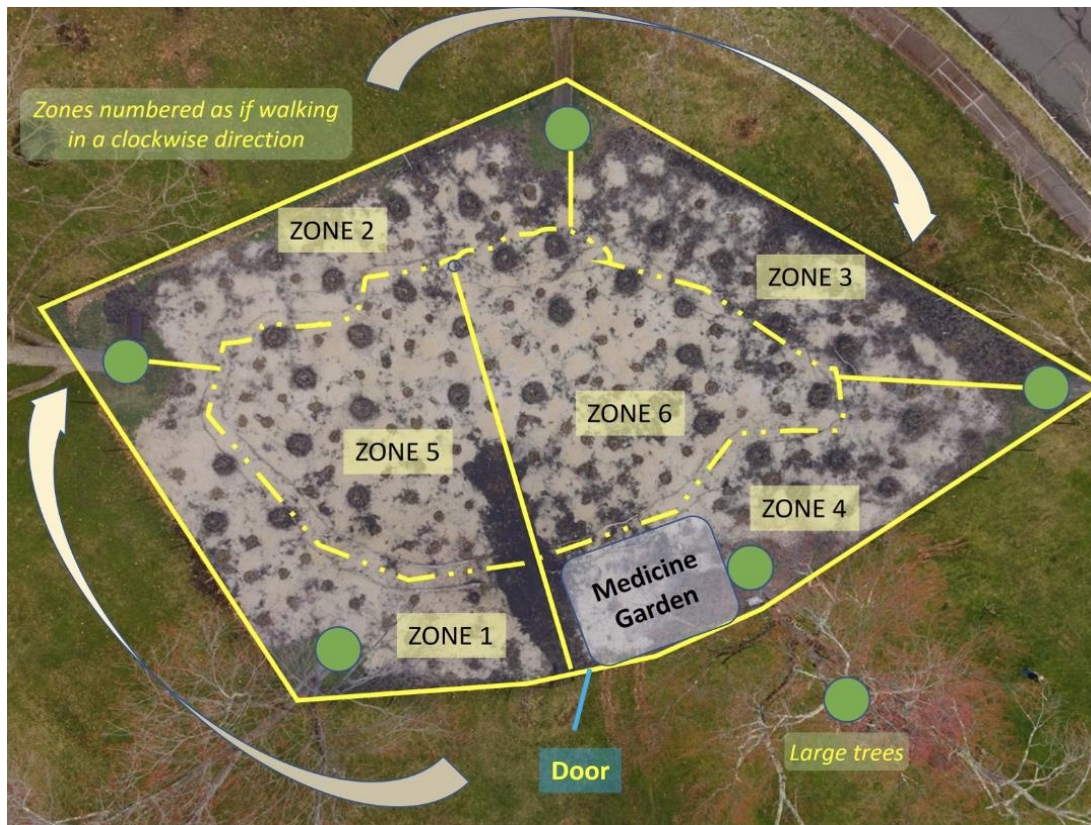
As of August 2025



Weeding the Tiny Forest Over Time

Creating Zones

July 2022 Workday



Collaborations in the Tiny Forest



Native Seed Library



Air Bee 'n Bee Hotel



Bird Recording Data



Signage in the Tiny Forest



Large Educational Signs



Tree/Shrub Identifiers



Wildflower Identifiers



WHAT IS A TINY FOREST?



The City of Summit Tiny Forest is a densely planted collection of over 50 native species. The Tiny Forest replaced a grassy meadow and provides these environmental benefits:

- **Increased biodiversity** | The wide variety of native plants give homes and food to more butterflies, bees and birds.
- **Improved stormwater management** | A forest holds more rainfall on-site and helps reduce the burden on our sewer system.
- **Enhanced carbon capture** | Mature trees absorb far more carbon dioxide than grass.

Aerial Views of Tiny Forest

Photo Credit: Dwight Hiscano Photography



October 2022



August 2024

What do you think it would look like from above today?



At maturity, the Tiny Forest will be a fully formed forest with different heights and layers of plants, depicted in the image to the left.

The Tiny Forest was planted in 2022 and is expected to reach maturity by 2042-2052.

Scan this QR code to learn more about the making of the Tiny Forest or to get involved.



NATIVE PLANTS

What is a native plant?

Native plants are species that have naturally co-evolved in a specific region, habitat, or ecosystem for hundreds or even thousands of years without human introduction.

They are adapted to local conditions and provide food and shelter for insects, birds, and other wildlife.

Native plants play a crucial role in ecosystem health and recovery after disturbances, and their conservation is essential for maintaining wildlife health and ecological balance.

Several seeds from plants in the Tiny Forest are available free of charge at the Summit Free Public Library.

Scan the QR code to learn more about the Tiny Forest.



Spotlight on Native Oaks

A single oak tree can support more than 500 types of caterpillars. This is important as caterpillars mature into adult pollinators. Also, birds rely on specific caterpillars to feed their young and cannot create nests in areas without them. Ornamental species may only support 10 types of caterpillars, so caterpillars and birds suffer without native species like oaks.

Leaf litter under a single oak can hold up to two inches of rainfall until it can seep into the ground. Without this, that rain runs off to the streets, sewers and rivers and adds to the potential for flash flooding.

The Tiny Forest contains over 50 native white oaks, red oaks and swamp white oaks.

Can you spot these plants?



Purple Coneflower



Rattlesnake Master



White Turtlehead



New England Aster



Butterfly-weed



Dense Blazing Star



INDIGENOUS MEDICINE GARDEN

The Tiny Forest is located on land that is part of the traditional territory of the Lenni-Lenape. The Lenape lived in harmony with one another upon this territory for thousands of years.

This corner of the Tiny Forest contains native plant species that the Lenape used for medicinal purposes. These plants could provide relief for ailments ranging from headaches, dental issues, digestive issues, sore throats, coughs and fevers.

Scan this QR code to learn more about the Tiny Forest or to get involved.



Here are four species to examine in the Indigenous Medicine Garden:



Sweetgrass



Wild Bergamot



Anise Hyssop



Common Yarrow

Planting List

Species	Date Planted	No. Planted
Red Oak (<i>Quercus rubra</i>)	12/18/21	34
White Oak (<i>Quercus alba</i>)	4/2/22	25
Short Leaf Pine (<i>Pinus echinata</i>)	4/2/22	25
Black Gum (<i>Nyssa Sylvatica</i>)	4/2/22	25
Arrowwood Viburnum (<i>Viburnum dentatum</i>)	4/2/22	25
White Flowering Dogwood (<i>Cornus florida</i>)	4/2/22	25
Persimmon (<i>Diospyros virginiana</i>)	4/2/22	25
Eastern Redbud (<i>Cercis Canadensis</i>)	4/23/22	10
Virginia Sweetspire (<i>Itea Virginica</i>)	4/23/22	10
NJ Tea (<i>Ceanothus Americanus</i>)	4/23/22	10
Hackberry (<i>Celtis Occidentalis</i>)	4/23/22	10
Fragrant Sumac (<i>Rhus Aromatica</i>)	4/23/22	10
Sensitive Fern (<i>Onoclea Sensibilis</i>)	4/23/22	32
Royal Fern (<i>Osmunda Regalis</i>)	4/23/22	32
Summersweet (<i>Clethra Alnifolia</i>)	4/23/22	32
Staghorn Sumac (<i>Rhus Typhina</i>)	4/23/22	32
Black Birch (<i>Betula Lenta</i>)	4/23/22	32
Nannyberry (<i>Viburnum Lentago</i>)	4/23/22	32
Black haw (<i>Viburnum Prunifolium</i>)	4/23/22	32
Blue Lobelia (<i>Lobelia siphilitica</i>)	4/30/22	5
Blue Wood Aster (<i>Symphotrichum cordifolium</i>)	4/30/22	5
Christmas Fern (<i>Polystichum acrostichoides</i>)	4/30/22	4
Culver's Root (<i>Veronicastrum virginicum</i>)	4/30/22	5
Dense Blazing Star (<i>Liatris spicata</i>)	4/30/22	5
Foamflower (<i>Tiarella cordifolia</i>)	4/30/22	5
Foxglove Beardtongue (<i>Penstemon digitalis</i>)	4/30/22	5
Rattlesnake Master (<i>Eryngium yuccifolium</i>)	4/30/22	5
Golden Alexander (<i>Zizia aurea</i>)	4/30/22	5
White Turtlehead (<i>Chelone glabra</i>)	4/30/22	5
Wreath Goldenrod (<i>Solidago caesia</i>)	4/30/22	5
Swamp Milkweed (<i>Asclepias incarnata</i>)	5/14/22	5
New York Aster (<i>Symphotrichum novi-belgii</i>)	5/14/22	5
Virginia Mountain Mint (<i>Pycnanthemum virginianum</i>)	5/14/22	5
Purple Coneflower (<i>Echinacea purpurea</i>)	5/14/22	5
American Elderberry (<i>Sambucus Canadensis</i>)	9/17/22	10
American Cranberrybush (<i>Viburnum Trilobum</i>)	9/17/22	10
Virginia Rose (<i>Rosa Virginiana</i>)	9/17/22	10
Common Ninebark (<i>Physocarpus Opulifolius</i>)	9/17/22	10
New England Aster (<i>Symphotrichum novae-angliae</i>)	9/17/22	50

Swamp White Oak (<i>Quercus bicolor</i>)	5/13/23	10
Black Cherry (<i>Prunus serotina</i>)	5/13/23	2
Bee Balm (<i>Monarda didyma</i>)	5/13/23	5
Wild Ginger (<i>Asarum canadense</i>)	6/24/23	3
Partridge Pea (<i>Chamaecrista fasciculata</i>)	4/27/24	seeds
Add'l Wild Bergamot (<i>Monarda fistulosa</i>)	5/11/24	5
Obedient Plant (<i>Physostegia virginiana</i>)	5/11/24	5
Atlantic White Cedar (<i>Chamaecyparis thvoides</i>)	5/11/24	5
Brown-Eyed Susans (<i>Rudbeckia triloba</i>)	5/11/24	5
Serviceberry (<i>Amelanchier canadensis</i>) (GRACE)	5/21/24	1
Serviceberry (<i>Amelanchier canadensis</i>) (STAC)	10/17/24	1
Butterfly Weed (<i>Asclepias tuberosa</i>)	On-going	numerous
Tulip Tree (<i>Liriodendron tulipifera</i>)	Volunteers	10+

INDIGENOUS MEDICINE GARDEN SECTION PLANTINGS

Sweetgrass (<i>Hierochloa odorata</i>)	11/19/22	50
Common Yarrow (<i>Achillea millefolium</i>)	4/30/22	5
Black Cohosh (<i>Actaea racemosa</i>)	4/30/22	1
Wild Bergamot (<i>Monarda fistulosa</i>)	4/30/22	5
Anise Hyssop (<i>Agastache foeniculum</i>)	4/30/22	5
Perique Tobacco (Louisiana) (no longer present)	6/18/22	3
Havana Tobacco (no longer present)	6/18/22	3
Turkish Tobacco (no longer present)	6/18/22	3

Contributors





Thank You



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www.cityofsummit.org/tinyforest