



Micro Forest Project



LEAD SPONSOR



FOUNDING PARTNER

RenaissanceRe



BZS MICRO FOREST PROJECT REPORT 2025

INTRO

Over the past four years, the BZS Micro Forest Project has grown from a seed of an idea to a thriving example of community-based conservation. Originally launched to restore native biodiversity in underutilized areas dominated by invasives, through dedicated collaboration and support, these areas have been transformed into vibrant micro forests across Bermuda. Please enjoy the highlights of the project with key milestones, achievements, and the positive impact we have had on the environment and the community.

FINANCIAL HIGHLIGHTS

APRIL 2024 – MARCH 2025

REVENUE*	OPERATIONAL EXPENSES**
\$127,999	\$123,845

**Includes revenue brought forward*

***Includes: administrative, programme and operational costs*

COMMUNITY & INTERNATIONAL RECOGNITION

Over the years, the BZS Micro Forest Project has garnered recognition both locally and internationally. In addition to securing the Darwin Plus Local Grant from the UK Government, the project has earned community awards and featured in international publications, as well as invitations for Micro Forest Project Manager Nicholas Coelho to speak both locally and abroad. The project continues to gain momentum as a model for community-driven environmental impact.

HIGHLIGHTS INCLUDE:

Nominated for a DroneDeploy ‘Steward of Sustainability Award in 2022 & 2023

Published in 2023 in the Naples Botanical Garden’s magazine Conserve

2024 Bermudiana Award for Natural Heritage Impact from the Bermuda National Trust (BNT)

Kings Coronation Medal (2024) for the King’s Coronation Garden in Botanical Gardens

Presented at the 2025 Caribbean and Central American Botanic Network (CCABGN) Plant Health & Biosecurity Workshop in Barbados.

Best of Bermuda 2025 & 2023 Awards for ‘Booster for the Environment’

ADAPTING FOR LONG-TERM IMPACT

Our work has revealed important insights into how our local environmental conditions affect maturity timelines. Typically, micro forests mature in 3-5 years, where we’ve observed longer growth periods – closer to five years, due to the unique challenges of persistent invasive species in Bermuda’s environment. It’s reinforced

the importance of innovation and integrating drone mapping technology, allowing us to detect issues earlier – often before they’re visible to the naked eye. Faster intervention and more accurate data collection ultimately leads to stronger outcomes for the health and success of our sites.

THE IMPORTANCE OF BIODIVERSITY

Environmental restoration is crucial for rehabilitating degraded ecosystems and reestablishing biodiversity. Restoration enhances local biodiversity and reinstates essential ecological processes by transforming areas affected by invasive species and pollution into thriving micro forests. Biodiversity is critically important in combating climate change by enhancing carbon sequestration and ecosystems with rich biodiversity acting as a carbon sink. Diverse ecosystems are also more resilient to extreme weather, help regulate local climates and strengthen the adaptability of species to changing conditions and protects against natural

disasters through coastal ecosystems like mangroves. On average, a mature tree can absorb about 48 pounds (21.77 kg) of CO2 annually. So, approximately 16.98 metric tons of CO2 can be absorbed annually by 68,000 square feet of micro forests. By establishing 68,000 square feet of micro forests, we could potentially sequester an estimated 102 metric tons of CO2 annually, provided optimal growth conditions. This contribution to carbon sequestration is crucial in combating climate change, as these micro forests collectively absorb and store atmospheric carbon, mitigate urban heat and enhance biodiversity.

TOTAL POUNDS OF CARBON DIOXIDE SEQUESTERED ON PLOT 1: JENNINGS ROAD BZS MICRO FOREST PROJECT

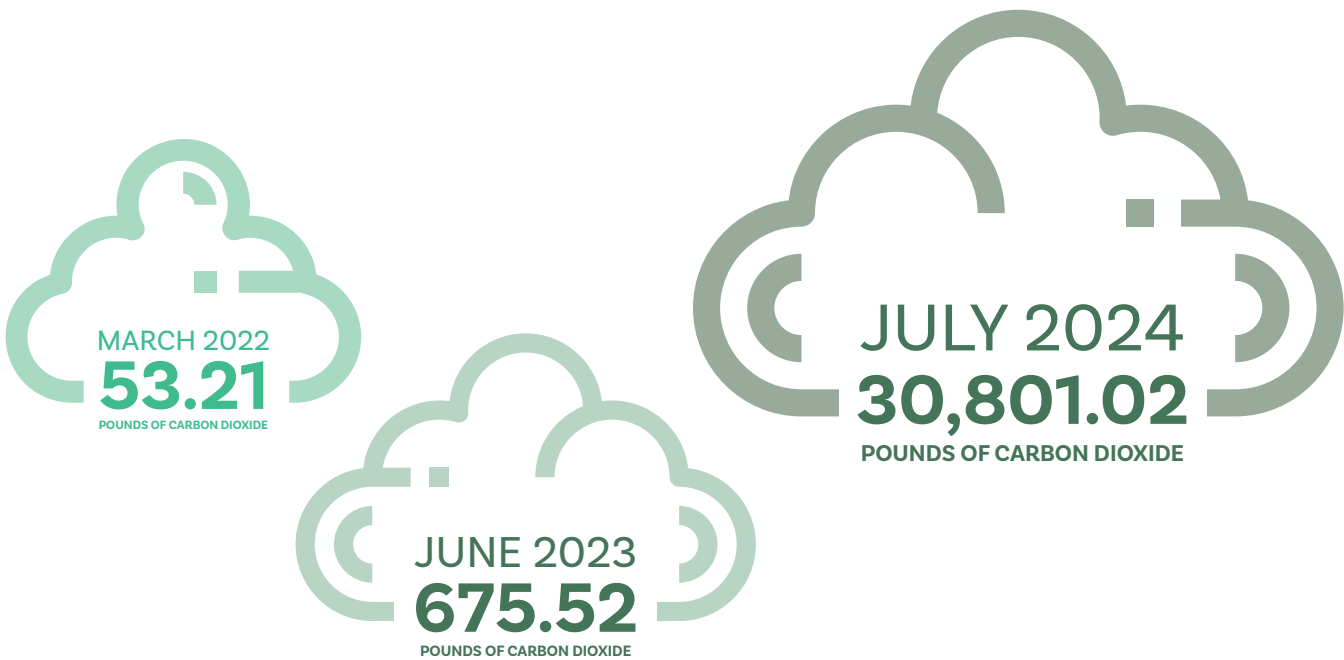


Figure 3. Carbon dioxide absorption over three years on plot 1: Jennings Road Micro Forest.



FLORAL DIVERSITY

Table 1. A current list of the 42 plant species planted across all BZS Micro-Forest plots.

Bermuda Olivewood
Green Buttonwood
Bermuda Palmetto
Bermuda Cedar
Green Sea Ox-Eye
Silver Sea Ox-Eye
Jamaican Dogwood
Bermuda Snowberry
Seven Year Apple
Turkey Berry/American Beauty Berry
Tassel Plant
Doc Bush
Darrell's Fleabane
Turnera
Yellowwood
Box Briar
Coast Sophora
Red Mangrove
Foresteria
Iodine Bush
Lamarck's Trema

Wax Myrtle
Loquat
Peach
Papaya / Pawpaw
St. Andrew's Cross
Rhacoma / Maidenberry
White Stopper
Seaside Goldenrod
Bay Bean
Bermudiana
Salt Marsh Ox-Eye
Jamaican Vervain
Shrubby Fleabane
Red Mulberry
Black Mangrove
Lantana / Sage Bush
Bermuda Sedge
Sea Rocket / Scurvy Plant
Garden Nightshade
Ink Berry
Easter Lilies

AMOUNT OF DAYS SINCE INITIAL PLANTING OF ALL MICRO FOREST PLOTS

BZS MICRO FOREST PROJECT

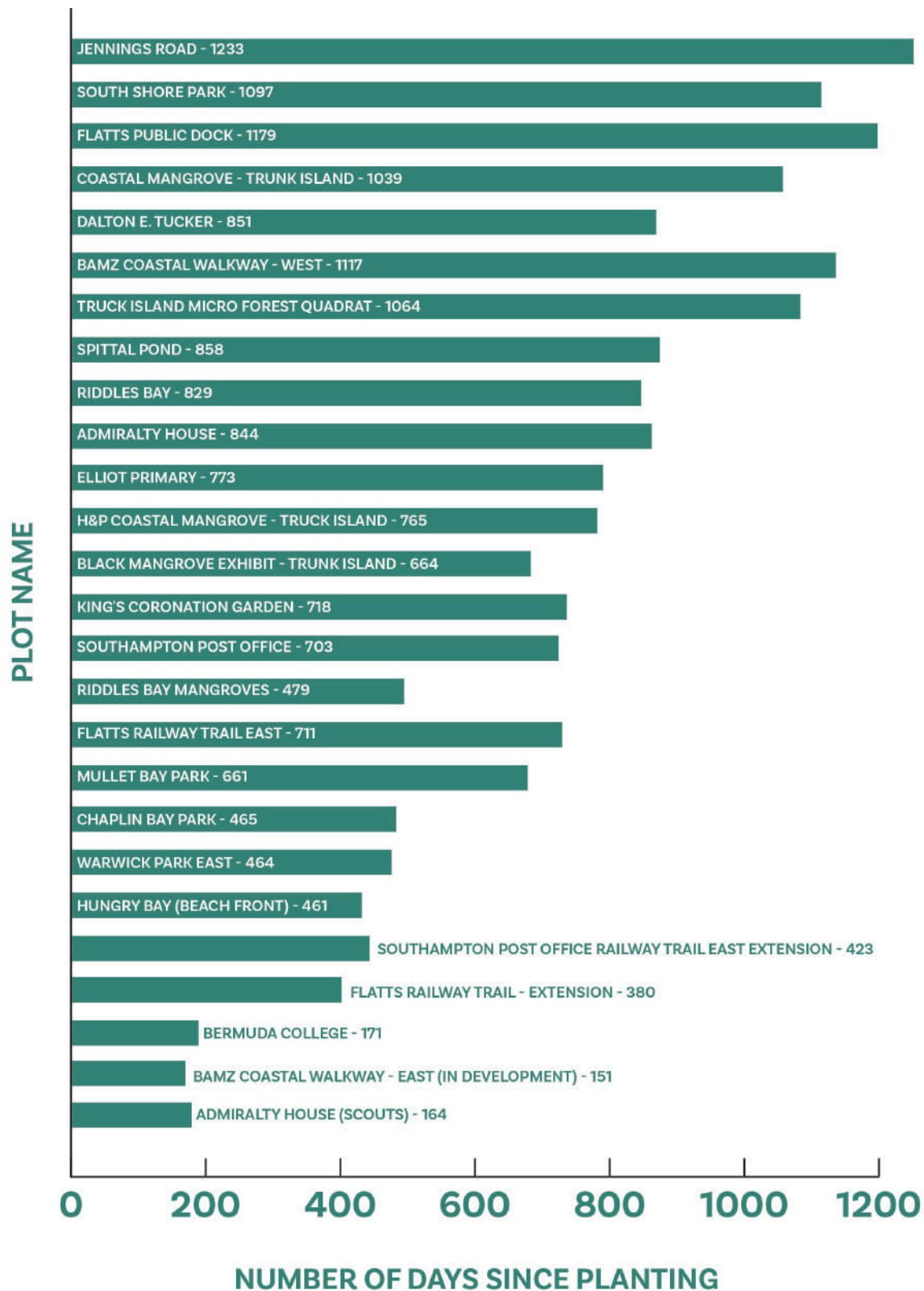


Figure 2. A bar graph displaying the total amount of days since initial planting of the 24 different BZS Micro Forest plots. Dates are reflecting up until November 13th, 2024.

BZS MICRO FOREST PROJECT SUCCESSES



26 SITES

10 micro forest sites
each year for 3 years



83,823.20 ft²
OR 7,787.4 m²
of planted Micro Forests



5295 PLANTS

have been planted
since 2021

91.75%
survival rate



Successfully
propagated over
3000 SEEDLINGS,
including red and black
mangroves



125,000 +
invasive plants
have been
removed to date.



BZS staff worked
3000+ HOURS
on the project.



662 STUDENT
volunteers have donated
1000+ HOURS



916 CORPORATE
volunteers have
contributed
3250+ HOURS



932
Individual volunteers
have contributed
2,000+
hours

MICRO FOREST EDUCATION & OUTREACH

Integrating micro forest education into our schools programmes has been a key aspect of the project, along with raising community awareness. From our youngest students to our corporate volunteers, bringing people together through nature and inspiring environmental stewardship has continued to grow.

Inspiring Environmental Stewardship through education by:

- Introducing students to Drone Technology and Environmental Monitoring
- Warwick Academy Y7 Tree Stewards Program collaboration introducing advanced conservation technology
- Saltus students Conservation Initiatives local fundraising and hours of service in the Micro Forest at Bermuda College
- Pre-school students learn in King's Coronation Garden and Dalton E. Tucker Micro Forest in collaboration with BZS Schools Programme.
- Collaborated with former Somersfield Academy student, Zoë Mir, on her 2nd place global Young Reporters for the Environment article about the Micro Forest Project.



COMMUNITY PARTNERS

Our work would not be possible without the dedication from our community partners. We are incredibly grateful to:

Lead Sponsor



Founding Partner



As well as the following partners, whose support has fostered this incredible connection between community and nature:





BZS



Micro Forest Project



**2025 BOOSTER FOR
THE ENVIRONMENT**

For more information about the BZS Micro Forest Project: microforest@bzs.bm

To sponsor a micro forest or to donate to the project: development@bzs.bm

*The Bermuda Zoological Society #179 is the support
charity for the Bermuda Aquarium Museum and Zoo*

P.O. Box FL 145 Flatts FL BX Bermuda
(441) 293 2727

www.bzs.bm