Pocket Forests of Sterling Heights

shpocketforest.com

GRAHAM SUSTAINABILITY INSTITUTE

CENTER FOR EMPOWERING COMMUNITIES

UNIVERSITY OF MICHIGAN

EGLE

MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY

Our Vision

Make urban forestry more accessible by creating a guide in a modern digital format.

Improve Sterling Heights' communities through reforestation.

Share our work with other Michigan communities.

Introductions

Paloma Calvin

CLC Fellow, Project Manager

Alexis Weinberg

Sterling Heights Sustainability

Ryan Fox

Sterling Heights Sustainability

William Francois

Logicalis Software Engineer

Matt Sharp

Sterling Heights Arborist

Pocket Forests...?

Highly dense: 3-7 plants per 10 sq. ft.

Biodiverse: Requires variety.

Only plants native to SE Michigan.

Quick growth: can grow up to 10x as quickly as a regular forest due to nutrient competition.

Why Pocket Forests?

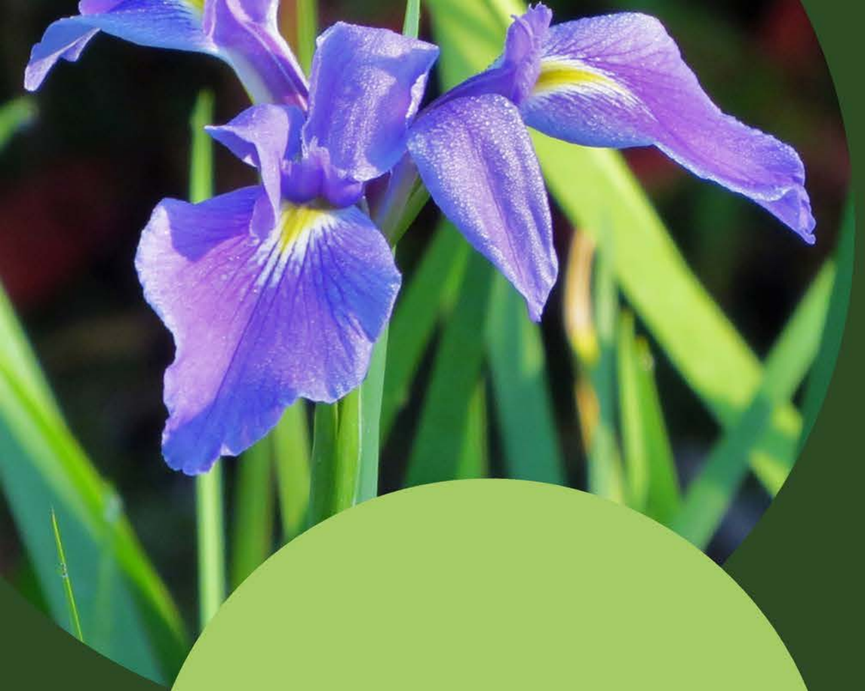
Increased canopy cover

Air quality
Shade
Habitats

Why Pocket Forests?

Pathway to Play and Preservation millage

STERLING HEIGHTS
PATHWAY TO PLAY & PRESERVATION



Process

Research

→

Native plants, Miyawaki method, planting methods, urban forestry.

Process

Development

Building the website, testing and iterating, hosting the site.

Process

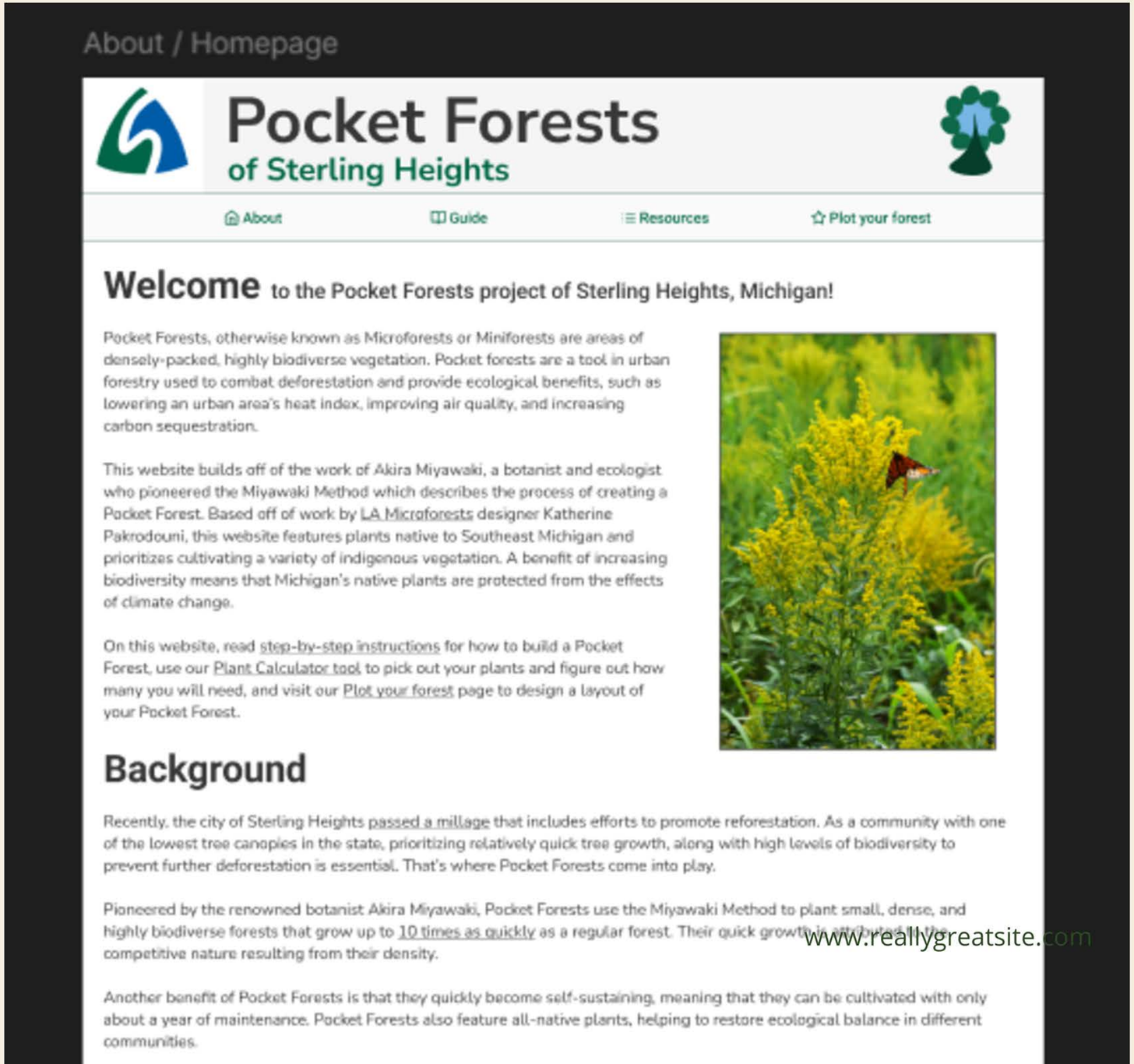
Access

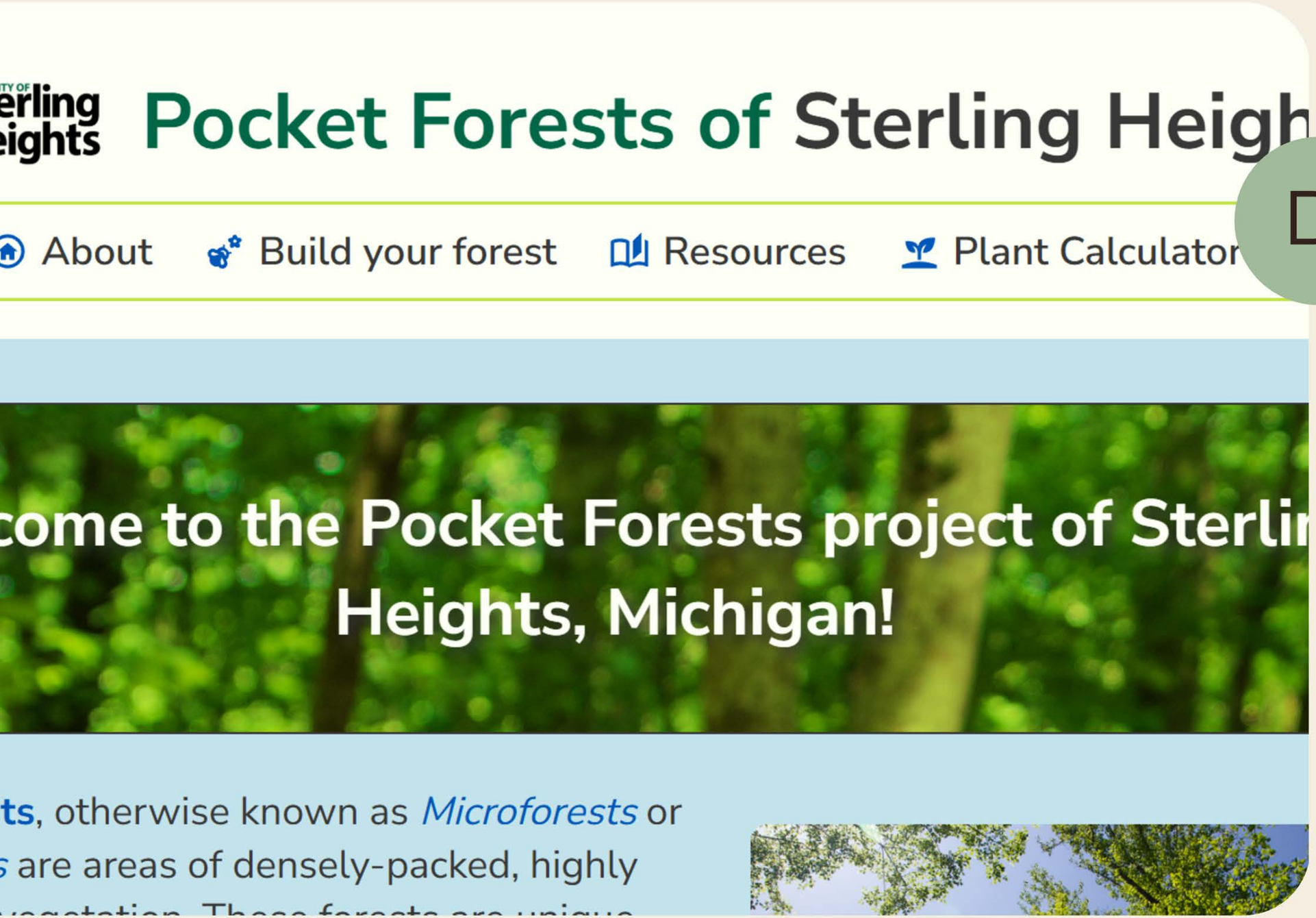
→

Cleaning the code, creating the code guide, sharing deliverables.

Process

Initial Designs and Research





Deliverables

Guide

Tools

Resources

palomacalvin.github.io/clcf_2025/#/plant-calculator

CLCF 2025 | In Amber

Plant Calculator

Choose the forest type that interests you and best suits your space.

Oak Forest

The Oak Forest is Michigan's most common ecological system. Oak Forests are strong, beautiful, and support a variety of wildlife. As maples become more common

Pollinator Forest

Pollinator forests are not just great for the

Dry Prairie

Prairies were once abundant in Michigan,

Wet Prairie

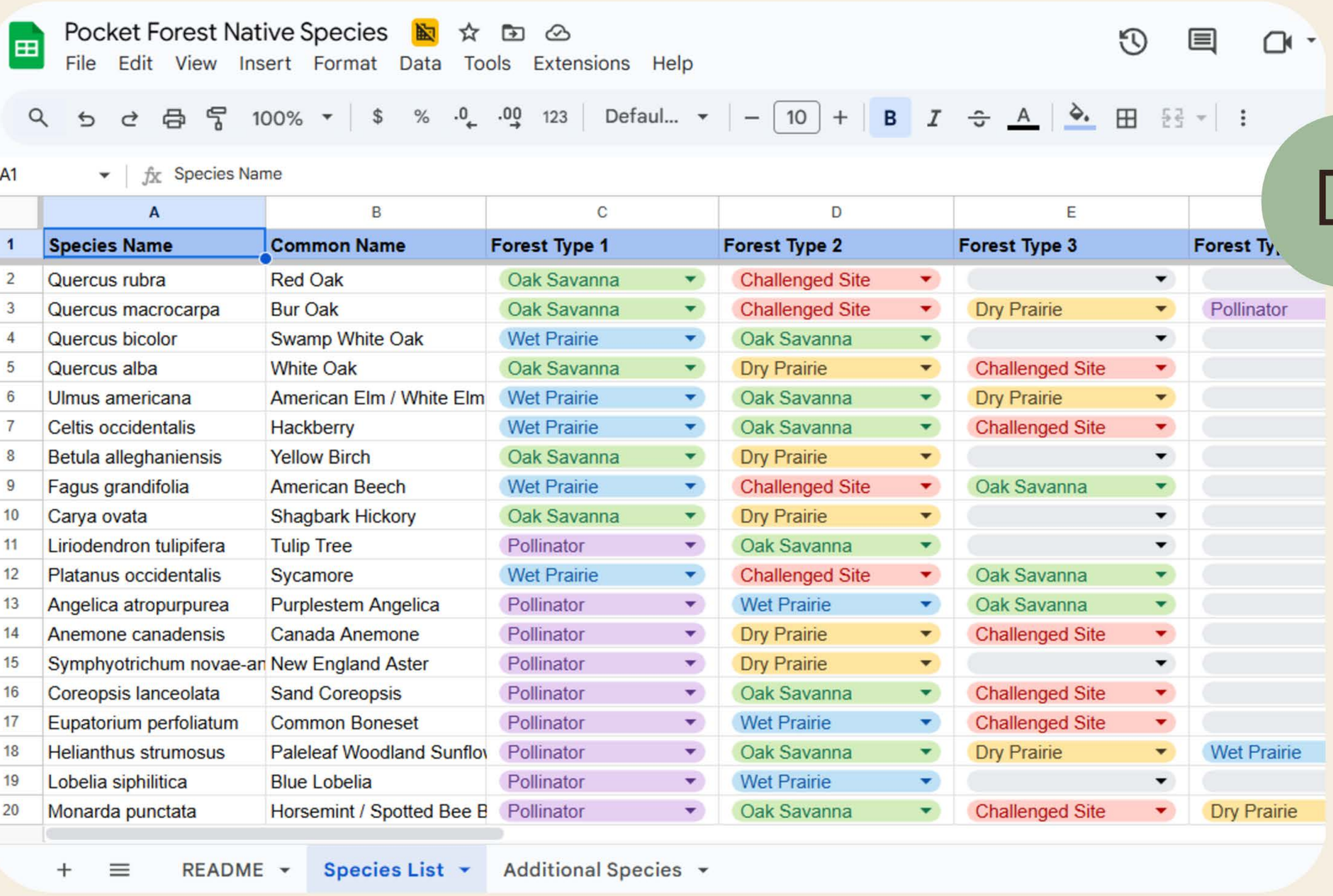
Prairies were once abundant in Michigan,

Challenged Site Forest

Got stubborn soil or demanding dirt? Consider building a Challenged Site Forest, best for areas that are suitable for only the most resilient of plants.

Your Selections

No plants recommended yet.

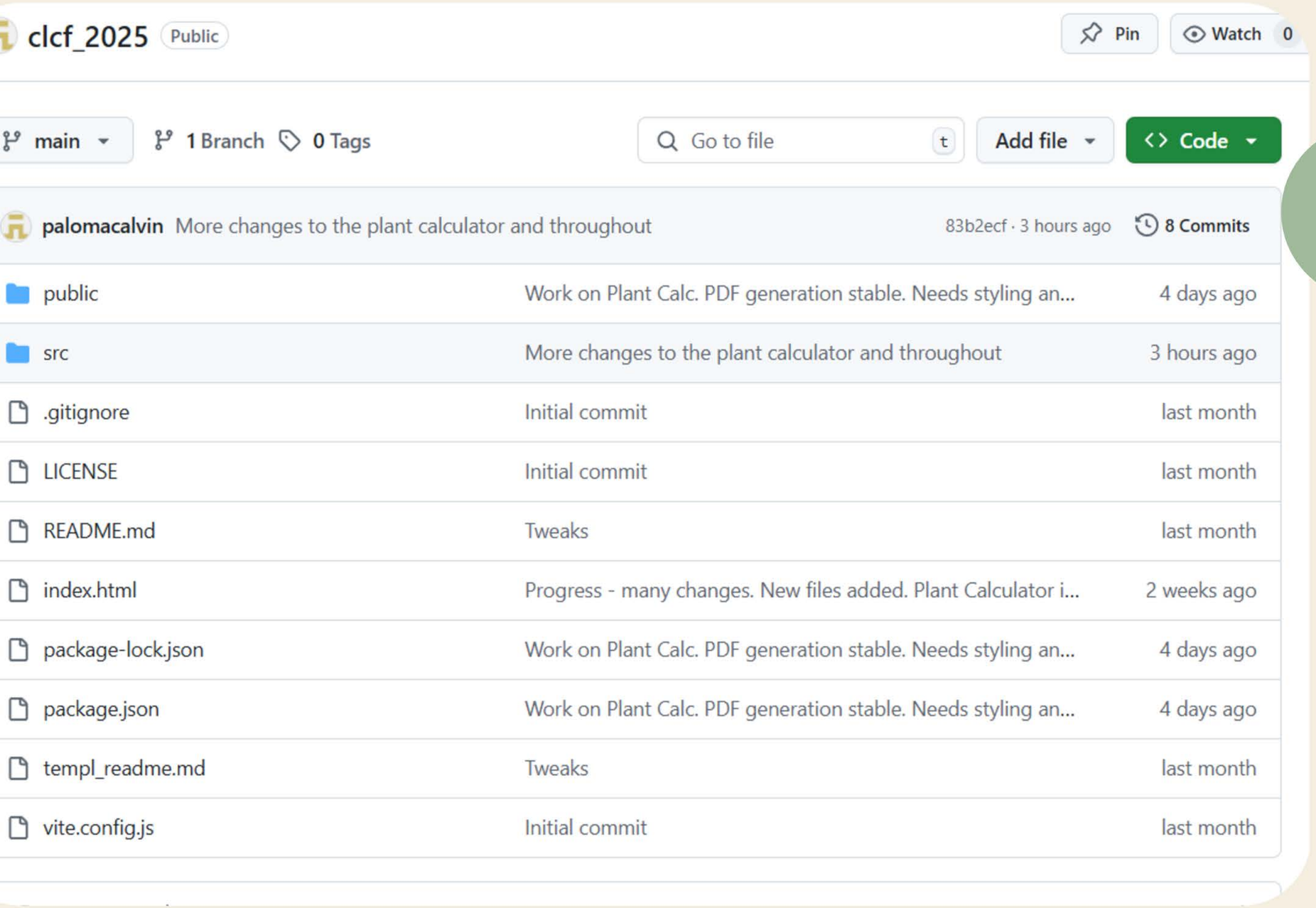


Species Name	Common Name	Forest Type 1	Forest Type 2	Forest Type 3	Forest Ty
Quercus rubra	Red Oak	Oak Savanna	Challenged Site		
Quercus macrocarpa	Bur Oak	Oak Savanna	Challenged Site	Dry Prairie	Pollinator
Quercus bicolor	Swamp White Oak	Wet Prairie	Oak Savanna		
Quercus alba	White Oak	Oak Savanna	Dry Prairie	Challenged Site	
Ulmus americana	American Elm / White Elm	Wet Prairie	Oak Savanna	Dry Prairie	
Celtis occidentalis	Hackberry	Wet Prairie	Oak Savanna	Challenged Site	
Betula alleghaniensis	Yellow Birch	Oak Savanna	Dry Prairie		
Fagus grandifolia	American Beech	Wet Prairie	Challenged Site	Oak Savanna	
Carya ovata	Shagbark Hickory	Oak Savanna	Dry Prairie		
Liriodendron tulipifera	Tulip Tree	Pollinator	Oak Savanna		
Platanus occidentalis	Sycamore	Wet Prairie	Challenged Site	Oak Savanna	
Angelica atropurpurea	Purplestem Angelica	Pollinator	Wet Prairie	Oak Savanna	
Anemone canadensis	Canada Anemone	Pollinator	Dry Prairie	Challenged Site	
Symphyotrichum novae-an	New England Aster	Pollinator	Dry Prairie		
Coreopsis lanceolata	Sand Coreopsis	Pollinator	Oak Savanna	Challenged Site	
Eupatorium perfoliatum	Common Boneset	Pollinator	Wet Prairie	Challenged Site	
Helianthus strumosus	Paleleaf Woodland Sunflo	Pollinator	Oak Savanna	Dry Prairie	Wet Prairie
Lobelia siphilitica	Blue Lobelia	Pollinator	Wet Prairie		
Monarda punctata	Horsemint / Spotted Bee B	Pollinator	Oak Savanna	Challenged Site	Dry Prairie

Deliverables

Spreadsheet

Resources



Deliverables

Codebase

Code Guide

Conclusion

Let’s improve our cities
one tiny forest at a time.

We need your help!

What should go on our FAQ page?

CITY OF Sterling Heights

Thank you!

Questions?