



Let's Talk About Trees!

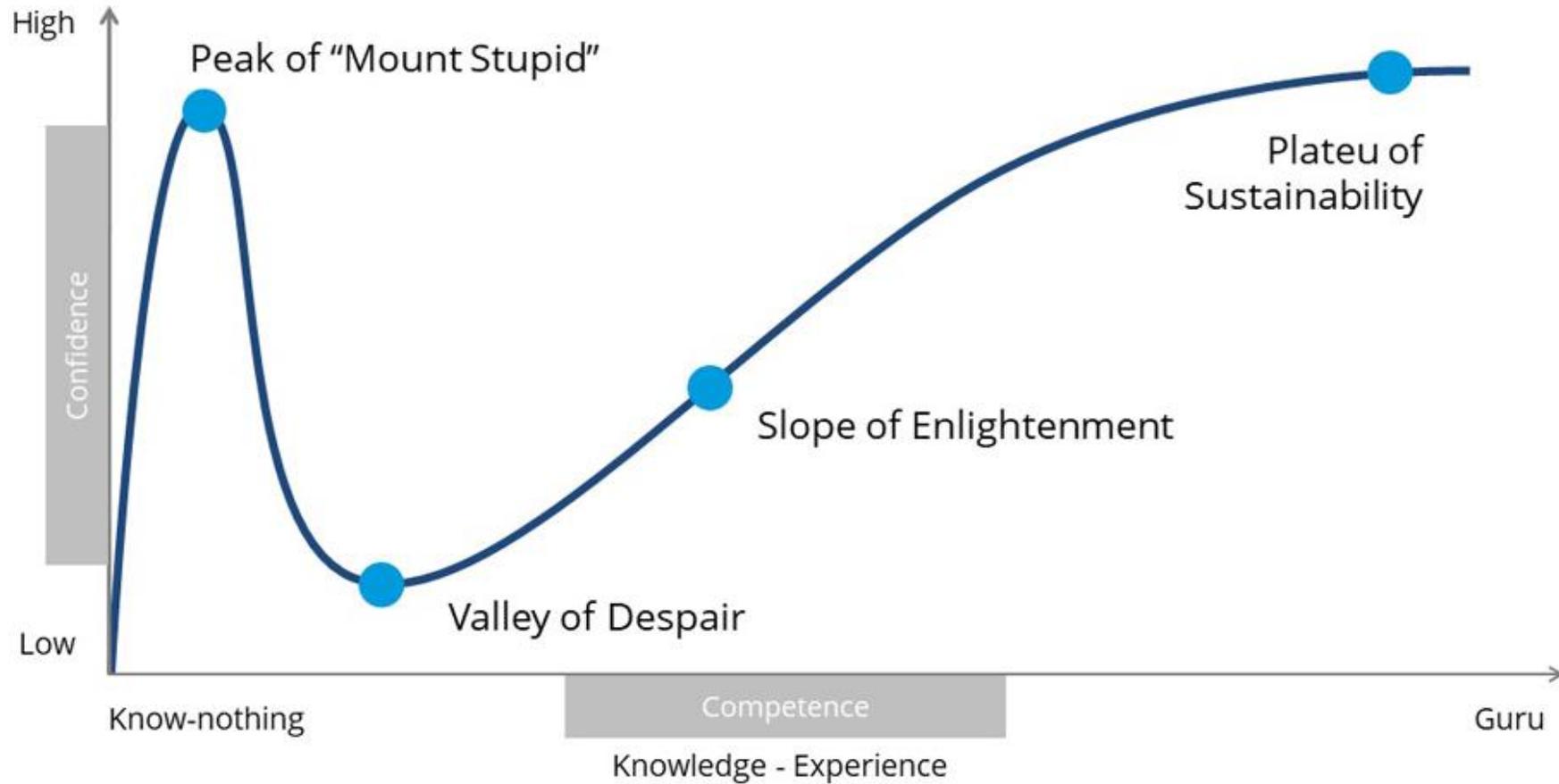
Lawrence Law

Michigan DNR

Urban and Community
Forestry Program



Dunning-Kruger Effect Curve



Why Trees Are Important

Provide benefits such as:

- Noise reduction
- Stormwater mitigation
- Water quality
- Filters air pollution
- Provides shade
- Blocks wind
- Traffic calming
- Increase pedestrian use
- Aesthetics (Green Soothe effect)
- Combat climate change effects
- Extending gray infrastructure life

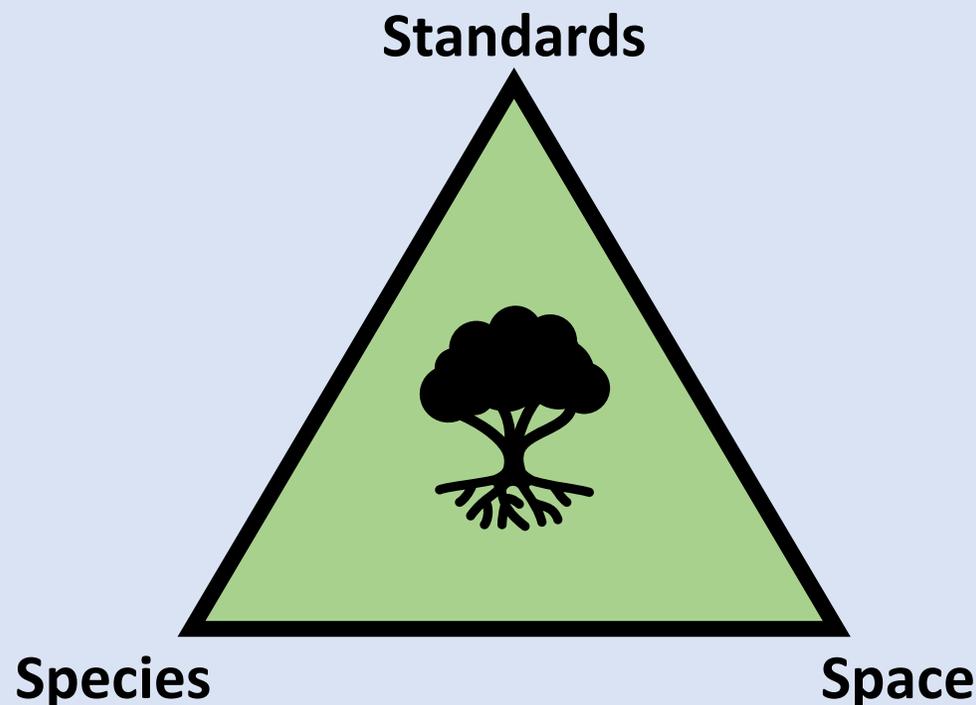


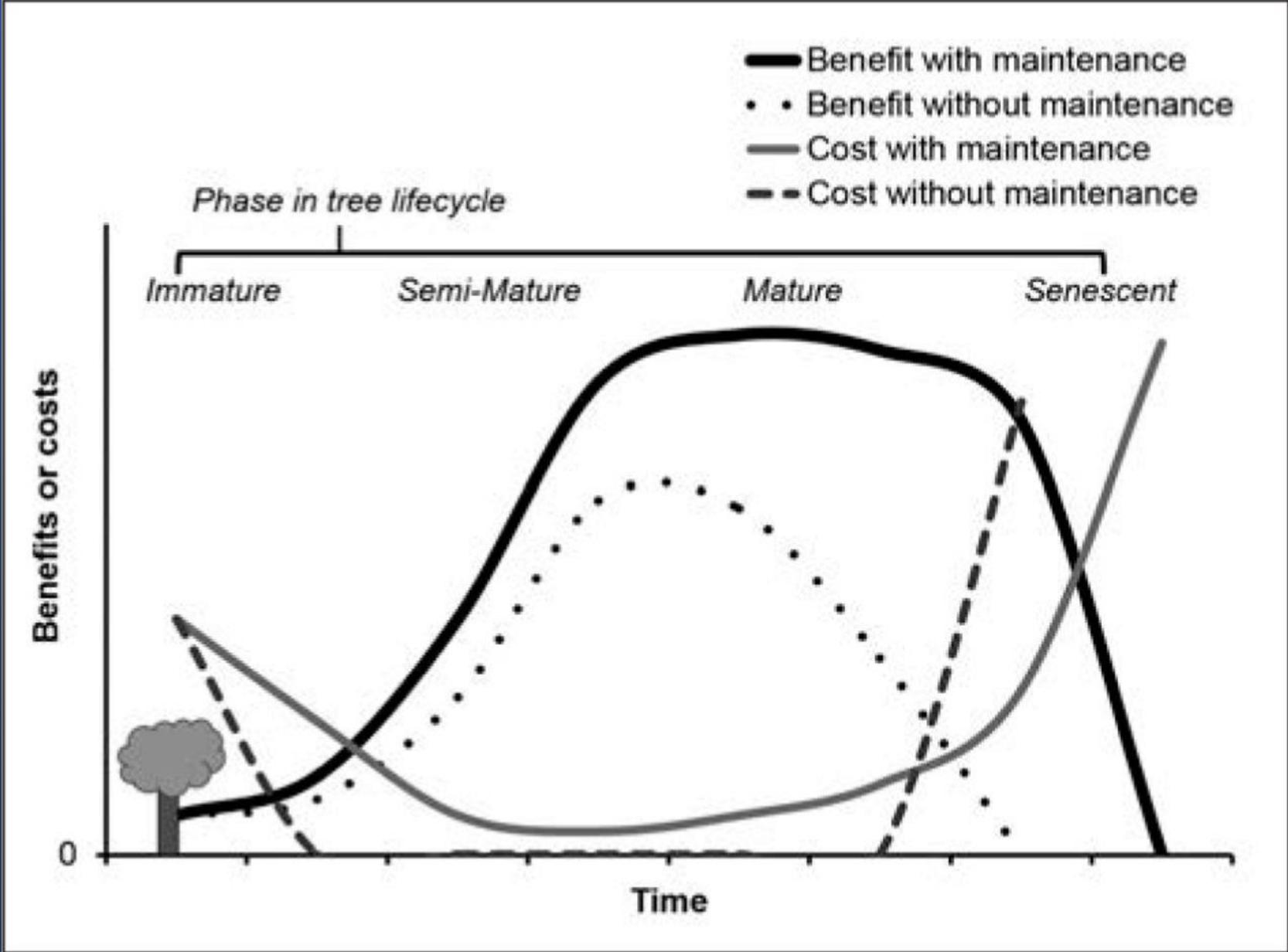
Right Tree-Right Place

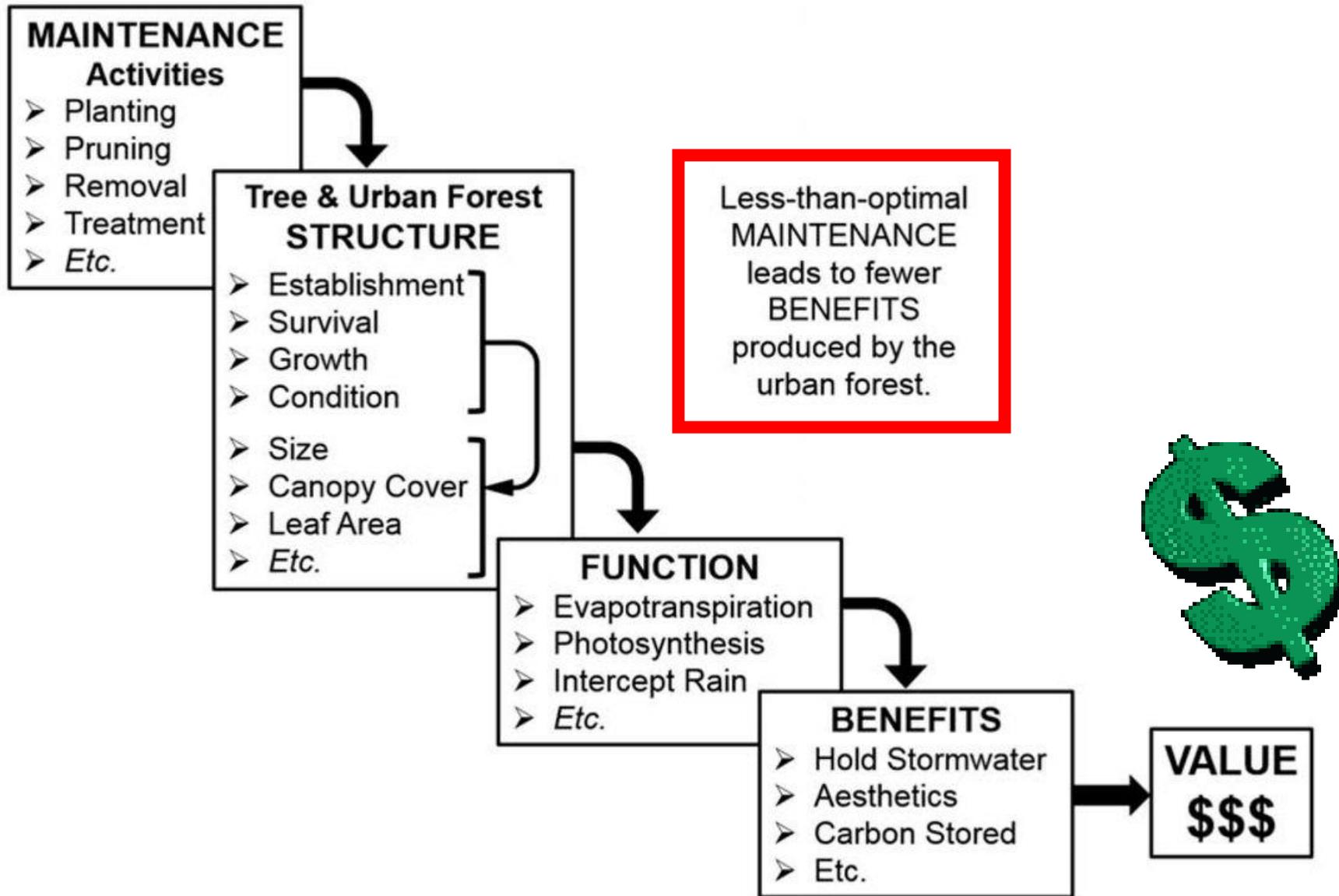
Having a successful urban tree canopy can be boiled down to the 3 S's:

- **Standards** - Ordinances, policies and plans that increase the lifespan and quality of the urban canopy
- **Space** - The physical area where trees are being planted and their preparation
- **Species** - Choosing an ideal species for the site

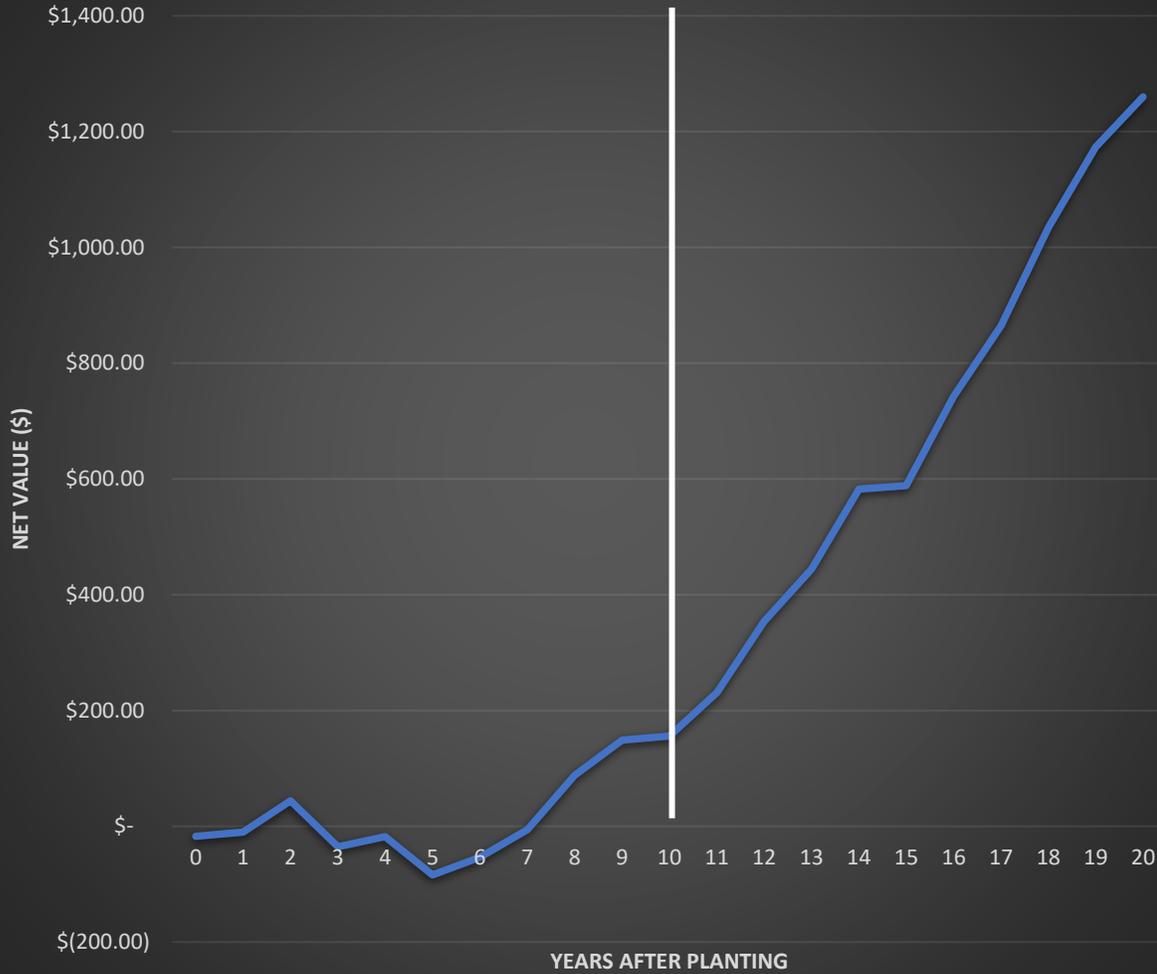
Most issues occur due to the decisions made in the planning and planting process.







Hackberry Net Value Over Time

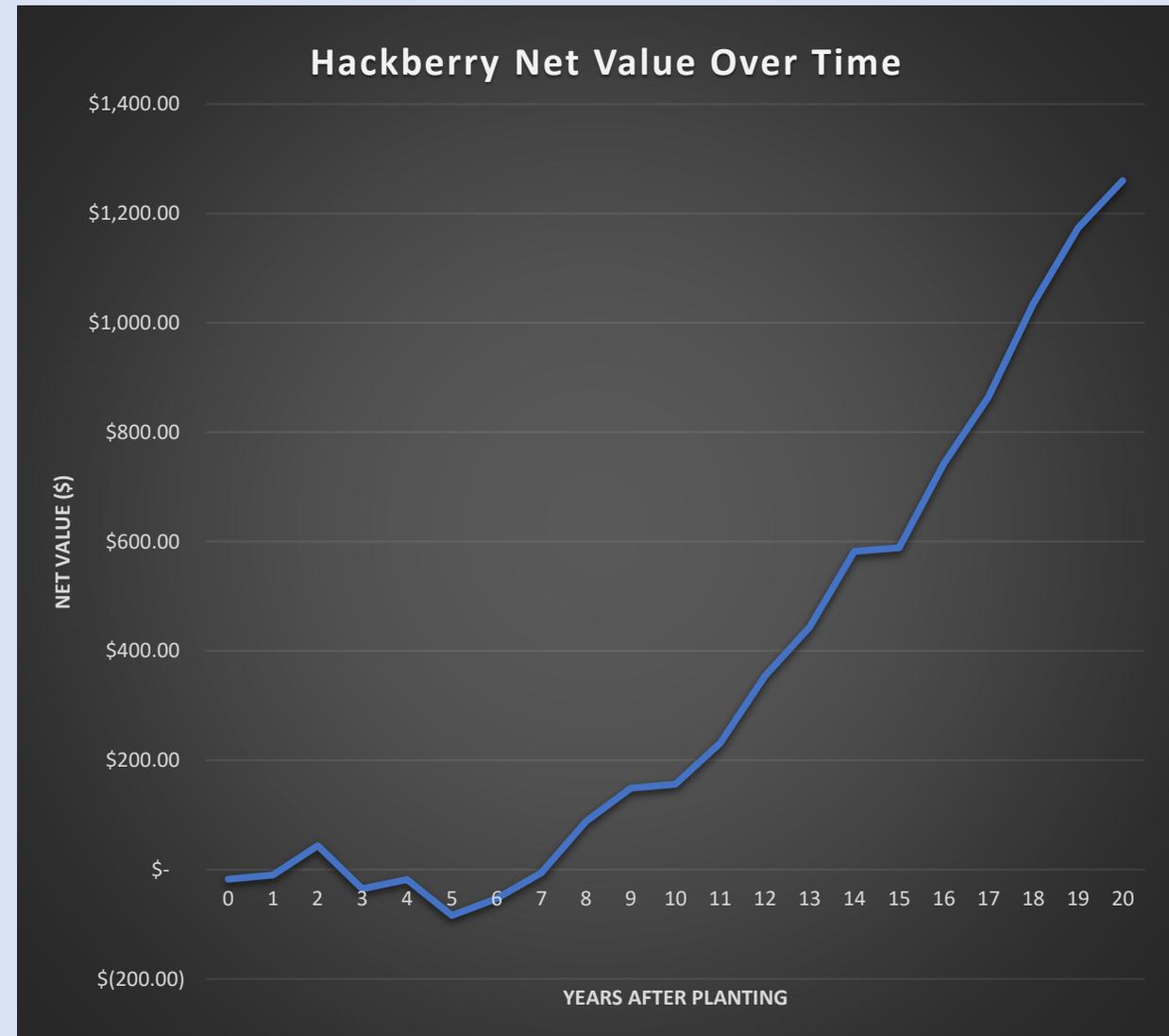


Pear Net Value Over Time



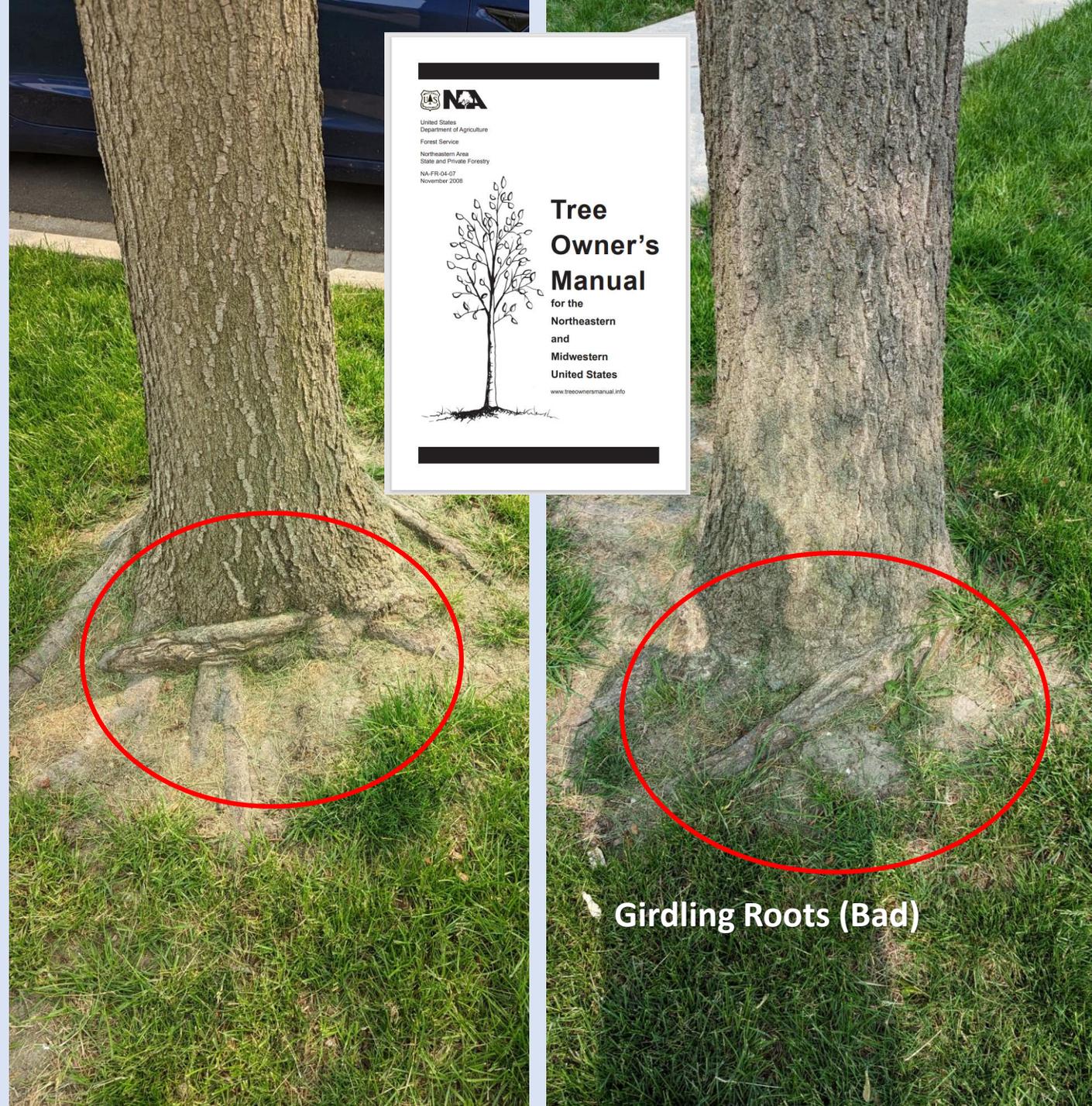
Mock Maintenance Schedule

- **Watering**- Every year for at least first 3 years
- **Fertilizing**- As needed (Soil Test, Symptoms)
- **Pruning**- Years 5, 10, 15...
- **Mulching**- Every 2 to 3 years as needed
- First 5 years are the most important!



Tree Owner's Manual

- Most common issues:
 - Poor root preparation
 - Planting too low
 - Improper mulching
 - Fertilizing when you shouldn't
 - Time of planting
 - Soil compaction
- Online PDF link on front
- For more detailed info check out **ANSI A300 Standards**

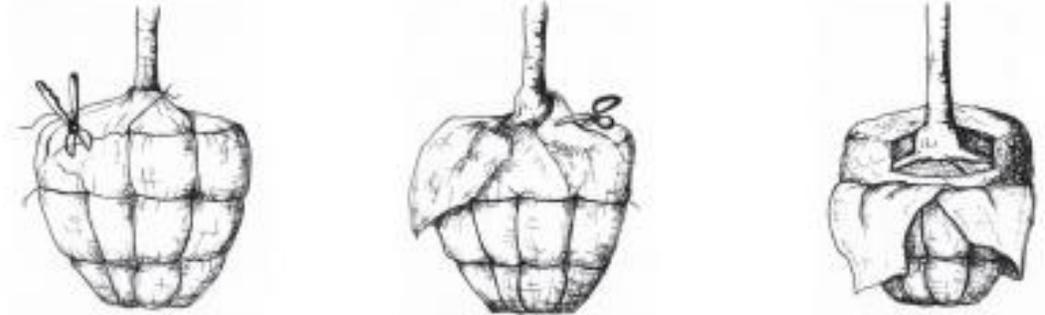


Girdling Roots (Bad)

Planting

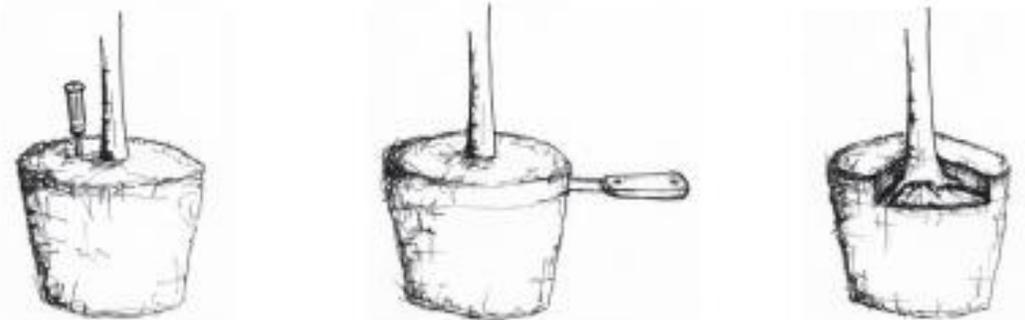
- Ideally 1.5"-2.5" DBH
- Must have a visible root flare
- 20'-30' spacing between trees
 - 30'+ spacing ok but will have more horizontal limbs
- Remove as much burlap/cage/material as possible
- Keep root ball moist
- Prune away girdling roots before planting

Balled-and-burlapped trees: Remove the top of the root ball packaging. Cut any twine from around the trunk taking care not to nick the bark. Then bend the wire basket back off the top of the ball. Remove soil from the top of the root ball until the main root system is found. You may have to cut some of the wire. Leave the rest of the wire basket in place until the tree is put in the ground.



Containerized trees: Remove the entire container. Pull or cut the soil off the top of the root ball until the main root system is found.

 **TIP:** A saw works well to remove the top layer of soil. Be careful not to cut into the trunk.



Mulching

- Donuts, not donut holes
- Mulch away from the base of the tree
- 2-4" deep is ideal
- Out to the "drip line" of the tree
- Mulch is there to conserve moisture, protect from mechanical damage, and reduce competition

Trunk diameter (inches)	Mulch diameter (feet)
1	4
2	6
3	8
4	10





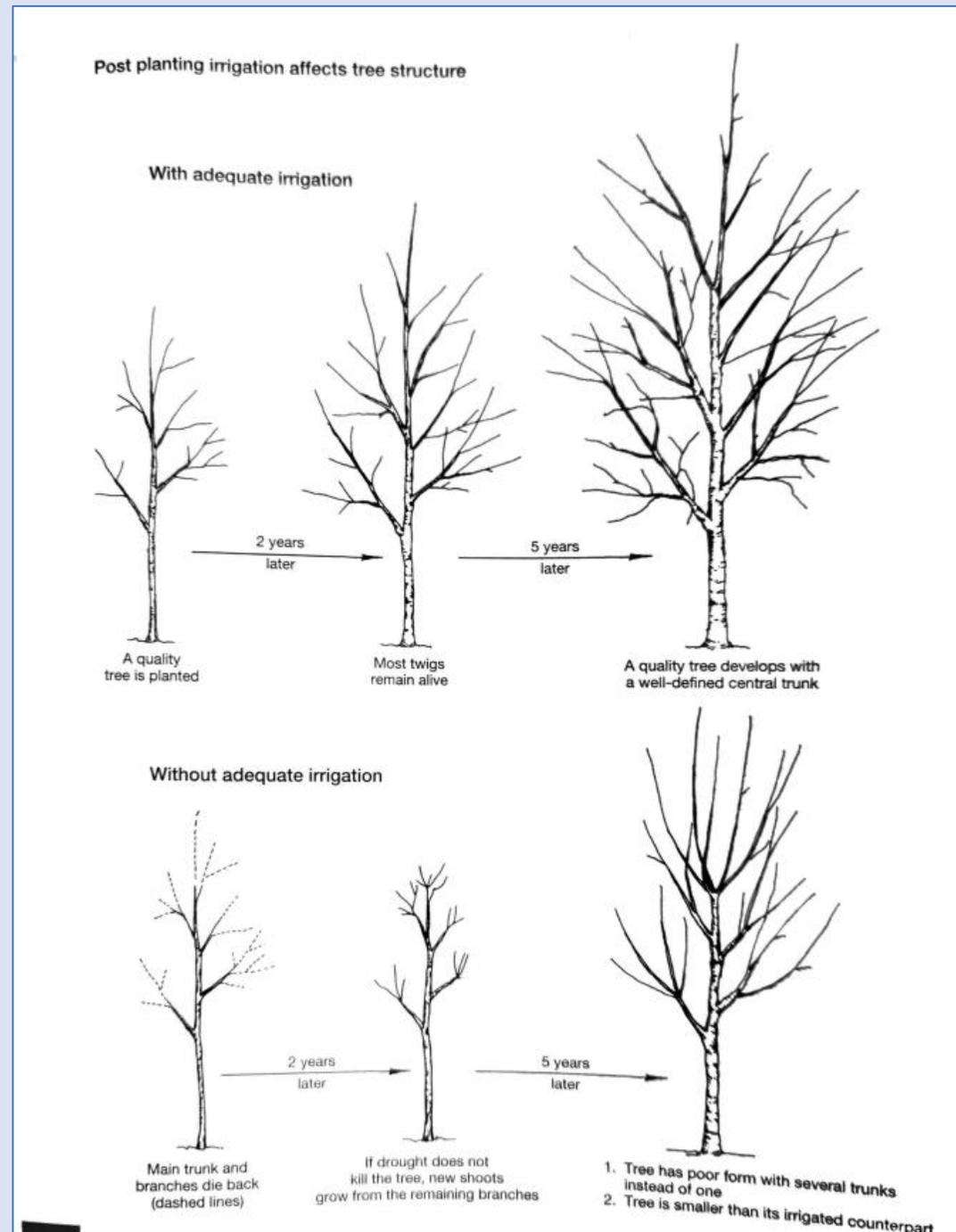
Staking

- Not always necessary
- Usually done for containerized and bareroot trees
- Sandy soil plantings
- Remove after a year!
- What makes the planting in this picture bad?



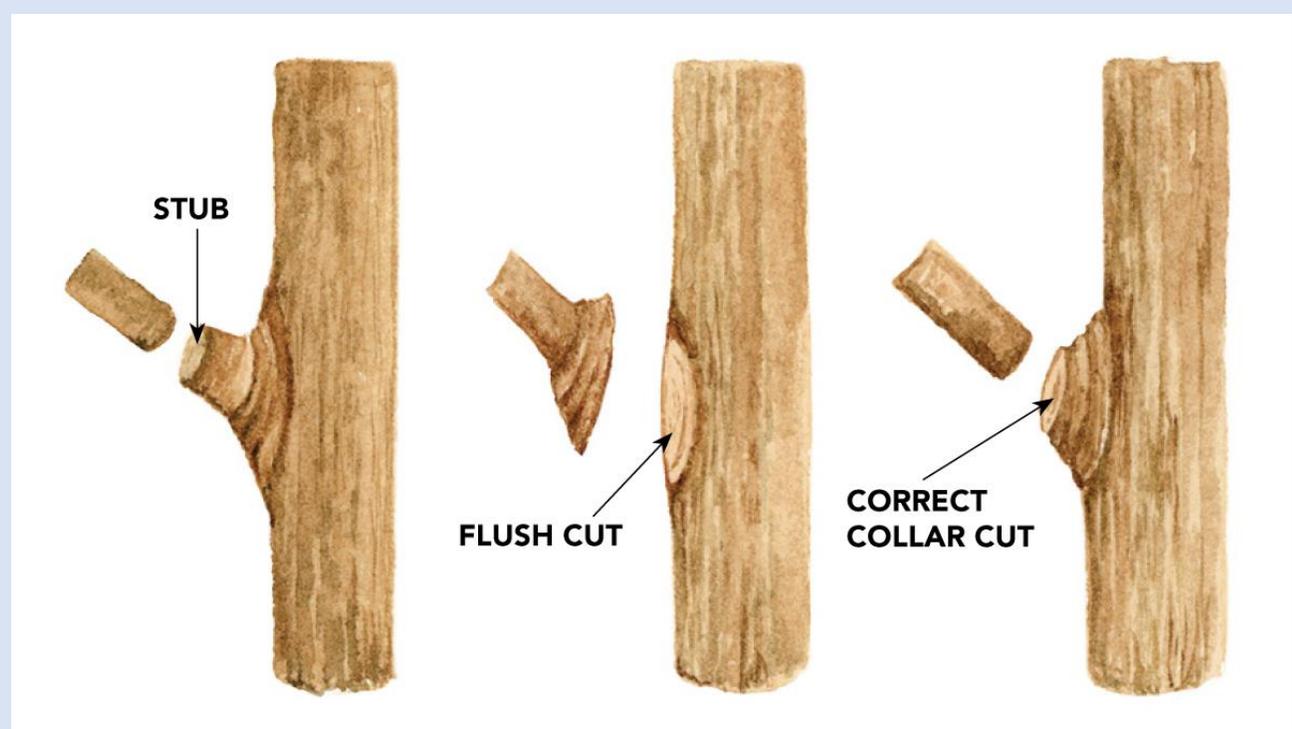
Fertilizing and Time of Planting

- No fertilizer should be used for at least **2 years** after planting
- Water!
 - Dry roots = Dead Tree
- Timing
 - Early spring before bud-break
 - Late fall when moist
 - All about making sure there is moisture for the tree



Pruning

- Ideally done in dormant season
- Hire certified professionals with insurance
 - ISA Michigan
- No Topping or flush cuts
- 3-cut method
- Don't harm bark collar
- **DON'T PAY FOR BAD WORK**
 - SET YOUR EXPECTATIONS





Poor Species and Space selection, topped trees



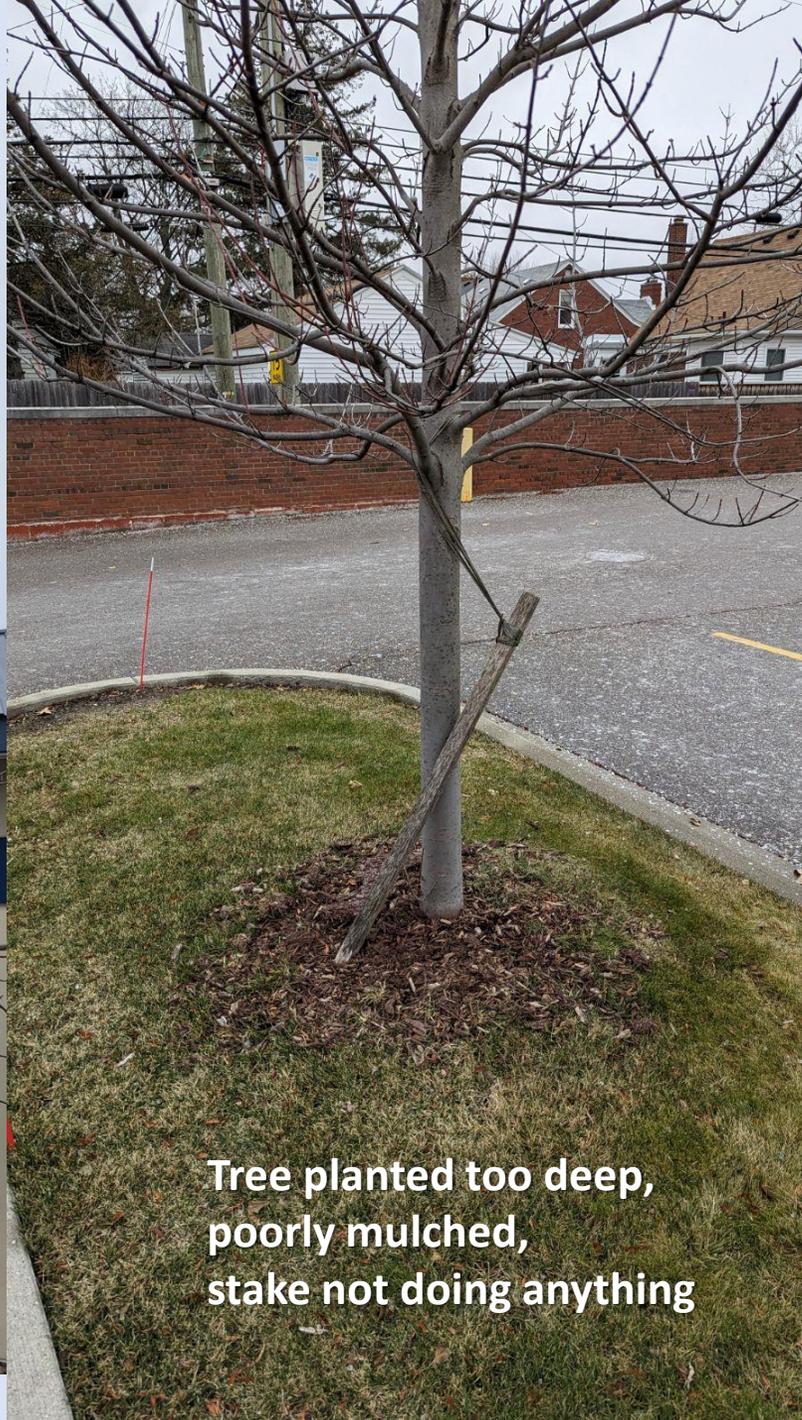
Unsupported with not enough water



Poor site, strangled root ball



A butchered tree



**Tree planted too deep,
poorly mulched,
stake not doing anything**



**Old Irrigation System
Strangling Tree (with
frost damage on trunk)**



Poor species choice (Silver Maple) planted under powerlines



No root preparation,
Planted too deep



No root preparation,
Planted too deep,
No protection from frost
damage



Find a Michigan Arborist Near You

[Find An Arborist Near Your](#)

This Arborist Directory is listing of members of ISA Michigan (the Michigan Chapter of the International Society of Arboriculture), who perform tree care practices. These arborists may hold a number of certifications or qualifications.

ISA Certified Arborists have met a minimum practical experience level, have been tested and certified to known science-based practices in the field of arboriculture, and maintain certification through continuing education. ISA Certified Arborists may have a "MI-#####" in their Directory Listing. ISA Certified Arborist credentials apply to individuals, not businesses. A [Code of Ethics](#) for ISA Certified Arborists® strengthens the credibility and reliability of the tree care work force. To confirm if an arborist is an **ISA Certified Arborist**, [CLICK HERE](#).

Tree Risk Assessment Qualified (TRAQ) is an ISA National program that trains arborists how to use methodologies outlined in the ISA Best Management Practices for Tree Risk Assessment. This qualification promotes the safety of people and property by providing a standardized and systematic process for assessing tree risk. The results of a tree risk assessment can provide tree owners and risk managers with information to make informed decisions to enhance tree benefits, health, and longevity. To confirm if an arborist is **Tree Risk Assessment Qualified**, [CLICK HERE](#).

Oak Wilt Qualified (OWQ) Michigan Oak Wilt Qualified Specialist is an ISA Michigan qualification that trains ISA Certified Arborists or Certified Foresters on the issues related to identification and management of oak wilt. To confirm if an arborist is **Oak Wilt Qualified**, [CLICK HERE](#).

Remember:

- Always ask for proof of insurance and references when hiring a tree care professional.
- No endorsement or recommendation is implied, nor granted, by ISA Michigan to any individual listed in this **Find An Arborist Directory**.
- Don't see an arborist in your area? Give an arborist a call – they may be willing to drive to your area.

When hiring a company

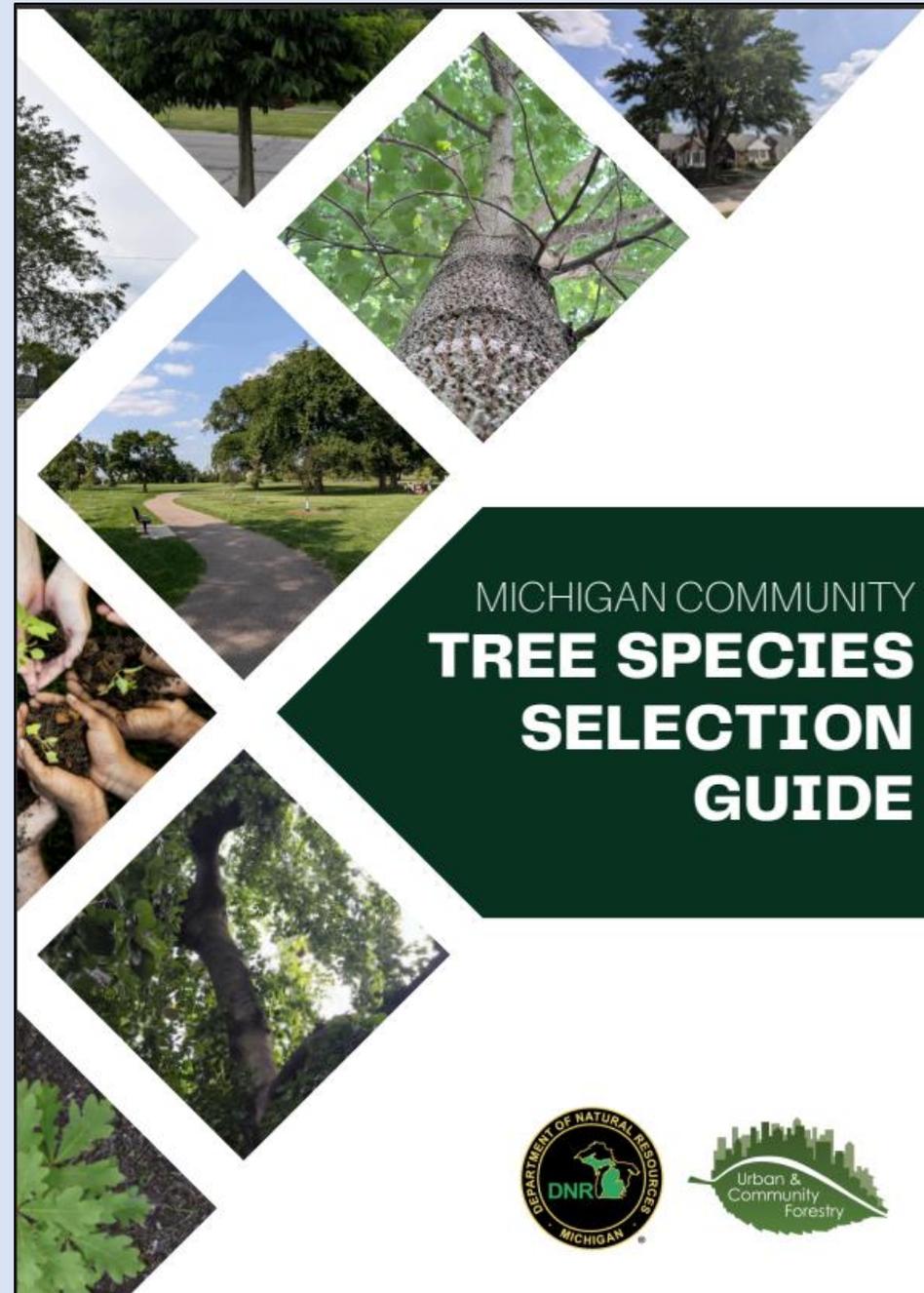
- Insurance!
- Credibility (ISA, ASCA, UCFS)
- Guarantee responsible pesticide use
 - Ask to see Safety Data Sheets and Pesticide Applicator License
- Get Tree Risk Assessment Qualification (TRAQ) Arborists to make risk assessments, not some random person
- Have some sort of quality assurance
- Don't settle for bad work!





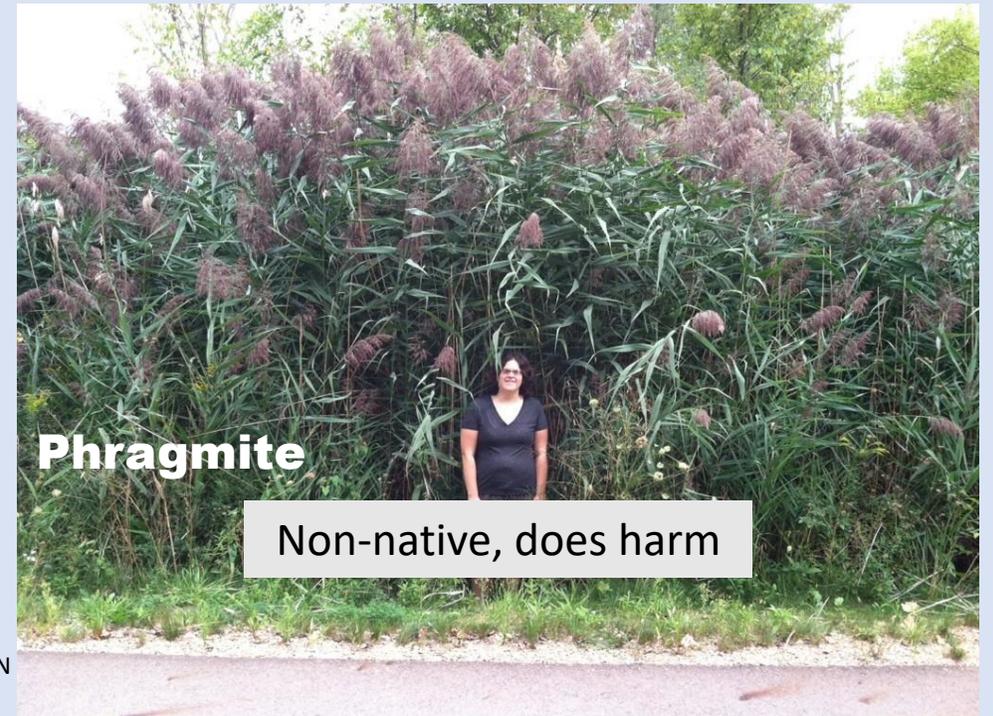
MiCoTSS

- Peer reviewed guide to assist in tree species selection
- Free at Michigan.gov/UCF
- Want species diversity
 - Emerald Ash Borer
 - Dutch Elm Disease
- Have fun with selection!



What's an Invasive Species?

A species that is **not native** and whose introduction causes, or is likely to cause, economic or environmental **harm**.



ISN

Map of Comparable Climatic Zones*

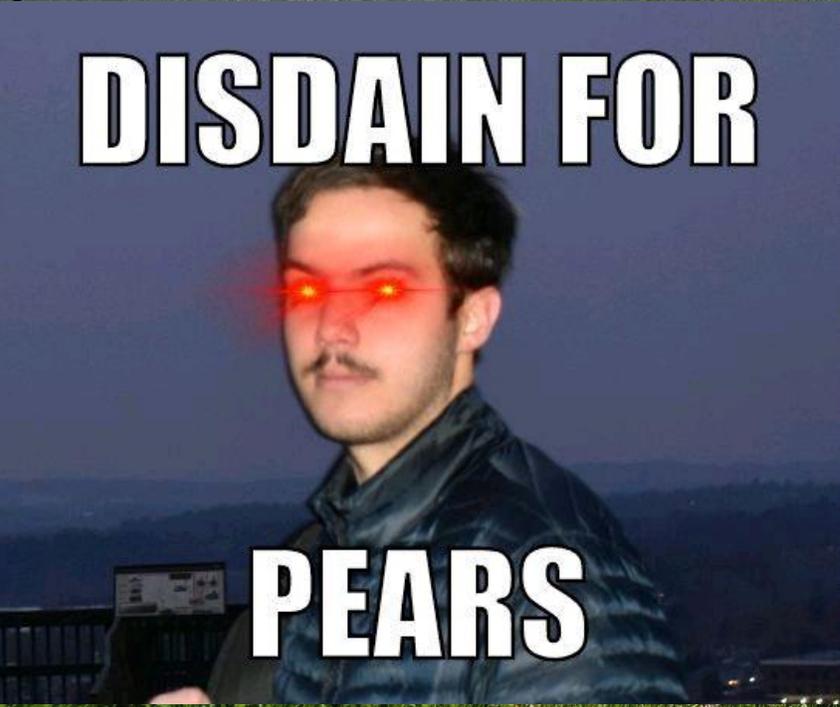
Based off of Köppen Climate Classification
<http://hanschen.org/koppen>



This is from a
Linkedin post
where the
original source is
Reddit so don't
take this too
seriously

DISDAIN FOR

PEARS





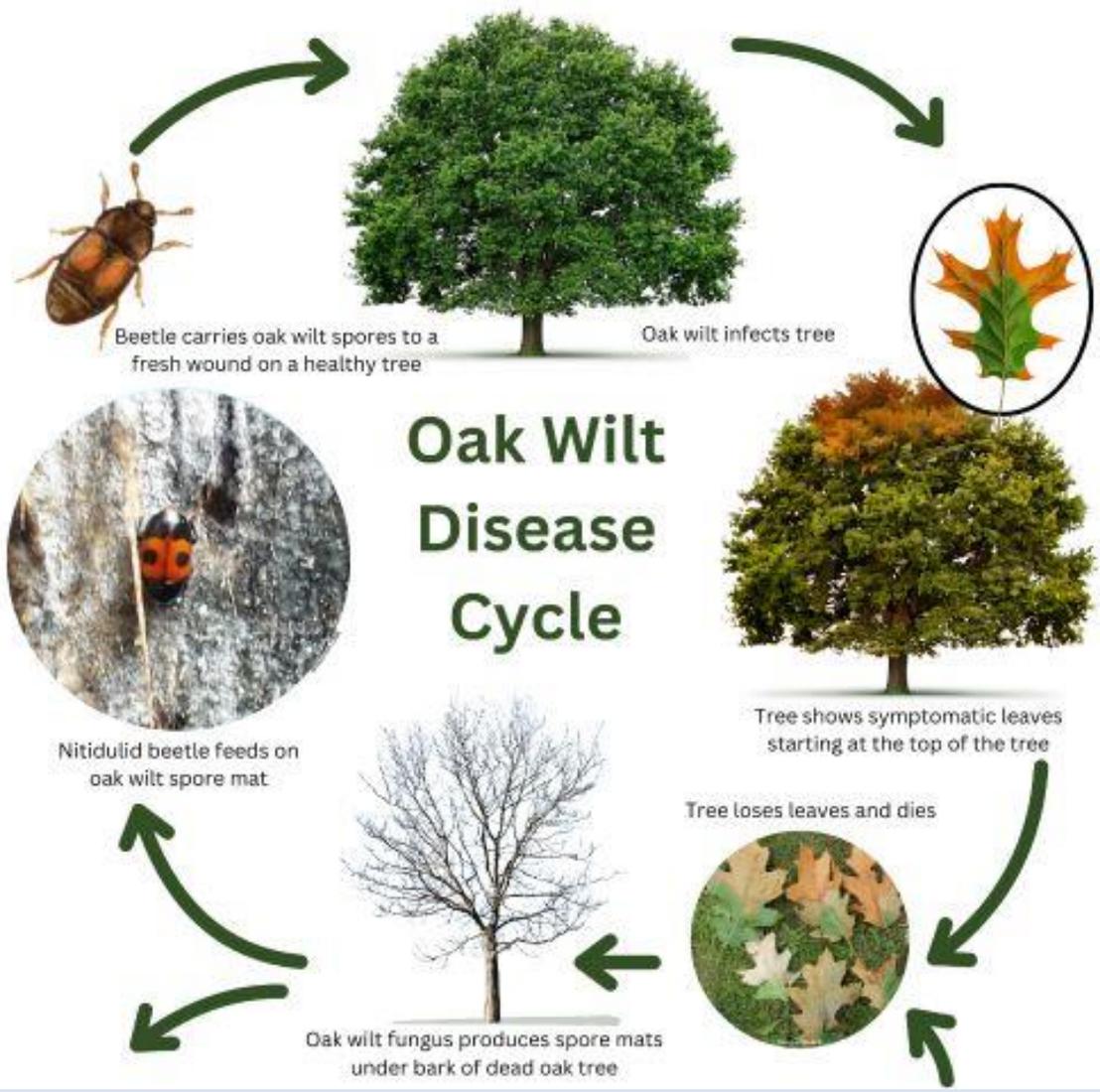
Its not just plants!

- Oak Wilt
 - Invasive fungus
 - Only prune between November 1st to March 14th
 - If you need to prune outside safe timeframe, make sure all wounds are sprayed with **Latex-based paint**
 - Spreads through beetles and root grafts
 - Red oaks more susceptible than white oaks

GREATEST RISK
APRIL 15 – JULY 15

LOWER RISK
MARCH 15 – APRIL 14, JULY 16 – OCTOBER 31

SAFEST PERIOD
NOVEMBER 1 – MARCH 14



Be Proactive!

- Asian Longhorned Beetle (ALB)



Other Common HOA Issues

- Spruce Decline and Spruce Needlecasts



Review Resources

- USDA Tree Owner's Manual
- ISA Michigan Website
- MSU Plant & Pest Diagnostics Lab
- MSU Soil Testing Lab
- Michigan Community Tree Species Selection Guide (MiCoTSS)



Home Lawn and Garden Soil Test Mailer

All materials and instructions included — no postage necessary!

This kit includes everything you need to send a soil sample from your lawn or garden for testing. You'll receive an *electronic* response with personalized fertilizer recommendations from Michigan State University that will help you grow beautiful, healthy plants and *protect the environment*.



What do we do?

- Large Silver Maple in Right-of-Way
- Sparse branching on top
- Low fork branches leaning over cars and condo roofs
- Probably \$4000-\$6000 removal



Avoid: Invasive Maples

Remember:
SHANT

Sycamore

Hedge

Amur

Norway

Tatarian



A. pseudoplatanus



A. campestre



A. ginnala

A. platinoides



A. tataricum



Reconsider: Freeman Maple



Consider: Baldcypress



Avoid: Goldenrain Tree



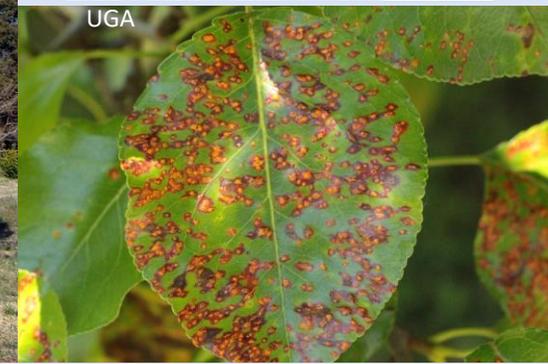
Consider: Kentucky Coffeetree



Avoid: Callery Pear



Rebekah D Wallace, UGA 5561871



Consider: Serviceberries



Avoid: Japanese Tree Lilac



Consider: White Fringetree



Avoid: White Mulberry

Consider: Osage Orange*



Questions?



Lawrence Law

LawL1@Michigan.gov

313-316-4137

CISMA (Cooperative Invasive Species
Management Area)

County Conservation Districts