

# Successful Tree Establishment **SELECTION**

La Fab / Hendrick Farm

Chelsea, Québec

Earth Day, 22 April 2023

Paul Hetzler, ISA Certified Arborist

# “Right Tree, Right Place”

- **Species** (e.g., *Acer rubrum*)
- **Cultivar** (e.g., ‘October Glory’)
- **Provenance** (e.g., Mallorytown, ON)



# **SOME GENERALITIES**

## ➤ COLD-HARDINESS

In general, plant trees rated **Zone 4 or lower**.

Some frost pockets may require Zone 3.

Zone 5 trees may survive in sheltered sites near River...but don't depend on it.





# **PROVENANCE:**

**Southern-grown plants may not be hardy to  
listed Zones!**

# ➤ **Drought Hardiness**

**More important than ever.**

**Reflected heat and limited root space will create drought-like conditions.**

**Plant tolerant species.**



## Right Tree, Right Place:

How tall, how wide,  
and where will the roots go?

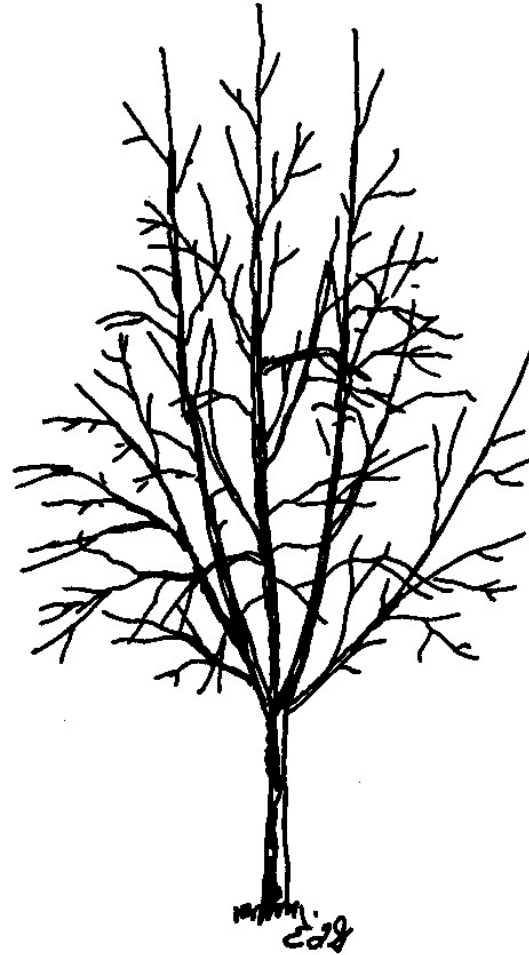
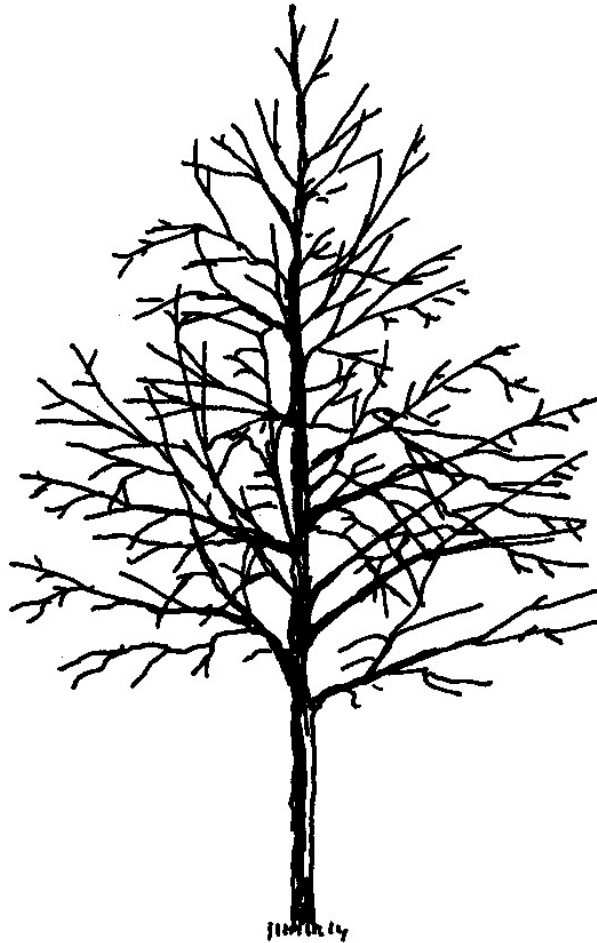




# Single Trunk



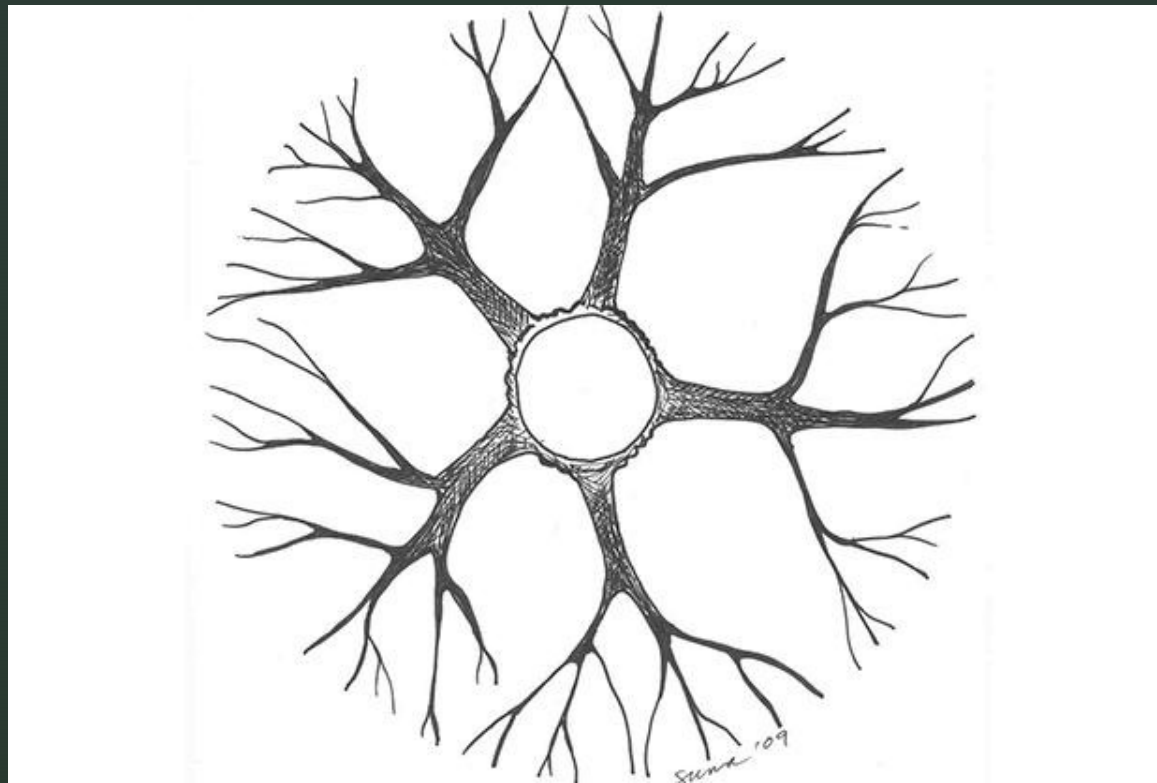
# Good Form vs. Poor Form



# Vertical Symmetry



# Radial Symmetry







poor quality



best quality



good quality



# Results of Poor-Quality Stock:









# **SOME SPECIFICS**

DO NOT PLANT:



Colorado « Blue » Spruce (*Picea pungens*)



# WHY NOT?



**EXTREMELY vulnerable to needlecast diseases like *Rhizosphaera***

**Many arborists think it should no longer be planted out East.**



# DO NOT PLANT:



Norway maple (*Acer platanoides*) 'Crimson King,' 'Royal Red,' etc.

# WHY NOT?



## IT'S **INVASIVE!**

A serious threat to woodlands across Québec



# Do Not Plant:



**European Weeping Birch (*Betula pendula*)**



# WHY NOT?



It's is a magnet for the bronze birch borer.

# Not Recommended:

European Mountain-Ash (*Sorbus aucuparia*)

Flowering Dogwood (*Cornus florida*)

# PLEASE CONSIDER PLANTING

**Ginkgo** (*Ginkgo biloba*) can handle severe drought, high soil pH, deicing salt, and air pollution. It's also largely maintenance-free.

**Japanese Tree Lilacs** (*Syringa reticulata*) produce lush blooms, and are perfect for under utility wires. In addition, they have few pests and diseases.

**Norway Spruce** (*Picea abies*) is very resistant to needlecast diseases that decimate Colorado and other spruces, and it's good on marginally wet sites.

# PLEASE CONSIDER PLANTING:

- **Kentucky Coffeetree** (*Gymnocladus dioecious*) is fantastically drought-resistant. It also survives air pollution, high soil pH, and occasional wet conditions.
- **Hackberry** (*Celtis occidentalis*) is happy in droughts, and doesn't mind intermittently wet feet.
- With an 800-year lifespan, the **Bur Oak** (*Quercus macrocarpa*) is a true legacy. Super drought-tolerant, yet fine with heavy seasonal flooding. Tricky to transplant, so use only small stock.
- **River Birch** (*Betula nigra*) is a good substitute for white-barked birches, as it is rarely attacked by bronze birch borers. Not drought-tolerant, but great for seasonally wet sites.



## ➤ PLEASE CONSIDER PLANTING

**Crabapples** (*Malus spp.*) now face higher disease pressure. But if you get disease-resistant varieties and plant only on full-sun sites, they can bring beauty for hundreds of years.

**Honeylocusts** (*Gleditsia triacanthos*) laugh at deicing salt, drought and occasional floods, and manage well in compacted soils too. Overplanted in some places, but tough as nails.

**Northern Catalpa** (*Catalpa speciosa*) is fairly drought-resistant; endures intermittent flooding.



# Questions?

