

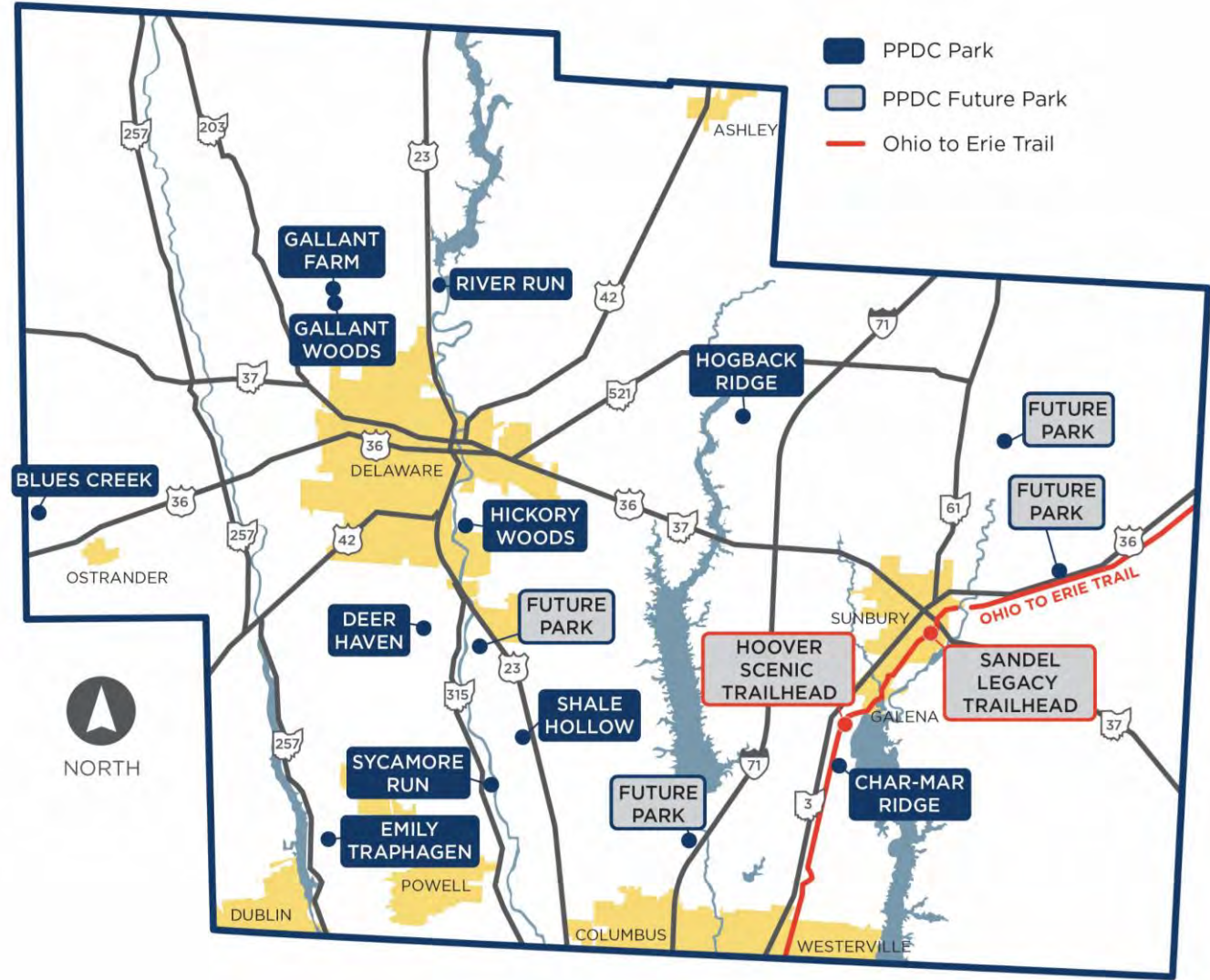
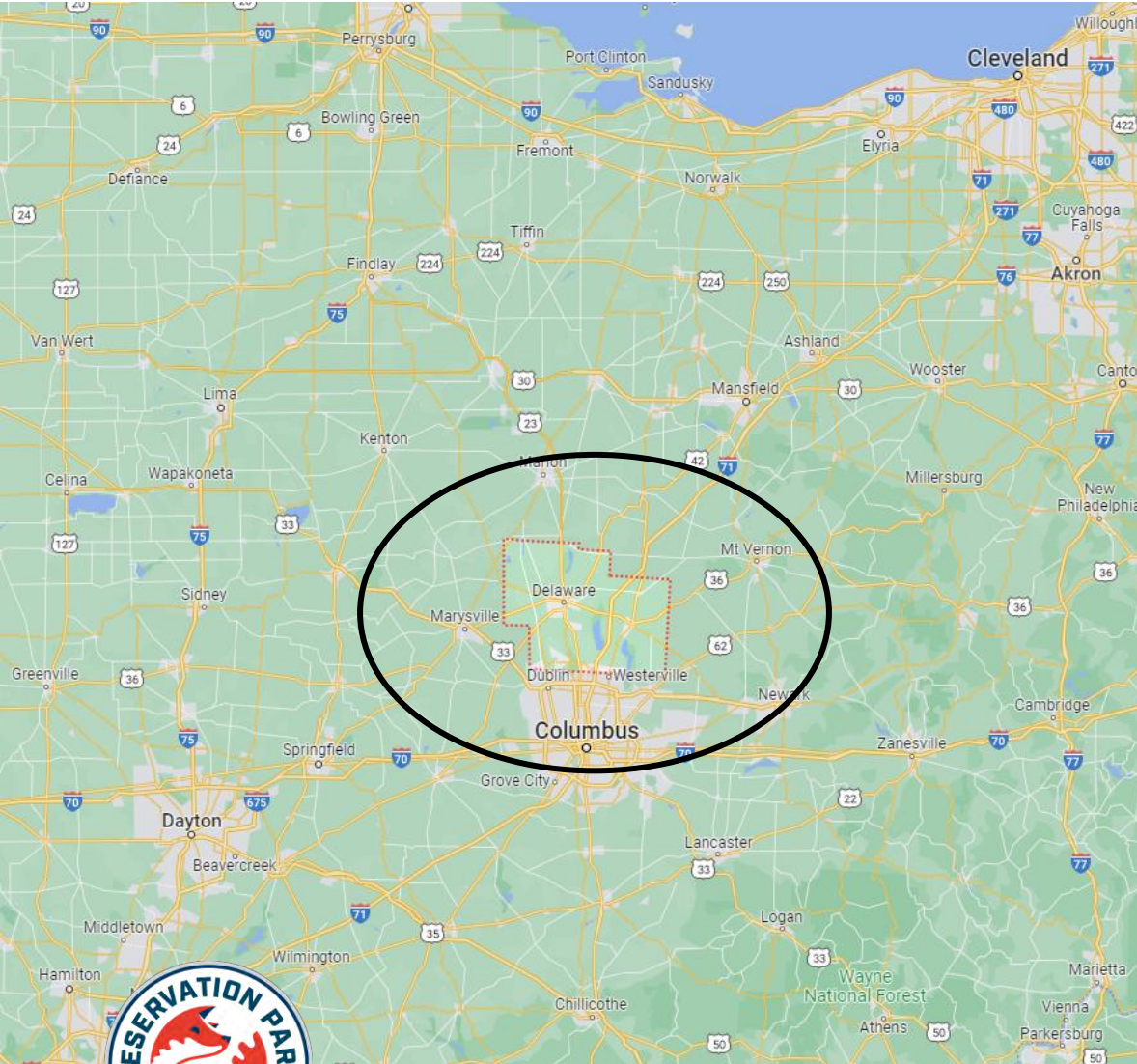


Tree Planting: Lessons Learned

Chris Roshon

Preservation Parks of Delaware County

Preservation Parks of Delaware County



The Natural Resources Department

2 Full-time Staff

+ 3 Summer Seasonal Employees

+ Volunteers

+ Assistance from Park Operations

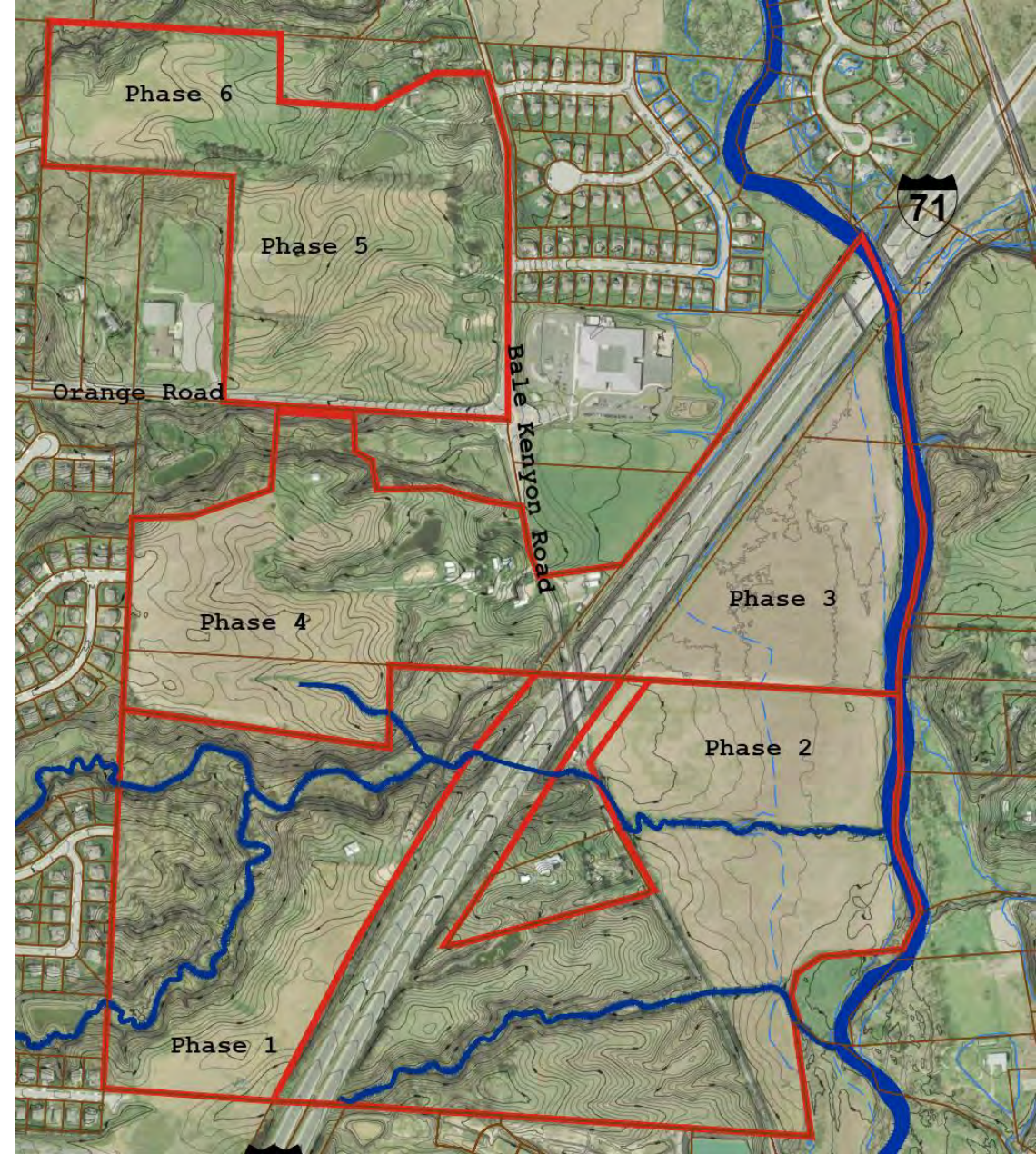


McCammon Creek Park

Tree Planting 2017-2022

110 acres of former field

- 80,000 Seedlings
- 870 Potted
- 1,075 B&B



Considerations when choosing sizes

Expense

Weight

Watering

Aesthetics

Planting Window



Comparing Options



Bareroot

- + Least expensive
- + Easy to handle
- + More species available
- + No watering
- Less visible
- Higher mortality?
- Short planting window



Potted

- + Immediate visual impact
- + Easier to handle than B&B
- Watering required
- Most likely to be blown over
- Animals dig in loose soil



B&B

- + Most impressive
- + Immediate impact
- + Stable once planted
- Expensive
- Heavy
- Watering required
- Least native species available



A Word on Benefits of Variety (Species and Size)



Larger Trees



Immediate Impact



Equipment Needed



Planting Height



Too Shallow



Too Deep



Warning: Use Care When Planting with an Auger



Regular watering is necessary (and difficult in remote locations)



Beware of Cultivars and Non-Natives



Seedlings

Spacing	6'x 6'	7'x 7'	8'x 8'	9'x 9'	10'x10'	11'x11'	12'x12'
Quantity/Acre	1,210	889	681	538	436	360	302

@ 6' spacing = \$0.75 each

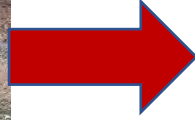
(\$907.50 for 1,210 trees/acre)
Materials only



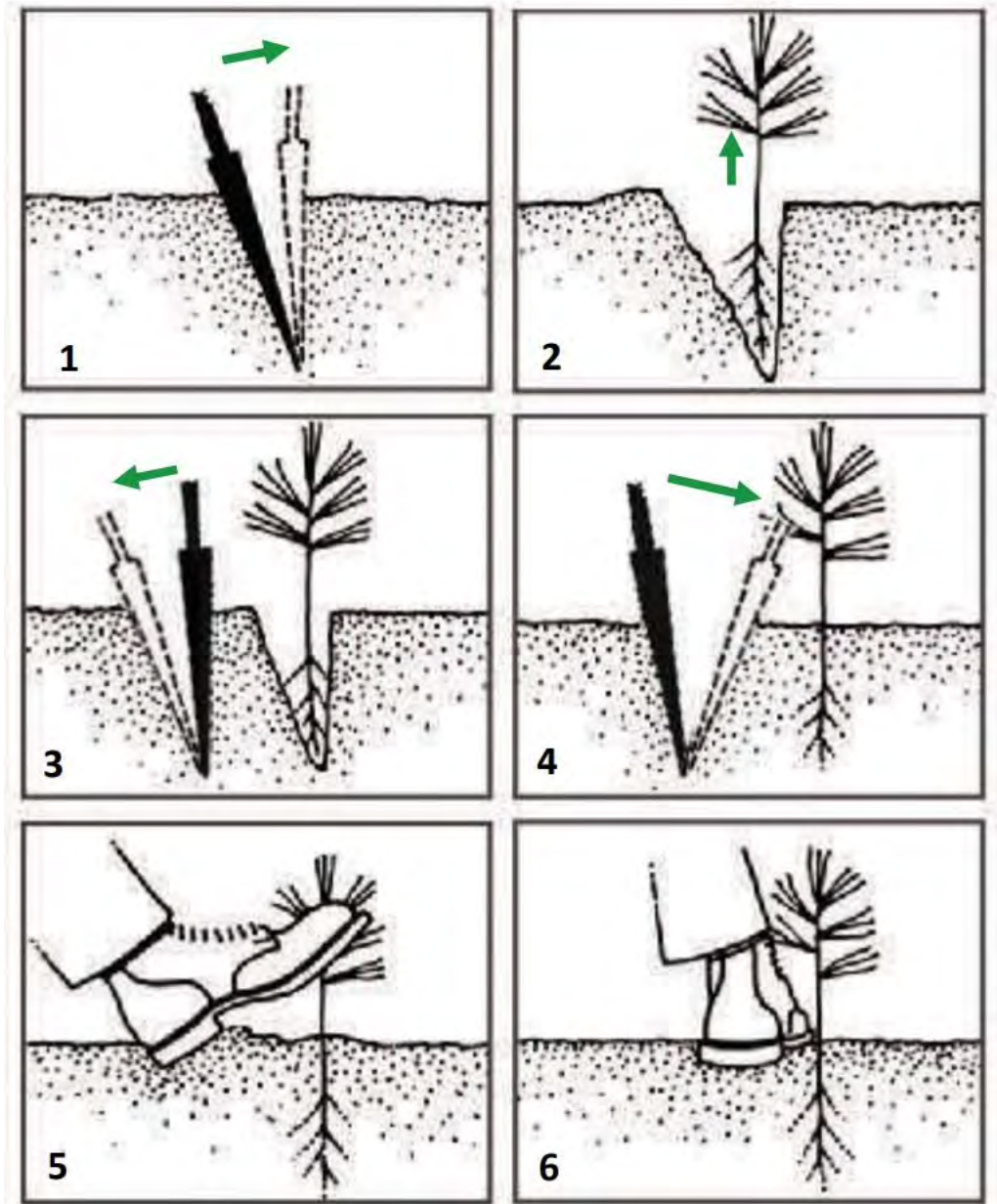
Ohio Buckeye



Heeling in seedlings until ready to plant



Proper Planting With a Dibble Bar



Correct Planting is **CRITICAL**



Tractor Planting (~4,000 seedlings per day)





What you want to see (furrows)



Avoiding Straight Rows



Seedling Planting Methods

Dibble Bar

- Plant 400 a day
- Works in saturated soil
- Works on uneven ground

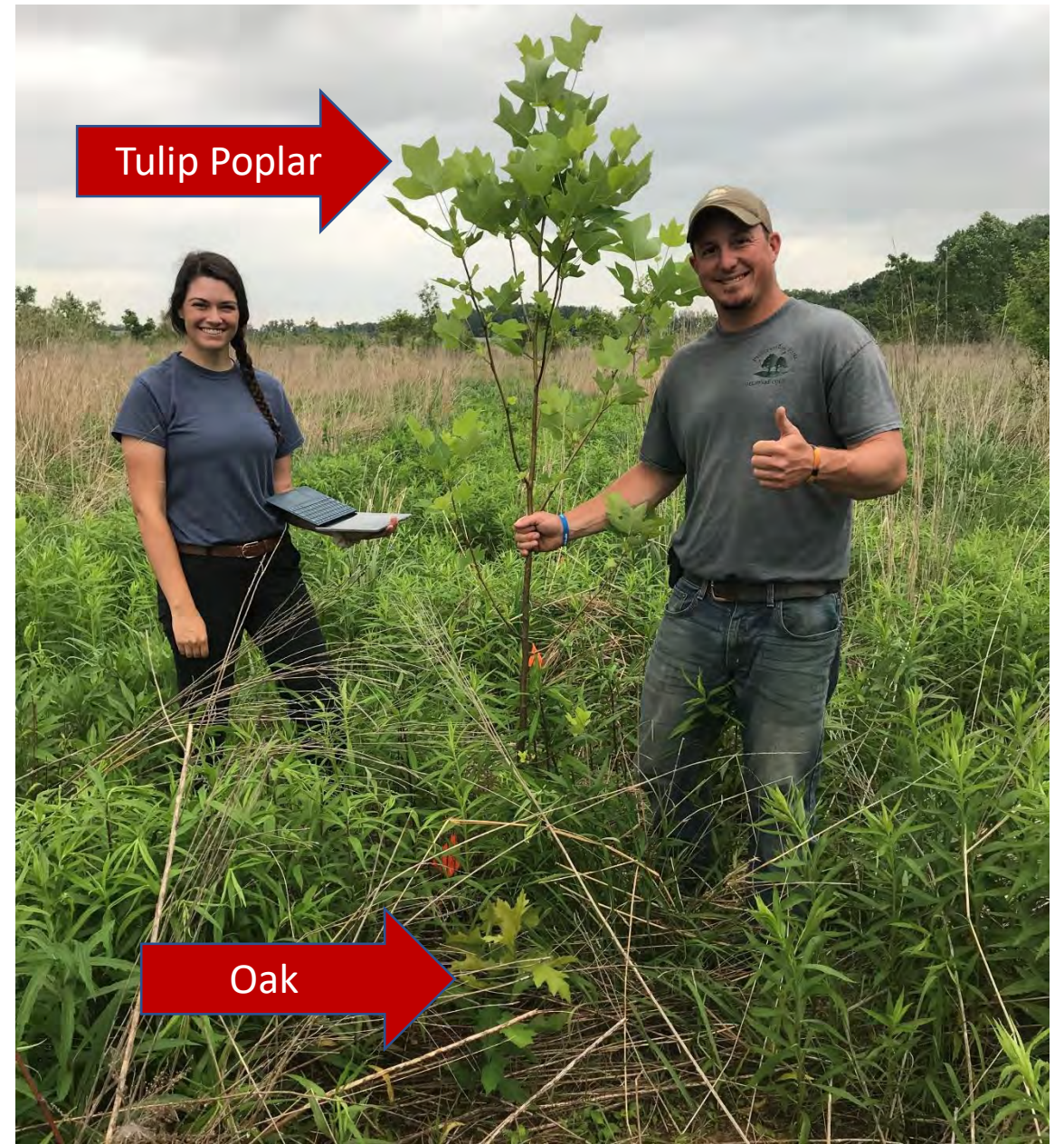
Tractor Planter

- Plant 4,000 a day
- Needs unsaturated soil
- Needs even ground

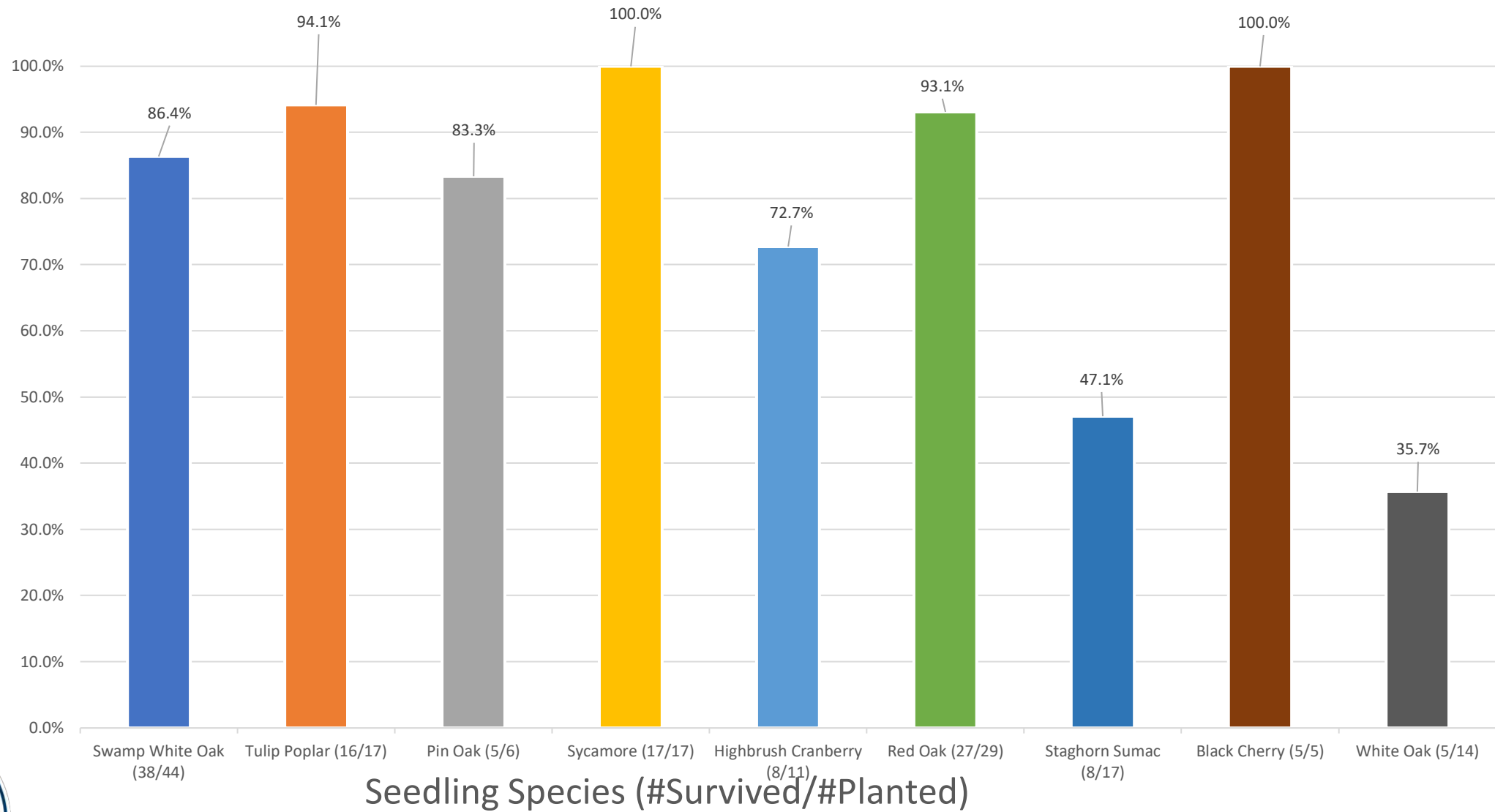


Growth Rates Vary by Species

Seedlings after
2.5 growing seasons



Survival Rate



Seedling Survival After 2 Growing Seasons

Seedlings after 10 Growing Seasons

Sycamore

Pin Oaks



Shale Hollow Park

Sycamore: Beyond the Water's Edge



Gallant Woods Park

...11 years later

Planted as
B&B

Planted as
Seedlings

Planted as
Seedlings



Photo Date: April 2021

River Run Park



River Run Park



2011



2022

River Run Park - 11 Years Later



March, 2011



October, 2022

Threats....

Meadow Voles, Invasives, Deer, Mowers...



Not Great



Tree Trunk Covers



Thank you!

Chris Roshon

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