



TREES UNION

Successful Gardener Series

Tree Planting and Maintenance in Union County

September 4, 2025

About your speaker



TREES UNION

- NCNLA Certified Plant Professional
- 11,000 trees planted or given away through programs in 7 states
- Advisory Committee for Monroe Parks and Recreation
- Founding Board Member and Planting Project Lead for Trees Union



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Session management



- During the session, please keep your phone or computer on mute
- For remote participants, please send in questions using the chat function
- Please hold questions until the end of the session
- You can contact me after the course as well:
 - johnthomasson@prodigy.net
 - 936-585-1235

Trees Union (treesunion.org)



TREES UNION

TreesUnion's mission is to preserve, grow, and diversify Union County's public and private tree canopy



TreesUnion: To Preserve, Grow, and Diversify Union County's Public and Private Tree Canopy

Today's Session



- Importance of effective tree planting and maintenance
- Planning
- Effective planting
- Tree maintenance
- Resources and tools
- Questions and answers



TREES UNION

Why do we care about trees?



TreesUnion: To Preserve, Grow, and Diversify Union County's Public and Private Tree Canopy

Why trees?



- **Because they're pretty**
- **Erosion control**
- **Air and water pollution mitigation**
- **Temperature and wind mitigation**
- **Sound and smell buffering**
- **Habitat**
- **Food**
- **Property value and livability**
- **Health and well being**

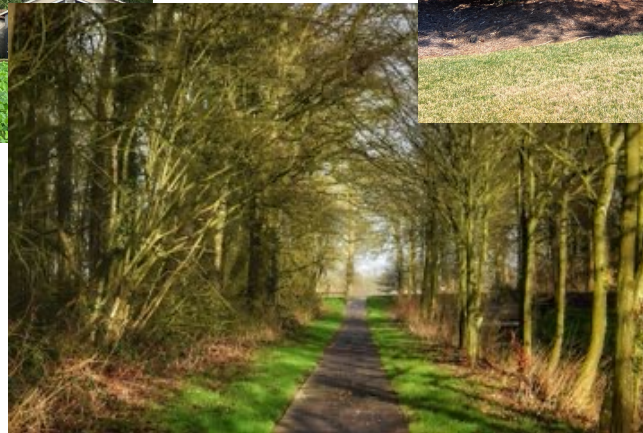
TREE PLANTING



TREES UNION

What are your objectives?

Shade? Erosion control? Fruit? Aesthetics? Buffer?



TREE PLANTING-The Plan



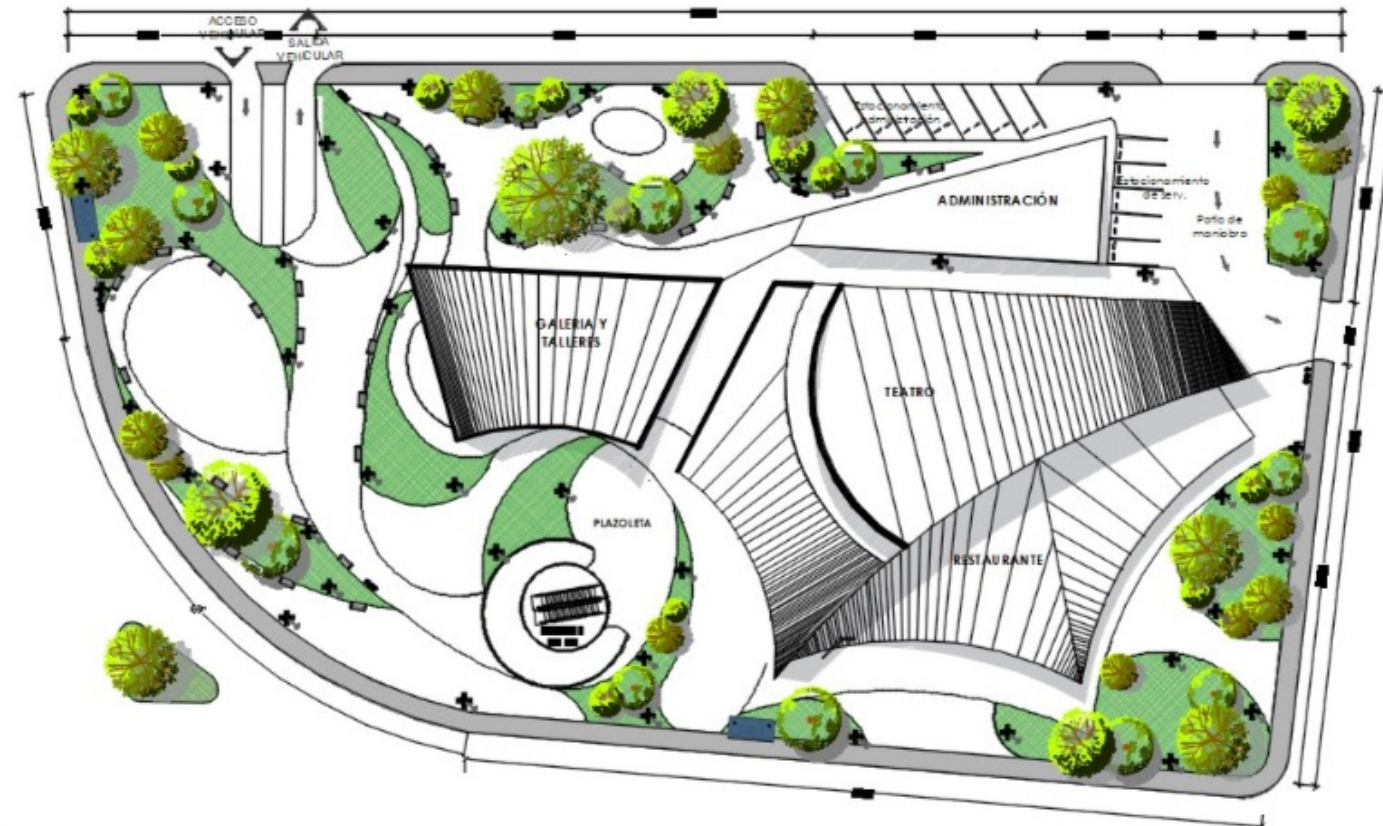
A professional plan includes:

- Property lines
- Easements and Right-of Ways
- Grading (contours)
- Hardscapes
- All plants
- Bed areas
- Plant list with details and pictures

TREE PLANTING-The Plan



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LANDSCAPE SYMBOLS					
ARBOLES y COMUNITAS			MATERIALES		
	Árbol: Picea Especie: Picea Medida: 15 cm	15		Árbol: Picea Especie: Picea Medida: 22 cm	22
	Árbol: Laurel Especie: Laurel Medida: 16 cm	16		Árbol: Picea Especie: Picea Medida: 11 cm	11
				Material: Pizarra Medida: 1 m x 1 m	1
				Material: Pizarra Medida: 2 m x 2 m	2

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TREE PLANTING-The Plan



For most homeowners, you need

- Your objectives
- A good satellite picture showing structures and existing plants
- Key dimensions
- Exposures
- Notes

TREE PLANTING-The Plan



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TREE PLANTING-Location



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Look up



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TREE PLANTING-Location



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Look Down-



CALL 811!!

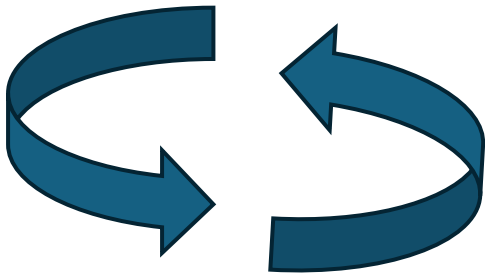


TREE PLANTING-Location



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Look Around



TREE PLANTING-Selection



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- **Purpose**
- **Species**
- **Size**
- **Quality**
- **Cost**
- **Transport**

Trees not recommended

- Invasives (Bradford Pear, Chinese Mulberry, Privett, Mimosa)
- Trees with pest issues (Ash, Leyland Cypress)

TREE PLANTING-Selection

Deciduous Trees



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Good



Bad



Things to look for

- No co-dominant leads
- U-branch unions
- Crown is 60% of tree height
- Size of tree and container
- Diseases
- Trunk should be undamaged
- For BnB, no more than 2" soil above main order root

TREE PLANTING-Selection

Quality: U-junctions



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TREE PLANTING-Selection

Split trunks/sharp-angled branches



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**Sharp-angled
connections
are not
connections
at all.**

TREE PLANTING-Selection

Evergreen Trees



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Things to look for

- Crown is at least 80% of tree height
- Size of tree and container
- Diseases

TREE PLANTING-Transport



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TRANSPORT & HANDLING

Safety:

- Lift with your legs, not your back
- Use equipment as you can

Additionally:

- Protect the roots, stems, and foliage during transport
- Shield the top of the plant from wind
- Wrap trunks with paper or plastic, just during transport
- Tie tops of plants to help prevent limb breakage



TREE PLANTING



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- Hole as deep as the bottom of the container to the flare.
- Hole 2-3 times as wide as the container



TREE PLANTING



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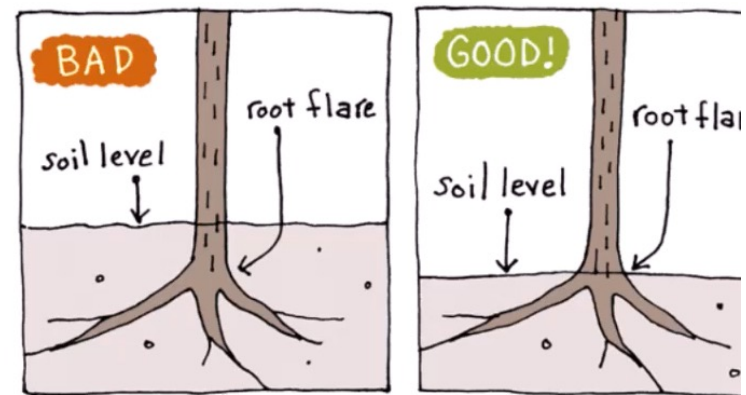
PLANTING

Prepping an entire bed is better than just digging a single hole when possible!

Your planting hole should be dug 2 to 3 times as wide as the rootball!

Planting Depth Determination

- Find trunk/root flare
- Goal = plant the first main order root just below the soil surface, even if the flare is not present



NC Certified Plant Professional Prep Course



HORTICULTURE
TECHNOLOGY

TREE PLANTING



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Cut girdling roots



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TREE PLANTING



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What should you add to the soil?

- Nothing. Just put back the native soil
- Research shows that adding a lot of organic matter does not affect establishment
- Use a shovel to chop up the backfill and reduce large air pockets
- Do not over water

TREE PLANTING



PLANTING

Bare Root Trees*

- Does not need to be as deeply, but might need to be wider
- Must keep them moist and cool prior to planting
- Tamping may be necessary
- Water well
- Mulch



NC Certified Plant Professional Prep Course



HORTICULTURE
TECHNOLOGY

TREE PLANTING

Pruning at planting



- Remove dead, damaged, or diseased parts
- Restore proper structure
- Remove intervening branches
- Remove co-leaders

TREE PLANTING

Staking



90% of the time, staking is not necessary

- If it wobbles and has a heavy leaf canopy, you need to stake it
- If not done correctly, it is better not to stake
- Can lead to girdling
- Tie loosely
- Use a soft tie or strap
- Remove after tree is established (6 months)

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Staking



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TREE MAINTENANCE

Mulching



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TREE MAINTANANCE

Mulching



Why mulch?

- Weed control
- Retaining moisture in the soil
- Erosion control
- Mulch breaks down and fertilizes the tree
- Mulch keeps the lawn mowers away from the trunk

TREE MAINTENANCE

Mulching



How to mulch:

- 2-4 inches of mulch out to the edge of the canopy ideally
- Keep the mulch away from the trunk

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**Mulch
Volcano:
DON'T DO
THIS!!!**



TREE MAINTENANCE

Watering



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- Thoroughly water plants at installation
- For every 2" of trunk diameter, apply 2-4 gallons every 5 days if there is no rain
- Use a soil probe to determine moisture



TREE MAINTENANCE

Pruning-Why?



Pruning

- Build a strong structure
- Eliminate co-leaders and intervening limbs
- Remove broken or diseased sections
- Control size, stunting
- Esthetics

TREE MAINTENANCE

Pruning-Guidelines



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Pruning

- At installation
- Annually, preferably during dormancy
- Pruning budget: Never $> 1/3$ of the canopy
- Avoid cutting limbs that are over $1/3$ the size of the main limb
- Prune just above a node

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Pruning
Example



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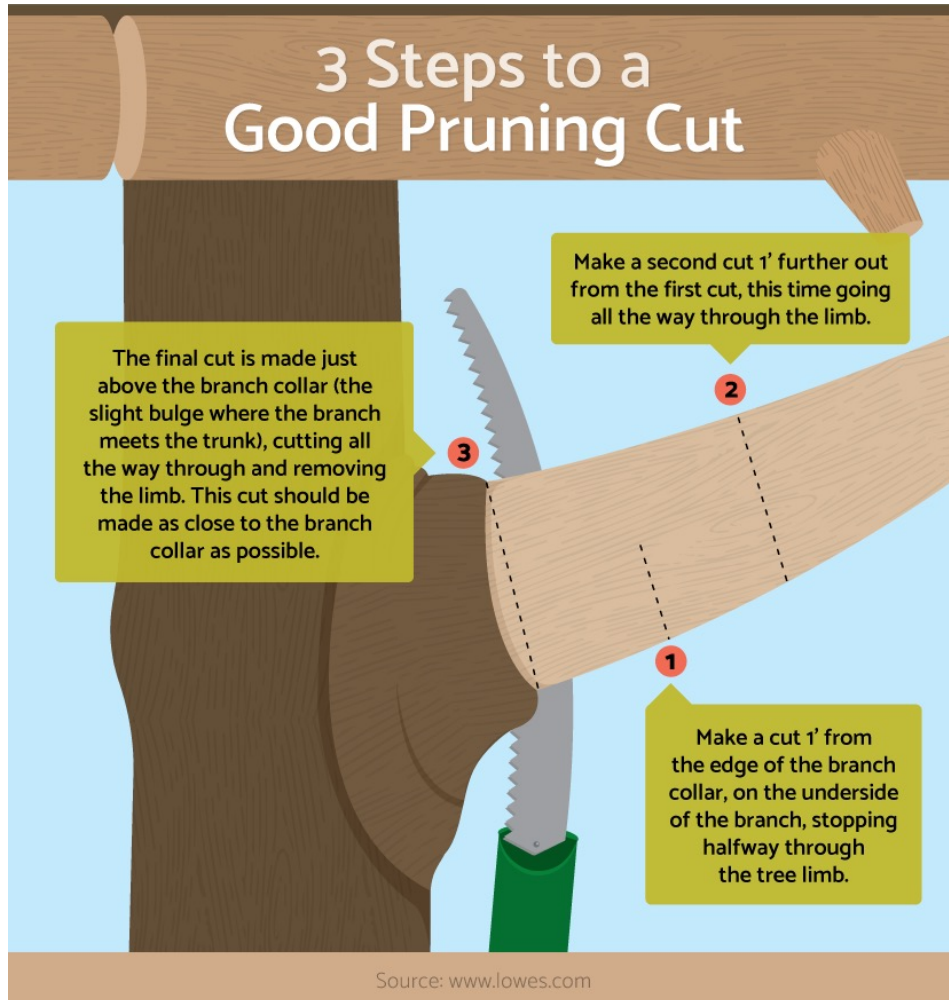
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Pruning larger branches



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Use the 3-cut method for pruning large branches.



Never, ever, EVER, top trees.



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Fertilization



- A tiny bit of SLOW RELEASE fertilizer at installation OUTSIDE the root ball is OK
- After that, if your tree is suited to the site no fertilization is necessary
- Overfertilizing can cause problems with pests or burning

TREE MAINTENANCE

Integrated Pest Management



- Trees are usually treated aggressively by the grower so they look perfect.
- After installation, in general:
 1. Almost all trees are going to show some signs of pests. There are 400 caterpillars that feed on oak leaves
 2. Usually, if you've selected a hardy tree, it's best just to leave it alone
 3. If you are concerned, take a picture or a sample and contact your extension agent

RESOURCES



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- Resources/tools
 - TreesUnion.org
 - Arborday.org
 - Union County Cooperative Extension
<https://union.ces.ncsu.edu/urban-forestry/>
 - North Carolina Extension Gardener Plant Toolbox
plants.ces.ncsu.edu
 - Union County GIS
www.unioncountync.gov/government/departments-f-p/gis-mapping
 - Learn more: <https://ucgov.info/4LL2YpY>

RESOURCES



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- Resources/tools
 - NAIP naip-usdaonline.hub.arcgis.com
 - INaturalist
 - ITree www.itreetools.org

What else?



Q & A