OG&E

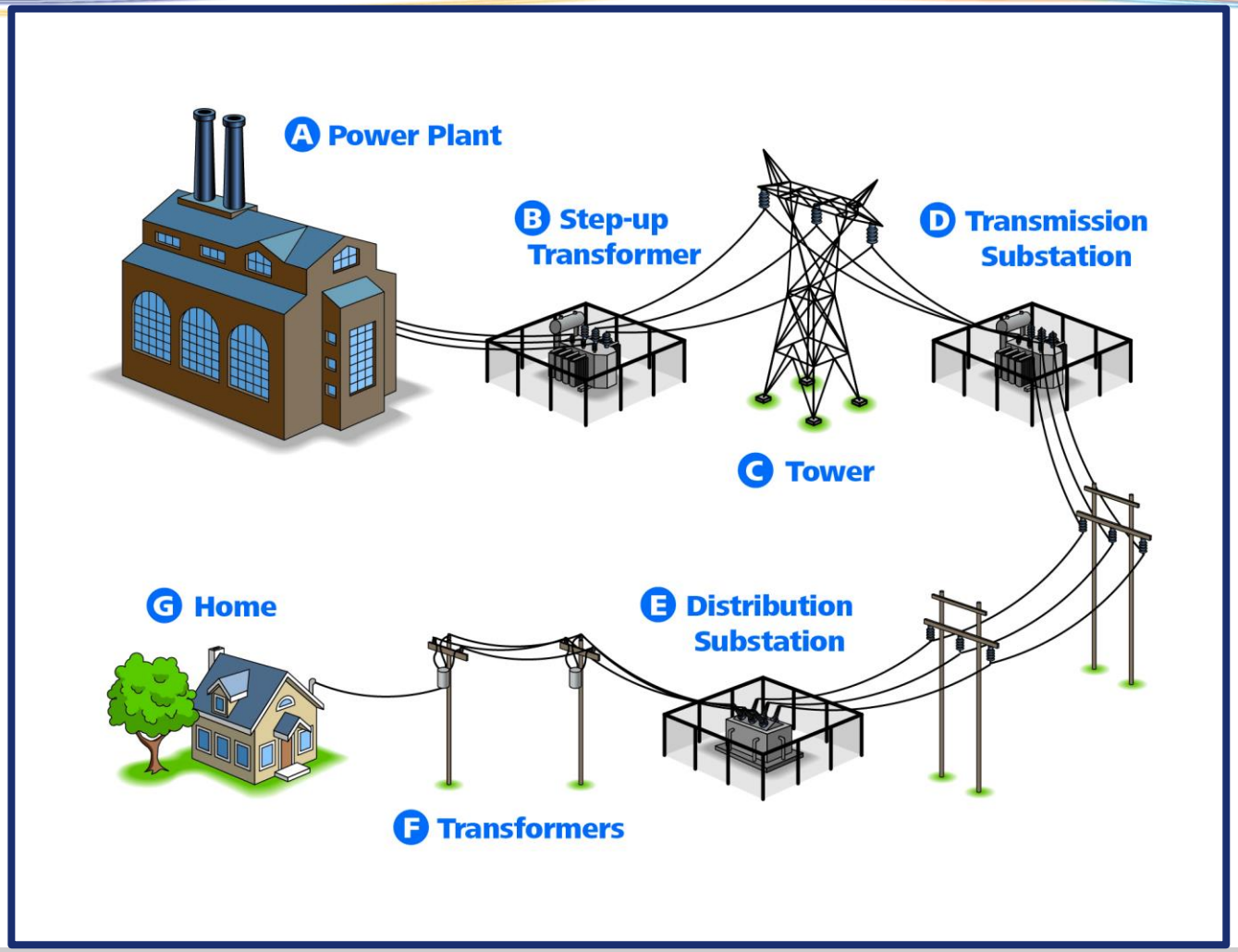
We Energize Life

Vegetation Management

Topics Covered

- Power Distribution
- Maintenance – None Maintenance & Storm Response
- Veg Standards
- Veg Mgmt Innovations
- Right Tree - Right Place
- Safety

Power Distribution



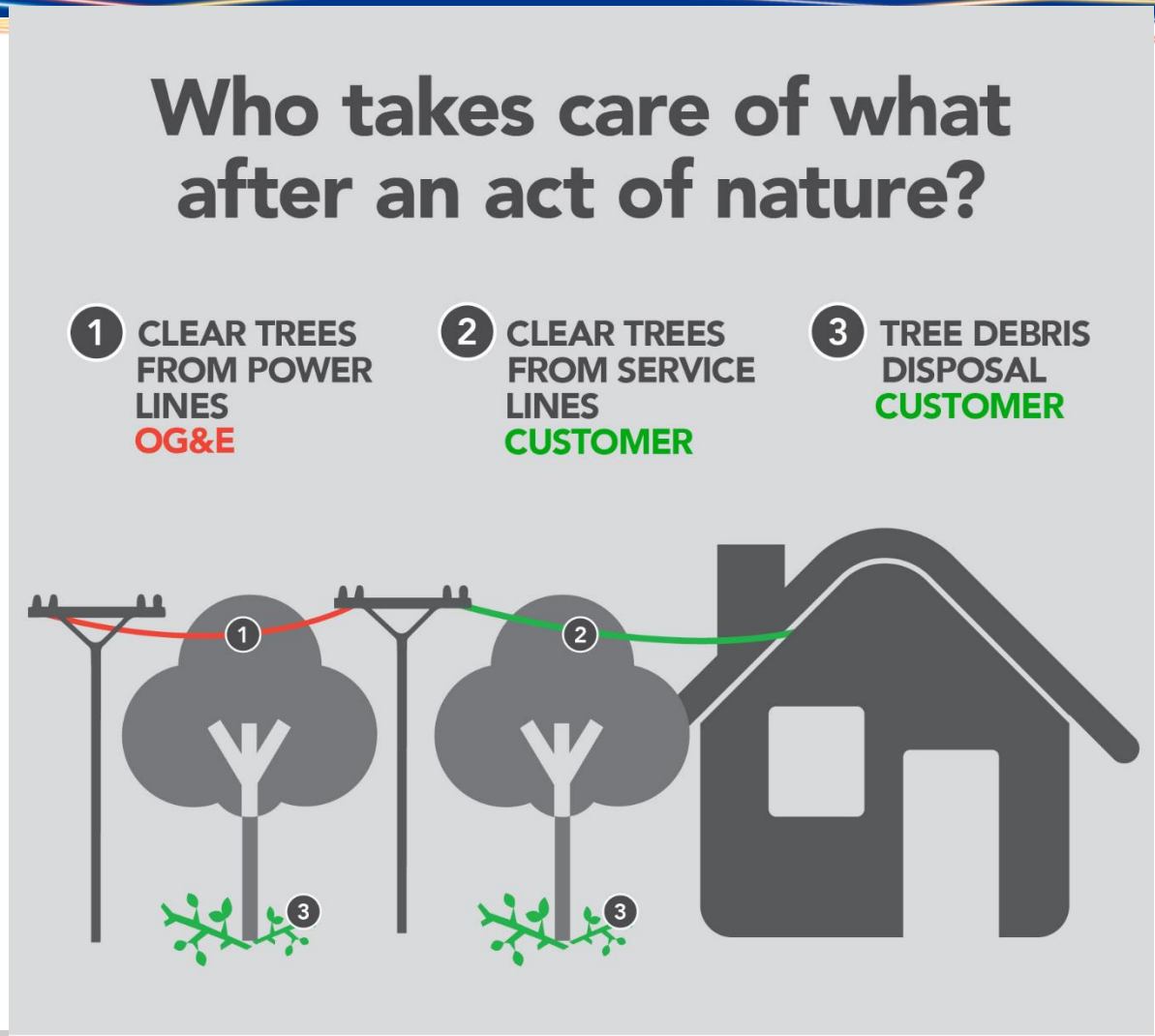
Maintenance - None Maintenance

- 4-year Maintenance Plan (Cycle)

- None Maintenance –
  - Special Projects (Capital Improvements)
  - Storms

Veg Standard Brush Policies

- Routine maintenance (tree & line work) - 1
  remove brush and leave wood cut into firewood lengths
- After hours Outages - 1
  same as routine maintenance
- Large Area/Regional Storms – 3
  vegetation is left at the curb
  notification on events



Planning/ Notification

- Planning each work location

  DRG, ECI, ACRT

- Door hanger

- Automated Call

Clearing the lines today for a **safe and reliable tomorrow**

To control the estimated 2.3 million trees growing near overhead power lines throughout our service area, we prune and remove trees on a 4-year schedule with certified line-clearance arborists. We manage vegetation by physically pruning or removing undesirable vegetation. We may also apply environmentally friendly herbicides and use tree growth regulators, which slows the growth rates of trees adjacent to power lines while maintaining the health of those trees.

Some of this work must be done on your property. This notice requires no response from you. However, if you would like to discuss the work being performed or need to make arrangements for locked gates or pets, please call the number below.

Business Card
OR

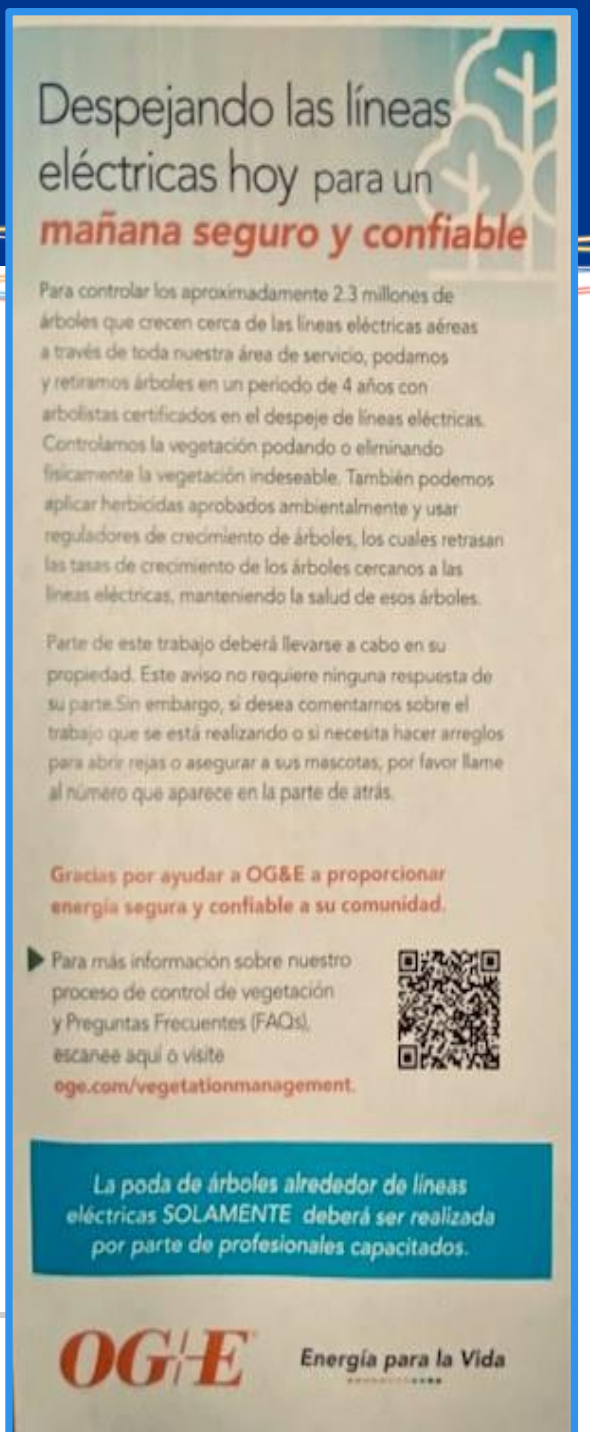
Contact Name: _____
Contact Number: _____

Thank you for helping OG&E provide safe and reliable power to your community.

For more information about our vegetation management process and FAQs, scan here or visit oge.com/vegetationmanagement.

Pruning trees around power lines should ONLY be completed by trained professionals.

OG&E We Energize Life



Despejando las líneas eléctricas hoy para un **mañana seguro y confiable**

Para controlar los aproximadamente 2.3 millones de árboles que crecen cerca de las líneas eléctricas aéreas a través de toda nuestra área de servicio, podamos y retiramos árboles en un periodo de 4 años con arbolistas certificados en el despeje de líneas eléctricas. Controlamos la vegetación podando o eliminando físicamente la vegetación indeseable. También podemos aplicar herbicidas aprobados ambientalmente y usar reguladores de crecimiento de árboles, los cuales retrasan las tasas de crecimiento de los árboles cercanos a las líneas eléctricas, manteniendo la salud de esos árboles.

Parte de este trabajo deberá llevarse a cabo en su propiedad. Este aviso no requiere ninguna respuesta de su parte.Sin embargo, si desea comentarnos sobre el trabajo que se está realizando o si necesita hacer arreglos para abrir rejas o asegurar a sus mascotas, por favor llame al número que aparece en la parte de atrás.

Gracias por ayudar a OG&E a proporcionar energía segura y confiable a su comunidad.

Para más información sobre nuestro proceso de control de vegetación y Preguntas Frecuentes (FAQs), escanee aquí o visite oge.com/vegetationmanagement.

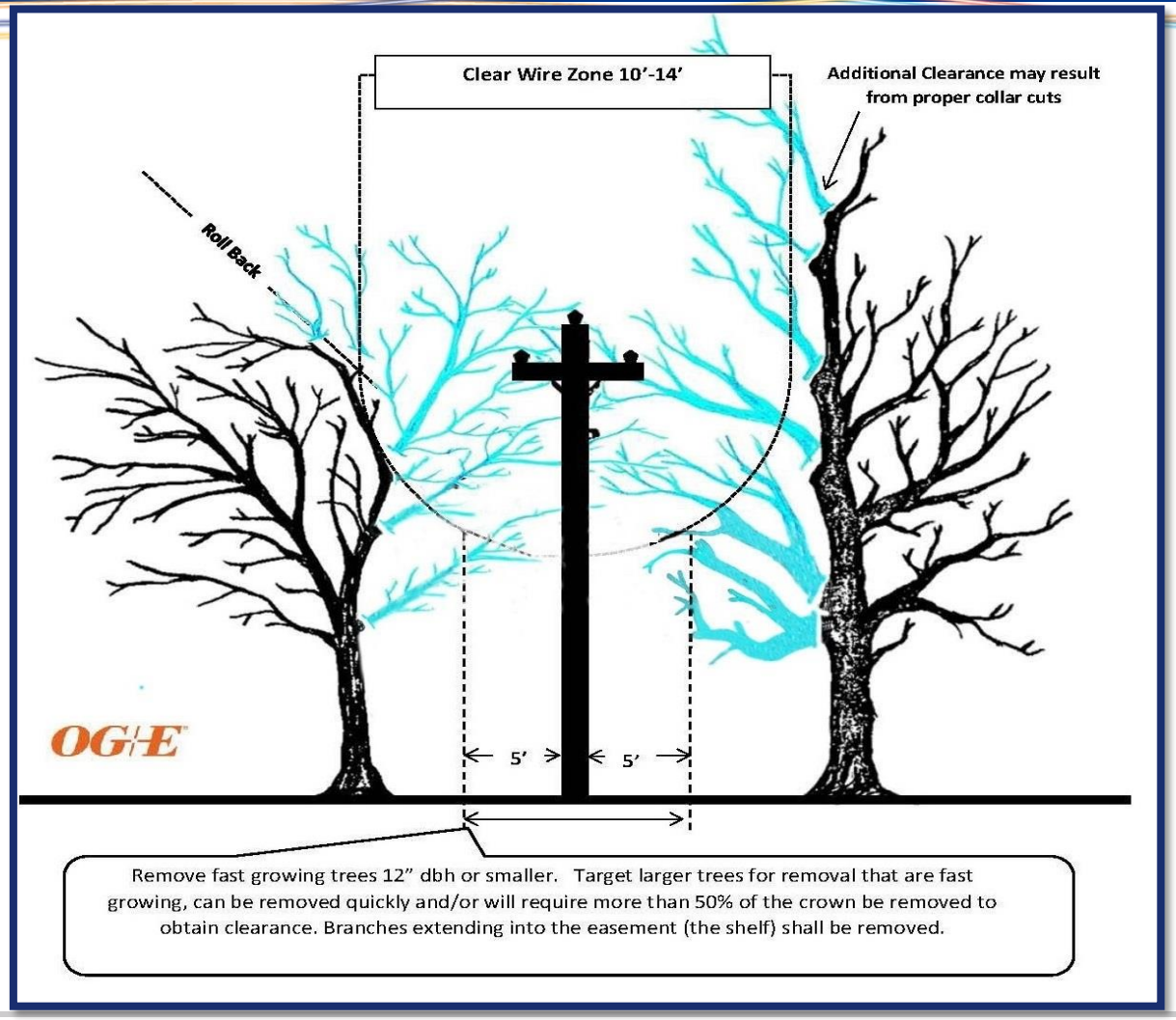
La poda de árboles alrededor de líneas eléctricas SOLAMENTE deberá ser realizada por parte de profesionales capacitados.

OG&E Energía para la Vida

Veg Standard for Trims & Removals

- Hackberry
- Elm
- Mulberry
- Silver Maple
- Cottonwood
- Willow

- Targeting 12” or less



Veg Standard for Trims & Removals

Veg Standard for Trims & Removals

Veg Standard for Trims & Removals

Veg Standard for Trims & Removals

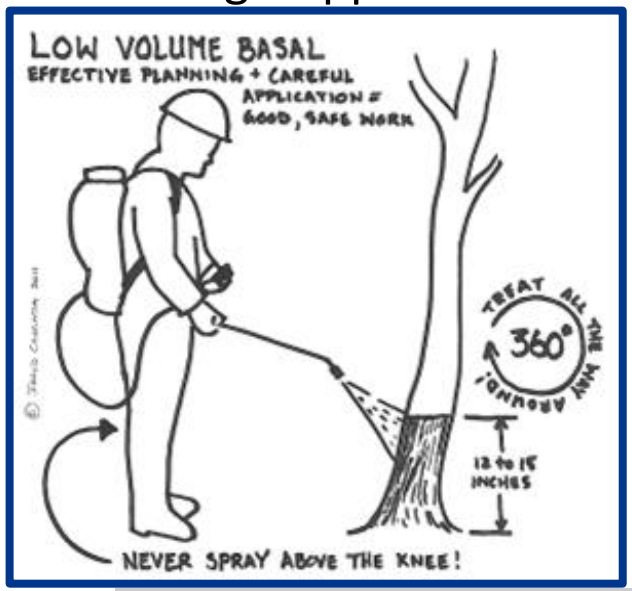
- Cannot remove stumps in the fence

  Potential for fence damage
  Potential Equipment damage
  Safety concern

- Treat stumps

Innovations - Herbicides

- Rural unmaintained areas and areas… industrial areas etc. - foliar
- In town-maintained areas basal- TGR
- Strategic application



Innovations - Tree Growth Regulators (TGR's)

- **Tree Growth Regulators (TGR) are specially developed compounds applied to a tree to gently reduce growth.**
  - Hormone that causes cell elongation
  - Cell division still occurs, but the new cells don't elongate.
  - Same number of leaves and internodes just compressed into a shorter length
- **Reduced diameter growth of the trunk and branches**
- **Reduced growth and biomass without significantly altering its appearance.**

Treated

Primary Benefits

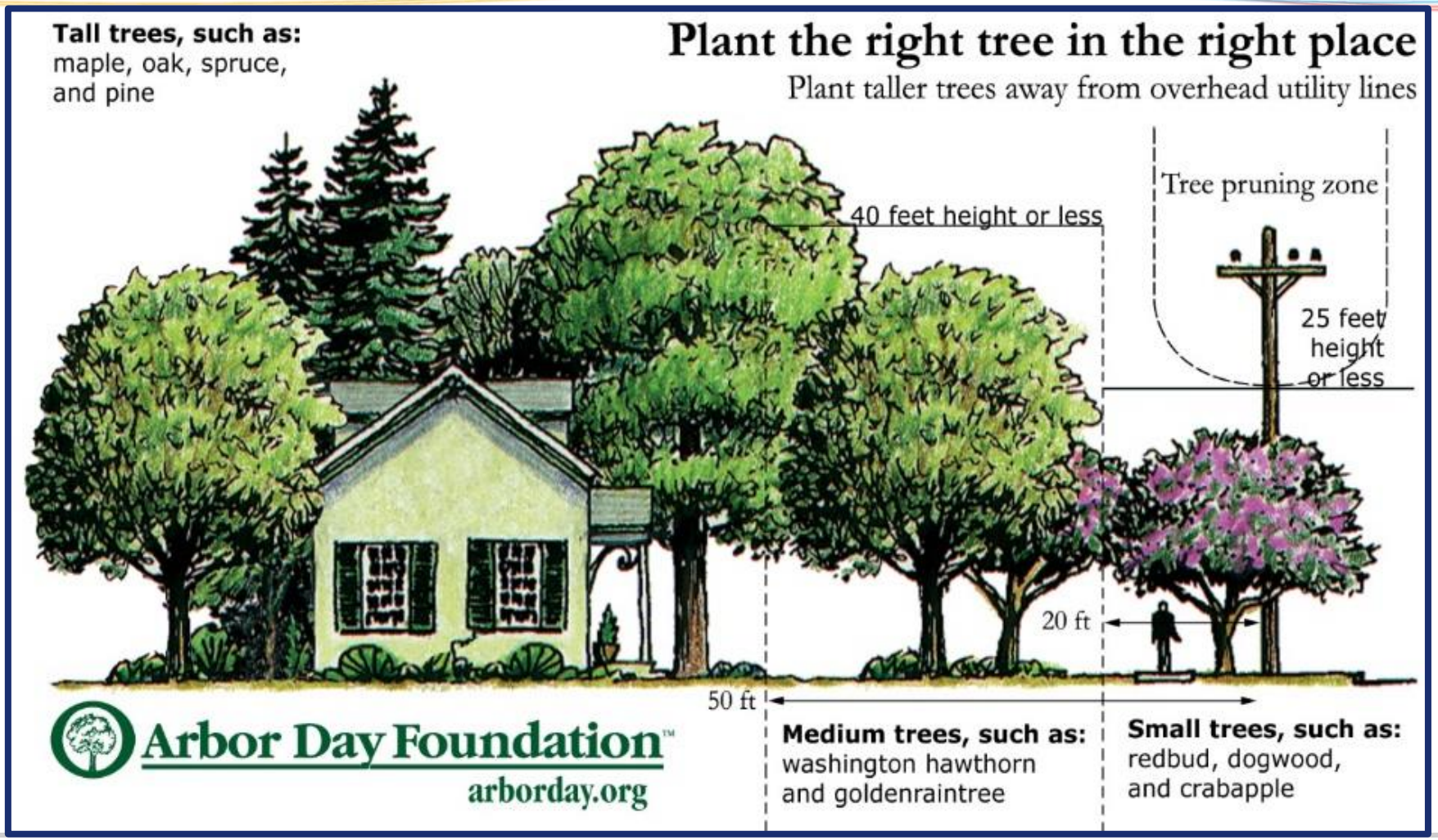
- Reduced growth (height)
- Reduced fruit growth
- Reduced radial growth
- Reduced pruning cycle
- Increased drought resistance
- Increased defenses

Photos courtesy of Mark Bays

Primary Benefits

- Soil applied
- Reapplied every 3 years
- Does not move in soil
- Tree ID tag

Right Tree, Right Place



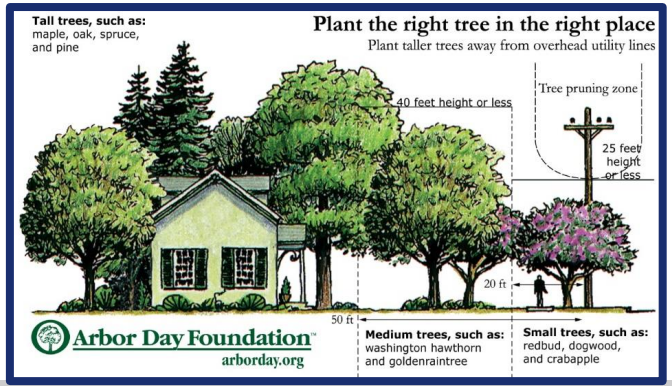
Wrong Tree, Wrong Place

Hackberry

Mature Height 40-60 Feet

Mature Spread 40-60 Feet

Fast Growing

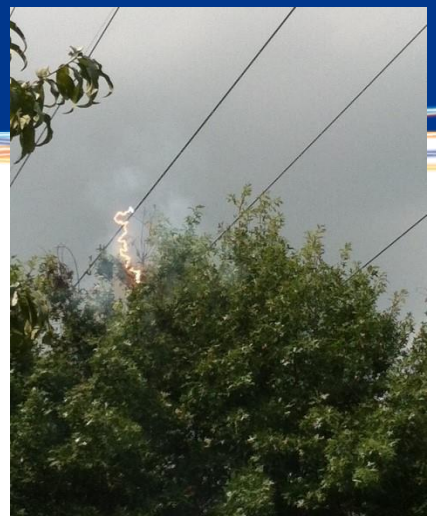


Right or Wrong Tree?

Issues caused by situation

- Decreased reliability
- Increased safety concern for workers
- More time to trim & more debris for clean-up

Utility Friendly Tree Species

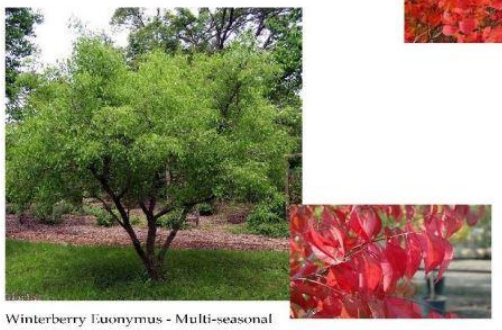


Common Lilac - Clay Soil, Showy Flower

Smoke Tree -Drought and Heat

Chaste Tree - Drought, Heat, Long Bloom Season

Crepemyrtle - Multi-seasonal



Winterberry Euonymus - Multi-seasonal

Oklahoma Redbud - Native Understory Tree

Desert Willow - Drought Tolerant

Horstman Dwarf Blue Atlas Cedar - Unusual Small Conifer, Foliage

Serviceberry - Fragrant Flower

Yaupon Holly - Native Broadleaf Evergreen

Shantung Maple - Heat Tolerant

Redbud	Crape Myrtle
Dogwood	Crabapple
Hawthorn	Desert Willow
Serviceberry	Amur Mackia
Chaste tree	Shantung Maple
Yaupon Holly	Mexican Plum
Winterberry	Star Magnolia
Smoke tree	Chinese Fringe tree
Teddy Bear Magnolia	Sumac (Winged, Smooth or Flameleaf)

Safety

- Line clearance certified arborist
- Private arborist
- Side work or previous employment with utility clearance company
- Reason for 10’ of clearance

Minimum Approach Distance

M.A.D. For Qualified Line Clearance Arborists (QLCA)

ANSI Z133.2017

Voltage Range (Phase-to-Phase)	Elevation Sea Level to 5,000 ft[1] Phase-to-Ground	Elevation 5,000 to 10,000 ft[1] Phase-to-Ground
kV	ft-in	ft-in
0.050 to 0.300	*Avoid Contact*	*Avoid Contact*
0.301 to 0.750	1-02	1-04
0.751 to 5.0	2-03	2-06
5.1 to 15.0	2-03	2-07
15.1 to 36.0	2-08	3-01
36.1 to 46.0	2-11	3-04
46.1 to 72.5	3-06	4-00
72.6 to 121.0	3-11	4-06
121.1 to 145.0	4-06	5-02
145.1 to 169.0	5-01	5-09
169.1 to 242.0	7-00	7-11
242.1 to 362.0	11-09	13-06
362.1 to 420.0	14-08	16-09
420.1 to 550.0	17-06	20-00
550.1 to 800.0	23-09	27-02

[1]From 29 CFR 1910.269 Tables R-6 & R-7 altitude corrected (R-5)

Unqualified Workers

Nominal Voltage (Phase-to-Phase)[2]	Minimum Approach Distance (MAD)[2]
kV	ft-in
50.0 and less	10-00
50.1 to 72.5	11-00
72.6 to 121.0	12-08
138.0 to 145.0	13-04
161.0 to 169.0	14-00
230.0 to 242.0	16-08
345.0 to 362.0	20-08
500.0 to 550.0	26-08
785.0 to 800.0	35-00

[2]Exceeds phase-to-ground per 29 CFR 1910.333

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