

# Introduction to Tree Diagnosis

Keith Babberney, TX-0236BTM

Forester, Community Tree Preservation Division



# Keith Babberney

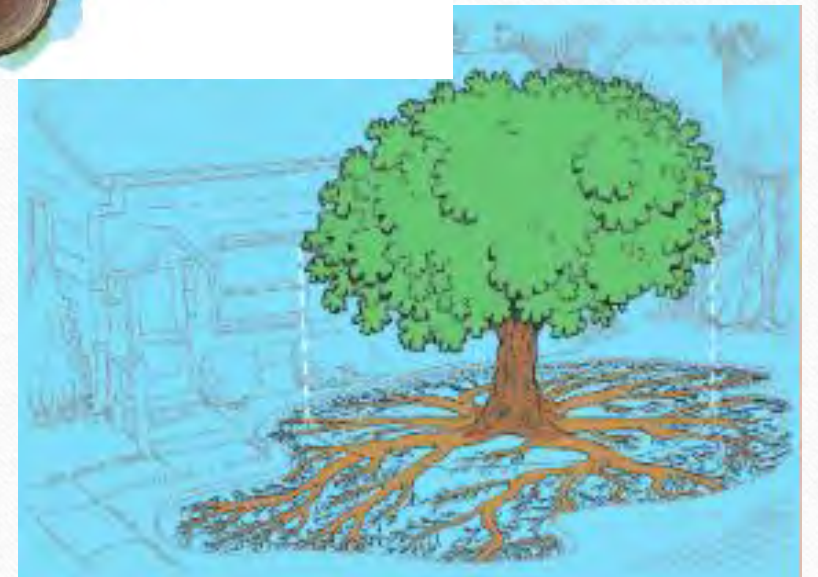
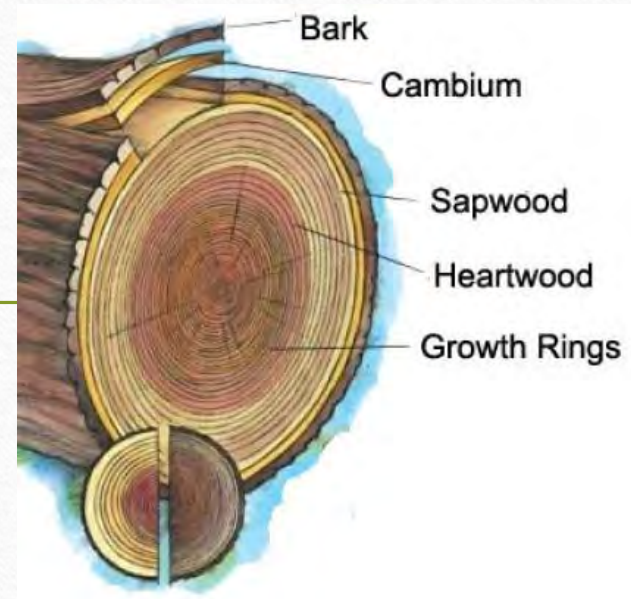
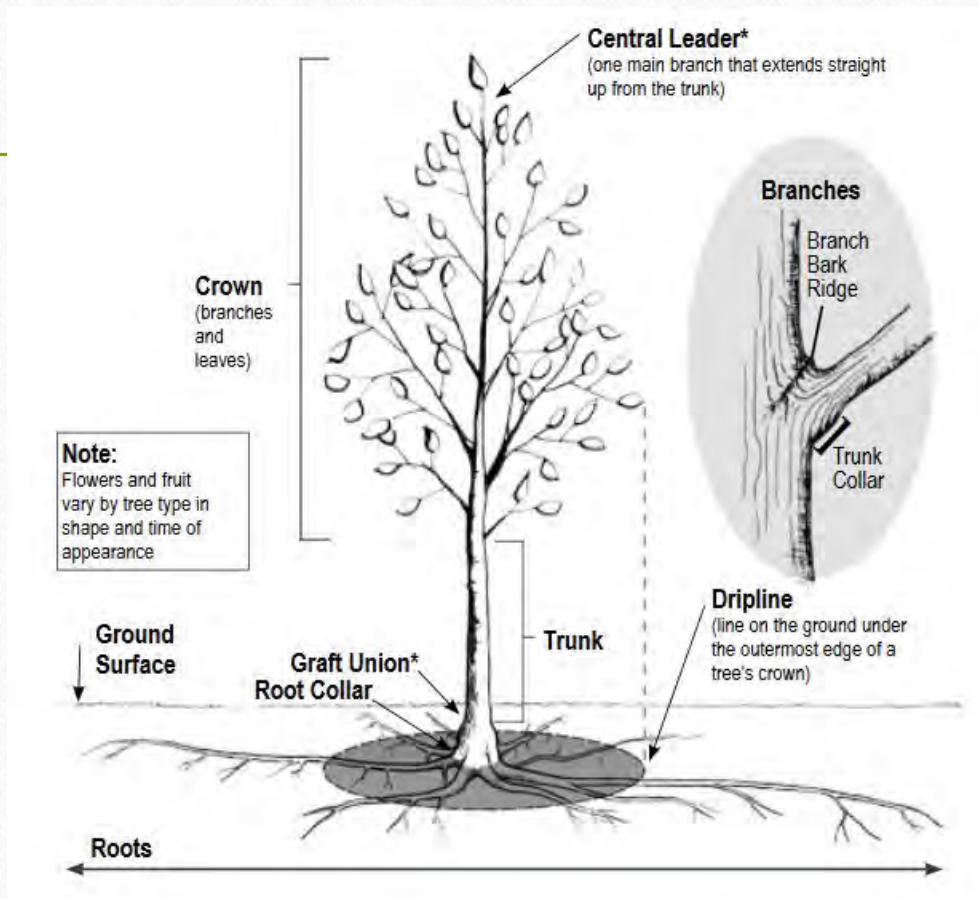
- Board Certified Master Arborist
- Municipal Specialist
- Certified Tree Worker / Climber Specialist
- [Keith.Babberney@austintexas.gov](mailto:Keith.Babberney@austintexas.gov)



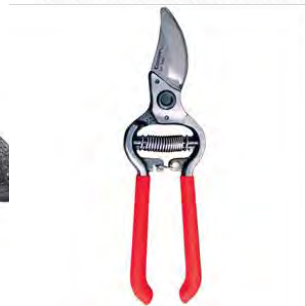
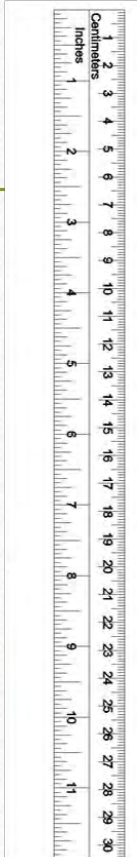
# Avoid problems by keeping trees healthy



# Tree Biology



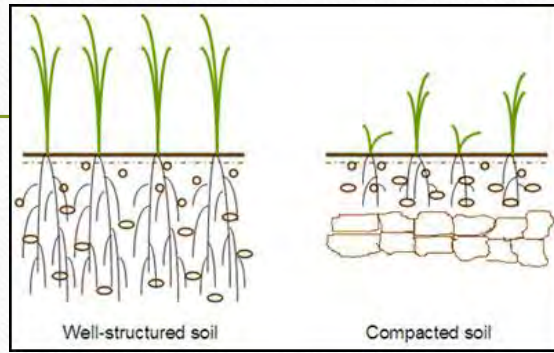
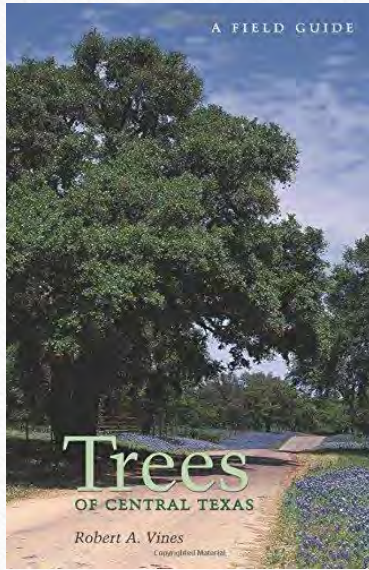
# Diagnosis Tool Kit



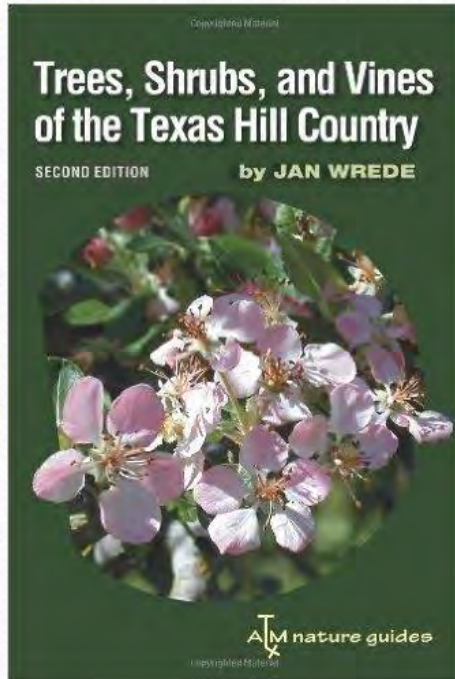
Google



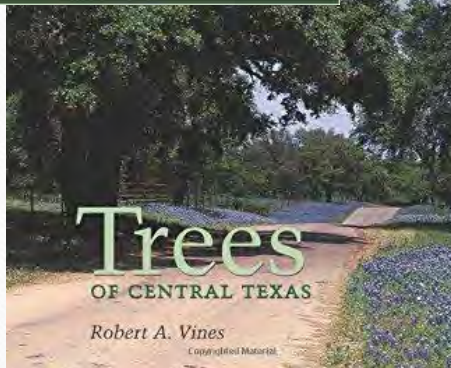
# Steps to diagnosis

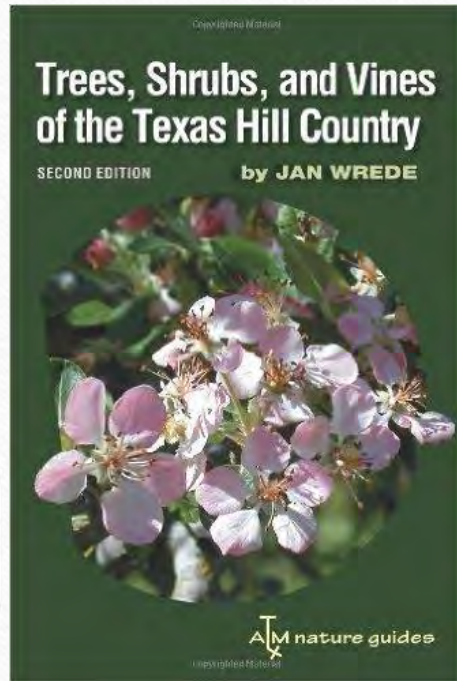


# Identification



- Most problems affect only one genus or species.





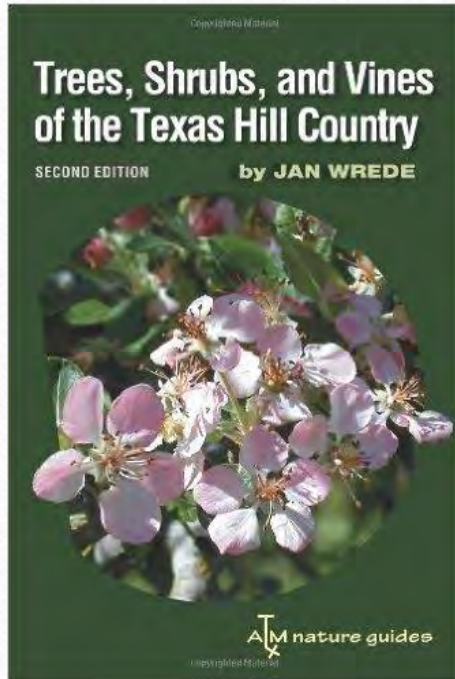
# Identification

- Most problems affect only one genus or species.
- Knowing local species helps recognize patterns.





# Identification



- Most problems affect only one genus or species.
- Knowing local species helps recognize patterns.
- Problems often recur annually.



# Patterns

- One plant or multiple?
- One species or multiple?
- Isolated or grouped?
- Progression?



# Site Conditions

- Soil Characteristics
- Drainage
- Hardscape
- Recent changes
- Irrigation
- Sunlight
- Circulation



# Poor Drainage



# Hardscape Issues



# Roots and Root Crown



Photo by Bartlett Tree Experts



# Root Crown Issues

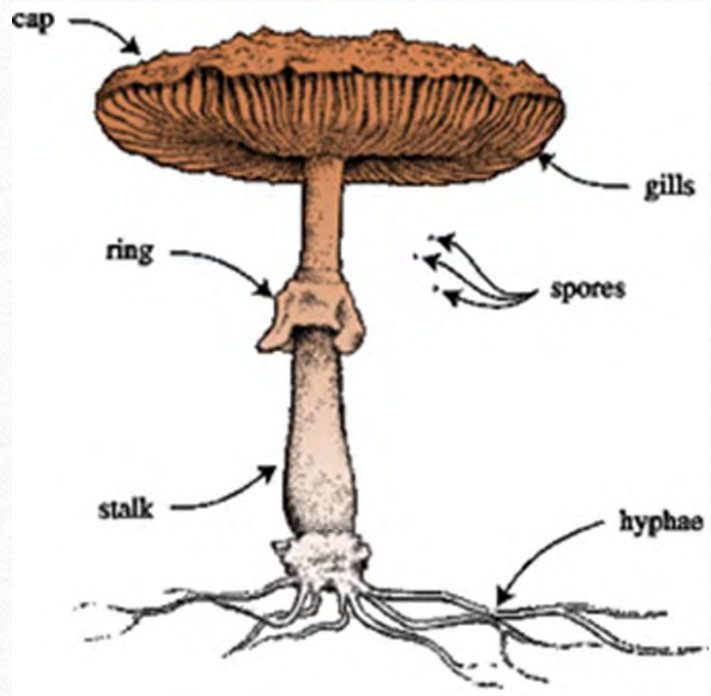


# Girdling Roots

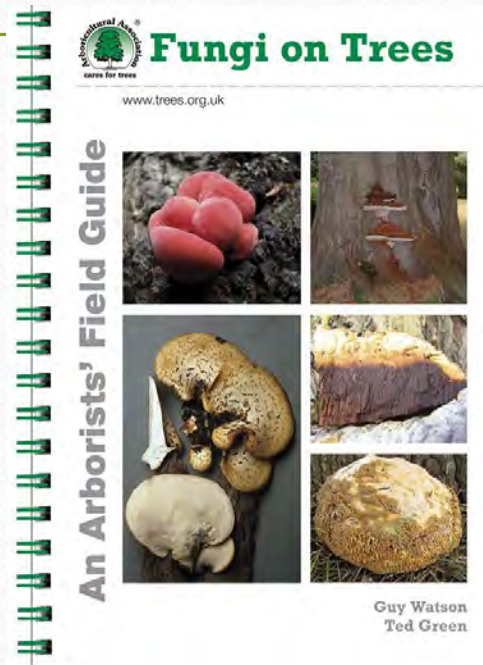
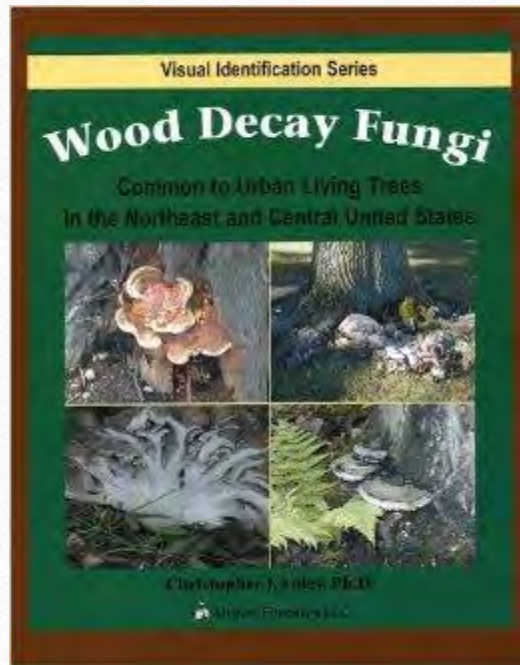




# Fungus



# Fungus Identification



- Wood Decay Fungi
- Christopher Luley
- Fungi on Trees
- Watson and Green
- [www.isa-arbor.com](http://www.isa-arbor.com)



ANY  
QUESTIONS  
?



# Trunk Symptoms and Signs



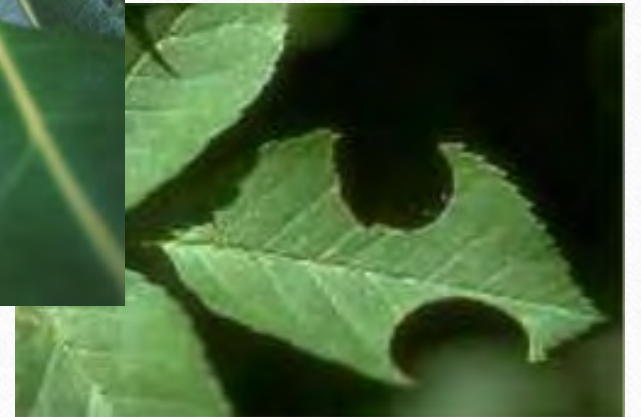
# Branch symptoms



# Leaf Symptoms and Signs



# Chewed Leaves



# Discolored leaves





# Bacterial Leaf Scorch



# Spots and Lesions on Leaves



# Chemical Damage



**Does my  
POWERPOINT  
SUCK?**



# Vascular Disease: Oak Wilt

[www.texasoakwilt.org](http://www.texasoakwilt.org)



# Borers



# Invasive pest: Asian Longhorn Beetle



Asian Longhorned Beetle

Cottonwood Borer

The adult Asian longhorned beetle (left) looks somewhat like the native cottonwood borer (right). To avoid confusing them, note the differences in color pattern on the main body and the antennae (Photo by H. A. Pase III).



# Invasive Pest: Emerald Ash Borers





# Scale Insects



538

# Questions?



Keith Babberney, TX-0236BTM [keith.babberney@austintexas.gov](mailto:keith.babberney@austintexas.gov)