

Common Tree Pests & Diseases Of Central Texas

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Stress and Trees

City life can be stressful, and trees feel stress too. Common urban tree issues include:

- Limited growing space
- Poor soil conditions
- Construction
- Pollution
- Urban Heat Island
- Lots of people

Stressed trees:

1. May be limited in their ability to acquire essential resources from their environment
2. May not have the resources to respond to an attack
3. Become increasingly vulnerable with each additional stress factor

So improving a tree's vigor through good tree care practices can help it be less likely to attract pests and disease, and can help it to fight them off and recover if it gets attacked

Common Central Texas Insects

Basic Categories:

- Stipplers
- Suckers
- Chewers
- Gall Makers
- Borers

Stipplers

Symptoms Include: Stippled, bronzed or bleached appearance of leaves



- ❖ Lace Bugs
 - Adults have lacy, flat wings
 - Feed on underside of leaves
 - Drop dark tar spots of excrement
 - Do not cause serious damage, but may lead to leaf drop

Feed on:

- Sycamore
- Hackberry
- Oak
- Walnut



- ❖ Spider Mites
 - More closely related to spiders
 - Very small – use paper test to find
 - Often see webbing

Feed on:

- Oaks
- Italian cypress
- Arborvitae
- Many other trees

Suckers

- Small insects on leaves or twigs
- Honeydew under tree
- Sooty mold under tree



- ❖ Aphids
 - Small, pear shaped
 - Some cause leaf curling
 - Not very damaging
 - Honeydew and sooty mold are a nuisance
 - Lady beetles are natural predators

Feed on:

- Hackberry
- Pecan
- Elm
- Many other trees

Suckers Cont.



❖ Scales

- Hard or soft shelled
- Soft scales crush easily
- Hard scales are difficult to control
- Some produce honeydew
- Most are not that detrimental, but some can cause twig dieback

Feed on:

- Crape myrtles
- Magnolia
- Elm
- Many other trees

Chewers

- Missing leaf tissues
- Skeletonized leaves
- Will often see culprit



❖ Bag Worms

- Caterpillars which live in "bags" made of leaves
- Can cause tip dieback
- Large populations can be detrimental
- Best controlled by manual removal

Feed on:

- Juniper (Cedar)
- Arborvitae
- Cypress
- Oak
- Many other trees



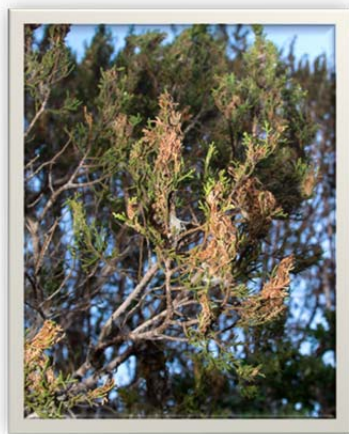
❖ Tent Caterpillars

- Form nests in crotches of trees or in mass on trunks
- Defoliate trees in the spring
- Do not feed within webs; only rest in webs
- Feed on most fruit trees

Chewers Cont.



- ❖ Fall Webworms
 - Form large webs at the edge of the canopy
 - Heavy infestations can cover and defoliate trees



- ❖ Juniper budworms
 - Feed on juniper (cedar) foliage causing browning
 - Build tubes at tips of branches
 - Can cause tip dieback
 - Best controlled by manual removal

Gall Makers

- Abnormal bumps or balls on leaves or twigs



Oak Apple Gall



Hackberry Nipple Gall

Borers

- Small holes in trunk
- Frass (saw dust)
- Tip dieback
- Tree decline
- Tree death



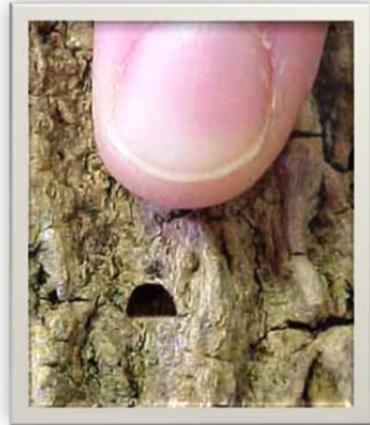
- ❖ Cottonwood Borer
 - Larvae create 1" -2" galleries in roots
 - Can cause young trees to break at root crown
 - Large infestations can cause trees to break at base

- ❖ Redheaded Ash Borer
 - Attack dying or dead trees
 - Often found in firewood

- ❖ Gum Bumelia Borer
 - Type of longhorn beetle
 - Highly collectable
 - Unsure of impact to tree

- ❖ Emerald Ash Borer
 - Arrived from China in the 90's on wood packing material
 - 1st Found in US in 2002
 - Have spread from the northeastern US
 - Will be in Texas Soon
 - Often spread when firewood is moved
 - Larvae tunnel under bark and kill trees

Borers Cont.



❖ Emerald Ash Borer

- Small bright green beetle
- Makes 'D' shaped holes in trunks
- Infested trees may have bark chipped off by woodpeckers looking for the insects
- Infested trees may have sparse leaves
- Infested trees may have sprouts at lower trunk

Report suspected emerald ash borer cases to the Texas A&M Forest Service:

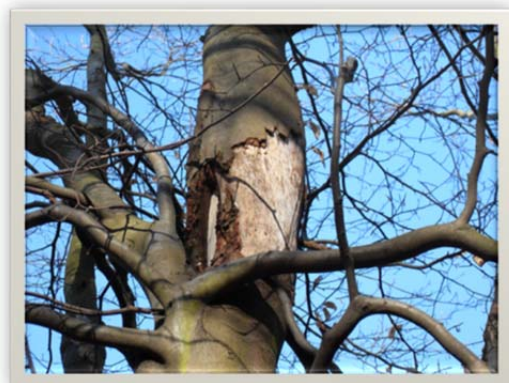
texasforests.tamu.edu

Other Pests



❖ Sapsuckers

- Drill holes in tree trunks in order to feed on sap
- Look for parallel lines of holes
- Are protected under the Federal Migratory Bird Act



❖ Squirrels

- Chew bark on tree branches
- Can girdle branches if they chew all the way around
- Can be difficult to control in an urban environment

Other Pests Cont.



❖ Mistletoe

- Is hemi-parasitic: it is rooted in the tree branches, and while they do photosynthesize somewhat, they also live off of the sugars produced by the tree
- Causes damage to tree tissues where it is rooted
- Can weaken limbs and lead to breakage
- Poisonous to humans
- Spread by birds

Common Central Texas Diseases

Main Pathogens:

- Fungus – common
- Bacteria – uncommon
- Viruses – very uncommon

Fungus



❖ Hypoxylon Canker

- Attacks weakened trees
- Common during drought
- Decays sapwood
- Crown may thin
- May see branch dieback
- Can kill rapidly

Susceptible Trees:

- Sycamore
- Pecan
- Oak
- Elms
- Many Others

Fungus Cont.



- ❖ Leaf Spots
 - Common during wet years
 - Cosmetic damage – not a serious problem
 - Many species are susceptible
 - Rake up leaves to prevent reinfection

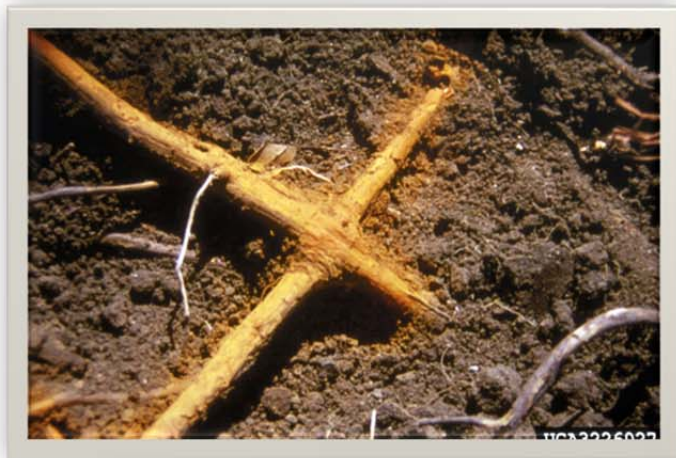


- ❖ Ganoderma
 - Effect roots and lower trunks
 - Oaks, ash, elms, many other species effected
 - Tree may show signs of: yellowing
 - Wilting
 - Undersized leaves
 - Branch dieback
 - Decline
 - Death
 - Look for conks
 - Can take 3 -5 years for tree death: often causes whole tree failure
 - Spores dispersed by wind infect open wounds
 - Avoid wounding roots and trunks
 - Remove trees with conks



- ❖ Armillaria
 - Foliage may thin or yellow
 - May see crown dieback
 - Shoot growth may be reduced
 - Look for mushrooms around base of tree
 - Causes white rot – leaves wood spongy
 - Can find white fungal growth under bark in affected areas
 - Can affect many species of trees
 - Prevent tree stress and keep sod and mulch back from trunks

Fungus Cont.



❖ Oak Wilt

- Red oaks most susceptible
- Live oaks also susceptible
- White oaks are more resistant

Symptoms include:

- Browning of leaves
- Veinal chlorosis in live oaks
- Leaf drop
- Tree death

Spread By:

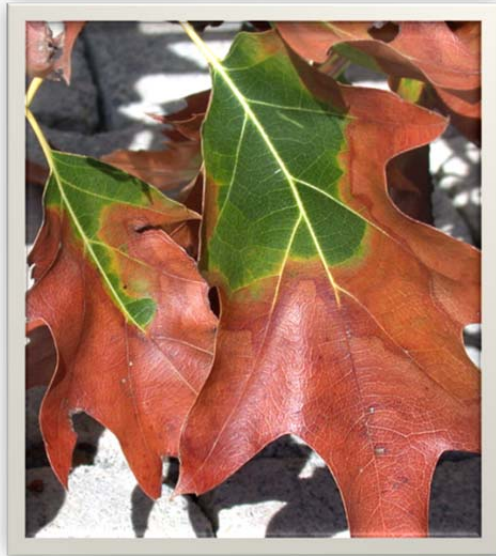
- Can spread by nitidulid beetles landing on fungal mats in red oaks, then feeding on open wounds in another oak tree
- Can also spread from tree to tree through root grafts

Management:

- Prune in hottest or coldest times of the year
- Disinfect saw or pruner blades between trees
- Paint wounds on oak trees only, to prevent infection by beetles
- Plant resistant species of oaks – Mexican white oak; Bur oak; Chinquapin oak
- Treatment is possible with mixed results
- Prevention is better – Fungicides applied by an ISA Certified Arborist can help protect trees in oak wilt areas

For more information and help finding a qualified arborist: texasoakwilt.org

Bacteria



❖ Bacterial Leaf Scorch

- Restricts water flow from roots to leaves
- Vecteded by insects: leafhoppers
- Symptoms develop in mid to late summer
- Look for yellow band between scorched tips and green tissue of leaves
- Can lead to early defoliation and branch dieback
- Trees are subject to secondary infections or pests due to stress caused by disease
- Oaks, sycamores, elms, boxelders, and several other trees are susceptible
- Good tree care practices can help suppress infection:
 - Supplemental water during drought
 - Mulching
 - Infected trees will eventually need removed and replaced

To help catch problems early:

- Get to know what your trees normally look like at different times of the year
- Inspect trees and plants regularly for signs and symptoms of pests and disease
- Pests and disease are easier to control if caught early

For more information on trees and to find an ISA Certified Arborist:

www.treesaregood.org

For more information on the City of Austin Urban Forestry Program or public trees:

austintexas.gov/departments/urban-forestry