Gardening Basics

What's Wrong with My Tree?

Homeowners cherish their trees as sources of shade, beauty, and significant property value. Unfortunately, trees suffer from various diseases, insect damage, and environmental stresses. Our help desk receives more questions about trees than any other subject.

To determine what might be happening to your tree, you need to become a detective. For example, you may notice that the leaves of one or more of your trees are turning color at the wrong time of year, falling off, or perhaps you notice sap running down the trunk. Before doing anything, such as spraying or adding fertilizer, assess the tree carefully. If you have to contact our Garden Help Desk or a Certified Arborist, it will be helpful to have some observations noted.

Master Gardeners may help you diagnose certain diseases and/or insects, but we do not treat trees. You may send pictures of the entire tree and close-ups of the problem areas with a description of the issues to our Garden Help Desk.

For general information including selecting, planting, etc. see our Trees - General Information (Gardening Basics Series).

What kind of tree is it?

Identifying the kind of tree you have is important to diagnose the problem. Some helpful resources follow:

Texas A&M Forest Service website "Trees of Texas": http://texastreeid.tamu.edu/

Taylor Guynes (formerly with the Texas Tree Foundation but now the Urban Forester for the City of Irving) has a video on Texas trees, note the timestamps of topics: tree features from beginning to 8:30; tree ID from 8:30 to approx. 25 mins.; tree selection/planting from 25 minutes to 55 minutes: https://www.youtube.com/watch?v=RnldDJHwe2k

Virginia Tech's Dendrology website asks questions to help you narrow down possible ID: http://dendro.cnre.vt.edu/dendrology/idit.htm

"Quercus sp. (Q. velutina (black oak) or Q. coccinea (scarlet oak)), twig showing leaf attachment below terminal bud" by tgpotterfield is licensed under CC BY-NC-SA 2.0.

Some plant ID apps that are popular include **vTree** (Virginia Tech), **LeafSnap** (Columbia Univ./Univ. of Maryland/Smithsonian), and **iNaturalist** (a crowdsource option).

DCMGA's Garden Help Desk volunteers are available to help you – see our webpage to supply the information we need.

Look for patterns

Part of being a tree detective is looking for patterns of misbehavior. Is the problem restricted to one species, or are many species affected? Most insects and disease-causing fungi and bacteria are somewhat host specific. When several species are affected, the problem is usually environmental.

Check environmental conditions

- Check soil moisture—an inexpensive moisture meter is handy; check sprinkler heads; do an irrigation audit.
- Has there been recent construction or anything that would disturb the roots? This can cause leaves to begin browning and/or falling off in the area(s) to which those roots supply nutrients and water.
- Have you (or perhaps a neighbor) used herbicides recently? A 'weed and feed' product?
- Is the tree planted too deeply? Is there a slight flare where the roots meet the soil line? (not like a phone pole)
- Is there too much shade for the species?
- Is it near a pool and pool chemicals?

Where is the problem?

Back away and look at the tree. Is the problem occurring all over, on individual limbs, only on top, only at the bottom, only on one side? Is it the leaves at twig tips, or older leaves? Is there flagging? Or does it appear to be all leaves?

Look at the leaves front and back

- Check for spots, holes, blotches, wilting, and necrosis (browning) along edges.
- Are they curling?
- Changing color?
- If leaves are falling, are they green or brown?
- Leaves may be brown but remain on the tree; this is important.
- Look for insects (usually on the back side of leaves if present). If insects are found, look for environmental problems that may stress the tree. Diseases and insects often attack stressed trees.
- Look for signs of cankers, scale insects, or galls. Scrape the stem and check for discoloration.

Inspect the Trunk

- There might be loose bark. If so, look on the back side of the bark and on the bare trunk for insect galleries (shallow tunnels) (pictured below).
- Is sap running, or do you see what looks like wet bark?
- Are there borer holes or any insects crawling on the trunk?
- Are there cankers - dead sections of bark on branches or main trunks of trees? Bark may be killed by mechanical injuries (like weed eaters) or by plant pathogens, especially fungi and bacteria. Canker diseases may cause extensive damage to trees when they kill all of the bark in an area, thus girdling a branch or main stem.
- Are there mushrooms or anything that looks like a fungus?

65/366 - a tragedy" by Judy Gallagher is licensed under CC BY 2.0.

About Insects

Some insects on your trees can be left alone while others must be removed to protect the tree. For example, borers can kill a tree. They require treatment. Ants, on the other hand, are generally not a problem. Termites, however, feed on dead tissue, and the tree will need further assessment. If you find insects, try to identify them: Our "How to Identify Bugs (Gardening Basics Series)" can assist: https://dcmga.com/garden-basics-identifying-bugs/

Texas A&M AgriLife Extension has a great website "Insects in the City" to help with insect identification and control: https://citybugs.tamu.edu/

Our Garden Help Desk volunteers are also available - visit our webpage to supply the information we need.

If you know your tree's ID, some insects and diseases are host specific. At the University of California IPM site you can click on a tree species and get a list of common insects and diseases as well as treatment options: https://ipm.ucanr.edu/PMG/GARDEN/plantmenu.html

An article in our e-magazine, The Root, March 2021, gives an overview of some "Insects That Attack Trees"

From our Gardening Basics series:
Bagworms: https://dcmga.com/garden-basics-bagworms/
Crape Myrtle Bark Scale: https://dcmga.com/garden-basics-crapemyrtle-bark-scale/
Emerald Ash Borer: https://dcmga.com/garden-basics-emerald-ash-borer/
Integrated Pest Management (IPM) (Gardening Basics Series):
https://dcmga.com/garden-basics-integrated-pest-management-ipm/
Oak Gall Insects: https://dcmga.com/gardent-basics-oak-gall-insects/
Pine Bark Beetles: https://dcmga.com/garden-basics-pine-bark-beetles/
Twig Girdlers: https://dcmga.com/garden-basics-twig-girdlers/
Other Pests
Controlling Tree Squirrels in Urban Areas (AgriLife): https://dcmga.com/urban-tree-squirrel-control/
Controlling Woodpecker Damage (AgriLife): https://dcmga.com/control-woodpecker-damage/

More about problems with common North Texas trees

- Texas A&M's Plant Disease Handbook, see section for trees:
  https://plantdiseasehandbook.tamu.edu/landscaping/trees/

- Sunscald or Sunburn on Trees, a Help Desk Q&A in The Root, June 2021

- For many years before his retirement, John Cooper served as the Denton County Extension Horticulturalist. His articles about Post Oaks and Pines have valuable information:

  The Care and Feeding of Post Oak Trees in Denton County (Cooper):
  https://dcmga.com/care-feeding-denton-county-post-oak-trees/

  The Care and Feeding of Pines in Denton County (Cooper):
  https://dcmga.com/care-feeding-denton-county-pine-trees/

Oaks

- Rapid Decline of Post Oaks in Texas, Texas A&M AgriLife Extension:
  https://texasoakwilt.org/backend/Docs/NOW/Rapid-Decline-of-Post-Oaks-in-TX.pdf

- Forest Health: Identify and Manage Oak Wilt, Texas A&M Forest Service:
  https://tfsweb.tamu.edu/uploadedFiles/TFSMain/Manage_Forest_and_Land/Landowner_Assistance/Stewardship(1)/Identify_and_Manage_Oak_Wilt.pdf

- Post Oaks and *Tubakia dryina* fungus, a Help Desk Q&A in The Root, October 2019

- Major Oak Diseases and their Control, Harris County Cooperative Extension:
  https://counties.agrilife.org/wise/files/2020/05/Oak-Tree-Diseases-and-Their-Control-8-5-16.pdf

- You may think it's a problem but it's probably not: Annual Texas Live Oak Leaf Drop, from Texas A&M AgriLife:
  https://plantclinic.tamu.edu/2011/03/30/annual-texas-live-oak-leaf-drop/

- Clemson University's Cooperative Extension page "Oak Diseases and Insect Pests" has a list of diseases, pests, and insecticide/fungicide options: https://hgic.clemson.edu/factsheet/oak-diseases-insect-pests/

"File:Pecan scab.jpg" by Sealox is licensed under CC BY-SA 4.0.

Pecans

A short, basic article about pecans from The Root, October 2019

and Pecans Don't Produce, a Help Desk Q&A from The Root, December 2018.

The Texas A&M AgriLife Extension's "Evaluating Pecan Problems" page is an excellent guide to many issues, including nutritional deficiencies: https://aggie-horticulture.tamu.edu/fruit-nut/fact-sheets/evaluating-pecan-problems/

If disease is suspected, for a fee you can send a sample to the Texas Plant Disease Diagnostic Lab, Texas A&M University. Instructions and a form are available on their website: https://plantclinic.tamu.edu/

Fruit Trees

- Growing Citrus Trees in North Texas, a Help Desk Q&A from The Root, November 2018, and see also "Citrus" topics in the last bullet point below.
- Diagnosis of Common Citrus Problems, from Texas A&M AgriLife's Fruit & Nut Resources https://aggie-horticulture.tamu.edu/fruit-nut/fact-sheets/citrus/table-2-common-citrus-problems/
- Brown Rot in Plums, (Garden Basics Series): https://dcmga.com/garden-basics-brown-rot-plums
- Homeowner's Guide to Pests of Peaches, Plums, and Pecans, Texas Cooperative Extension: http://amarillo.tamu.edu/files/2010/11/PestsFruitTrees.pdf
- Plum Curculio beetle (affects peaches, plums, nectarines, pears, & cherries), a Help Desk Q&A from The Root, June 2019
- Preventing Bird Damage to Fruits (Garden Basics Series): https://dcmga.com/garden-basics-preventing-bird-fruit-damage/
- Texas A&M AgriLife Extension fruit and nut species fact sheets often provide information on diseases/problems: https://aggie-horticulture.tamu.edu/fruit-nut/

Certified Arborists

We often suggest you call a **Certified Arborist** to diagnose and treat the tree. It can be difficult for the average homeowner to care for an entire tree, particularly if it is large. You can find a Certified Arborist in your area by using your zip code and '25 miles' for filters when prompted: https://www.treesaregood.org/findanarborist/findanarborist/

"Hiring a Certified Arborist" a Help Desk Q&A article in The Root, August 2022, has complete information.

Resources:

Trees, Shrubs & Woody Ornamentals, University of California Agriculture & Natural Resources, IPM : https://ipm.ucanr.edu/PMG/GARDEN/plantmenu.html

Identifying Tree Problems, Iowa Cooperative Extension Service: https://store.extension.iastate.edu/Product/sul3-pdf