

# TREETISE

SUMMER 2009

## The Fungus Among Us!

Have you ever heard an arborist talk about a tree “failing” or “tree failures?” The word “failure” simply means when something breaks and falls and usually hits something. Tree failures, whether they be whole tree failures or limbs breaking off of trees, are extremely inconvenient and sometimes dangerous. Typically when a specific item such as trees, landscaping, roofing, etc. is labeled “Dangerous” then it could probably also be labeled as “expensive.” Tree failures represent a source for a number of unexpected costs to property owners such as trees falling on cars or homes, roots doing damage to concrete or slabs, trip hazards created by elevated roots, limbs falling on pedestrians etc. As a matter of fact, a property with trees that are known to “breakout” or fail may be required to pay higher insurance premiums in order to cover the potential damage these trees may cause. Unfortunately for trees, this aspect of their existence ends up creating a very negative stigma towards large trees or even certain species of trees both amongst tree owners and tree specialists.

### The the most common question

we are asked in regards to failures is, “Could that have been prevented?” This question is wonderful so long as the person asking is willing to stay for a response. The answer to the question depends on which indicators have been made available to the arborist. Also, are the indicators visually observable without the use of specialized instruments? Basically, if we can’t see anything that tells us the tree has a problem, we can’t tell you that it does either.



9 times out of 10 trees fail is because of decay. Granted some trees fail because of heavy winds, loose soils, poor root structure or heavy canopy foliage, but many of these cases have decay involved in one form or another. Wood decay is the result of a breakdown of woody material either caused by a wood decay fungus, structural defects, pruning or injury. Many things cause decay, but these 4 are the most common sources we see. For now, we are going to focus on wood decay fungi.



ROOTED IN KNOWLEDGE

VOLUME 1 | ISSUE 3

### Message from the President

“We are excited to announce that Four Seasons Tree Care is now 1 of 4 companies in San Diego to earn TCIA Accreditation. This is an incredible accomplishment and is one more item we bring to your community to provide safe and proper tree care.”



n. (tree•tis) a formal and systematic exposition of the principles of a subject; more detailed than an essay.

FOUR SEASONS TREE CARE | 760-477-7795 | WWW.FOURSEASONSTC.COM



## One of the easiest ways to identify hazardous trees

with strong potential for failure is by identifying wood decay fungi attached to portions of the tree. The type of fungus and its location on the tree give arborists plenty of information to assess risk. There are many kinds of fungi, but the 2 that are very important to recognize are Ganoderma conks and Armillaria Root Rot. If you have trees with any of these 2 fungi it may be a good idea to have those trees removed. Like most wood decay fungi, fruiting bodies (mushrooms) or “conks” are produced by the fungi like a tree produces fruit. Conks are products of decay, not the cause. Conks indicate that decay is happening internally and a high concentration of the decay will be directly behind the fruiting body. Decay causes the breakdown of wood integrity, softening the wood and jeopardizing the trees ability to stay intact at the location of the mushroom. If you see conks along the trunk or root collar of the tree, you can easily anticipate a future problem if the tree is not eventually removed. We have provided pictures of these fruiting bodies on this treatise to help familiarize you with the fungus. Hopefully, none of your trees have these!



## Ganoderma are fungi that cause decay

are fungi that cause decay in heart wood, buttress roots, root rot and trunk rot. The Ganoderma fungi are very aggressive and cause the decay of the cambium layer of roots and wood. Without the cambium layer, cell differentiation cannot occur (new wood tissues are not created) and vascular transport is significantly stifled. Woody material becomes softened and weak in trees with Ganoderma fungi and ultimately whole tree failures or trunk failures occur. It is important that your arborist can identify these fungi. We have seen them commonly on Pear trees, Oaks, Brazilian Peppers and Locusts this past year.



Armillaria Root Rot (*A. mellea*) causes the rotting along roots and root collars of trees. We have seen this most recently in White Alder trees where soils are over saturated and airflow is minimal. This is a very difficult fungus to identify because the fruiting bodies look very similar to lawn mushrooms and mushrooms found in mulch piles. The most important characteristic to look for, when the presence of Armillaria is suspect, is a pattern of black shoe string-like hairs (rhizomorphs) along the buttress roots,

trunks or root collars of the tree. There is no cure for Armillaria, so any trees that are in decline that you suspect are infected should probably be considered for removal.

Being able to identify fungi that threaten the health of your tree is just one more way you can become actively involved in the care of your arboriscape. There may be times when trees cannot be saved, but being able to identify potential hazards can save people from being injured or having their property damaged. A small mushroom can give you insight to the kinds of concerns you are dealing with in a community forest and may help assess whether your current tree care provider is capable enough to identify these hazards and recommend proper action in response.

n. (tree•tis) a formal and systematic exposition of the principles of a subject; more detailed than an essay.

## DID YOU KNOW?

Each year, one person uses wood and paper products equivalent to a 100 foot tree 18 inches in diameter.



Welcome to the team Shannon Miller! Our new Customer Support rep will assist you in a variety of ways to continue to allow us to provide you with quality customer service.

VOLUME 2 ISSUE 1 OF  
TREETISE

Structural Deffects



FOUR SEASONS  
TREE CARE