Cavities in Trees

Communities grow up with trees. They are part of our character, culture and experience. Trees also come in all shapes, sizes and situations and all have some level of risk associated with them. This risk is a function of the health and structural integrity of the tree as well as the location of nearby structures or people who might be targets. The level of risk can be the difference between a large Red Oak with a trunk cavity sitting in a pasture versus the same tree in your back yard. The first might be of little harm, the second unacceptable.

Cavities are created when physical wounding of the trunk occurs whether by human, weather or wildlife action. These wounds are then expanded by wood decaying fungi, bacteria or wildlife and can occur anywhere on the tree but are most critical when they occur in the trunk or in major stems and branches. Cavities at the base of the tree may destabilize the root system to the point where it can no longer support the physical weight of the tree. Cavities in the main trunk, when of a large enough diameter, can weaken the structural integrity of the tree and render it unsound. The same is true for major stems and branches from woodpecker holes to major cracks that allow fungi and bacteria to enter. However not all cavities render the tree a hazard or unsound. Cavities that are internal to the tree trunk (not open to the outside) may not significantly decrease the integrity of the whole tree system. Stem and branch cavities may be pruned to reduce the weight of the outlying branches or removed altogether.

How do you know?

Different tree species have different resistance to tree cavities; Live oak seldom have cavities but Sugarberry almost always do. Few individuals have the capability, knowledge and training to be able to properly identify trees let alone assess the risk associated with a tree cavity. Probing the inside of a cavity to remove loose wood helps determine the extent of the damaged tissue. Removing ivy and other vines will help expose any openings in the trunk. However it takes a professional with experience and knowledge to determine how much structural integrity may have been lost. Most often, it is best to call in a certified arborist who has specialized tools for determining the extent of cavities and the viability of root systems. The GFC provides a link to a list of Arborist certified by the International Society of Arboriculture (ISA) who conduct fee-based site visits that can help homeowners determine their tree care needs at: