

*Lingering students asking questions
of the arboriculture crew after the
tree planting demonstration
by Levi Ellenby*



Horticulture 101 Student Writing: Tree Planting

By Ellen Vincent, Clemson University Environmental Landscape Specialist

Tree Planting: Captivating and Critical

By Colleen Williams

I found the tree planting this Thursday to be enlightening and interesting. I never really considered all the many factors that went into the tree planting process. The depth of the hole has to be spot on; the tree has to be the best shape with a visible trunk flare; watering maintenance must be kept for at least two years after it is planted. All of these many details gave me such a respect for arborists and the coordination and maintenance they must practice. This experience demonstrated to me that in my future career, as a landscape architect, I will really have to coordinate with arborists and horticulturists to make sure that I pick the right species for the right location and not just make selections based on design aesthetics. I will want my designs to not only be successful visually, but also successful for the health of the plants and for the people that visit them.

Tree Planting Reflective Essay

By Peter Signoretti

When I was told that we were going to be planting a tree on campus, I initially thought my role would be a little bit more hands on. When I saw the tractor and crew of men, I knew my tree planting experience would be more scholarly than I had originally anticipated. When I saw how large the hole was in relation to the comparatively small tree, I was confused: Why dig more than necessary? I soon learned that proper depth is exactly the distance from the root collar to the base of the rootball. I was also informed that the diameter of the hole should be at least double, sometime triple, the width of the root-



Horticulture 101 class at Clemson's famous Centennial Oak (Quercus macrocarpa)

Horticulture 101 students come from multiple disciplines. The majority are horticulture and landscape architecture majors but others come from architecture, chemistry, geology, business, engineering, or psychology to name a few. Many of these students are seeking a minor in horticulture, others are looking to study something they have an intense interest in. Each week students connect to the lecture or demonstration and to the required readings by writing both a reflective essay and a scholarly paragraph. The reflective essay is personal-it tells the story of a past experience or a relevant moment in time. The scholarly paragraph strictly focuses on the subject matter and is written in the third person using APA style citations. This page contains a sampling of student writing related to tree planting.

ball to ensure a solid cornerstone for the roots to develop into. After hearing all of these things to consider when planting a tree, I couldn't help but remember when I planted a magnolia tree for my parents last year. It would have been nice to know the proper way to have planted it.

Tree Planting and Sustainability

By Ryan Merritt

I really enjoyed the tree planting that we attended on Thursday. I learned a lot of things from Arborist Minerva,

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like how to identify root flares. I had no idea that there even was a root flare on a tree, or that it needed to be planted above ground level. There are trees that are lacking in growth in my yard at home and I now know that it is most likely a root flare depth problem with the tree, and not so much a soil or sunlight problem as I originally thought. We recently ordered a shipment of six whips for my home and I will make sure that these trees take off and thrive to add aesthetic appeal to my yard. As usual when I heard something about landscaping my mind went racing as to what I could do to better my own yard, and hopefully a lot more people will think the same way and we can have more sustainable landscapes across America and save money on landscaping in the long run to spend on other things.

Reflective Essay: Tree Planting

By Chris Rinebold

Prior to our class trip to watch the tree planting demonstration by the Clemson Arboriculture team, I thought I knew a lot about tree planting techniques. I think it is fair to say that, during that class meeting, I was proved wrong more often than an incompetent defense lawyer. Unfortunately, I cannot remember the name of the facilities team leader that provided all of the great information and answered questions. This may have resulted from being so astounded by the knowledge that he was imparting about trees. In any event, I am forced to refer to him as the “foreman”* in this essay.

About 16 years ago my father and I planted quite a few trees around our house. We love summer and fall foliage and wanted to enjoy the trees in a yard that previously consisted of only shrubbery and grass. So we planted some saplings around the house. A few of the trees flourished, but a majority of the trees remained puny or died altogether. We always came up with various reasons why those trees did not succeed. I suppose that we simply did not want to consider that perhaps the trees did not flourish because of our planting techniques. After watching the

Clemson Arboriculture team and learning from the foreman how to properly plant a tree, a very bright light bulb has been lit in my head, so to speak.

During the demonstration, the foreman listed several mistakes that should be avoided when planting a tree. As he was covering each error, I said to myself, “Yes, my father and I committed that mistake”. We would plant trees too deep in the ground. We would plant trees on an incline without making sure that they were straight. We would shovel excess soil back on top of a tree’s root flare and would over mulch on an annual basis. I now know that committing these common, but avoidable errors caused our trees not to flourish. Yesterday, I found myself subconsciously examining trees while walking around campus. I thought about how far their roots were spread underground. I wondered if there were underground utilities in the area that determined the placement of the tree. Before taking part in the tree planting demonstration, I used to enjoy the trees on campus simply based on their aesthetic qualities. Now, I have become appreciative of the careful planning and maintenance that goes into each and every tree planted on campus.

* *The arborist being referred to is Mr. Paul Minerva, head of the Clemson University Arboriculture division.*

Roots Out of Sight: Scholarly Paragraph

By Levi Ellenby

While trees look beautiful above ground with strong trunks and outstretching branches and leaves, this would not be possible without what is below ground and out of sight. Many people think on an out of sight out of mind level and never really stop to observe a tree’s root system. These underground lifelines to the earth are essential to the health and durability of trees. The life below one’s feet is what provides the tree with the water, oxygen, and nutrients it needs to survive. “The majority of a large tree’s roots are in the upper 18”-24” of soil” (Morton Arboretum). Large trees with enormous branches that can fill huge ar-

chas of the sky often have root systems that are two to three times wider than the diameter of the drip line. It is almost upsetting to think that these incredible roots are not visible by the human eye. It’s like looking at a beautiful island surrounded by a coral reef but never being able to look underwater. If it were possible for humans to view roots of trees underground, a whole new appreciation would be gained for this part of plants not commonly viewed. This underground world of roots is never seen until situations arise in which roots cause damage to manmade structures.

Tree roots have long been associated with problems with underground pipes, pavement, foundations, and even girdling of the tree itself. This association has given some trees a bad name however “in almost every case, roots are not the cause of the problem” (Morton Arboretum). Roots are extremely powerful in healthy trees and can actually lift pavement and break pipes. Problems such as these are better off solved by preventative means. Planting new trees should always involve looking towards the future of the area surrounding the tree so when the plant is full grown its roots are not lifting pavement. When the correct measures are not taken in solving a root problem, serious damage can be caused to the tree. Major tree roots commonly grow within a few inches of the soil surface. Often times these roots become exposed and cause hazards for people walking. “Removing these roots may disrupt the moisture supply to the tree, causing serious stress. Covering them with soil could cut off the oxygen supply to the fine roots in the soil below” (Morton Arboretum). If proper maintenance of tree roots is not respected, the health of the tree will decline.

No matter what type of roots a plant has, it is these concealed supports that give life to trees and provide them with the things they need to survive. If not carefully planned for at the time of planting a tree’s roots can cause a lot of damage to manmade structures. Without the proper care and respect for these unnoticed parts of trees, damage can be caused to even the oldest and strongest of plants.

Works Cited:

Morton Arboretum. (n/d). *Tree root problems*. Retrieved February 12, 2010 from <http://www.mortonarb.org/tree-plant-advice/article/698/tree-root-problems.html>