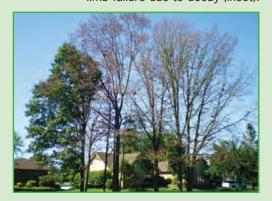


**Photo 2:** Proper pruning techniques encourage rapid wound closure, avoiding decay issues that can cause harm to trees, people and property.



**Photo 3:** The topping of trees is rampant in some communities, obviously a contagious practice implemented by arbor-hackers and, regrettably, sought after by an unknowing public. Topping usually results in proliferation of shoots at the wounds, followed by limb failure due to decay (Inset).



**Photo 4:** These oak trees were pruned in the spring by an arbor-hacker who was a door-knocker and operated on a cash-only basis. All trees that were pruned contracted oak wilt. The apparently healthy tree on the left was not pruned; nevertheless, it subsequently died from root graft transmission of the oak wilt fungus.



# TREE CARE AND PRUNING: THE GOOD, THE BAD AND THE UGLY



**Photo 1:** This large 250-year-old Bur oak tree was moved on the University of Michigan campus on October 25, 2014. The relocation of the tree, expected to exceed \$400,000 in costs, was contracted to satisfy a generous gift for an addition to the law school. Proper pruning techniques can help this tree survive this drastic move. The roots were pruned several months before the move. Note that the transporter on the right is raised higher than the transporter on the left, to tilt the tree to clear the building on the right. Even so, some branches needed to be pruned to augment clearance.

### **INTRODUCTION:**

Pediatricians have human patients, albeit on the smallish side. In the veterinary world, there are large and small animal clinics that specialize in animal health, based somewhat on size of the animal. Tree care professionals (aka Arborists) care for some of the largest living beings on the planet (Photo 1). Tree care professionals have a daunting task in their care of these large, living beings. As with human and animal issues, tree maladies often develop as the result of a variety of factors including poor nutrition/soil issues, adverse environmental conditions, various diseases and pests and poor care from humans and their activities. People are gradually discovering that the key to a healthy, long and happy life is moderation in things, good living habits and preventative health care. Similarly, our practices in tree care can drastically affect the health and longevity of our patients. One of those key factors that are often implemented by arborists to presumably improve tree health is "Pruning." This article is not an exhaustive treatise on pruning but rather a general article on the overall implications of pruning.



**Photo 5:** Improper pruning whether it is at the wrong time of year or the wrong technique can result in infection by fungi that cause cankers (note orangish fungal reproductive structure). Practically every pruning wound on this tree resulted in infection, seriously jeopardizing the health of this tree.



**Photo 6:** These large silver maples were improperly pruned approximately 12-15 years ago. All exhibited severe wounds and decay about 12 feet from the ground (Inset). Because of the species and their location near a pool and common area in a condo complex, all had to be condemned, pre-empting possible catastrophic failure.



Photo 7: During a storm, this tree failed in this rather public area. In the author's observation, decay occurred from too much, improper pruning over many years.



**Photo 8:** Improper pruning of oak trees by pseudo-arborists along this street more than a decade ago resulted in slow healing wounds and decay. During a storm, the top portion of an oak fell on this car, killing the driver/father. The baby in the back seat survived.

## THE GOOD:

The pruning or trimming of trees is often performed for a variety of reasons. For example, "Dead Wooding" is often performed to eliminate necrotic wood (branches, etc.) from trees to improve their health and for safety reasons (example: reduce the likelihood of "widow makers"). Pruning can also eliminate diseased or pest-infested portions of trees. Selective pruning can improve the structure of trees and make them less susceptible to catastrophic failure from environmental conditions such as ice accumulation and wind storms. Professional arborists know what, when and how often they need to implement proper pruning procedures. The key word in good pruning is "proper" pruning. Proper pruning augments efficient and complete wound closure to avert future decay and tree failure issues (Photo 2).

### THE BAD AND THE UGLY:

Arboriculture is probably one of the least regulated "Professions." In my experience there has been an alarming increase in the number of people starting businesses in arboriculture. Anyone who can afford an old pickup truck and a chain saw may claim "professional arborist" status to the general public. These "Arbor-Hackers" or "Arbor-Terrorists" are common in our industry and often cause more harm than good. In my experience, the arbor-hacker can possibly be stereotyped as follows: frequently visits neighborhoods where they door-knock to gain business, uses shoe irons (spikes) to climb trees for pruning, prunes a few of the lowest branches from trees and calls it a pruning job, rarely if ever attends conferences and seminars to learn arboriculture, often is not licensed or insured, offers a so-called "cheap" service for cash.

**The Bad:** I have witnessed an increase in what might be generally categorized as improper pruning practices over the last decade or so. Many trees are pruned way too often and/or branches that are too large are unnecessarily pruned. Trees should only be pruned when necessary and for specific reasons rather than as a goals to make money or the need for a yearly "haircut." In the haircut mode, trees are sometimes pruned to reduce their size (Photo 3 and Inset). Trees are also pruned at the improper time; pruning at the wrong time of year can result in contraction of lethal diseases (Photos 4 and 5). Inappropriate pruning cuts can result in wounds that heal slowly (Photo 6 Insert).

**The Ugly:** Compared to other arboriculture practices, the act of pruning may have long term implications on the health of trees ... and people. Pruning cuts that are too large or that are improperly performed often results in slow wound closure, followed by decay. Bad pruning practices often result in unwanted consequences years after the pruning event (Photos 6-8), including the loss of our trees, safety issues and possible legal ramifications.

### **SUMMARY:**

A case can be made that the arboriculture industry needs more regulation to protect the public and the professional arborists that serve them. While some basic regulation is not likely to occur in the near future, it is increasingly imperative that we do what we can to promote professionalism in the industry and to educate the general public about our profession.

For more information, please feel free to email David Roberts at robertsd@msu. edu or contact a professional plant health care provider. The author, MSU and MGIA do not endorse any particular products. If using pesticides, be sure to read and follow label directions.

