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Arborist Training
By Ken Palmer and Juan Torres

This article is about the importance of training for all arborists.

Safety, skill, and productivity are essential for professional success in today's tree care industry. Tree workers must learn and become familiar with safety and best practices and actually use them on the job. Making decisions for safety, skill, and productivity are often based on personal experience and/or the experiences of co-workers.

There are at least two problems with this type of decision-making process:

1. Though experience is an essential part of skill development, it can also be a very dangerous teacher if the experience is wrong or not supervised.
2. It is dangerous to base critical decisions on what has worked before, because everything changes at each job site from one cut to the next.

Arborists and tree workers have to be able to think on the job and adjust their thinking to their surroundings. Accidents can be reduced and productivity increased when tree workers have the information and knowledge to think first and make sound decisions.

Non-English-Speaking Workers

Along with a huge growth in the number of non-English-speaking workers in the tree care industry; there has been a large increase in the number of injuries and deaths among the non-English-speaking workforce. OSHA will spend a significant sum to increase safety training for non-English-speaking workers. The new money follows an 11% and 9% increase in fatality rates for Spanish-speaking workers in 2000 and 2001 respectively. Employers and manufacturers must provide manuals, fact sheets, procedural information, warning decals, etc., in the native language of each worker.

Emergency Preparedness

Training, preparation, and planning are all necessary in order to deal with the unexpected. Emergency preparedness on the job means being prepared to deal with emergency situations because safety is everyone's responsibility.

Training for Fall Prevention

Professional tree climbers must wear a climbing saddle that is designed to protect them in two very specific ways. The lower part of the saddle is designed to suspend the climber with an arborist climbing line when they are sitting (suspension system). The upper part, or waist belt, typically has two or more D-rings for use with a work positioning lanyard similar to a lineman's belt (work positioning system).

Professional lift operators should wear a full body harness with a dorsal attachment and a shock absorbing lanyard that is connected to the upper boom and designed to decelerate or bring a person to a gradual stop should they fall or be launched from the bucket or platform (fall arrest system).

As an alternative, an operator may wear a body belt connected to the upper boom with a very short lanyard designed to prevent the operator from being able to fall from the bucket or platform at all (fall restraint system).

The above-mentioned forms of fall protection must be used correctly in order to prevent injury. This comes from proper training. Each of these systems are manufactured with unique features; however they are each designed to function in a very specific way and must be inspected daily and used for their proper task.

Training for Chain Saw Operations

With today's chain saw technology, safety, skill, and productivity can be attained with a thorough understanding of the saw's basic design and limitations, reaction forces, wood fiber, tension and compression wood, the knowledge to formulate a felling/cutting plan and the ability to skillfully work the plan. Experience building and skill development on the job must be an ongoing process in order to reach a true level of competence and proficiency using a chain saw. As we gain better, clearer data about accidents throughout the tree care industry, chain saw accidents continue to increase. It's not always a cut by the chain saw; it's often the result of what is being cut and how a person approaches their cutting. Training is the key to safety, skill, and productivity with chain saws!

Training for Rigging

Up until 10 to 12 years ago, arborists almost exclusively utilized natural crotches for rigging points. This method worked for years and required only basic equipment but it had limitations. Today, arborists have rigging blocks (specialized rigging pulleys) that can make rigging operations safer, easier, and more efficient. However, working with large sources of potential energy during tree dismantling operations can be disastrous without an understanding of the forces involved.

In the tree care industry, the lift operator must be trained and experienced with a good working knowledge of trees and tree care operations. Training must be an ongoing process. It is important to remember that no matter how strong the rigging equipment is, the trees and the rigging equipment are still impacted by the decisions and actions of the tree worker. The whole tree or parts of a tree can still fail if the operator cuts a piece that is too big. The equipment can fail if it is pushed beyond its limits or the rigging line is not allowed to run in order to decelerate the load and minimize the forces.

Training

The process of safe tree care operations begins with training and practice. It continues with experience building and skill development. When a career path is structured with a systematic training process followed by time for practice and experience building, competency and proficiency can be achieved. The objective is to build confidence and enhance productivity through measurable results. With training, a more professional attitude and commitment to safety is inevitable.

If we truly want responsible, productive people and want to gain the respect of the general public for the important and valuable work that we do, it's up to each of us to develop and build our respective organizations with a focus on safety and best practice.

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