The Mental Demands of Arboriculture May Be Greater than the Physical

By Amanda Carpenter, PT, DPT, CProT, CEAS

ne might assume that the physical aspect of being an arborist is the most stressful part of the occupation, however the human body is designed to tolerate regular physical activity and stress. The routine physical tasks of a production arborist are not unlike the primal movements of our ancestors. Humans are designed to move, and the importance of human movement has become widely accepted as a key to health and vitality. So, why might the physical activity of the modern arborist be a greater stress than that of our hunter-and-gatherer ancestors? I believe it's because the health of the body is being compromised by consistent mental, emotional and biological stresses associated with modern-day living.

The physical activity required for production tree work can be a benefit to health

According to the research of Dr. James Levine, director of the Mayo Clinic at Arizona State University, "Sitting is the new smoking." The human body is designed to move every 60 to 90 minutes, so any sedentary position for greater than 60 minutes can be problematic due to the reduction in blood flow. The importance of human movement has become accepted as a key to health and survival. The physical activity of the production arborist can be beneficial to health when combined with a whole-foods diet, adequate sleep, a good mindset and proper hydration.

I recently asked three arborists (T.C. Mazar, Marcy Carpenter and Daryl Stanely) who are actively involved in production tree work about the physical and mental effects of their jobs. They all agreed that the physical aspect of the occupation is a challenge, but also is the greatest benefit. They each feel the "physical release" they get by working in the field is a key to their health and wellbeing. Each agreed



NATS instructor Tony Tresselt takes a break during a training session. Courtesy of the author.

that even though there are great physical demands, years of experience have allowed them to work smarter, reducing the physical stresses of the job.

"Production tree work allows for great meditation, and the physicality is a great stress reliever. The work has allowed me to live a healthy and exciting life, and I'll do it as long as I physically and mentally can."

T.C. Mazar

The mental stress of tree work may be a bigger threat than the physical demand

Humans are designed to respond to occasional life-threatening physical stress, such as getting chased by a predator. However, evolution of the human brain combined with modern lifestyle practices have caused more consistent stress than the human body is designed to tolerate. It is the evolution of the human brain that has allowed our species to think about the past and anticipate the future, which can create the same physical and biochemical response as being chased by a saber tooth tiger. Additionally, modern day conveniences causing increased EMF (Electromagnetic Field) and light pollution are adding to the stresses on our bodies.

Stress has been referred to as the "health epidemic of the 21st century" by the World Health Organization, costing businesses \$300 billion annually. The effects of modern-day stress have penetrated every home and business across the nation. We turn on the television to hear the media reporting on the latest scandal or tragedy, while we live in a 24/7, 365-day active world. The body cannot differentiate between the physical stress of being chased by a predator and the mental stress of modernday life. The Centers for Disease Control (CDC) estimate that 60 to 80 percent of all doctor visits are related to stress. Stress, whether physical or mental/emotional, is the root of nearly all chronic disease, according to the CDC.

When the body is in stress response, or sympathetic overdrive, it uses glucose, a quick-burning fuel, diverts energy away from healing and immune-system protection and elevates heart rate and blood pressure to quickly pump blood to the extremities to allow for fight or flight. (See figure A)

All three arborists I interviewed agreed that the business of tree care is the primary cause of mental stress in the tree care industry. Business requires balancing productivity with safety, which creates mental/emotional stress on top of the high physical demands of the job. The pressure of productivity to maintain financial sustainability paired with the dangers of the job requiring the need for safety measures causes time pressure to become the major stressor.

Mental and emotional stress can contrib-

Provide Eight Hours of Crew Leader Training in January

TCIA has proclaimed January 2019 as Crew Leader Month and is encouraging companies to provide crew leaders or potential crew leaders with at least eight hours of training during the month. Here are some ideas for doing eight hours of crew leader training:



- 1. Ride along with the "boss." Invite a crew leader to ride along with the company owner or a top sales person for a day to give them new insight into your company as well help them see first-hand what a leader does throughout a day.
- 2. Set up a formal mentor program between an experienced crew leader or other experienced person at your company and a new or potential crew leader. Ask the mentor to try and provide about 8 hours of guidance and counseling.
- 3. Review a large job from start to finish with a new crew leader. Review how the job was marketed and sold, the communications with the client, the proposal/work specs and the finished job. Show how you analyze the job for profitability and/or provide any quality-control follow-up.

Leading b	y example			
You are always leading by example. As the leader of the crew, you set the tone for professionalism, integ- rity, and quality of work. If you set a poor example, you will be ineffective as a leader and all other aspects of your daily work will suffer. But if you set a good exam- ple, you will find it much easier to maintain morale and	have a crew that is motivated to perform at a high level. What example do you set as a leader? Answer the following questions about your leadership and assess the areas that you think could be better.			
	Always	Most of	Hardly	Never
I show respect for the members of my crew and treat them as professionals.				
make my expectations clear to avoid misunderstandings.				
I am honest, fair, consistent, and compassionate in dealing with crew members.				
I take responsibility for my work and the work and behavior of my crew.				
l acknowledge mistakes and focus on them as learning opportunities.				
l encourage teamwork and help crew members to support each other.				
I am flexible to the ideas of others and I'm open to change.				
I roll up my sleeves and work alongside my crew and I don't routinely avoid the most difficult tasks.				
I strive for continuous improvement in myself and with my crew members.				
I acknowledge the efforts of my crew members and frequently praise achievements.				
I do not avoid the difficult conversations and I deal with problems promptly.				
set a good example in following policy and direction from supervisors and top management.				
I am willing and able to hear critique and to work toward improvement.				
I demonstrate my integrity in every aspect of my job.				

This chart is excerpted from the Leadership section in TCIA's Tree Care Academy Crew Leader manual.

- 4. Give a crew leader some time during the day to work on the Tree Care Academy Crew Leader manual.
- 5. Have crew leaders do the self-assessment test in the crew leader manual, see the ad, page 47. Review the self-assessments and create a custom plan to help

crew leaders grow their leadership skills.

6. Consider attending a crew leader workshop. See page 47 for a list of crew leader workshops being held in January.

Have another idea? Go to the Tree Care Industry Association Facebook page to send us your ideas?

ute to difficulties focusing on work tasks, increased risk of errors and injuries and dif-

Figure A: The effects of stress on the human body

Elevated heart rate
Elevated blood pressure
Elevated blood sugar (glucose) with
suppressed ability to burn fat
Suppressed healing
Reduced immune activity
Slowed digestion

ficulty interacting with others in the workforce. However, I believe that production arborists have an advantage over the general population due to physical aspects of the job coupled with routine engagement in nature and working under natural vs. artificial light, which all are beneficial to health and vitality. Additionally, the dangerous nature of the job requires the arborist to remain present and mindful of each task, thus reducing the mental stress associated with replaying the past or anticipating the future.

Amanda Carpenter is director of health and wellness and a lead instructor for North American Training Solutions (NATS). NATS is a TCIA Partners Advancing Commercial Tree Care (PACT) Crown partner. PACT partners provide financial support for a variety of TCIA safety and training programs.

For more information on the PACT program, visit www.tcia.org, or contact Amy Tetreault at atetreault@tcia.org or 800-733-2622.