

The Healing Power of Agriculture

Greensboro, NC – August, 2019 – Dr. Crystal Kyle wears several hats in her quests to keep farmers safe, bring farming to veterans and veterans to farming. She works for N.C. A&T's Cooperative Extension Program, is its coordinator with the North Carolina Agromedicine Institute and also the director of the North Carolina AgrAbility Program. It is this last role which presents many opportunities to discover strengths and improve lives. The North Carolina AgrAbility Program is a federally-funded project through the USDA/NIFA that provides disabled individuals with the education and assistance they need to live successful, safe, and productive lives in production agriculture or agriculture-related occupations.



The Veteran Connection

Having spent 10 years in the United States Army herself, Dr. Kyle has experienced many of the physical, emotional, and financial challenges facing veterans with combat experience. When she completed her tours of duty, Dr. Kyle had difficulty transitioning to civilian life. A tidy, repetitive daily work schedule and a comparatively sterile office environment was very hard to adjust to; it seemed tedious, easy and unimportant. As she struggled to find her place, she found herself drawn to some of the basic elements of agriculture she was learning at N.C. A&T's College of Agriculture and Environmental Sciences.

"Farming was familiar and comforting. In returning to the land, I was able to leverage what I learned in the Army to build a rich, useful civilian career," explains Kyle.

There are numerous parallels between farming and military service in North Carolina. Agriculture is the largest employment sector in the state, followed by the military. Both lines of work are extremely hazardous accounting for myriad injuries and long-felt disabilities. Both dress their workers in boots, coveralls and gloves, and both groups are usually found outside in the elements interacting with the land around them.

For someone who has served in combat, there is great comfort and relief being outside in an open space like a farm where you can hear and see everything for miles. You can see any danger approaching and stay aware. Heavy equipment and tools are familiar. And, at the end of the day, you have a reason to take a shower; there is great satisfaction in washing away the day's dirt and sweat after a job well-done.

"Farming is patriotic. It's an investment of effort in the land which our soldiers defend, and this forms a cultural and symbolic bridge between soldiers and the civilians back home who they serve. In Afghanistan and Iraq, I watched local people farm successfully without mechanization, and I have drawn on that experience as I work with farmers and veterans here in North Carolina," says Kyle.

Research

Dr. Kyle received both her bachelors and master's degrees from N.C. A&T, and completed her doctoral studies at Virginia Polytechnic Institute and State University where she recently won the dissertation of the year award for her research on veterans in agriculture. Her early years were spent studying 273 goats at the Piedmont Research Station near Salisbury, where she was involved with implementing de-worming programs. Today she lives in Greensboro, still with goats: 36 meat goats, both breeders and bucks. She leases land in Greensboro and raises them until they are about six months old, then sells them to a niche market in the state.

Kyle used to research goats, now she just enjoys raising them. Her present research pursuits are dedicated to studying the needs of farmers and veteran farmers and how farming can be accomplished more safely. She is very passionate about researching how agriculture can help veterans heal and become part of society back here at home.

Kyle is concerned as we all are with veteran suicide rates, and her future research emphasis will revolve around understanding the stressors affecting both veterans and farmers.

North Carolina

Today, Kyle employs a manager and an N.C. A&T master's student through the North Carolina AgrAbility Program grant. In January, she will add a student from the Murphy Deming College of Health Sciences at Mary Baldwin University in Fishersville, Virginia. The team works to screen, evaluate, create, and deliver evidence-based care plans for farmers and veterans across all 100 North Carolina counties. They also work to find assistive technology that helps all farmers in the state keep farming while staying safe and productive.

While N.C. A&T is fairly new to the AgrAbility program having joined in 2011 (the national program has been around since the '90s), it is the only 1890 land-grant institution in the nation to take the lead. In early 2019, Kyle re-applied and received a fresh, new, four-year AgrAbility grant.

North Carolina is in an excellent position to compete for federal funding because of its innate strengths: a long growing season, diverse agricultural crops and animals, an extraordinary number of small farms across the entire state, and, most germane to Kyle's research, over nine percent (736,000) of North Carolinians are veterans! Additionally, farmers are aging, with an



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average age over 58 years old. This brings unique challenges to farmers across the state, including disabilities and illnesses. Kyle's passion and job is to keep farmers' critical identity as a farmer intact while keeping them healthy and safe. Farming is considered the most dangerous occupation so, she stays busy.

Farming: A Family Affair

If her goats, research and three jobs weren't enough to keep her busy, Dr. Kyle home-schools two daughters, while her eldest is graduating with a degree in middle school education from North Carolina State University. All of the Kyle daughters have been exposed to generous amounts of agriculture over the years, with her youngest intending to become a veterinarian.

About the Division of Research and Economic Development (DORED)

DORED manages N.C. A&T's research enterprise. DORED provides services to faculty, postdoctoral research associates, student researchers, current and potential research partners, funding agencies, and economic development agencies. DORED serves the university and its research efforts through research services and project management, compliance and ethics guidelines, aiding in the submission of research proposals, handling financial and regulatory administration of all contracts and grants awarded to N.C. A&T, management of the university's technology transfer and commercialization programs and promoting opportunities for undergraduates to conduct research.

About North Carolina A&T State University

North Carolina Agricultural and Technical State University is the nation's largest historically black university, ranked number one among public HBCUs by U.S. News & World Report. It is a land-grant, doctoral high-research classified university by the Carnegie Foundation and constituent member of the University of North Carolina system. A&T is known for its leadership in producing graduates in engineering, agriculture and other STEM fields. The university was founded in 1891 and is located in Greensboro, North Carolina.



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