

## AGRABILITY VIRGINIA

*Assisting Farmers and Farm Workers to Continue Working Safely and Productively with Dignity*

### E-NEWS – ISSUE NO. 3: 2018

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### FEATURED CLIENT: HUNTER HARRIS, AUGUSTA COUNTY

Wilson Workforce Rehabilitation Center (WWRC) originally referred Hunter Harris (53) to AgrAbility Virginia after he had a stroke, which affected the left-side of his body. Hunter was grateful for the initial care and rehabilitation from WWRC. He and his wife own 125 acres, and they rent an additional 250 acres. They raise brood cows and anywhere from 30,000 to 80,000 turkeys. Unfortunately, all aspects of Hunter’s daily farm work were impacted by the stroke. Thankfully, after receiving his therapy at WWRC, Hunter has been able to maintain all his operations that existed prior to the stroke. This was accomplished in three ways. First, by installing an accommodating system (Bale Bed) for loading and unloading hay rolls (pictured); second, by adding a prosthesis (Hand Spring/Myo Pro) for his left arm (pictured) that is operated by a shoulder strap from his right shoulder; and the third step includes plans for WWRC engineers to add assistive steps and handles to his tractors. One of the requisite needs of raising turkeys in large numbers is that turkeys, for one reason or another, need to be removed from the poultry house. To remove them requires a great deal of physical effort, which is difficult for Hunter to do. Currently, Hunter does much of the removal with a wagon and assistance from his wife and hired labor. However, research into a more effective automated or assisted means is something AgrAbility is actively pursuing.



## AGRABILITY VIRGINIA PROGRAM EVALUATION

In 2016-2017, the AgrAbility Virginia team conducted an evaluation of the AgrAbility Virginia program to assess how well we are meeting our goals of addressing farmers' needs in Virginia. This is the first time a formal evaluation tool has been designed and implemented for AgrAbility Virginia. The entire team contributed to this unique process by voicing the parts of the program that we wanted to evaluate using an updated AgrAbility Virginia logic model. This resulted in the team compiling a survey tool and an interview protocol that the Institutional Review Board (IRB) of Virginia Tech approved. Surveys were sent out to 52 current and former clients spanning five years. Interviews were conducted to ask more in-depth questions about their experience with AgrAbility Virginia. The overall goal of this evaluation is to identify key areas that we need to improve on, as well as, recognize critical areas of that are working well. We are specifically concentrating on access to educational materials, connections to further assistance, and modification suggestions for farms and equipment. The priority is to ensure the program is completing the important work of assisting Virginia farmers to continue farming effectively, safely, and with dignity. You can read more about our evaluation process by reviewing our newest publications. A link is provided below in the publication section.

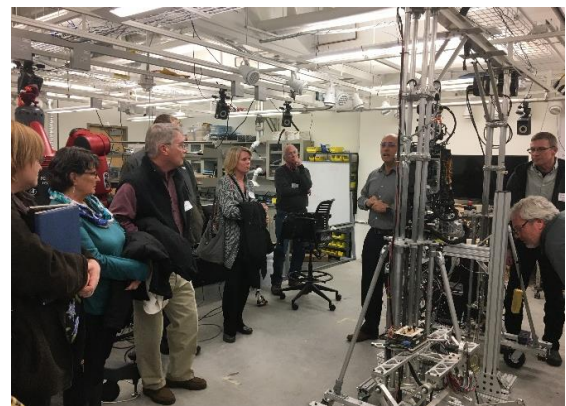
## NATIONAL SCIENCE FOUNDATION GRANT PROJECT

### **“Affordable Flexible Robotic Technology to Enhance Work Performance of Farmers with Mobility Restrictions”**

The AgrAbility Virginia team has partnered with the Departments of Mechanical Engineering and Industrial and Systems Engineering at Virginia Tech on a newly awarded, three-year (\$999,277) National Science Foundation (NSF) grant titled, “Affordable Flexible Robotic Technology to Enhance Work Performance of Farmers with Mobility Restrictions.” AgrAbility Virginia will be working alongside engineers, medical professionals, and TORC Robotics to co-develop flexible robotic systems that are wearable by farmers with mobility limitations in order to assist them in performing activities of daily living with dignity and success. This NSF Partnerships for Innovation: Building Innovation Capacity (PFI:BIC) project leverages the collaboration between Virginia Tech, AgrAbility Virginia, TORC, Easter Seals UCP, and Total Motion Physical Therapy to provide new understanding of the use of service robotics for the care of farmers and farm workers. A poster summarizing the project will be presented at the National AgrAbility Training Workshop this spring.



On January 30, 2018, representatives from the Department for Aging and Rehabilitation (DARS) and Wilson Workforce Rehab Center (WWRC), and members of the AgrAbility Advisory Group visited the AgrAbility team at Virginia Tech to tour of the Robotics Lab (pictured) of Dr. Alexander Leonessa, Associate Professor of Mechanical Engineering and Director of the Center for Dynamic Systems Modeling and Control. The group also visited the Robotics, Autonomous & Dynamical Systems (Exoskeleton) Lab of Dr. Alan Asbeck, project partner and Assistant Professor of Mechanical Engineering.



## **AGRABILITY VIRGINIA COOPERATIVE EXTENSION PUBLICATIONS**

The AgrAbility Team consists of Dr. Kim Niewolny (VT), Don Ohanehi (VT), Crystal Kyle (VT), Kirk Ballin (AV), Tristan Robertson (ESUCP), Steve Bridge (AV), and Jim Sheppard (AV). Together we created and published three new resource publications for farmers and farm families through Virginia Cooperative Extension. These include: *AgrAbility Virginia 2016 Evaluation Brief*; *AgrAbility Virginia 2016 Mixed-Method Program Evaluation Approach and Considerations*; and *An Introduction to Drones: On Farm Use and Safety Implications*. All three are accessible through the AgrAbility Virginia website: <http://www.agrability.ext.vt.edu/publications/> .

## **MURPHY DEMING COLLEGE OF HEALTH SCIENCES PRACTICUM**



Austin, Lauren, Shawn, Emily

The Mary Baldwin Murphy Deming College of Health Sciences is located in Fishersville, VA, near the Augusta Medical Center. The College was established in 2014 to offer graduate level degrees such as Doctors of Physical Therapy and Occupational Therapy, Master of Science in Physician Assistant, and Registered Nurse to Baccalaureate of Science in Nursing. AgrAbility has had the honor of participating in four semester-long practicum studies. This past semester the four students pictured above focused on researching programs and surveys related to farm safety issues as part of a needs assessment on farm safety education and outreach in Virginia. Their research provides a snapshot of the broad range of approaches and challenges to addressing issues of farm safety.

AgrAbility Virginia will once again work with the Physical Therapy and Occupational Therapy departments at the Murphy Deming School of Health Sciences at Mary Baldwin University in doing research on, and development of, farm safety improvements for the Virginia farming community. For the spring 2018 semester, the goal is to develop a new assessment tool for AgrAbility Virginia and our Rural Rehabilitation Network to better address safety and health issues with farmers and farm families. We will also be reaching out to the agriculture teacher and extension community this spring with more updates and ways to connect with our programming to support individuals and their families who farm, and have illnesses, injuries or disabilities, to work safely, effectively, and with dignity. To learn more about The Mary Baldwin Murphy Deming College of Health Sciences, visit:

[www.mbc.edu/health\\_sciences/about/](http://www.mbc.edu/health_sciences/about/)

## **UPDATE FROM THE VIRGINIA BEGINNING FARMER & RANCHER COALITION**

AgrAbility Virginia continues to partner with the Virginia Beginning Farmer and Rancher Coalition Program (VBFRCP)! The VBFRCP is excited to announce a new USDA Beginning Farmer and Rancher Development (BFRDP) grant project to educate and mentor socially disadvantaged and veteran Virginia beginning farmers. This new grant is led by Virginia State University's Small Farm Outreach Program (VSU's SFOP) and will specifically target programming in 54 Virginia counties. Socially disadvantaged and veteran farming audiences have been traditionally underserved and have struggled with several start-up barriers such as high start-up costs and limited access to: credit and capital, knowledge on land acquisition and transition processes, production and financial planning information, and existing and viable markets. VSU's SFOP, in a continued partnership with the VBFRCP, proposes to address these barriers by using the VBFRCP's "Whole Farm Planning" curriculum and by supporting new professional development trainings and networking opportunities on these issues with the expected result of an improved quality of life for beginning farmers and their communities. See [here](#) for a news release by VSU. Questions about the VBFRCP may be directed to Kim Niewolny (niewolny@vt.edu) or Allyssa Mark (allys91@vt.edu).

## **FARMER VETERAN COALITION CHAPTER UPDATE**



Inga Haugen, Librarian for the College of Agriculture and Life Sciences at Virginia Tech and FVC Virginia Organizer; Army Colonel (ret.) Veteran Farmer and Virginia FVC Director, John Fant; Virginia Gov. Terry McAuliffe; Crystal Kyle, Veteran Farmer, FVC Organizer and AgrAbility Virginia and Beginning Farmer Coalition Virginia Tech graduate assistant; Rick Cavey, Veteran Farmer and Grayson County LandCare member; Dr. Kim Niewolny, Virginia Tech, Project Director for both AgrAbility Virginia and the Virginia Beginning Farmer/Rancher Coalition.

In collaboration with, the Virginia Beginning Farmers and Ranchers Coalition (VBFRC), and partnering organizations across the state, AgrAbility Virginia celebrated the conception of the Farmer Veteran Coalition's (FVC) Virginia Chapter in July. At this ceremony, Virginia Governor, Terry McAuliffe, the Virginia Secretary of Agricultural, Dr. Basil I. Gooden, Michael O'Gorman (founder of the Farmer Veteran Coalition), and other dignitaries, officially recognized Virginia's FVC Chapter. Under the leadership of southwest Virginia veteran farmer, and steering committee member of the VBFRC, John Fant, an action team established the state chapter of the FVC. This Chapter is dedicated to assisting veterans who wish to begin farming as a significant vocation. The process of becoming a Chapter required an adherence to certain procedures and protocols to ensure adequate training, guidance, and support for prospective veterans. With membership in the Chapter, veterans who farm are able to receive a number of benefits and community support for successful and sustainable farm enterprises, including the Home Grown by Heroes Certification. For more information, please visit: <https://www.facebook.com/FVCofVA/>

## **AGRABILITY VIRGINIA RURAL REHAB PARTNERS NEWS**

**Independent Living Expo 2018 is being organized by the Blue Ridge Independent Living Center, on Saturday, April 14, from 9 a.m. until 3 p.m., at the Salem, Virginia Civic Center.** It is a FREE day of seeing, touching, trying and learning about the different types of assistive technology (AT) that can be used to help a person with a disability be independent. All people use some sort of technology but for people with disabilities AT provides equal access and helps them to perform functions that can be difficult or impossible. Types of AT include augmentative communication devices, Bluetooth, phone apps, screen readers, wearable AT, environmental and vehicle modifications, computer software, self-care items and more. Our hope is to bring information about services and devices together under one roof for people with disabilities, their families, caregivers, service providers and others to see, feel, try and learn how AT can support independent living. For more information, email [mdavis@brilc.org](mailto:mdavis@brilc.org), call 540-341-1231 or visit [www.brilc.org](http://www.brilc.org)

## **THE NATIONAL AGRABILITY TRAINING WORKSHOP (NTW)**



**The next Annual AgrAbility National Training Workshop (NTW) will be held in Portland, Maine, March 19-22, 2018.** This convergence of staff, farmers, service providers, and agricultural experts is a major source of education, networking, and collegial engagement for AgrAbility Projects and the clients they serve. Registration is available at <http://www.agrability.org/agrability-national-training-workshop/>

## **AGRABILITY VIRGINIA ADVISORY GROUP**

The AgrAbility Virginia (AV) Advisory Group, which serves to assist the AgrAbility Virginia Program by providing guidance on marketing, networking, and education aims, has met twice in 2017. The first time was a face-to-face meeting held at the Wilson Workforce Rehabilitation Center (WWRC) in the spring, and the second meeting was a conference call held in December 2017. The Group consists of: Dr. William Crutchfield, Virginia State University; Ms. Terrie Webb, produce/flower producer and former AV client; Ms. Beth O'Connor, Executive Director of the Virginia Rural Health Association; Rick Sizemore, Director of WWRC; Robert Krollman, Department for Aging and Rehabilitative Services (ret. DARS); Renard Turner, farmer, Vanguard Ranch; Dr. Robert Grisso, Virginia Tech/Virginia Cooperative Extension; Dr. Robert Pittman, Eastern Virginia Agricultural Research and Extension Center Virginia Cooperative Extension. Their participation, input, and continued support is greatly appreciated!

## **AGRABILITY VIRGINIA NEW GRANT APPLICATION**

The AgrAbility Virginia Project is funded through a grant provided by the USDA-NIFA. The grant is received through a formal application made by a Land Grant University (Virginia Tech) in conjunction with a non-profit (Easter Seals UCP). The grant covers a 4-year period. Each year the grant is subject to a “renewal” process or review in order to assure the project is complying with the requisites set by the grant. There are 19 other State/Regional AgrAbility Projects (SRAPs). Every four years, each SRAP has to re-apply for the grant. Not all SRAPs are on the same re-application schedule, thus not all SRAP’s are reapplying at the same time. Also, new states can apply for the grants. This makes the re-application cycle extremely competitive. Virginia is up for re-application, this year, as the current grant-year ends August 31. We are anticipating a positive resubmission process this spring. Stay tuned!

## **AGRABILITY VIRGINIA CONTACT/WEBSITE/FACEBOOK**

- ◇ AgrAbility Virginia website at: [www.agrabilityvirginia.org](http://www.agrabilityvirginia.org)
- ◇ Facebook Page! Like us at: [www.facebook.com/AgrAbility-Virginia-905173346197288/?fref=nf](https://www.facebook.com/AgrAbility-Virginia-905173346197288/?fref=nf)
- ◇ AgrAbility Virginia brochures! If you would like a few for yourself/agency, please contact Kirk Ballin at the e-mail/tel. below.

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