

AgrAbility



30 YEARS OF
IMPACT

Cultivating Independence
for People with
Disabilities in Agriculture



LET'S START WITH THE FUTURE...

Will there continue to be a need for AgrAbility?

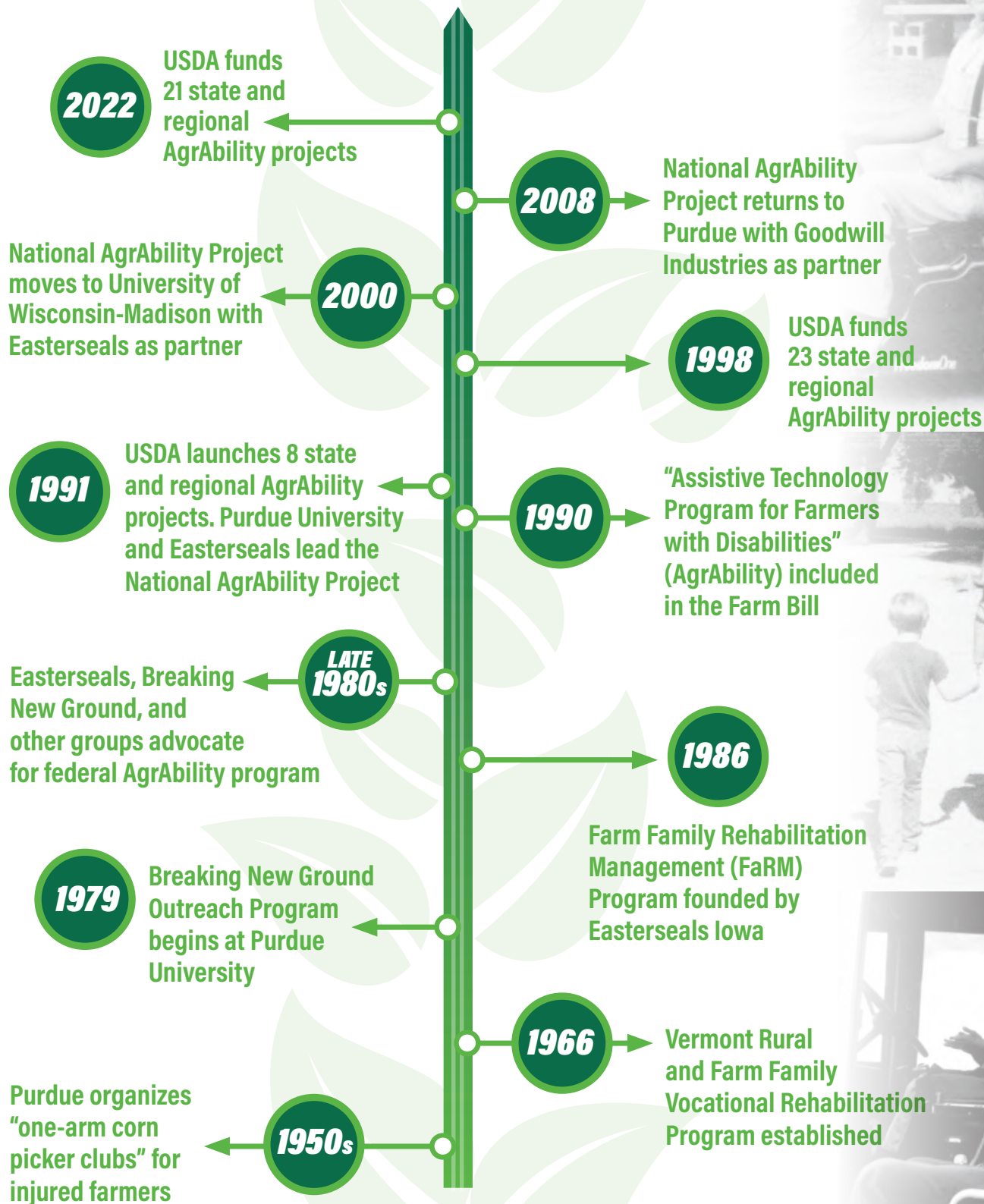
- Our agricultural population continues to age, with the average age of farmers currently at 57.5 years. With aging comes a variety of potential impairments, such as mobility, hearing, joint, and vision problems.
- Even with safety advances, agriculture remains one of the most dangerous industries and will likely remain so.
- The pandemic showed how essential – and vulnerable – our food supply chain can be. We can't take any of our agricultural producers for granted.
- Epidemics of obesity and diabetes show no signs of waning.
- Arthritis continues to be the most common disabling condition in the U.S., and farmers show a high rate of rheumatic conditions.
- Military veterans, many with physical and psychological challenges, are turning to agriculture as a means of employment and healing.
- The continuum of agriculture continues to expand with new frontiers in urban enterprises, local producers, and beginning farmers of all backgrounds and abilities.
- Innovative technologies are making agriculture accessible to more and more people. Artificial intelligence, GPS, auto-steer, apps, and drones are just a few advances benefitting farmers with disabilities.



It's hard to envision a time when AgrAbility will not be needed.

Front cover photo credits:
 (Top left) MJ Multimedia
 (Top right) Tennessee Farm Bureau Federation
 (Bottom) ©Randy Berger Photography

...BUILDING ON THE PAST



As a national science liaison with the National Institute of Food and Agriculture at USDA, I have had the privilege of working with AgrAbility since it was first initiated more than 30 years ago. Since that time, the program has supported more than 13,600 farmers, ranchers, and other agricultural workers.

In that course of time I've met many people with disabilities who want to continue to work or begin working in agriculture. I have always been inspired and impressed by their determination to do something that can be very difficult and challenging for anyone: succeeding in agriculture. AgrAbility has been there to help improve quality of life for these dedicated farmers and ranchers.

I would like to express my appreciation for all of those people who have provided support to people with disabilities who want to continue to work in agriculture – to those who work with the Extension system and to our nonprofit organizations and all the other collaborators who have helped make AgrAbility a success. I truly appreciate all of the impacts and outcomes that those organizations have accomplished to help support people working in agriculture and to truly make a difference in their lives.

Congratulations on more than 30 years of service and success.



Brad Rein

Bradley Rein, P.E.
National Science Liaison
National Institute of Food and Agriculture
USDA

SOME THINGS HAVE CHANGED IN 30 YEARS, OTHERS HAVEN'T

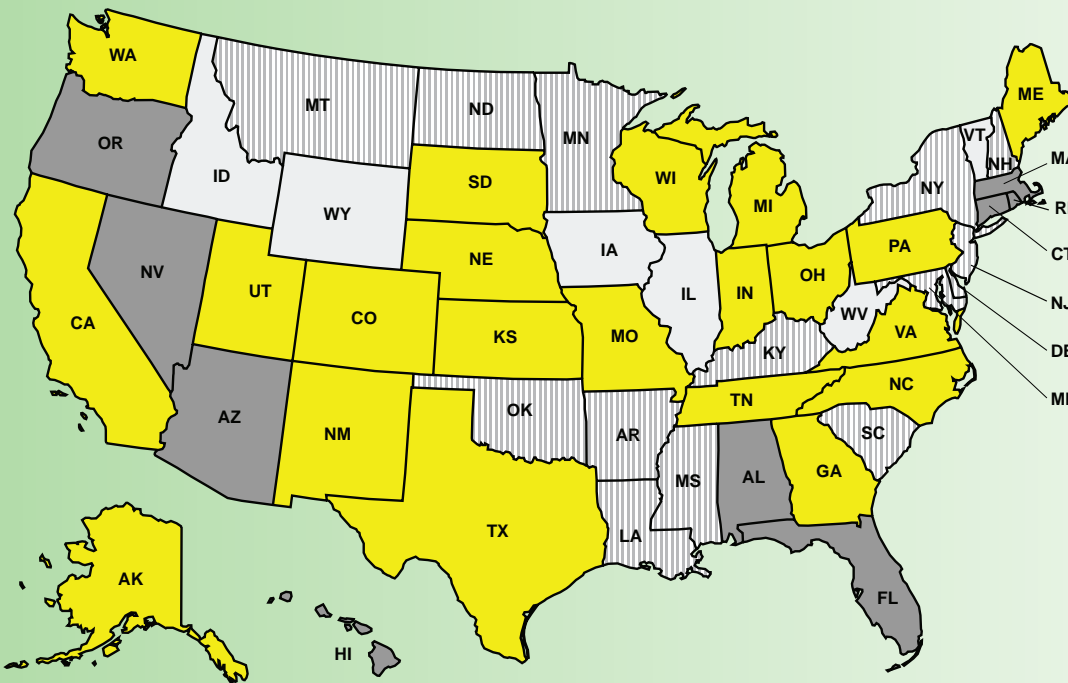
AgrAbility has grown from 8 “demonstration projects” in 1991 to 21 funded projects today. Over the years, the program has developed an impressive body of collective knowledge to assist our clientele and has consistently embarked on new and more effective strategies of conducting evidence-based outreach.

During the past three decades, the assistive technologies available to agricultural workers have become more advanced and widespread. Agriculture itself has evolved to include new enterprise options, such as urban farms and a multitude of niche markets. AgrAbility’s clientele has become more diverse to include greater numbers of veterans, women, and those involved in agriculture from the African American, Native American, and Latino communities. Greater emphasis is also now placed on things like farm stress and mental/behavioral health issues.

What hasn’t changed? Farmers, ranchers, and other agricultural workers are still determined to persevere in their lifestyles, no matter the obstacles. They maintain an independent spirit and resist being labeled as “disabled.” They use creativity and innovation to get the job done.

And AgrAbility hasn’t changed its commitment to provide essential services to help them overcome barriers to success.

This publication outlines some of the ways AgrAbility works to fulfill its mission and some of the stories of people whose lives have changed because of the program’s services.



During AgrAbility’s existence, a total of 41 states have been covered by a USDA-funded AgrAbility project. However, due to funding limitations, there are only 21 currently funded state AgrAbility projects plus the National AgrAbility Project whose purpose is to support the state projects and provide limited services to agricultural workers in states without AgrAbility projects.

- Currently funded AgrAbility Projects (2022)
- Previously funded and still providing some AgrAbility services through other funding sources
- Previously funded but not currently providing AgrAbility services
- Never funded

ALAN KALTENBERG: STAYING THE COURSE

Video of Alan



Alan Kaltenberg loves the land. But woven into the beauty of working the land is the danger. At 4 years old, he lost his arm in a corn auger. "I was the different kid growing up—the kid with one arm," he says. "But I did anything I wanted to do."

However, with age, the physical demands of farming exacted a toll.

"Farmers tend to be more prone to arthritis and repetitive motion injuries," says Richard Straub, University of Wisconsin professor emeritus and co-director of AgrAbility of Wisconsin.

Paul Leverenz of Easterseals Wisconsin agreed. "Farmers don't think about bad backs, bad hips, or milker's knee as disabilities," he said. "We define disability as anything that presents a barrier to doing your work."

When Kaltenberg contacted Easterseals, Leverenz came to his 300-acre farm. "Adding a step with a handrail allows him to get on the platform," Leverenz said. "It's a \$200 change, but it's profound."



On a cold, damp morning in 2010, Kaltenberg's hand slipped off the top rung of the grain bin ladder, and he fell 30 feet. Crawling for 2 hours, he made it from the bin to a phone in his shop. Over the next three months, he had multiple surgeries to repair shattered ankle bones. "I had to learn to walk again," he says.

Today Kaltenberg uses a power lift to access his grain bins and can change implements without leaving his skid loader. "Farming's what I love," he says. "AgrAbility's here to help and say, 'Hey, it's not the end.'"

OVER 13,600 CLIENTS; MULTITUDES MORE SERVED

It is estimated that during its 30-year history, AgrAbility has provided direct, on-site services to more than 13,600 individuals. A typical site visit involves an AgrAbility staff member touring the client's operation to identify barriers to productivity and discuss potential solutions. Ongoing services include additional visits, phone follow-up, and referrals to other assisting organizations, such as state vocational rehabilitation agencies. However, in addition to these intensive on-site services, AgrAbility staff members have assisted hundreds of thousands of people through phone contacts, emails, workshops, publications, exhibits at events, and web resources.

BROAD SPECTRUM OF ABILITIES

AgrAbility assists people with all types of abilities – and disabilities. While some clients have sustained traumatic injuries, such as those incurred in farm- or vehicle-related incidents, many others struggle with chronic conditions, such as arthritis, back impairments, and other joint-related limitations. It's not just physical disabilities that AgrAbility addresses: staff members also assist clients who have mental/behavioral health issues, including veterans who are dealing with PTSD.



FRANK BEARD: "I'VE BEEN BLESSED"

Video of Frank



If you visit Frank Beard at his Rutherford, Tennessee, farm, you'll hear how much he appreciates his opportunity to learn the value of work while growing up on the farm. "I was blessed to learn to work," he says. The events of November 9, 1982—and its impact on the 76-year-old—seem almost like an after-thought.

Beard was picking corn on his grandparents' farm when the stalks jammed. "I jumped off the tractor, and without shutting off the PTO," he recalls. "I got too close to the chain—caught my pant leg. I had a brand new pair of blue jeans on. Once those snapping rolls get hold of you, they just keep grinding. That's where they found me, still alive, but barely."

Stabilized at the local hospital, Beard was transferred to Vanderbilt University Medical Center. "God had other plans for me," he says. "I had a few more goals, and God allowed me to achieve those goals. To this day, I tell people it's all about what God has done for me."



Several operations and months of rehab later, Beard was fitted with prosthetic legs. Determined to get back to farming, he learned about Tennessee AgrAbility. His life changed again. He recalls, "Joetta White (AgrAbility staff member) said,

'Frank, we have a platform lift for your tractor.' Without it, I couldn't keep farming—or have the strength to get up into the tractor. I can bush hog, I can roll hay," he says. "AgrAbility has kept me continuing to enjoy what I really love. End of story."

JESSE BELL: OVERCOMING THE ODDS

Video of Jesse



Tide Mill Organic Farm in Edmunds, Maine, has been home to the Bell family for over 200 years. Jesse Bell was born into the eighth generation in 1980. Diagnosed with autism, he spent three weeks in the hospital as a newborn. Thanks to occupational, physical, and speech therapy, plus clear goals set throughout his education plan, he attended school and successfully transitioned to becoming an independent, contributing member of the farm.

Some of this success can be attributed to Maine AgrAbility since Jesse's family reached out to the project for advice to improve his independence on the farm.

Maine AgrAbility recommended adaptations to his routine, including use of a utility vehicle to get around. He has since moved up to driving a jeep to get from one end of the farm to another. Jesse's chores range from operating the wood splitter to milking cows, cleaning the barn, sterilizing



the milking machine, and moving cows from pasture to the barn for milking.

Another adaptation was the creation of a checklist. As long as Jesse has a sequence, he can learn it, and once he learns it, he never forgets it. Today Jesse lives independently

on the farm, in his own home, with his cat, Rachel Ray. He volunteers to donate his rare blood type and for the Autism Walk. Jesse leads a fulfilling life on the farm, working as an integral part of the next generation of Maine farmers.

COALITION OF PARTNERSHIPS

An important aspect of AgrAbility's structure is the requirement for partnerships: land-grant university Extension services must subcontract with nonprofit disability services organizations. Agricultural expertise is provided through the university, and the nonprofit provides disability expertise. Over the 30 years of AgrAbility, more than 40 universities have been involved and an even greater number of nonprofits have participated, including Easterseals, Goodwill, Arthritis Foundation, Tech Act projects, United Cerebral Palsy, centers for independent living, Osteoarthritis Action Alliance, AgriSafe Network, and many more.

THE POWER OF COLLABORATION

Because the interface of disability and agriculture requires expertise and resources that no one person or organization can provide, AgrAbility staff members must be experts at networking. Therefore, collaboration with occupational therapists, Extension educators, and professionals from other nonprofit organizations is essential. Since AgrAbility is not allowed to provide funding or equipment to clients through its USDA grants, it relies heavily on state vocational rehabilitation agencies to supply assistive technologies, building modifications, and other critical services. Funding from external organizations like agriculture-related companies and foundations is also important to supporting outreach.



KRISTI GROVE: “AGRABILITY KEEPS FARMERS LIKE ME FARMING” [More about Kristi](#)



Kristi Grove was born with optic nerve atrophy. As a child, she attended the North Carolina School for the Blind in Raleigh during the summers. “It was hard for me when I was young,” she says. Today, North Carolina AgrAbility is here to help Grove, who operates Grove Cattle Company with her husband, Dan, near Bailey.

The Groves raise Texas Longhorns, selling breeding and roping stock, as well as rodeo steers. They also sell packaged and labeled grass-fed beef. Kristi and Dan also have a young daughter, Leah.

NC AgrAbility helped her obtain specialized equipment, and Grove also relies on her iPhone. “I use the magnifier on my phone to unlock the cattle gate,” she says.

Grove wears readers to enlarge print, and glasses with binocular lenses allow her to drive, although she has a restricted license.



©Randy Berger Photography

Betty Rodriguez, director of North Carolina AgrAbility, says, “AgrAbility is the hub to help farmers get information and services.”

In addition to farming, Grove also gives riding lessons and operates educational camps for kids to learn about farming. “AgrAbility keeps farmers like me farming,” Grove says.¹

DOUG VER HOEVEN: PAYING IT FORWARD

Video of Doug



Doug VerHoeven's life changed overnight 43 years ago when he was injured in a vehicle accident as a high school student. But it didn't end his dream of farming the family operation near Holland, Michigan. Through his years of farming from the seat of a wheelchair, he built an inventory of tools, ideas, and methods that helped him persevere. He also benefitted from being an AgrAbility client and from serving as a member of AgrAbility's farmer advisory panel. In 2019, he teamed up with Michigan AgrAbility to create the Michigan AgrAbility Demonstration Farm to share his knowledge of assistive technology tools and equipment.

"My heart has always been to give back," he says.

Ned Stoller, an assistive technology professional and Michigan AgrAbility ag engineer, has worked with VerHoeven to make the demonstration farm a reality. "It gives farmers a chance to try assistive technology before they buy it and



gain ideas by seeing what other farmers have built," he says.

The demonstration farm includes lifts, ramps, outdoor mobility vehicles, hitch attachments, and basic overhead-door-handling equipment. It also offers smaller tools: pruners, anti-vibration gloves, easy attachments for hydraulic hoses, and more.

"Over the years, other people who are paralyzed or injured have come to the farm," VerHoeven says. "They think that when they're in the wheelchair, that's what they're confined to and they don't really know they can do other things until you show them."²

BEYOND PHYSICAL ISSUES

In its earlier days, AgrAbility focused primarily on physical disabilities and assistive technologies needed to accommodate them. However, over the years the program has evolved to where it recognizes that not all barriers are readily apparent. For example, during the late 1990s, AgrAbility put significant effort into assisting the caregivers of farmers with disabilities, since it's not just the person with a disability that faces struggles. More recently, farm stress and mental health have come to the forefront, and AgrAbility has responded by participating in such efforts as USDA's Farm and Ranch Stress Assistance Network and by conducting Mental Health First Aid and QPR trainings.



SERVING THOSE WHO SERVED

Agriculture has become an important source of employment and healing for military veterans. After leaving the service, many discover that working in agriculture fulfills them in ways that other occupations can't. AgrAbility engages with veterans at multiple levels. For example, National AgrAbility collaborates closely with the Farmer Veteran Coalition (FVC), and many state projects work with their state FVC chapters. Other examples of AgrAbility veteran initiatives include participation in USDA AgVets grant projects and the development of unique state programs like Maine AgrAbility's "Boots-2-Bushels" and Texas AgrAbility's "Battleground to Breaking Ground."



DAVON GOODWIN: "GETTING MY HANDS IN THE DIRT CHANGED ME"

Video of Davon



"When I got on the farm, I felt re-invigorated," says Davon Goodwin. "I felt a connection. Putting my hands in the dirt changed me."

The Laurinburg, North Carolina, veteran suffered a traumatic brain injury from a roadside bomb in Afghanistan in 2010. He also injured the L1 and L2 vertebrae in his lower back.

Goodwin had studied biology and botany in college. "When I woke up after my injury, I didn't want those things anymore," he says. "I developed narcolepsy from my head injury. Then I met two doctors with a 500-acre farm looking for a farm manager. That was the start of farming."

Goodwin says agriculture and military service have much in common.

"Military service and farming require the same discipline, persistence, and commitment," he says. His first job taught him to manage land, set up a farm, and maintain a vineyard. He opened OTL Farms, where he grows



three acres of Muscatine grapes. He hopes to expand to eight acres of U-pick.

"After the injury I felt I wasn't serving," he says. "Now I'm giving my community fresh fruits and vegetables—serving in a different way." The Farmer Veteran Coalition, a National AgrAbility partner, also helped Goodwin. "You gain the camaraderie

you had in the service," he says. He uses the Coalition's "Homegrown by Heroes" label for his products and bought equipment with help from its Fellowship Fund. "Farming can be scary," he says. "It helps if you find another vet who farms and get your feet wet. I'm excited about what the coalition can do in North Carolina."³

SAMANTHA, CAM, AND NICK: "MY DISABILITY WON'T DEFINE ME"

Video of Samantha, Cam, & Nick



Samantha Johnston was one of three students working a summer job at Rummier Run Farm near Buxton, Maine. It's not always easy to find summer work, and it can be even more difficult as a teenager with a disability.

"We go into schools to teach job readiness," said Sarah Morton, youth peer mentoring/counselor at Alpha One in Portland, Maine. "The newest thing we've added is AgrAbility. What we're finding is that businesses are afraid to hire kids with disabilities, so our goal is to help businesses learn about them by bringing them on-board to show how they do. Students work three days a week at the farm, and the fun thing is that they get paid."

The program is a partnership between Maine AgrAbility, the University of Maine, and Alpha One, and is funded by the Maine Department of Labor Division of Vocational Rehabilitation.

"These kids are really motivated," said farm owner Sally Farrell. "They like animals. They're interested



in agriculture, so it's a good fit. As older farmers, we need to encourage youth. Especially youth with disabilities. Everybody can be successful on the farm."

Another student, Cam, agreed. "I am learning about myself, and a lot about these animals, and learning

about how to communicate with my peers better," he says. "Teamwork is awesome. Teamwork is everything in business."

He adds, "I know my disability is not going to define who I am. Actually, it makes me work harder. Work should be fun. I love this job."

EXPANDED OUTREACH THROUGH THE WEB

Over the past 30 years, AgrAbility's impact has been greatly multiplied by the internet - a technology that few had heard of when AgrAbility began. The web provides a means of communication through which clients, professionals, and others can correspond directly with AgrAbility staff members; it functions as a repository of scores of AgrAbility publications, videos, and other resources that can be accessed anytime, anywhere with the right technologies; and it provides a conduit for live training events to worldwide audiences that can be archived for future use. The www.agrability.org site currently receives more than 5 million hits and 440,000 total visitors per year.



GLOBAL IMPACT

Although focused on agricultural workers in the U.S., many of the concepts and technologies recommended or developed by AgrAbility staff members are relevant to those in other nations, including developing countries. To facilitate information transfer on a global scale, National AgrAbility has engaged an assistive technology specialist to help catalog and disseminate information about low-tech assistive technologies that could benefit agricultural workers anywhere. AgrAbility has welcomed international attendees to its conferences, has conducted training in more than 10 countries, and is currently involved with the emerging AgrAbility for Africa effort.



TODD HAAGEN: FARMING'S IN HIS BLOOD

Video of Todd



Todd Haagen lives and works on his family's four-generation farm in Madison County, Georgia. He doesn't take his role in the family business for granted, either. A spinal cord injury at age 24 made that role even more challenging.

"My great-great grandfather started it and passed it down," he says. Haagen has been raising sheep on 25 acres of the original farm since 2014. "But my dream always was to be able to get back on the tractor again. So, in 2016, I decided I was going to try to make it happen."

After his equipment dealer told him about AgrAbility, he met with university staff at AgrAbility in Georgia to make a plan to equip his tractor with hand controls. He also got a boost from a lift attached to his cab tractor, allowing him to hook it up to a Jiffy Hitch with a PTO system, back up, and hook up to a bush hog or use a harrow.

"I never have to leave the tractor or get someone out there to help me," he says. Haagen describes his Action



Trackchair as "the greatest thing" to help him to move around the farm to do his work. "If there's one thing I couldn't live without, this would be it," he says. "You can go anywhere and work on anything you want to."

During AgrAbility's Virtual State Fair in 2020, Gary Black, Georgia Commissioner of Agriculture, visited

with Haagen on his farm. "Let's take technology, let's take what we're capable of doing, and enable people," Black said. "The AgrAbility program uses technology to enable farm people to fulfill what's in their blood."

JACKIE WEIMER: AGRABILITY HELPS HER DO WHAT SHE LOVES

Video of Jackie



Jackie Weimer's alarm rings at 4:45 a.m. daily. Even after almost 40 years of training thoroughbred racehorses, the Bennett, Coloradoan still feeds and cares for three horse barns. Diagnosed with scoliosis as a child, she's had three back surgeries, two new knees, and struggled with lung problems.

"It's getting harder every year," she admits. "I continue to do things because I love the horses. Anytime someone quits doing what they enjoy, you don't have much of a life. I just keep plugging along."

Her husband, Jim, saw a newspaper article about a workshop for farmers and ranchers organized by Colorado AgrAbility and Goodwill Industries of Denver. She reluctantly agreed to attend, and she met Jill Sump, an occupational therapist with Colorado AgrAbility, and case manager Vince Luke, working in partnership with Goodwill Industries.




Sump visited the ranch and saw that a utility vehicle would help her immensely. The Colorado Division of Vocational Rehabilitation contributed the financing.

"The first day I got the Mule (UTV), it was heavenly," Jackie says. Jim was relieved, too. "It has a cab, heater, and windshield wipers," he says. "She's protected in there."

Jackie also obtained a manure vacuum to clean stalls. "Without these, we probably couldn't continue on this scale today," Jim says.

"I just think AgrAbility is wonderful," Jackie says. "They're wonderful people."

EVIDENCE-BASED RESOURCES



As a land-grant university Extension program, AgrAbility's primary task is disseminating evidence-based information to the public. Though not explicitly a research program, AgrAbility staff members (and the graduate students working with them) have nonetheless generated an impressive amount of scholarship. Since 1991, more than 50 peer-reviewed, AgrAbility-related articles have been published, most in academic journals. (See agrability.org/impact for a complete list.) Topics have included assistive technology, secondary injuries, caregiving, and many others. These articles have provided a credible source of information for professionals to design and implement evidence-based programs, and they have led to the development of many subsequent resources, like those found at www.agrability.org/resources.

EXPANDING AG OPPORTUNITIES

The face of agriculture may change depending on the location: row crop farming in the Midwest, ranching in the Great Plains and the West, large pockets of dairy or vegetable production in certain areas. With the expanding spectrum of agriculture, enterprises could include aquaponics or hydroponics, floriculture, niche markets, beekeeping, urban agriculture, or even agritourism. What doesn't change is AgrAbility's commitment to providing individualized services to people with disabilities involved in any agricultural production pursuit.



KANE LEWIS: FOLLOWING IN THE FOOTSTEPS OF FAMILY

Kane Lewis is a fifth-generation Jamestown, Ohio, farmer. Like many other young people in agriculture, he's working on a degree at the same time as he's gaining experience and helping on the family's corn and soybean farm.

Unlike other young farmers, he's taking on an additional challenge. In 2019, Lewis was injured. "I was in the tree stand that morning, bow hunting," he says. Everything seemed normal, but the next thing Lewis knew, he was lying on the ground below. Following surgery, he was told that he would be paralyzed from the waist down.

"The biggest thing for me was how was I going to react?" he says. "How was I going to go back to my normal life?"

Thanks to help from AgrAbility and Ohio's vocational rehabilitation program, Opportunities for Ohioans with Disabilities, Lewis began his journey. He applied for an Action Trackchair that allows him to stand upright, and his truck was retrofitted with a lift to get him into equipment. He learned about other helpful assistive technologies.

Rachel Jarman, a rural rehabilitation coordinator with Ohio AgrAbility, works with Lewis. "Kane has been positive from the start," she says. "He absolutely said 'I want to do this.'"

Lewis admits, "Sometimes it's hard. Getting out of bed and just pushing on. But you're following in your family's footsteps. Stuff might be hard, but it's not impossible. I want

my kids to think that I'm a strong, independent guy, and my main goal is that they're going to take over the farm once I'm gone."⁴



[More about Kane](#)

FARMWORKERS LEARN 5 HEALTHY STEPS: RAISING AWARENESS ONE STEP AT A TIME

Latino farm workers in the U.S. face daily risks, but now one less well-known health risk is gaining attention: type 2 diabetes. During outreach events and site assessments with Latino farmworkers, California AgrAbility staff identified the need for a tool that these workers could use to help them manage their diabetes. They then partnered with the Western Center for Agricultural Health to produce an educational tool in a format popular with farmworkers: the fotonovela.

“The incidence of diabetes in the Latino community is high, and we’re trying to fill a gap,” says Teresa Andrews, UC-Davis Education and Outreach Specialist. “Nobody can control what they don’t understand. The novella aims to empower people to understand what diabetes is, why it develops, and how to prevent it or control it—the 5 healthy steps. The

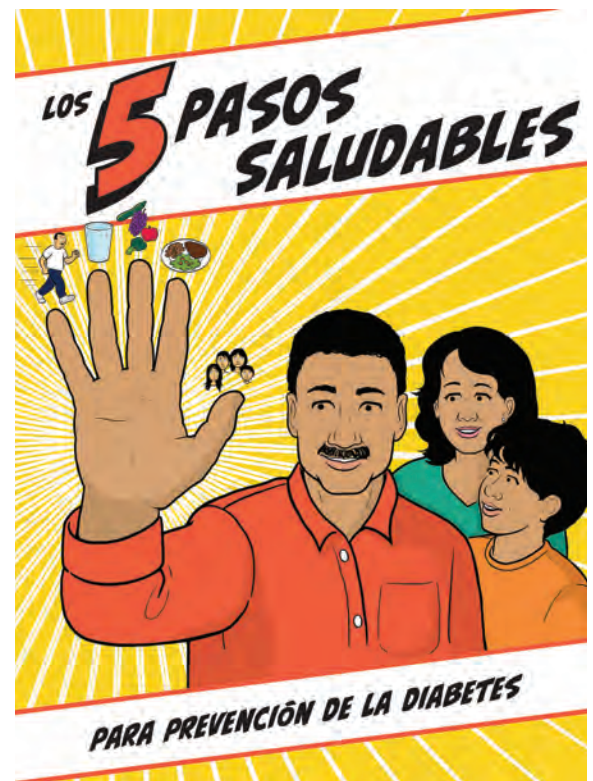
comic book format is easy to read, as its science-based information is explained in a conversational way.”

The 5 Healthy Steps for the Prevention of Diabetes is written in Spanish and English. This 41-page fotonovela with an attractive four-color cover features the story of a Latino man with unhealthy eating habits.

His conversations with family members and other characters raise the need for awareness of the following five healthy habits:

1. Stay physically active
2. Drink water instead of sodas and sugary drinks
3. Eat vegetables and fruits
4. Measure your food portion
5. Share this lifestyle with loved ones

Download the fotonovela



The fotonovela also contains helpful tips on things like risk factors, heart disease, portion control, and healthy recipes.

DIVERSE AUDIENCES

AgrAbility has made significant strides in reaching out to agricultural populations that have been considered underserved. Since 2014, the National AgrAbility Project has conducted nine workshops at the historically-Black 1890 land-grant institutions, one of which has received its own AgrAbility project grant, and two workshops on Native American reservations. In addition, various states work extensively with Latino farmworkers, and the National AgrAbility Project recently added a Latino Outreach Coordinator to its staff. Given the significant Amish/Old Order Anabaptist populations in several states, both national and state AgrAbility staff members have engaged in multiple networking activities with these groups.

STUDENT CONTRIBUTIONS

AgrAbility provides many opportunities for students to join the mission of assisting people with disabilities. Undergraduate engineering students have developed assistive technologies through senior capstone design projects, including some of the initial prototypes for lifts to get farmers back into their equipment. High school students have completed numerous AgrAbility-related service projects through opportunities like the Bridging Horizons Community Service Contest. Occupational therapy graduate interns hone their skills while learning more about disability in agriculture. Even university fraternities and sororities partner with AgrAbility by conducting fundraisers that have provided sizable support to many projects around the country.



CAREY PORTELL: AGAINST THE ODDS

Video of Carey



In December 2010, Carey Portell's life shattered when a drunk driver collided head-on with her vehicle on Route 66, a few miles from her St. James, Missouri, home. She suffered a fractured pelvis, crushed right ankle and dislocated left foot. After undergoing two surgeries, Carey remembers waking up to hear her eight-year-old son saying, "Thank you for staying alive, Mom." She says, "When I looked down, my legs were in external fixators. I knew it was bad, but I had no clue how long or how hard my recovery would be." Limited to wheelchair use for almost two years, it was four years before Carey walked again without support. She had 10 subsequent operations, fusing the joints in her ankles and bones in her pelvis.

In 2014, Carey attended a University of Missouri conference for ag women where she met Karen Funkenbusch, Missouri AgrAbility director. Funkenbusch contacted



the state Department of Vocational Rehabilitation (VR) and encouraged Carey to apply to become a client. With help from Missouri AgrAbility and VR, Carey received funding to buy a Polaris Ranger UTV with an automatic feeder attached. "The UTV keeps me from being bumped over by cows and from flying calf hooves," she says. "I don't have to walk on

ground with frozen hoof prints. It's the most essential piece of equipment I've received." Other adaptations reduce Carey's fatigue, including anti-vibration gloves and remote control pasture gates.

Today the Portells have 120 head of Angus on their 1,000 acres. "The cows give me a purpose," she says.

MARVIN VAN BEEK: FINDING A WAY TO GET IT DONE

Video of Marvin



Marvin Van Beek has farmed near Inwood, Iowa, for most of his life. That didn't change after the father of four children lost both arms in a power take-off.

"Marvin is the epitome of an Iowa farmer," says Tracy Keninger, director of Easterseals Iowa Rural Solutions Program, an AgrAbility affiliate program. "Tenacious, driven, literally nothing stops him. Marvin had lived and worked independently for years, but there comes a time in life when farmers need additional help. That's where the Rural Solutions Program steps in."

In the early 1990s, Chuck Larson, an Easterseals Iowa rural rehabilitation specialist, stopped to see Van Beek. Later Larson helped him set up a game farm and eventually helped him switch over to raising sheep.

"He has all the courage in the world to progress and be successful," Larson says. "And that's what he's done."



However, as Keninger points out, "Marvin's solutions weren't always long-term, since they were so taxing on him." For example, as Van Beek pointed out, "I carried buckets with my teeth—I could lift 120 pounds."

Easterseals Iowa helped him set up automatic feed and watering systems. "The great thing about

Easterseals is there's no limits on length of support," Keninger says.

Two years ago, Van Beek began work at Hope Haven part-time as a job coach for people with intellectual disabilities. "I like to see other people succeed," he says. "There's going to be a lot of people who tell you that you can't do something. My attitude is to prove them wrong."

DEMONSTRATED, MEASURABLE IMPACT

A collection of client success stories may be inspirational, but is there any hard evidence that AgrAbility really works?

To help gauge its impact, AgrAbility recently conducted a 10-year study to compare the program's impact with a no-treatment comparison group. Using the McGill Quality of Life (QOL) survey and a newly-developed Independent Living and Working (ILW) instrument, AgrAbility gathered data both from AgrAbility clients and from farmers/ranchers with disabilities who had not received services.

The results: on average, the 196 AgrAbility client group participants reported: (1) increased QOL levels of 28%, while the 97 no-treatment comparison group's QOL level fell by 4%; and (2) increased ILW levels of 30%, while the no-treatment comparison group increased by only 8%.

Source: Fetsch, R. J. and P. Turk. A quantitative assessment of the effectiveness of USDA's AgrAbility project. *Disability and Health Journal*. 11(2), 249-255.



1,200+ YEARS OF STAFF EXPERIENCE

The staff members on currently funded AgrAbility projects and AgrAbility affiliate projects have more than 1,200 years of combined AgrAbility experience.

"The prevalence of disability, the high risk of injury involved in production agriculture, and the farming culture justify the need for AgrAbility. These success stories, and the farmers we have the honor to work with, are the reason we work so hard to provide a program that works for them."

Lani Carlson, Maine AgrAbility

"The people we serve — the farmers and ag workers assisted by AgrAbility PA — are like no other. Their determination to be successful and to continue working despite a disability is inspiring. And there's a ripple effect when I talk or share with people what I do. Their eyes get big and you can see the aha moment happening."

Kendra Martin, AgrAbility for Pennsylvanians

"I am thankful for AgrAbility because it gives people hope that they can continue working, even when others tell them they cannot continue."

Ned Stoller, Michigan AgrAbility

"It is often hard for farmers and ranchers to open up to strangers, if I can provide even one small suggestion or tool to make the task easier or possible, then I might see a small smile or receive a strong handshake as I walk out the door. That makes it worth it. That is why I am here!"

Karin Rasmussen, Kansas AgrAbility Project

"Human connections are what make AgrAbility special. When farmers have a personal challenge, we don't want them to have to give up their lifestyle and what they love to do."

Joetta White, Tennessee AgrAbility Project

"There is nothing more satisfying than hearing thanks from a farmer who was able to continue farming because of AgrAbility."

Randall Bagley, AgrAbility of Utah

References:

1. <https://tinyurl.com/grove-impact>;
2. <https://tinyurl.com/verhoeven-impact>;
3. <https://tinyurl.com/goodwin-impact>;
4. <https://tinyurl.com/lewis-impact>



The **VISION OF AGRABILITY** is to enhance quality of life for farmers, ranchers, and other agricultural workers with disabilities.

It is estimated that at least 634,000 people in the U.S. farm/ranch population have a disability. For more than 30 years, the USDA AgrAbility Program has reached out to empower these individuals to keep doing what they love. AgrAbility's efforts have helped enhance quality of life not only for individuals but also for families and communities.



Over the decades, many corporations, foundations, and other entities have provided significant **SUPPORT** in helping AgrAbility fulfill its mission.

USDA National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE



www.agrability.org