

AGRABILITY QUARTERLY

Promoting Success in Agriculture for People with Disabilities and Their Families

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The National Grant Program
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Farmer Keeps On...Farming to State Capital

Like many farmers and ranchers, John Enns is focused, hardworking, and civic minded. Despite a disabling rollover incident, this recently-married Oklahoma farmer looks forward to a bright and busy future, where he continues to farm and serve his fellow Oklahomans in the state legislature.

John began his farming career at six years old when he partnered with his eight-year-old brother to buy their first cow-calf pair. Using that original pair, he established a cow-calf operation that numbered 60 pair before his injury. He also raises a variety of grain and forage crops.

In 2004, John was involved in an incident while doing custom work for a neighbor. He was operating a rye wicker as part of his weed control program when it rolled over while driving through a ditch. The machine carries a herbicide-soaked wick or sponge which treats the taller plants that are considered weeds in a field. John broke his back in three places resulting in an incomplete T-12 spinal cord injury.

The road to recovery was tough for the 37-year-old farmer. After a successful back surgery to fuse several vertebrae and remove bone fragments from his spinal cord, John spent nearly two months recuperating in the Jim Thorpe Rehabilitation Hospital in Oklahoma City, Oklahoma. The physical therapist he was working with told him about AgrAbility and Oklahoma Vocational Rehabilitation (OVR). He welcomed the services of these programs because he was eager to get back to the 1,000 acres of land he farmed as part of his family's operation.



John Enns on his farm, next to the modified barn doors.

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Client Story

John Enns

John contacted OVR and AgrAbility. “I was very impressed with the professionalism of the VR counselor and AgrAbility. They helped me navigate the process of getting back to farming,” John said. Carla Wilhite, an occupational therapist with Oklahoma AgrAbility, visited John about a month after he returned home from the hospital. At that time, AgrAbility conducted both a functional assessment and farm worksite assessment.

“The functional assessment allowed me to see what John’s physical abilities were, and as we did the worksite assessment, I was able to begin problem solving with John on what the potential solutions could be in terms of accessing buildings, equipment, vehicles, fields, etc.”

Carla recalled, “I knew John was going to be an excellent candidate for vocational rehabilitation services because he was focused on maximizing his recovery, he was doing an excellent job of self-managing his care and therapies, and he was willing to be adaptable to the situation.”

Though John can walk 700 feet on flat ground with a walker and braces, he generally uses a manual wheelchair to get around. AgrAbility recommended a number of assistive technologies and modifications, including adapting his barn doors so he could open and close them himself, seated tractor lifts, hand controls and a chair lift for his pickup truck, gate opening devices, and an all-terrain powered scooter. OVR provided funding for the vehicle modifications, barn door adaptations, and tractor lifts. The Oklahoma Assistive Technology Foundation provided funding for his wheelchair lift for the pickup.

John is looking forward to doing more on his farm. “When I get on the tractor, I feel more normal.” One of John’s goals is to perform all the maintenance and repair work on his equipment. Moreover, John is looking to acquire additional technologies to help him hitch equipment and get out to his pastures.

AgrAbility helped John write a Plan for Achieving Self-Sufficiency (PASS) to the Social Security Administration. The plan would set aside funds to purchase solar-powered gate openers, a powered scooter and a powered standing wheelchair so he can interact with people at eye level. Another avenue for purchasing equipment that John is considering,

if the PASS plan is not approved, is an Alternative Finance Program loan through Oklahoma ABLE Tech and Oklahoma Assistive Technology Foundation.

With the help of many organizations, John continues to farm. “AgrAbility has meant a great deal to me... I am not sure I would be where I am today without their help.” John continues, “AgrAbility’s involvement has helped me to keep going physically, as well as mentally.”



John Enns using his seated tractor lift.

John has certainly “kept going.” With the help of two part-time farmworkers, John continues to farm 320 acres of wheat, milo, and alfalfa in addition to managing his cow-calf operation. He hopes to get back to the 1000-acre operation someday. In July 2006, following his marriage to the love of his life, Charla, John ran for Oklahoma’s state legislature. “Running for office was something that was always in the back of my mind and with everything that has happened the past few years, I felt it was the right time,” John said.

Capacity Building with Health Care Professionals

After the onset or diagnosis of a disability, the farmer or rancher will likely come in contact with an array of health care professionals (e.g., physicians, occupational and/or physical therapists, social workers, rehabilitation nurses, discharge planners). These professionals often have limited knowledge of farm occupations and culture yet have considerable impact on treatment interventions that could return the farmer or rancher to work.

Beginnings

In 2003, the Oklahoma AgrAbility Project approached the National AgrAbility Project (NAP) with the idea that AgrAbility projects could expand their outreach and build service capacity by demonstrating to occupational (OT) and physical therapists (PT) that farmers with disabilities can return to farming. Carla Wilhite, a registered occupational therapist and Oklahoma AgrAbility project specialist, conducted a focus group of OTs and PTs who had experience working with farmers and offered her findings to NAP. The focus group identified skills, knowledge and interpersonal abilities believed essential in working with farmers. The group indicated that these areas were not part of the standard occupational or physical therapy curriculum and offered suggestions for additional coursework and training. Building on the focus group findings, NAP conducted surveys at both the American Occupational Therapy Association and American Physical Therapy Association annual meetings in 2005. The results supported the suggestions offered by the focus group.

In the 2004-2008 CSREES/USDA grant proposal, NAP included an educational priority to build service capacity with health care professionals. Initially, NAP has focused on training resources for the OTs and PTs because of their direct intervention role in rehabilitation and employment strategies. The goal is to build an infrastructure of educational resources and training materials that can be offered to a variety of healthcare professionals. In 2004, NAP also applied for and received a University of Wisconsin Extension program innovation grant that provided additional funds to videotape farmers and their assistive

technologies and build an online course for Wisconsin occupational and physical therapists.

The NAP approach to building service capacity with OTs and PTs is being done on three levels: providing training materials to be used by State and Regional AgrAbility projects (SRAPs), an online continuing education course available on a national level, and resources and curriculum for university students at the pre-service level.

Interest Spreads

Initially six SRAPs expressed interest in participating in a pilot to build service capacity with OTs and PTs. As the curriculum and resources were being developed, additional SRAPs expressed an interest to become involved. Using 2005-2006 supplemental funds, NAP brought together fifteen SRAPs in July 2006 in Oklahoma City, Oklahoma to pilot the training materials. Oklahoma AgrAbility provided invaluable information to the SRAPs about their experiences in conducting OT/PT training workshops. Additionally, Carla Wilhite has consulted with several SRAPs individually and will be a presenter during some of their future training workshops.

Following the Oklahoma training, each of these SRAPs committed their project to conducting a training workshop for OTs and PTs by the end of fiscal year 2006. Feedback from the SRAPs has been used to refine the materials used for face-to-face training and will be applied to the online curriculum and university pre-service resources as well.

Outcome

The educational priority to reach out to the healthcare community is expected to be a win-win for farmers and ranchers, for health care providers and for the state projects. The initial feedback from Oklahoma training workshops and the NAP online course for OTs and PTs has been very positive and encouraging. ❖

The Farm / Ranch Pickup Truck

The trusty pickup truck is a widely used piece of farm or ranch machinery. According to Wikipedia¹, a pickup truck or pick-up is a light motor vehicle with an open-top rear cargo area. Whether used to haul feed to livestock or tools to the field, to make trips to the dealership for purchasing repair parts, or just to relax in the cab while having lunch, the pick-up is a staple on the North American farm and ranch landscape.

Pick-ups can be purchased in many different configurations. Generally, trucks are classified by hauling capacity (i.e., compact to full-sized), by cabin size/style (i.e., standard to crew cab), or by rear cargo area (i.e., short to extended bed). With today's truck popularity, anyone can purchase a pick-up with nearly every standard "automotive comfort feature or accessory" (i.e., color, engines, power windows, cruise, etc.). Indeed, a fully loaded pick-up can cost thousands of dollars.

Today for a farmer or a rancher with a disability, the ability to modify the pickup to meet specific disability needs is more feasible than attempting to modify any other piece of farm machinery. This is due, in part, because pickups are also popular off the farm or ranch. Because of this larger personal vehicle market, an assistive technology product market has been created and sustained for pickups.

If a farmer or rancher requires assistive technology adaptations for a pickup, there are many companies

and sources of information online to assist them in their search. The National AgrAbility Project (NAP) assistive technology product database (ATPD) has an entire category called "Truck Modifications²". Likewise, several other online assistive technology databases, such as AbleDATA³, offer entire categories on "Transportation" which includes products to enable people with disabilities to drive or ride in cars, vans, trucks and buses. Breaking New Ground's "The Toolbox" has a product category specific to "Trucks/Off-Road Vehicles⁴". If these resources are not helpful, a farmer or rancher can always search the entire Internet using their favorite search engine.

Most major automobile and truck manufacturers offer financial assistance programs for purchasing and modifying one of their vehicles. If a farmer or rancher is interested in buying a new pickup, he or she may wish to check first with local dealerships about such incentives, and/or read about them at various web sites⁵. Organizations, such as "Disabled Dealer", may offer pre-owned vehicles that others have modified but no longer need⁶.

For a farmer with a disability who needs to get in and out of a wheelchair to enter the cab of the pickup, perhaps the most dangerous issue to negotiate is the "transfer" itself. Pickups tend to sit higher above the ground than the wheelchair, making transfers more difficult. Depending upon a farmer's physical ability and whether he or she can transfer with or

Resources

- **National AgrAbility Project**

Truck Modifications at <http://www.agrabilityproject.org/search/category.cfm?categoryid=14>

- **AbleDATA**

Transportation at <http://www.abledata.com/abledata.cfm?pageid=27512>

- **Breaking New Ground**

The Toolbox at http://pasture.ecn.purdue.edu/~agenhtml/ABE/Extension/BNG/CD_ad.pdf

without assistance, it is important that proper safety techniques be followed. Using the correct procedures will reduce the risk of secondary injuries due to slips/falls, bumping body parts upon entry/exit, or tearing/scratching the skin when transferring. The preferred method of transfer occurs on a level surface, across equal elevation points of access, and under ideal weather conditions. However, when working on the farm, these conditions rarely exist. Even when a farmer or rancher has the ability to self-transfer under ideal conditions, that same farmer or rancher may need assistance under different circumstances. A ramp, lift, or simple transfer-board may be needed when attempting a wheelchair-to-truck (or tractor) transfer to work in the farm shop, around the farmstead, or in the field. Therefore, the importance of training by qualified therapists can not be emphasized enough. Transfer training should include “real-world” transfers, in situations likely to be encountered on the farm or ranch. If transfers are not executed properly nor performed safely, none of the other modifications or adaptations are very useful if the farmer sustains secondary injuries.

To facilitate easier transfers, most companies that offer pickup modifications have some kind of transferring seat system. For example, Access Unlimited’s Easy-Reach⁷ seat (see figure 1) is a unique seating system that allows the entire seat to extend away from the pickup truck to allow for a safer transfer. Other companies offer similar systems.

In addition to seating systems, there are many choices of hand controls for brake and gas pedals, as well as other controls the farmer may wish to change for ease of access when driving. Depending upon specific needs, the farmer or rancher may benefit from a simple “spinner knob⁸” or traditional hand controls, such as the Monarch Mark I-A⁹, to a more “all-in-one” control such as the Mini-Touch⁷ 6 or 12 Function Vehicle Control Pad. The Mini-Touch can place the turn signals, hi-lo beams, and other vehicle controls at the driver’s fingertips, by mounting the control pad wherever it is convenient for the operator. Other pickup truck adaptations or modifications include a variety of ramps that allow for vehicle entry

while remaining in the wheelchair or scooter, various seat cushions that can be used on-top or in place of a standard seat, added hand holds, mirrors, and cameras that improve visibility while driving in reverse. There are also steps or lifts to make the truck bed or cargo area more accessible. For example, Bruno offers a system called the “Out-Rider⁵” vehicle lift, that allows the farmer or rancher to stow a scooter or wheelchair in the pickup truck bed, using a fully-automatic lift arm. A hand-held controller allows the operator to lift and safely store a mobility system.

For hauling and accessing the rear cargo or pickup truck bed, several companies offer specialized product lines. For example, the Ezy-Lift¹⁰ can easily lift 1000 pounds onto the cargo area of the pick-up. This might be an option when hauling pallets of feed, fertilizer, or medium-sized rectangular bales of hay. Other companies offer modified pickup truck liftgates that can be lowered to the ground to facilitate loading and unloading of the cargo area. ❖



Figure 1: Access Unlimited Easy-Reach power seat system.

Oklahoma AgrAbility Project

Oklahoma AgrAbility was launched in 2002 as a partnership combining the agricultural, disability, and assistive technology expertise of four organizations: Oklahoma State University Cooperative Extension Service, Langston University, Oklahoma Assistive Technology Foundation, and Oklahoma ABLE Tech.

As Oklahoma AgrAbility connected with farmers and ranchers around rural health care, the most serious concerns identified included cost and availability of health insurance, cost of prescription medications, lack of doctors, lack of 911 access, and prevalence of general poor health conditions. More than 50 percent of Oklahoma AgrAbility participants have arthritis or are pre-disposed to arthritis. Reaching out to meet these gaps in service Oklahoma AgrAbility launched several programs to address these issues head-on.

Rehabilitating the Oklahoma Farmer and Rancher Workshops

A workshop targeting occupational and physical therapists is held annually on the main campus of OSU to increase the competency of health care professionals in assisting agricultural workers to return to agricultural work and lifestyle activities. Occupational and physical therapists receive continuing education credits for licensure continuation upon completing the workshop. About 30 participants attend each year.

Workshop topics include an introduction to the AgrAbility Project; an introduction and description of agricultural settings, work tasks and lifestyle considerations; assistive technology in agriculture; how to complete an on-farm evaluation and develop treatment strategies using case studies. Participants also visit two of the OSU farms to explore specific tasks and environments similar to those their clients

may be exposed to. Oklahoma AgrAbility's ingenuity in developing this program with the Missouri AgrAbility Project has helped make Oklahoma a resource for other AgrAbility Projects.

OK in a Minute: Quick Facts¹¹

- Number of farms: 83,000
- Average farm size: 406 acres
- Top five agricultural commodities: wheat, cattle & calves, forage, hogs & pigs, and poultry

Peer Support Network

The Oklahoma AgrAbility Support Network provides encouragement and assistance to agricultural families impacted by

disability issues by connecting farmers and ranchers with disabilities to other farmers and ranchers who have successfully coped with a disabling condition. The fundamental goal of the support network is to keep people with disabilities working in their chosen agricultural occupation.

Peer supporters share experiences and information about acquiring and using assistive technology; working with rehabilitation and financial agencies; and how to successfully adapt to living with a disability and cope with potential side effects a disability may lead to, including depression, anxiety, stress and medical expenses.

Oklahoma AgrAbility Project Contact Information

ADDRESS | 211 Agricultural Hall, Stillwater, OK 74078-6021

WEB SITE | <http://agrability.okstate.edu>

PHONE | (405) 744-2398; (888) 885-5588

EMAIL | ability@okstate.edu

Project Feature

Oklahoma

Quality of Life Grant from the Christopher Reeve Paralysis Foundation

The Oklahoma AgrAbility Project and Oklahoma Assistive Technology Foundation (501(c)(3) nonprofit) was awarded a Quality of Life Grant from the Christopher Reeve Paralysis Foundation. The grant was used to establish a fund to provide low-cost assistive technology to Oklahoma farmers, ranchers and their family members who lack the services and resources needed to obtain adaptive or assistive devices. The Assistive Technology Grant Program for Farmers with Disabilities continues through donations. ❖

Oklahoma AgrAbility Staff

Ray Huhnke, Ph.D., project director, oversees management of project. Ray has been a professor in the *Biosystems & Ag Engineering department* with Oklahoma State University for twenty-seven years and has been serving as Oklahoma AgrAbility principal investigator for the past five years.

Traci Naile, M.S., project coordinator, performs a number of services that include public relations and marketing activities, educational outreach, and networking. Traci has been with both Oklahoma State University and Oklahoma AgrAbility for one year.

Linda Jaco, M.S., co-director, oversees management of project. Linda has been with Oklahoma Assistive Technology Foundation for twelve years and Oklahoma AgrAbility for the last 5 years.

Carla Wilhite, OTR/L, AgrAbility program specialist, provides numerous services to include coordination and delivery of direct services, program development, grant writing, educational outreach, and networking. Carla has worked for ABLE Tech for six years and Oklahoma AgrAbility for the past three years.

Oklahoma AgrAbility is also supported by **Millee Jorge**, Ed.D., PT/L, Dean, School of Physical Therapy, Langston University; **Sandra Wade-Penn**, M.S., program specialist, Langston University; **D. Chongo Mundende**, Ph.D., Langston University; **Clark Williams**, Ph.D., Farm Financial Specialist, Langston University; and **Gwen George**, Program Assistant, ABLE Tech. ❖

Client Story

John Enns

On November 16, 2006, John was sworn into office in the Oklahoma House of Representatives representing the 41st District. John enjoys serving his community, a community that has known his family since 1893, when his great-grandparents participated in the Run of the Cherokee Strip, the largest land run that opened nearly 7 million acres to settlement. One of John’s dreams is to be able to ride a horse again over those 1000 acres to check on the cattle and fences and just enjoy the great outdoors.

“John has been incredible to work with as he is articulate, intelligent, and motivated.” Carla said, “He is the true embodiment of an Oklahoma farmer.” ❖

References

Farm / Ranch Pickup Truck

1. Wikipedia. The Free Encyclopedia. *Pickup Truck*. Available at http://en.wikipedia.org/wiki/Pickup_truck. Accessed 11 January 2007.
2. National AgrAbility Project. *AgrAbility Assistive Technologies Search*. Available at <http://www.agrabilityproject.org/search/index.cfm>. Accessed 11 January 2007.
3. AbleDATA. *Your Source for Assistive Technology Information*, Available at <http://www.abledata.com/abledata.cfm?pageid=19327&ksectionid=19327>. Accessed 11 January 2007.
4. Purdue University. *The Toolbox CD*. Available at http://pasture.ecn.purdue.edu/~agenhtml/ABE/Extension/BNG/CD_ad.pdf. Accessed 15 January 2007.
5. Bruno. *First in Performance, Built to Last*. Available at <http://www.bruno.com/mobility-reimbursement.html>. Accessed 11 January 2007.
6. Disabled Dealer. *Accessible Vans, Scooters, Wheelchairs, Homes, RVs*. Available at <http://www.disableddealer.com>. Accessed 11 January 2007.
7. Access Unlimited. *The Power of Choice in Mobility*. Available at <http://www.accessunlimited.com/index.html>. Accessed 15 January 2007.
8. Creative Controls Inc. *Creative Controls Handicapped Driving Equipment*. Available at <http://www.creativecontrolsinc.com/steering-devices/>. Accessed 15 January 2007.
9. Manufacturing and Production Service (MPS). Available at http://www.sacvans.com/products_MPS.htm. Accessed 15 January 2007.
10. Ezy-Lift. *Changing the Way Pickup Trucks Work*. Available at <http://www.ezy-lift.com/>. Accessed 15 January 2007.
11. USDA. 2003. *2002 Census of Agriculture State Profile: Oklahoma State Agriculture Overview—2005*. Washington, DC: USDA, National Agricultural Statistics Service. Available at http://www.nass.usda.gov/Statistics_by_State/Oklahoma/index.asp. Accessed 06 February 2007. ❖

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The AgrAbility Project promotes success in agriculture for individuals with disabilities and their families through on-site assistance and educational resources. For additional information on the National AgrAbility Project or for a current list of state project sites, addresses, and telephone numbers contact:

University of Wisconsin - Cooperative Extension

460 Henry Mall
 Madison, WI 53706
 866-259-6280 or 608-262-5166

Easter Seals, Inc.

1425 K St., NW, Suite 200
 Washington, DC 20005
 800-914-4424 or 202-347-3066

<http://www.agrabilityproject.org>

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