

SUMMER 2020



## Project News

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# CONTENTS

## 4 PROJECT DIRECTOR'S MESSAGE

Dr. Sonja Koukel provides information and guidance for dealing with life during COVID 19.

## 6 A TESTAMENT TO COMMITMENT

Terry Christesson, a New Mexico AgrAbility Advisory Committee member tells us about a dedicated farmer, Dennis Dodd, overcoming adversity to keep working in production agriculture.

## 8 OCCUPATIONAL THERAPY AND HIPPO THERAPY

Sandia Wood, UNM OT Graduate Student reports on the benefits of equines in pursuit of health and wellness for people with disabilities.

## 11 PARTNER UPDATES

NMAP Partner's give updates on how they are promoting success for people with health challenges who are working in agriculture.

## 14 UNM OCCUPATIONAL THERAPY RESEARCHERS WANT TO KNOW HOW COVID-19 HAS AFFECTED YOUR LIFE

## 15 TECH CORNER

Here's a nifty column to learn about featured technology items that help people work smarter, not harder.

THE NEW MEXICO AGRABILITY PROJECT IS FUNDED THROUGH A GRANT FROM THE UNITED STATES DEPARTMENT AGRICULTURE UNDER AWARD CFDA 10.500 #2018-41590-28717



ONLY NEW MEXICO PEPPERS WILL DO!! Photo: USDA

# PROJECT DIRECTOR'S MESSAGE

*NMAP has a core mission of promoting success in agriculture*



The flu and COVID-19 are both contagious respiratory illnesses caused by different viruses yet some of the symptoms are similar. Common symptoms the two illnesses share include:

- Fever or feeling feverish/chills
- Cough
- Shortness or breath or difficulty breathing
- Fatigue or feeling tired
- Sore throat
- Runny or stuffy nose
- Muscle pain or body aches
- Headache
- Some people may have vomiting and diarrhea (more common in children)

In addition to the symptoms listed, COVID-19 may include change in or loss of taste and smell. There is still much that is unknown about this virus. It may be hard to tell the difference between the illnesses based on symptoms alone, and testing may be needed to help confirm a diagnosis. Follow this link for NM

Department of Health COVID-19 screening and testing sites.

<https://cvprovider.nmhealth.org/directory.html>

Be proactive. Get vaccinated before flu season starts. It takes about two weeks after vaccination for antibodies that protect against flu to develop in the body. And, continue to follow CDC guidelines to protect yourself and others from contracting the coronavirus: Wear a mask. Wash your hands. Avoid large gatherings of 10 or more. Stay safe and be well.

Current COVID-19 Pandemic information is found by visiting the New Mexico State University Extension Service webpage at:

<https://aces.nmsu.edu/covid19/health.html>

Cordially,  
Sonja Koukel  
NMAP Program Director

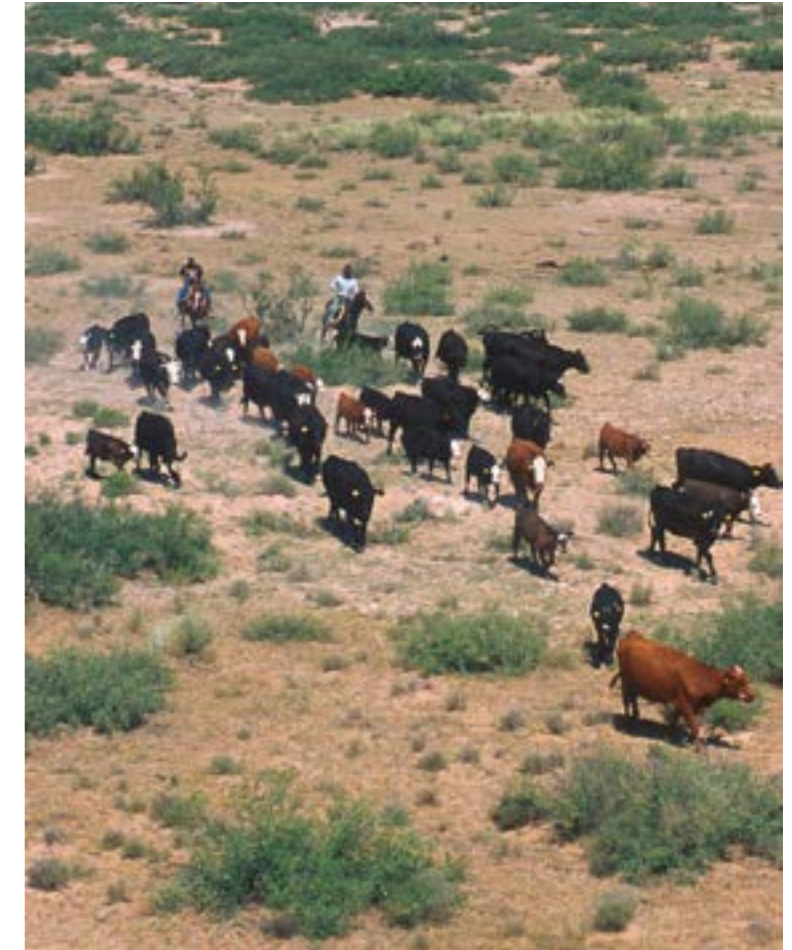


Photo: USDA

View the project YouTube video:

[https://www.youtube.com/results?search\\_query=NMAgrAbility+Program](https://www.youtube.com/results?search_query=NMAgrAbility+Program)

Questions about the program?  
Wish to refer a farmer, rancher, food grower or food worker?  
Contact Us!

Toll Free: 1-800-289-6577  
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Email: [skoukel@nmsu.edu](mailto:skoukel@nmsu.edu)

# A TRIBUTE TO COMMITMENT

by Terry Christesson, NM  
AgrAbility Advisory Council

**Every** living being faces challenges and struggles as we make our way along the road of life. There are some who seem to take them in stride and continue with much the same degree of momentum they have always maintained. Most do not. Are there lessons to be learned from those persevering with such qualities? The following story represents an example of one who has possessed these qualities and continues to thrive even while facing significant challenges carrying on with day to day activities related to their career.

Dennis Dodd is a farmer living and farming in east central New Mexico near the village of Melrose. He farms milo, wheat, and hay and raises cattle. He has farmed in the area since 1980. He was as committed to getting started as a young farmer and rancher as he has been at keeping his business successful as a going concern. He was determined to establish himself in this career field because he loved the lifestyle and range of work experience required to succeed. He once stated “even if farming and ranching didn’t provide as much income or comparable working conditions to other career options it was a good choice because while farming and working in nature every day was a good day because I was getting to do exactly what I wanted”. I believe this personal philosophy



Photo: Dennis Dodd, Courtesy of Author

represents one facet of living a life that feels gratifying. There have been many challenges he has navigated along this career path as well.

Many people with disabilities can trace them back to a point at which it all started. Dennis is one such individual. He was playing college football at which time he received an injury to his ankle that most likely represented a fracture. Being a strong-willed person, Dennis persisted through the pain associated with the injury and continued to play. Although his ankle healed it was significantly larger than normal and caused him to walk with most of his weight born on the outside of his foot. Subsequently, many years of 90-100 hour work weeks for nine months of each year eventually took a heavy toll on his ankle and foot and eventually the

time came when it needed to be addressed.

Dennis was referred to a surgeon specializing in bone disorders and collectively they determined that re-breaking the ankle and setting it back straight was the best course of action to pursue. The first surgical procedure was performed in January 2000 and was aimed at helping his toes deal with the extra load they had been forced to carry as he walked. The surgeon followed up in February 2007 with the procedure in which the ankle was broken, set in a manner that would straighten it and allowed to heal.

The procedure was successful for the most part, but unfortunately the dynamics of change led to a collapse of the entire ankle in 2010. The surgeon fused the ankle rigidly in 2011 and although uncomfortable, doing so served him well until 2016 at which time they became aware of infection existing around the plates and pins that had been used to fuse the ankle statically. Five surgeries followed with each aimed at cleaning infection from the ankle and stabilizing it yet again. Unfortunately, it never completely healed.

Dennis and his surgeon eventually concluded his best option for long term return to some semblance of eventual normalcy was an amputation below the knee. The infection surrounding the hardware located in his leg was never likely to be eradicated. His leg was amputated below the knee in October 2018 and he immediately lost 15 pounds. He humorously speculates it may be the quickest weight loss program he has known. This same good attitude never waned at any point along the way and he immediately started yearning for a new companion he affectionately referred to as “Peggy Sue”, an alliterative attempt to look forward to the prostheses he would receive in lieu of referring to it as a “peg leg”. Sadly, the amputation wasn’t the end of a very challenging series of surgical procedures in that the infection around the

bone persisted. In addition, the leg was prone to injury in that he continued to work as normally as was possible all along. Nine surgical procedures later, on January 22, 2019 he had another amputation closer to the knee than the first and it was successful. Dennis had his first date with “Peggy Sue” March 21, 2020. Five short months later Dennis walks much the same as he did at 20 years of age and an observer who didn’t know of his history would most likely not notice he was an amputee.

Dennis represents a significant model for us because he managed to farm a few thousand acres and care for large herd of cattle throughout all those years. He admits to having needed and received help along the way, but won’t admit he worked as much anyone at any time. He is quite resolute about the importance of his wife, Dena serving as an irreplaceable source of support and strength, though. He found a way to work through every difficult moment and every difficult day and most of those days were difficult. I personally believe his life offers us a lesson in that his attitude was always positive and even at his worst he was eager to offer help to anyone in need.

Although we may not get to choose the things that happen to us in life, we are afforded the luxury of choosing how we will respond to these challenges. Dennis chose to continually live with the faith that all would work out for the best and kept a glad heart. He continues to live every day independently working diligently while choosing to live joyously.

Photo: USDA



# OCCUPATIONAL THERAPY AND HIPPO THERAPY

Sandia Wood  
Occupational Therapy  
Student Intern



Photo USDA

**On** a sunny June day, four occupational therapy students from the University of New Mexico carried out an activity analysis regarding horseback riding. Taking place at Mandy's Farm, a residential and day program involving farming and ranching activities for adults with disabilities, in a rural area of Albuquerque, New Mexico, the students experienced haltering, grooming, saddling and riding a quartet of therapy horses. Horses and horseback riding have long been essential parts of occupations and transportation throughout history. Even in the present era, horses remain an essential occupational partner, particularly in ranch work. Being able to catch the horse, tack them up, and ride independently is a mandatory occupation in many fields.

However, besides the necessity of the work horse, in the modern day, horses have become an integral facet in hippotherapy. Hippotherapy involves an individual with mental, emotional, physical, or developmental disabilities working with a trained professional, such as an occupational therapist, to complete activities using horses. Riding horses in hippotherapy encompasses many different perturbations in one activity. Contrary to common belief, a rider does not just "sit there". Riding involves dynamic balance, strength, gross and fine motor control, and postural stability, as well as sensory stimulation, emotional regulation, and cognitive sequencing and planning.

People who participate in hippotherapy that has a psychosocial focus may be veterans with PTSD, people who have been abused, or people with autism or other intellectual or developmental disabilities. Sitting astride a thousand plus pound animal is inherently intimidating, people must regulate their emotions, and then build trust and communication with the horse. When the horse and rider start working in tandem, through effective communication, the person may feel an immense sense of pride, accomplishment, and self-efficacy. Even if the individual is not riding with independent control of the horse, they can still give verbal commands to the horse leader about which direction to go or which obstacle to complete, among other things.

Hippotherapy with a biomechanical focus may involve individuals who experience cerebral palsy, muscular dystrophy, a stroke, or other physical disabilities. Using the dynamic motion of the horse, the person's postural stability is immediately challenged. The person must rely on core strength and control, as well as strength from the lower extremities, to maintain an upright position. The rider must also exhibit head and neck control to look up and in



Photo Courtesy of  
Mandy's Farm

the direction they want to go, usually with the added weight of a riding helmet. The upper extremities may be used as "props" to hold up the body, particularly in early intervention settings with toddlers. However, as strength and confidence increase, even very young children can hold themselves upright with their arms and hands free to do things such as hold the reins. Once strength and balance improve, the hippotherapy may increase in complexity and challenge. The rider may be given bean bags or rings to aim and toss into a bucket or around a pole. The rider may also be asked to ride in different positions, such as sideways, or even backwards on the horse. Riding in different positions challenges the individual's strength and balance in different manners. Riding up and down small hills, or over poles on the ground also offers varying dynamic balance and strength challenges.

Hippotherapy may appear in many different formats, depending on the individual. A regulated and stable form of hippotherapy involves a horse leader leading and controlling the horse with a lead rope, and two side walkers who walk on either side of the horse, and hold onto the individual, who is wearing a type of gait belt with hand holds on the sides. The therapist may be a side walker, or they may observe and work with the client, alongside the two side walkers. This form is typically used in early intervention, with individuals who have highly limited balance and postural control, or people who may lack safety awareness and impulse control.

With slightly less structure, only one side walker may be used, along with the horse leader.  
(continued p. 10)

This is more common in hippotherapy settings with older children, or people with increased postural stability or executive function. The next step up includes the individual riding independently without side walkers. There may only be the therapist or a therapist and horse leader. The horse may be on a long lead line or in a smaller corral for safety, but the rider may be directing the horse with the reins, independently. People who do not have significant cognitive or motor control issues may participate in this type of hippotherapy. Generally, hippotherapy is completed one on one, with one therapist per rider. There may be multiple riders with therapists participating at one time, but hippotherapy is generally not a group activity, with many riders and one therapist.

It is important to remember that horses are inherently dangerous and unpredictable animals, however, by following the correct safety methods and trainings, they can make significantly beneficial therapy tools and partners. As the occupational therapy students learned, hippotherapy involves considerable physical benefits, such as improving strength, balance, and postural control, cognitive benefits, such as sequencing and planning involved in directing and communicating with the horse, along with emotional benefits, such as increasing feelings of success, leadership, and confidence.

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Photo: Jimmiesmom, Creative Commons



Photo: Life Essentials

# PARTNER UPDATES

## NMSU



### New Mexico State University Cooperative Extension

information. Specialists can assist NMAP in addressing identified educational and training needs through fact sheets, circulars, guides, media-based delivery, and informal presentations. NMSU will host and assist in the development of mobile and web content; manage the branding, promotion, and marketing; and engage in marketing and promoting NMAP to farmers, ranchers, and others.

Extension agents live and work in the communities they serve, and through their networks, can serve as a resource for linking interested/eligible individuals to the NMAP.

NMAP plans to work with the NM Tribal Extension Program to deliver community-based education to the state's 23 Native American tribes. This outreach involves both educational and training programs.

Further, Extension State Specialists are resources for research-based

Most importantly, NMSU will serve as the critical foundation for all the partners' mutual activities for team building, coordination, and

# NMTAP



**The New Mexico Technology Assistance Program (NMTAP)**, one partner of the NM AgrAbility Project is still open and providing services during the COVID-19 pandemic. While the last few months have certainly looked different for many individuals and organizations, NMTAP's responsibility to the farmers and ranchers of the state remains the same. We are available to provide on-site assessments to farmers and ranchers with disabilities. This assessment will help determine if technology or process adaptations will be beneficial in accomplishing farm tasks.

For aspects of assessments conducted at the farm/ranch, staff will wear their own Personal Protective Equipment (PPE) and maintain a distance of six feet in accordance to the public health order. Call on us and/or help us spread the word about this free service that can improve the quality of life of some of our most important workers in the State of New Mexico.

Also, in the coming months NMTAP will offer FREE virtual online trainings to farmers and ranchers with disabilities, their families, and professionals regarding assistive devices that can be used on a farm or ranch. These trainings will be performed over ZOOM and will feature overviews of the program, information about assistive devices and live demonstration when possible.



Photo: USDA

During the time of COVID-19, we are trying to find creative ways to continue providing useful and needed resources. Sharing over a virtual platform ensures the safety of our staff while allowing individuals to gain educational information from the safety of their homes.

For more information about farm site assessments or the virtual trainings, please contact us at 505-841-4450 and visit:

<http://www.tap.gcd.state.nm.us/>



OT Graduate Student, Shelby Jones

# UNM-OTGP



**On** August 29th, Occupational Therapy Graduate Students and faculty from the University of New Mexico presented a webinar on *Farmer Back Health and Safety* to about 40 occupational therapy, physical therapy, and assistive technology professionals from across New Mexico.

Topics of the webinar included the incidence of back problems in production agriculture, techniques for preventing back issues, pain management, a range of assistive technologies to improve back ergonomics or work processes, and general exercise and stretching programs that farmers or ranchers could do while working. Additional topics covered how professionals could approach task analysis in order to make recommendations on work modifications, adaptive equipment, and other strategies to promote participation in agriculture.

Participants in the webinar earned 2.75 continuing education unit hours (CEUs) at no cost. The webinar was free and was recorded.

Additional professionals who would like to earn the CEUs at no cost, can watch the webinar, complete a short exam, and feedback exit form to receive a certificate of completion.

Contact: Carla Wilhite at UNM-Occupational Therapy Graduate Program for the link to the webinar and instructions at:

[cwilhite@salud.unm.edu](mailto:cwilhite@salud.unm.edu)

# UNM OCCUPATIONAL THERAPY RESEARCHERS WANT TO KNOW HOW COVID-19 HAS AFFECTED YOUR LIFE

by Cindy Foster, UNM Public Affairs



**Overnight** everything changed. Activities and habits we took for granted were suddenly over-turned. Vacations, trainings and new jobs were suddenly placed on hold as businesses and schools closed.

At the University of New Mexico-Health Sciences Center, Division of Occupational Therapy researchers want to know what the experience has been like for New Mexicans. From how it is affecting stress levels to what – besides toilet paper – has been hard to find, OT graduate students and professors are interviewing persons of all ages and occupations to see how the New Mexican experience has been.

“All of us saw our lives upended and it is very distressing,” says Carla Wilhite, OTD, OTR/L an assistant professor within the UNM School of Medicine Division of Occupational Therapy. “We are very concerned about how people are doing in their daily lives – and how that might impact their health,” she says.

People are grieving – whether for friendships, loved ones or simple routines that anchored their lives. “I didn’t realize how much I would miss my office,” she says. “We are social creatures and we need to connect. Those small moments at the beginning of the day - as we make a cup of coffee in the break room or check-in with a coworker back from vacation - can help anchor and structure our day,” she says. Losing those anchors can increase stress and ultimately affect health.

“We are looking for participants from across New Mexico, whether they be students, married caretakers, farmers or scientists. We are hoping for representation from rural areas as well as the metropolitan ones so that they can begin to understand the scope, the similarities and where the experience differs for different groups of people,” she says.

The changes wrought by the corona virus haven’t been uniformly bad, she adds. Some people have found richer relationships with their family or significant others or have picked up old hobbies, and reread half-abandoned books. “It can be anything between those two poles,” she adds. “Our ultimate goal is to have people living productive lives. We do feel a sense of urgency to conduct and complete this research while the experience is still new and fresh. We realize as people return to work they begin to forget the experience,” she says.

The study is funded through the UNM Health Sciences Center Translational Research Center. The interviews take about 30 minutes and can be done via phone, regular mail or email. To learn more about the study, including how to participate, contact Wilhite, at 505-272-3324 or at [cwilhite@salud.unm.edu](mailto:cwilhite@salud.unm.edu).

# TECHNOLOGY CORNER

## FROM THE NATIONAL AGRABILITY TOOLBOX

The trigger-operated **SowEZ** Hand-Held Seeder is used by home gardeners and commercial growers alike for starting plants in seed trays, soil blocks, raised beds, etc., and/or spot planting in fields. The device consists of a clear polycarbonate hopper that holds up to 1,000 seeds (depending on seed size), a disc with four openings (to accommodate different seed sizes), and a trigger mechanism designed to ensure quick and accurate seed drop. Costs \$25

Source SowEZ LLC  
Earl Weber  
31291 SW Heater Road  
Sherwood, OR, 97140  
Website [www.sowez.com](http://www.sowez.com)  
Email [bimweber@gmail.com](mailto:bimweber@gmail.com)  
Phone 503-625-5764

Vendor photo



Vendor photo

## THE SEEDING SQUARE

The Seeding Square can assist gardeners of any age who may benefit from a cognitive assist in performing gardening. The square is advertised as:

- Maximizes garden layout for highest yield possible.
- Organizes each seed and plant with perfect spacing
- Makes weeds easy to spot
- For all sizes of garden: plant in rows or by square-foot
- The color-coded holes makes gardening fun for all ages

Cost: \$26

Email: [info@seedingsquare.com](mailto:info@seedingsquare.com)

Phone: 1-604-616-6528

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**THANK THE BEES FOR POLLINATION!**