

The logo for alphaOne, featuring the word "alpha" in white lowercase letters, a stylized yellow "O" with a white dot inside, and the word "ne" in white lowercase letters, all set against a dark blue rounded rectangular background with a yellow border.

alphaOne

Keep Farming Using Technology Solutions

Ketra S. Crosson, OTR/L

Visit us online at alphaonenow.org

A smaller version of the alphaOne logo, with "alpha" in white, a yellow "O" with a white dot, and "ne" in white, on a dark blue background with a yellow border.

alphaOne

Webinar Info

- This webinar will be recorded/archived
- The power point is on your screen
- CART, captioning is being provided
- The Chat box is on the right column....this is where you will type in your questions/comments during the webinar

Alpha One - Who we are

Our Vision

As the result of Alpha One's endeavors, Maine will be a model for the nation in enabling people with disabilities of all ages to live independently.

Our Mission

Alpha One, Maine's Center for Independent Living, directed by and for people with disabilities, is committed to providing the disabled community in Maine with information, services and products that create opportunities for people with disabilities to live independently.

Alpha One - Our Services

Personal Assistance Services

- *Consumer Directed*

Transportation

- *Adaptive Driver Evaluation*

Recreation

- *Open Waters (Adaptive Scuba diving)*
- *Rink Link (Adaptive Ice sports program)*

Adaptive Equipment

- *Renegade Wheelchairs*

Other

- *Maine affiliate for New England ADA Technical Assistance*

Alpha One - Our Services

Housing

- *Access Design (Architectural Accessibility specialists)*
- *Home Retro*
- *Critical Access*

Financing

- *mPower (Maine's adaptive loan fund)*
- *Personal Finance Skills Training*
- *Title 7 part b*

Independent Living Services

- *Information & Referral*
- *AgrAbility*
- *Hear in Maine*
- *Independent Living Assessment and Skills Training*
- *Homeward Bound*

Learning Objectives

Participants will learn about . . .

- Maine's AgrAbility program
- Who are the farmers we are working with?
- Examples of assistive technology solutions including
 - Off –the-shelf products
 - Adaptive equipment specific to agricultural need
 - Farm modification
 - Software products
- Assistive technology resources and funding options

What is Assistive Technology?

- **Assistive or Adaptive Technology (AT)** commonly refers to “...products, devices or equipment, whether acquired commercially, modified or customized, that are used to maintain, increase or improve the functional capabilities of individuals with disabilities...” according to the definition proposed in the Assistive Technology Act of 1998.
- **AT Products** can enable people with disabilities to accomplish daily living tasks, assist them in communication, education, work or recreation activities, in essence, help them achieve greater independence and enhance their quality of life. AT devices can help improve physical or mental functioning, overcome a disorder or impairment, help prevent the worsening of a condition, strengthen a physical or mental weakness, help improve a person’s capacity to learn, or even replace a missing limb.

What is Assistive Technology?

- **AT Services** support people with disabilities or their caregivers to help them select, acquire, or use adaptive devices.

Such services include functional evaluations, training on devices, product demonstration, and equipment purchasing or leasing.

What is the Maine AgrAbility program?

Maine AgrAbility is funded by the USDA to help farmers facing barriers due to

- Disability
- Injury (on or off farm)
- Chronic conditions



Staff work directly with farmers, farm family members, farm workers

- Information and Referral
- Make on-farm assessments (workplace and home),
- Make recommendations for assistive technology, modified work practices, funding options and other solutions to keep farming

What is the Maine AgrAbility program?

Community awareness

- Networking with farmers , ag professionals, Veteran's and health care communities
- Education and training on safety and prevention of injuries
- Surveys (arthritis; boots and back; hearing; PPE; tractor safety; and farmer health)

Organizational Partnership

- University of Maine Cooperative Extension
- Goodwill Industries of Northern New England
- Alpha One

Who Are the Farmers?

Typical Diagnoses

- Arthritis
- Hearing impairment
- Respiratory impairment
- Cancer
- Visual impairment
- Repetitive movement
- Orthopedic injury (back, neck, shoulder, knee, ankle)
- Other – fibromyalgia, multiple sclerosis, mental health

60% Male, 40% Female

Who Are the Farmers?

Age

- 5% are under 30y/o
- 35% are 30 to 50 y/o
- 40% are 50 to 70 y/o
- 20% are older than 70

Farming Experience

- Life long famers
- Baby Boomers – redefining work and leisure
- Beginning farmers –awareness of farm safety/work smart, health & well being

Who Are the Farmers?

Position on the farm

- Primary farmer
- Spouse - may farm and hold outside job
- Member of the farm family
- Farm worker
- Designated as farm successor

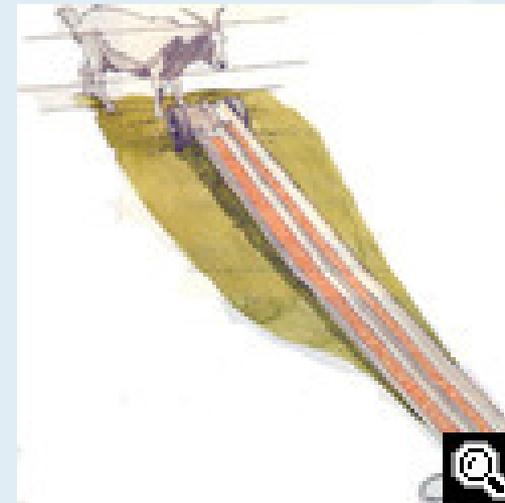
Farm Focus

- 30% veggies
- 15% dairy
- 15% beef
- 10% fruit
- Remainder - agritourism, fiber, bees, hay, xmas trees.

Examples of Do-it-Yourself AT

Farmers have always needed to develop on-farm solutions in the course of their work. This may include making things out of scrap products on the farm or purchasing products and creating something to meet the need.

Goat Feeder - To eliminate the potential danger in dealing with pushy/aggressive goats at feeding time, King, NC, farmer David Carroll built a feeding trough that he fills outside his goat pasture, then rolls it under the bottom wire of the pasture fence. He made it by nailing two vinyl gutters side-by-side onto a 10-foot-long 2" x 10" board, with an axle and set of wheels affixed under the board at one end. He then attached a rope at the other end to pull his feeder from under the fence.



Art Linsenmeyer's **Homemade Powered Wheelbarrow** might be just the thing for one with limited mobility who needs to transport small loads around the farmstead. At age 74 and with arthritic knees, the Wymore, NE, market gardener uses an old 32-inch riding lawn mower with a 6-cubic-foot wheelbarrow tub that he mounted on a tricycle-style frame and attached to the mower. Sitting on a seat atop the mower's 11 hp engine, he controls the speed with its hydrostatic rear-end. The wheelbarrow fits easily between his sweet corn rows and holds up to 10 dozen ears, which he takes to his vegetable stand and dumps by tilting the tub. (It's also used for many other hauling jobs around his place.)

Off-the-Shelf Products

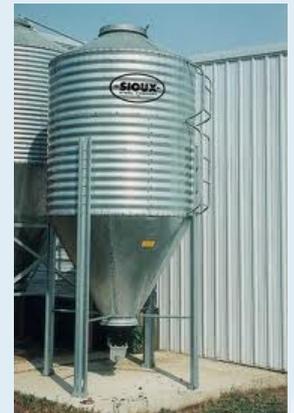
These are products that are commercially made to help any farmer be more productive or mechanize a previously labor intensive task. For a farmer with a limitation, they may be “just the right thing” to allow the farmer to return to a task they have not been able to do, increase safety, or prevent further injury.



John Deer Gator – and similar utility vehicles help with mobility access around a farm for someone who has mobility difficulty navigating farm terrain.

Show You Tube
“Truck Picking up
hay bales in
Montana”

Feed Bin – for someone with bending and lifting limitations, converting to a feed bin with delivered grain, can help in feed management.

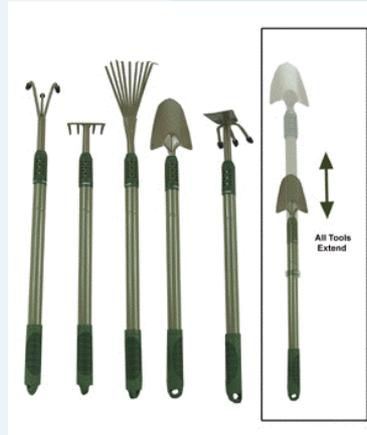


Adaptive Equipment – Work Smart

Work smart products are ergonomically designed tools that help to decrease injury, may require less force, extend reach to reduce bending/reaching, allow for one handed use, or help the farmer to accomplish tasks with less wear and tear on the body.



Ratchet pruners provide more cutting power



Telescoping tools can extend reach

Ergonomic garden tools put wrist in neutral position



Adaptive Equipment – Work Smart



HerShovel – designed for the digging needs of women



Ergonomic grips – add leverage

Grip builders

- closed cell foam tubing
- rubber coating tools
- Sugru – moldable rubber

Adaptive Equipment

This group of products are specifically designed to provide greater independence to a person with a disability who is involved in farming.



Advanced Mobility Solutions' Ag **Equipment Access Lifts**, available in either platform or seat style, provides access to tractors, combines, or other large equipment.



All Terrain wheelchairs



Equipment Modification

This group of products are available to modify an existing piece of equipment to make it easier, safer, prevent further injury or allow a farmer to be more independent.



K & M Manufacturing's wide, non-skid **Add-On Tractor Steps** (plus handrail) make entering/exiting the cab safer and easier.

Tractor Seating – wheelchair cushions are replaced as frequently as every 2 years as they lose their effectiveness. Tractor seats may be as old as the tractor and be a contributor to hip, back, and neck pain. After market tractor seats are available, many with added suspension.



Farm Modification

Structural modifications to the farm may help in addressing a number of needs. This may include alterations to existing buildings for mobility access, new construction of farm buildings to meet a specific consumer need, farm layout changes, upgrade accessible routes between buildings, or to prevent further injury.

For example, to prevent further soft tissue injury the farmer may want to take the following into consideration when designing a new work space:

- set up work areas to avoid awkward postures
- work tasks to allow for good body mechanics
- limit bending
- limit reaching above shoulders and below knees

Farm Modification

- sit/stand – for tasks that require several hours, set up work so that it can be done both sitting and standing.
- lifting/carrying/moving - set up work so that the height it needs to be moved from/too is close.
- where load is heavy (greater than 40 lbs) use equipment to assist with the lift. This may involve work floors to be wide enough to accommodate the equipment and the surface to be able to support the equipment
- energy conservation/work smart – look at ways to reduce extra work

Farm Modification



This step up style milking set up requires repetitive bending, reaching and twisting on the part of the farmer to milk each cow.

Converting to a parlor style milking set up places the farmer in a pit below the cows. Cleansing the udders and attaching the milker place the work task between hips and shoulders, significantly reducing repetitive bending, reaching and twisting.



Computers/Tablets/Smartphones

Hardware, software and apps have changed how we live and work. These products can help the farmer with limitations in a variety of ways. These can include handy tools built into the smartphone that the farmer carries with them, point of sale products for tablets and smartphones, and organizational and business software to track farm data and manage the farm books.

Because the hardware products can easily be adapted for a person with limited hand function, visual loss, or hearing impairment they can enable the farmer, or farm family member with a more involved disability to have full participation in the farm business.

Examples of apps

“farmGRAZE

Calculate the amount of grass there is in a field for your livestock to graze. Save money on unnecessary fertilizers and bought in feed. Accurately and quickly monitor the performance of your swards in your grazing platform to make best use of your grass...[Read More](#)

- See more at:

<http://www.mobilefarmapps.com/apps.html#sthash.OCuESdgb.dpuf>

Magnifyer App
You Tube – “Using
Magnifier App on
iPhone

Computers/Tablets/Smartphones

More apps –

“ Weather Underground.

There are many weather apps, and this one holds up as well as any of them. Lots of information is available, including temperature, visibility and humidity. View hourly and seven-day forecasts, too.”

“Evernote

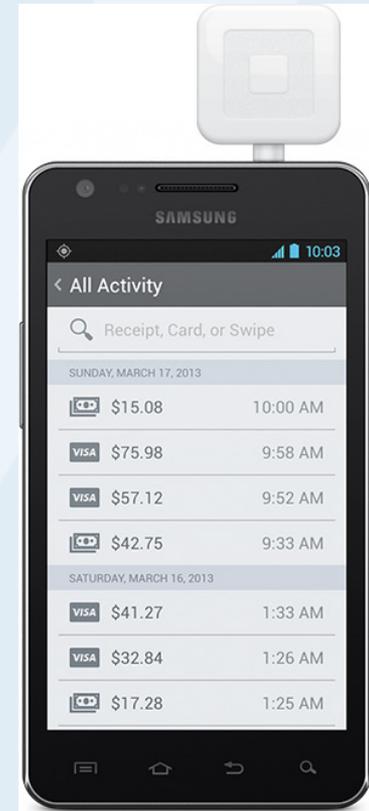
Evernote makes it easy to remember things big and small from your everyday life using your computer, phone, tablet and the web.”

“Square - Optimize your checkout

Check out customers by particular items in addition to custom amounts. Create a library of items you sell; add names, photos, order modifiers, and prices. Sort items into categories and add them to your page of favorites for faster checkout.

Know your numbers

Track sales data in real time and make more informed business decisions. Review your daily sales summaries, X and Z reports, or create custom reports—all from within the app on your iPad. [Learn more](#)”



Computers/Tablets/Smartphones



Tablets – big and small, priced from \$10 to \$400. Many applications (see MaineCite.org). Voice/finger/knuckle/nose/stylus in a hand cuff, touch and drag. Light weight. Accessories include attachable keyboard. Internet, e-mail , calendar, camera, social media, games, movies, etc.

Bluetooth Headset – requires limited arm range of motion/hand function to “pick up/hang up phone”. Hands free while talking. Can program frequently called numbers, scroll on voice command.



Consumer Story

Maine consumer talks about and shows the assistive technology she finds useful to lead independent lives in the community.

Naomi - show clip

Question for the Audience:

- Have you met farmers who could benefit from AgrAbility services?
- What kinds of AT do the consumers you work with need?
- Do you have questions? Comments?

How do you and your consumer find the right product?

- What is needed or wanted for independence is as unique as the consumer.
- One size does not fit all.
- When making an investment in AT, you want to have a good idea that it will do what you expect and it will be useful to you.
- There are lots of products created either for a specific need or to meet a generic need. There are a lot of variables.
- What about service after the sale? Buy from a local vendor who will service what they sell.

Good places to start:

Try a friends – ask them questions about where they got it, did they like the vendor or manufacturer, service issues, satisfaction.

Shop Around – look at similar products, compare price, service, installation time, your first impressions of the vendor or manufacturer

Try-Before-Buy & Assessment Services

- University of Maine at Farmington -AT collection
- <http://kcmc.umf.maine.edu/>
- Driver Evaluation Service - Alpha One
800-640-7200 v.tty or www.alphaonenow.org
- All Tech (includes former Technical Exploration Center)
www.alltech-tsi.org
- Communication Pathways - Augmentative
www.pinetreesociety.org/pathways.asp
- Mark Hammond Associates, Inc - Augmentative
www.mrhassociates.com
- Wheelchair clinics – check with your local hospital

Try-Before-Buy & Assessment Services

- The Iris Network - Blind and visually impaired
www.theiris.org
- Mainly Access – Blind and visually impaired
<http://www.mainlyaccess.com/index.htm>
- Joyce Kennedy, OTR/L– Adaptive Computer Needs
joyce@webjericho.com

Tech Act Program in Maine

- Maine CITE
www.mainecite.org

Resources

- <http://umaine.edu/agrability/>

The website for the Maine AgrAbility Project. Your portal to information and referral, resources, setting up a site visit, requesting a presentation.

- <http://www.agrability.org/index.cfm>

The website for the National AgrAbility Project. It also includes the Toolbox of products for farmers with limitations.

<http://www.agrability.org/Toolbox/index.cfm>

<http://extension.umaine.edu/>

Maine Cooperative Extension for agricultural resources

Resources

- <http://www.apple.com/iphone/from-the-app-store/>
The iPhone app store
- www.abledata.com
"AbleData provides objective information about assistive technology products and rehabilitation equipment"
- <http://www.nmeda.com/locate-a-dealer/>
Search for local adapted vehicle modifier

Resources

- <http://www.gimpgear.us/>

Broadened Horizons company provides , “Unique assistive technologies providing independence to disabled wheelchair users with limited or no use of their hands and arms.”

- www.accesstr.com

Access to Recreation, Inc., provides, “products that give them [customers] the ability to enjoy activities that they once thought impossible. We carry a wide range of products from Fishing Aids to Crochet Aids, Exercise Equipment to Rehabilitation Equipment . . . “

- <http://www.arthritissupplies.com/arthritis-gardening-tools.html>

Adapted gardening tools.

Resources

- <http://www.flaghouse.com/Giant-Leaps/Recreation-and-Play/Gardening-PN=1&navlink=true>
Adapted gardening tools
- <http://pinterest.com/maineagrability>
Search adaptive equipment or farming or anything
- <http://assistivetechology.about.com/od/ATCAT4/a/Build-Better-Accommodation-Solutions-For-Less.htm> Therese Willkomm is a leader in AT and agriculture

Funding Options

Cross disability eligibility and broad based AT need

- mPower Adapted Loan Program
www.mpowerloans.org
- Independent Living Services Grant - \$5000 cap
Call 800-640-7200 (v/tty)

Work related funding

- Worker's Compensation
- Vocational Rehabilitation
www.maine.gov/rehab
- www.ssa.gov
 - Plan to Achieve Self Support
 - Blind and work-related expenses/impairment and work related expenses

Funding Options

Communication Funding

- Hearing Aids – Contact Hear In Maine program for resources
800-640-7200 v/tty
- Telecommunication Equipment Program - adapted phones,
TTY's, etc
Maine Center on Deafness
www.mcdmaine.org

Funding Options

Farm Related Funding

- www.ceimaine.org/Agriculture
Coastal Enterprises makes financing available for equipment, greenhouses, seeds, land, storage
- <http://www.nrcs.usda.gov/wps/portal/nrcs/main/me/programs/financial/>
Natural Resources Conservation Service provides financing to , “. . . address issues such as water management, water quality, and erosion control by incorporating conservation into their farming operations. Producers may construct or improve water management structures or irrigation structures; plant trees for windbreaks or to improve water quality.”

Funding Options

Home Access Funding

- Subsidized housing – tenants can ask landlord for reasonable modifications and accommodations. Changes are made at no cost to the tenant. Google “How to request a reasonable modification or accommodation.”
- Home Retro Program – Grant \$10,000, 80% median income
800-640-7200 v/tty
- Maine Home Repair Network – Community Action Programs (CAPS)
www.mainecommunityaction.org

Funding Options

Home Access Funding

- Rural Development – Housing Repair/Rehabilitation Grants and Loans <http://www.rurdev.usda.gov/me/>
- Critical Ramp Access Program – modular ramps, 80% median income 800-640-7200 v/tty
- Community Development Block Grant Funds – Towns determine community needs – ex. Auburn Accessible Housing Program

Funding Options

Funding for Specific Groups

- Elder Independence of Maine
 - Community based long term care programs
 - Adults with Disabilities Waiver/Medicaid Waiver participants - \$3000/fiscal year
 - Home Based Care participants - \$3000 lifetime
 - Funding for home modifications
 - Kitchens, bathrooms, ramps, door widening, stair lifts, low pile carpet or flooring for mobility
 - Call care manager -1-866-456-2322 (north), 1-888-234-3920 (South)
- Veterans Administration
 - Funding for service connected and partial service connected disabilities
 - Contact Benefit Information and Assistance
 - www.va.gov

Funding Options

Funding for Specific Groups

- Goodwill Industries Veteran's Fund \$1000 – for veterans, spouses and children. Fund will assist with one time needs such as car repair, fees for licensing exams, equipment purchases for small business and travel expenses. Contact anne.nadzo@goodwillnne.org or www.goodwillnne.org
- Muscular Dystrophy Association
www.mdausa.org
- Division for the Blind and Visually Impaired
www.maine.gov/rehab/dbvi
- Multiple Sclerosis Society - Financial Assistance Program
www.msmaine.org

Funding Options

Funding for Specific Groups

- Spinal Cord Injury
 - Travis Roy Foundation grant
<http://www.travisroyfoundation.org/grants>
 - Kelly Brush Foundation – Adaptive sports and recreational equipment <http://kellybrushfoundation.org>

Miscellaneous

- **United States Tax Code**
 - Tax deductions available to tax payers that may be used to offset the cost of assistive technology. Such as medical care expenses
- **Service Organizations**
 - Lions Club, Rotary (Pancake Breakfast, spaghetti supper, etc)

Funding Options

Miscellaneous

- **Community Service**
 - Organization does volunteer labor for home access
 - Local lumber company donates materials
 - Bequest in a will that makes funds available for AT in a particular community
 - A band that plays for benefit concerts
 - Crowd Funding – an on-line service that assists in personal fundraising

<http://crowdfunding.com/>

- Modest Needs - a registered charity that promotes the self-sufficiency of low-income workers by helping them to afford short-term, emergency expenses.

<https://www.modestneeds.org/index.asp>

Used Equipment

- Alpha One Classifieds
www.alphaonenow.org/classified_ads.htm
- GetATStuff
www.getatstuff.org
- All Tech – Demo, loaner and recycled Assistive Equipment
www.alltech-tsi.org
- Community lending closets
- The Maine Building Materials Exchange – used or overrun
www.mainebme.org or
- Uncle Henry's
<http://www.unclehenrys.com/>
- Disabled Dealer – used adapted vehicles
www.disableddealer.com

Disclaimer: The resources provided are for information purposes only. **Alpha One** does not endorse any individual service or provider. If you find that any information here is incorrect or out-of-date, please contact us.

Questions - Comments?



Thank you

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Please complete the electronic evaluation form and you will receive an attendance certificate.