MESSAGE FROM THE DISTRICT COORDINATOR

At Michigan State University, our goal is to move the state forward by focusing on research and educational programs that matter most to those who call Michigan home. The issue identification process is an important part of determining where to concentrate the time and energy of MSUE faculty and staff members for the greatest outcomes. In January 2016, District 4 held two sessions, this same process was repeated in 13 areas of the state, and data will be aggregated and used to set a direction for future university engagement with the development of our long-range plan of work. Although the plan is not yet complete, below are major program areas that were identified for our district.

Michigan State University Extension
2015 Programs In Which Alcona County Residents Participated

Tourism has the potential to drive future economic development.

Alcona Residents took part in the following workshops which have a connection to economic development, business skills, community beautification and a strong county government.

- Supporting Coastal Community Development and Tourism Development in NE Michigan
- Understanding Tourism presentation
- Place Making Strategy Development workshop
- Lake Huron Fisheries workshops
- Home Foreclosure Prevention webinars
- Smart Gardening
- Soil Test Services
- Mid Michigan Farm and Garden Show MSUE sessions
- Master Gardener training and certification
- Cooking for Crowds
- Communicating through conflict
- Cottage Food Law
- Facilitative Leadership
- Fostering

Thank you Alcona County Residents and the Alcona County Commissioners for supporting Michigan State University Extension. Building relationships, solving problems and meeting the needs of Michiganders has been the focus for MSUE for over 150 years.
Health and nutrition, chronic disease, poverty and an aging population contribute to the poor health reports for our counties: (Robert Wood Johnson Foundation and the University of Wisconsin Population Health Institute.)

Alcona Residents took part in the following workshops which have a connection to preventing chronic diseases, healthy eating, and food safety.

- ServSafe Series for food establishment workers
- Food Preservation workshops
- SNAP series for adults and youth
- Stress Less with Mindfulness webinar

Alcona County ranked 38 out of 83 counties for overall health according to countyhealthrankings.org (2016)

Natural Resources is a major financial, recreational, physical and emotional well-being platform in our region.

Alcona Residents took part in the following workshops which have a connection our water, forests, and wild life.

- Science Camp
- Great Lakes Stewardship Camp for youth
- Lake Huron Fisheries workshop
- “Bringing Science Alive” 7 workshops around natural resources for teachers
- Insight Into Your Septic System

Advances made by CANR student and faculty, and MSU Extension educators and specialists enhance your life today and will improve the lives of your children and grandchildren tomorrow.
Agricultural practices, financial management and regulatory requirements are changing rapidly and the producer has to be current to be viable. There is a need to promote the general publics’ understanding of agriculture literacy.

Alcona Residents took part in the following workshops which have a connection production, diseases, and financial management to assist growers in being profitable and environmentally friendly:

- Potato Field Day
- Soil Test Services
- Integrated Pest Management webinar series (11 Alcona participants)
- Master Gardener re-certification
- Great Lakes Hop & Barely Conference
- Western Bean Cutworm & Dry Bean Field Day
- Northeast Michigan Aerial cover Crop Seeding demonstration
- Focus on Dairy Production

Youth and 4-H, a substantial portion of youth are unprepared for the skills needed to be successfully employed. Some of the factors that contribute to this are: high school dropout rates, limited out of school activities, a low number of people to volunteer for out of school time activities, and a high percentage of families living in generational poverty.

4-H Youth Programs:

- 445 youth members in 4-H clubs
- 369 youth participated in short term programs
- 45 youth attended camp
- 330 youth participated in School Enrichment programs

⇒ Total of 1189 4-H Alcona Youth
DEVELOPING YOUTH AND COMMUNITIES

CHILDREN AND YOUTH INSTITUTE
Les Thomas, 4-H Program Coordinator—Alcona County

4-H preparing youth for the future

The future of Michigan lies, in part, in the hands of its students’ abilities to excel in science, technology, engineering and mathematics (STEM). Science literacy among school aged youth in Michigan is below the national average, directly impacting college readiness.

Extension 4-H clubs connect caring adult volunteers to youth

Through MSU Extension 4-H programs, youth participants learn life skills that prepare them for the workforce – especially for highly sought after jobs in science, technology, engineering and mathematics (STEM).

- 19 active clubs ranging from livestock to sewing, archery, STEM, and athletics.
- New clubs that will be starting soon are Fishing and Trapping.
- 39 adult volunteers make all clubs successful.

“I’m realizing the science and what they learn are secondary to the relationship we are building. It’s more important to the kids that we are here and care about them.” - 4-H Tech Wizards volunteer

More successful young people in communities results in greater tax revenues and consumer spending and increases the likelihood that young people will stay in, or return to, their communities.
Developing Youth and Communities

**MSU 4-H Exploration Days**

A pre-college program where over 2500 youth from across Michigan learn to become independent and responsible by living in residence halls on the campus of MSU.

- 38 youth and 5 adults from Alcona County took a variety of action packed classes.
- Several course choices offer a firsthand experience in a potential career.
- Youth experience MSU dorms, buses, cafeteria and other aspects of major university life.

**Libraries for Learning**

A literacy initiative from the 4-H Advisory Council designed to increase access to books for youth in need. Books are obtained through a non-profit clearing house called ‘First Book’ whose mission is to build personal libraries for youth at risk.

- Alcona 4-H has given away over 1,500 books in Alcona County in 2015-16 with an approximate value of $13,000. Books are given away at 8 annual events all around Alcona County - including festivals, fairs, AHS Family Literacy night, Kindergarten Roundup as well as whenever a child visits the MSU Extension Office.

**“It has given my boys confidence and eliminated some of the fears associated with attending college...it makes it much less scary for these young adults.”**

**“The experience at Exploration Days made (my son) a more confident leader.”**

**“Our daughter had a much easier time adjusting to college like because of this program...it is a must for preparing youth attending a University - especially if you are from a rural area.”**

- Exploration Days Attendee Parents

**In 2015-16, the Alcona 4-H Advisory Council gave away over $2000 in scholarships to youth in need, including programs like camp and Exploration Days as well as to cover Michigan 4-H participation fees**
As young people learn, building their skills and knowledge, their power increases. MSUE programs bring young people and their families together with volunteers, community members and professionals in a powerful partnership through which all learn and grow.

Developing Youth and Communities

CHILDREN AND YOUTH INSTITUTE
Tracy D’Augustio Extension Educator—Alcona County

Science Literacy is a growing area of Interest in Alcona County and across Michigan.

Alcona Residents took part in the following events which had components designed to support STEM (Science, Technology, Engineering and Mathematics).

- Safety day where adults and youth designed and built a helmet to protect an egg.
- Family Engineering Night – Families designed and built an air propelled rocket and engaged in other activities supporting teamwork, collaborating and communication as well as STEM.
- Youth in both the middle and high schools had the opportunity to participate and explore science with MSU Extension during lunchtime challenges throughout the school year.
- Residents across the county had the opportunity to stop by their local library and explore science with MSU Extension. Activities were available during library hours for the entire month with a new activity each month.

The purpose of STEM is NOT only to teach a specific topic but to help youth experience the excitement of science exploration!
**KEEPING PEOPLE HEALTHY**

*Karen Fifield*
*Extension Educator, Health and Nutrition Institute, Food Safety*

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**Teaching Alcona Food Safety**

Cooking for Crowds is an educational program for nonprofit groups that prepare food for their members or for the general public as fundraisers.

- Participants learn how to prevent unsafe conditions that may cause food borne illness.
- Participants learn how to plan, purchase, store, prepare and serve food correctly.
- MSUE provided this course to six Alcona residents.

*Michigan State University Extension Offers ServSafe, a national certification program for those working in food service, specifically manages and other leaders.*

- The course teaches how to prevent foodborne illness and how to train employees about the latest food safety issues.
- Three Alcona residents participated in the eight hour course
- They covered topic including: providing safe food, forms of contamination, the safe food handler, food safety management systems, safe facilities, pest management, and cleaning & sanitizing.

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"This class has made me aware of a better quality of food service/food safety that can be attained at our church."

- *Cooking for Crowds participant*
Keeping People Healthy

Jessica St. George
Family Nutrition Program Instructor

Healthy Cooking Classes for Teens & Moms
Through 6-week long “hands-on” cooking/nutrition classes, MSUE teaches teens and adults valuable cooking tips and techniques that promote healthier lifestyles.

- Youth participated in “Cooking Matters for Teens”, a program that teaches teens how to independently make healthy and tasty meals/snacks for themselves and their friends.
- Local moms participated in “Cooking Matters for Parents” (a partnership with Alcona MOPS and St. Andrew’s Episcopal Church) to learn how to buy and prepare healthier foods for their families – including how to make healthy food taste great to picky eaters!

Health Care Providers & MSUE Teaming Up to Promote Healthier Lifestyles
Alcona County initiated a new “Prescription for Health” program, which brings health care providers and MSUE together to help people adopt healthier lifestyles as a part of their overall health plan. Health care providers “prescribe” physical activity/nutrition classes to a patient’s overall health care plan. Through 6-week long classes, MSUE teaches patients fun and simple ways to stay active, how to eat healthy food on a limited budget, how to build a meal plan, and how to make small changes that add up to an overall healthier lifestyle.

- Is part of a 13 county wide action plan to help all of Northeast Michigan.
- Reached 20 adults in Alcona County during its first set of classes; and classes continue to be offered year-round.
- Provided both education and up to $60 in vouchers to purchase fresh produce from local stores and farm markets.

MSU Extension nutrition aims to improve the knowledge, skills, attitudes and behavior of how individuals view nutrition.
ENSURING STRONG COMMUNITIES

Greening Michigan Institute
Bonnie Wichtner-Zoia, Extension Educator
Leadership, Community Engagement and Tourism

Leadership and Community Engagement

Through its public policy education and community leadership workshops, MSU Extension informs residents about public policy issues and processes, offers leadership skill development classes and strengthens community capacity to solve complex problems.

- MSU Extension offers two highly acclaimed facilitation workshops that are designed to train leaders from communities and organizations: Facilitative Leadership and Advanced Facilitative Leadership.

Conflict Resolution

To engage productively in community and economic development opportunities it is essential to openly address and resolve disagreement in a constructive manner.

- MSU Extension offers hands-on and research-based educational opportunities that help people build the skills they need to manage a range of conflict situations – from one-on-one interactions to large public meetings.
- A Three-hour Communicating through Conflict workshop has been offered in the county and surrounding district.

“When working with the public, we come into conflicts and what I learned will help me stop and think of how to work through and ultimately resolve those conflicts.”

- Attendee

Placemaking, a strategy led by local governments and planning commissions, can be a cornerstone of Michigan’s economic recovery.
Lake Huron Regional Fisheries Workshops

Engaging 245 local fisheries stakeholders with fisheries research and management agencies, 11 attendees identified themselves as residing in Alcona.

- Recreational anglers had the opportunity to become more scientific anglers, learning about feeding trends of predator fish species
- Fishery businesses gained insights related to Lake Huron fisheries resources around which their business depends
- Research and management agencies shared informational updates.

Wild produced Lake Trout more often seen in angler catches, a sign of recovery for this native species in Lake Huron.

Michigan Sea Grant Extension offers expertise to coastal communities and partners interested in developing and enhancing water trails.
Our Michigan Sea Grant and MSUE supported Northeast Michigan Great Lakes Stewardship Initiative has been selected as one of the top 5 award winners selected for national UL/NAAEE Environmental (E)-STEM Innovation Award.

Tracy D’Augustino and Brandon Schroeder with several of our network partners submitted the award to the North American Assoc. for Environmental Education (NAAEE) is our national professional association for environmental and outdoor education.

- Award comes with a $25,000 award to be reinvested with schools to promote E-STEM opportunities via our NEMIGLSI network.
- Alcona elementary raised salmon in the classroom (DNR education program) but connected it with water and biodiversity studies in their local river/harbor.
- Alcona middle school helped us explore National Geographic-supported iNaturalist app as citizen science opportunity to collect biodiversity data at coastal Negwegon State Park.

To learn more about Place-Based Education in Michigan visit the NEMIGLSI website.
Farm Business Management

In collaboration with the USDA Farm Service Agency and commodity organizations in Michigan, the MSUE FIRM team (Farm Information Resources Management) developed a one-stop source of information for producers and landlords that include:

- A set of publications for Michigan producers and landlords.
- Decision-making software to analyze the financial consequences of alternative program decisions.
- Integration of the FIRM software with advanced risk management tools developed at the University of Illinois and Texas A&M University.
- 110 local and reginal educational meetings that reached a total audience of 8,000 producers throughout the state.

Farm Employee Management:

Managing employees on a dairy is a key to better and more consistent performance; therefore:

- Have helped dairy owners and managers develop their skills and knowledge to more effectively manage employees.
- Co-wrote a series of employee mastitis lessons that are published in Hoard’s Dairyman magazine so that dairy employees develop their knowledge.
- Taken a leadership role in coordinating a section of a new book on managing farm employees for dairy producers.
Supporting Food and Agriculture, continued

Cattle health and comfort:
- Leading a statewide project to help dairy producers, including those locally, reduce the risk of transmission of BLV.
- Involved statewide, and locally with dairy farms to better understand mastitis and improve treatment use.
- Have written and taught locally, statewide, nationally and internationally about cattle health and comfort.

Learning on the farm:
The best classroom for farmers is often a farm, and farmers can provide a good example and model for other producers.
- Involving local dairy producers as members of the MSU Extension Dairy Advisory Team; providing input and learning and sharing experience and ways of doing things.
- Host monthly conference calls with producers to discuss current issues on farms and in the industry.
- Developed farm tours enable producers to see and understand how other producers solve problems and achieve results.

Proper animal composting works well as a way to deal with road kill, as an alternative disposal method for animal control units and as a disaster response when livestock and other animal mortalities require disposal.

During the 2014 Ag Expo, MSU researchers provided a demonstration for local municipality representatives of animal mortality composting.
Supporting Food and Agriculture, continued

**Working to prevent bovine TB**

Two herds infected with TB in Alcona County, Michigan. MSU Extension, working with the Michigan Department of Agriculture & Rural Development (MDARD) and the USDA have developed a project called Enhanced TB Risk Assessment to help farmers prevent new infection.

How it Works:

- MSUE, MDARD & USDA staff visit farmers in high risk areas to assess risks to their herd.
- Risks are considered as the potential threats from infected wildlife. Owners are encouraged to consider what those risks may be and to take greater responsibility for protecting their cattle.
- Communities of farms are working together because what one landowner does may impact deer movement to other farms. Working in concert with one another can help to reduce risks throughout the community.
- This effort is considered by MDARD as the primary means to change the course of disease incidence.

TB is caused by an infection with the bacteria called *Mycobacterium bovis* (*M. bovis*). Infected animals may not show any outward signs of disease until the most advanced stages.
Alcona Growers Participate in Michigan State University Potato Field Day

On-farm research and outreach bring locally relevant research-based information directly to producers, who learn more effectively using this participatory approach.

- This annual event showcases an on-farm potato variety plot, including 32 varieties this year, and provides an opportunity for researchers and industry representatives to communicate directly with potato producers.
- Chris Long, MSU Potato Specialist, presented information on potato variety development and performance in the trial.
- Mike Wenkel, Executive Director of MPIC discussed activities of the commission.
- Dr. Noah Rosenzweig also attended our event, sharing an update on potato pathology concerns in 2015 and ongoing soil health research in potato systems.

Evaluations at the end of the Field Crops Management series indicated:
- 72% of participants will use new strategies to combat white mold in soybeans.
- 48% will implement new herbicide resistant weed control measures.
- 34% will use nitrogen loss prevention techniques.
Aerial Cover Crop Seeding Demonstration

$29,810 in grant funds from the new Sustainable Agriculture Research and Education (SARE) Partnership Program to investigate and demonstrate cooperative aerial seeding as a method of timely cover crop establishments on Northeast MI corn and soybean acres.

- The grant fully funded aerial seeding of 400 corn and soybean acres to cover crops in late August 2015. These sites demonstrated the practice and also for collection of data on cover crop establishment, biomass production and nitrogen cycling.

- Development of a viable cooperative aerial seeding program in Northeast Michigan will depend on aggregation of more acres to decrease cost, making the practice competitive with traditional ground seeding technologies.

Western Bean Cutworm Trap Network

MSUE research and outreach brings locally relevant researched-based information directly to producers, who learn more effectively using this participatory approach.

- Catch numbers relative to the established IPM threshold for Michigan were reported to collaborating growers and Dr. Difonzo, as well as published in regional crop report articles to inform scouting and insecticide application decisions.

- In 2015, Western Bean Cutworm catch numbers did not reach the economic threshold for treatment, allowing participating growers to avoid insecticide applications on 928 of 1775 dry bean acres assessed. This information was also available to non-participating growers with the potential to impact as much as 6,700 dry bean acres in the region.

Western bean cutworm eggs two to three days old. Photo credit: Chris DiFonzo, MSU
**SUPPORTING FOOD AND AGRICULTURE**

*James DeDecker*

*Extension Educator, Agriculture and Agribusiness Institute*

**Dry Bean Field Day**

On August 11, 2015 MSU Extension partnered with the Michigan Bean Commission, ADM Edible Bean, and Freeland Bean & Grain to offer a Dry Bean Field Day at Smolinski Green Acres Farm in Lachine, MI.

- Thirty-six producers and partners attended the event to hear presentations on the current state of Michigan’s dry bean industry (Terry Schindler, MBC), Western bean cutworm management (Fred Springborn, MSUE), nutrient management and plant desiccants (J.J. Metz, CPS), and dry bean markets (Dan Hensler, ADM & Roger Hupfer, Freeland Bean & Grain).

- Following these presentations, participates had an opportunity to view an on-farm dry bean variety trail, including several classes on edible beans, conducted by Greg Varner of the Michigan Bean Commission.

**Integrated Pest Management**

Michigan State University Extension has been offering a series of free on-demand integrated pest management webinar since July 2013.

- In 2015, eleven Alcona residents participated in one or more of the 17 available webinars.

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Historical and forecast weather data is perhaps the most valuable information available to a scout, as crop and pest development are strongly influenced by temperature and moisture. Degree day models are available for any pests and can be customized using generated information available via [MSU Enviro-weather](https://www.msuextension.msu.edu/Environet).

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Michigan State University Extension has been offering a series of free, on-demand integrated pest management webinars since July 2013. Viewers are able to request up to five recertification credits towards their pesticide applicators license in the state of Michigan.
Extension Educators Serving Alcona County

Staff Located in Alcona County Office:

Kelly Hiemstra, District Coordinator  hiemstra@anr.msu.edu

Tracy D’ Augustino, Extension Educator, Children and Youth Institute  daugustt@msu.edu

Les Thomas, 4-H Program Instructor  thoma322@msu.edu

DISTRICT 4 DIGITAL REACH
From July 1, 2014, to June 30, 2015:

⇒ 2.5 million visitors viewed more than 5.3 million web pages.

⇒ Search engine ranking help make msue.msu.edu one of the most visited Cooperative Extension Systems education sites in the country.

⇒ 751,000 topic newsletters were distributed to more than 10,400 email addresses.

⇒ MSUE Extension reached more than 2,500 Facebook and more than 2,200 Twitter followers.

⇒ Michigan 4-H families and volunteers stay informed about activities through Michigan 4-H Facebook with 3,125 likes.
District 4 Extension Council

Each district of MSU Extension has an advisory council to assist the District Coordinator in a variety of ways. The Council’s composition is a balance among various sectors that Extension educational programming serves.

Members are nominated and selected due to their experiences with Extension and proved leadership. They network with others who share similar interests and concerns, help shape Extension programming efforts important to citizens in the district, gather support for establishing or extending educational effectors around issues of concern in the district, and participate in leadership and issue focused educational events.

Members of the District 4 Council in 2016 include:

- Bobbe Burke (Arenac)
- Joan Crick (Alcona)
- Sharon Czaika (Iosco)
- Jen Czymbor (Arenac)
- Robert Dixion (Crawford)
- Roy Elie (Ogemaw)
- Rose Ford (Iosco)
- Elizabeth Grabow (Ogemaw)
- Paul Grabstanowicz (Alcona)
- Shelly Hubbard (Crawford)
- Patricia Killingbeck (Arenac)
- Joell Krejarek (Alcona)
- Ken Melvin (Roscommon)
- Marc Milburn (Roscommon)
- Joe Powers (Crawford)
- Chuck Preston (Iosco)
- Bruce Reetz (Ogemaw)
- Erik Rodriguez (Arenac)
- Leisa Sutton (Iosco)
- Sasha Weaver (Crawford)

MISSION:
Michigan State University Extension helps people improve their lives through an educational process that applies knowledge to critical issues, needs and opportunities.