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August 2017

Forage Event of the Decade Coming to MSU AgBioResearch Station at Lake City MSU Ag Innovations Day – Thursday, August 24

Michigan State University is packing a huge educational punch into its second annual MSU Agriculture Innovations Day Aug. 24 at the Lake City Research Center. Experts, scientists and researchers will tackle the most pressing issues facing farmers through breakout sessions and demonstrations on new and emerging technologies and how they can help farm businesses improve sustainability and profitability.

MSU Agriculture Innovations Day began last year after a steering committee of industry experts convened to develop a replacement for the discontinued Ag Expo. The day is designed as an educational event that moves annually throughout the state, providing information based on the identified needs in that specific locale.

Each year the theme changes. Last year's theme, "Focus on Soils," was hosted at the Michigan State University Saginaw Valley Research and Extension Center. It focused on cutting-edge technology regarding crop fertilization, drainage and soil compaction.

This year's theme, "Focus on Forages and the Future," is being hosted at the Lake City Research center located at 5401 W. Jennings Road, Lake City. This free event begins at 12:30 p.m. with registration and field sessions starting at 1 p.m. [Pre-registration](#) is not required, but is suggested by going on-line to Agriculture Innovation Day or by calling the MSU Extension Office in Osceola County at 231-832-6139.

Inside this issue:

MSU Ag Innovations Day	1-3
Grazing Field Day	4
Wild Parsnip	5-6
Burke Teichert, Speaking at Ag Innovations Day	7
Grazing School	8-9

MSU Ag Innovations Day – Thursday, August 24—Continued

A free catered dinner is available to all participants to celebrate Michigan agriculture. The dinner will be served at 4:30 P.M. and will feature a short program with comments from MSU President Lou Anna K. Simon and Ron Hendrick, the dean of the College of Agriculture and Natural Resources.

According to Jerry Lindquist, longtime MSU Extension forage expert “this is one of the bigger field days that MSU has conducted on forages for dairy and livestock farms in some time, especially when you look at the quality of speakers that are coming from across the country – Michigan farms don’t want to miss this one!”

Educational sessions offered

The educational sessions will discuss topics that address newly completed research on reduced lignin alfalfa, new technology to improve corn silage quality, better methods to produce baleage, ways to stretch acreage for manure application with cover crops, and several sessions regarding improved methods in beef production. Each session will highlight key ideas needed for successful implementation and show financial analysis of how these ideas will impact farm profitability. They will include:

Reduced-lignin alfalfa in cattle feeding systems. Reduced-lignin alfalfa is a new innovation in alfalfa production, with limited information available regarding how it will perform and be used in modern dairy feeding systems. Mark Sulc, of The Ohio State University, will discuss the first release of results of a three-year study across multiple locations including MSU, comparing reduced-lignin alfalfa to traditional varieties. This will include both yield and quality results. Producers will learn how this technology may be used across Michigan depending on the length of the growing season, and see an example calendar demonstrating this concept. A cost analysis will show how this technology may positively impact farm profitability. This is an afternoon session.

Improving chopped silage with app. Improving corn silage quality can have a tremendous impact on milk production and farm income, but improving particle size when chopping silage is difficult to do. Brian Luck from the University of Wisconsin will demonstrate a new phone app and how it can be used in the field when chopping silage. This technological breakthrough will help dairy and beef farmers improve particle size while chopping silage in the field and will help to create more consistent silage. Participants will be able to learn how to use this technology and how it may affect their cost of production. This is an afternoon session.

Fitness tracking for cows. Precision agriculture is an often-used phrase that can mean many different things. However, how it will be used in cow management is emerging. Barbara Jones from Tarleton State University will discuss how precision animal monitoring can be used in modern dairy production to improve both health and reproductive management. This will include an assessment of how different forms of this technology impact the producer’s bottom line. This is an afternoon session.

Improving soil with manure and cover crops. Manure as a soil amendment is an important component to improving soil quality and reducing the use of commercial fertilizers. Two sessions will cover manure application as a soil amendment. MSU educators Kim Cassida and Marilyn Thelen will talk about using cover crops in a double-cropping system that can increase forage production and improve forage quality for use in growing stock in both dairy and beef. This double-cropping approach is used to enhance soil nutrient removal to effectively increase the amount of manure applied on those acres. This type of system can increase forage production and stretch those acres in which manure can be applied. The financial impact of this on the farm will also be addressed.

MSU’s Lisa Tiemann and Dean Baas will show producers how manure application is an important component to improving soil quality. Using manure along with forage crop selection, crop rotation and cover crops in a systematic approach will improve soil quality and overall soil fertility and sustainability. Emerging strategies

show that a systematic approach to enhancing soil quality improves overall soil health and better support crop production. These will be afternoon sessions.

Baleage made right. Baleage is an alternative to traditional silage or dry hay and is growing in popularity. But many producers face a challenge when trying to turn baleage into a high-quality feed whether it be for growing cattle young cattle, wintering beef cows, milking dairy cattle or grass fed beef cattle. Wayne Coblenz, USDA Researcher at the Dairy Forage Research Center in Madison, Wisconsin will discuss how better practices can improve baleage quality and show differences in forage quality based on different methods used in making baleage. The financial implications of differences in baleage quality will be featured as well. This will be an evening session.

Creating profitable beef operations. Beef production can be a rewarding and challenging business. Burke Teichert, past manager of Deseret Land and Cattle Co., one of the largest cow/calf operations in the country will show how beef production can be successful from a farm business and holistic point of view. As a featured columnist for BEEF magazine, Burke will draw on his vast knowledge, as well as experiences of the many cattle producers he has worked with throughout his career. This will be an evening session.

Grass-fed beef. Consumer preferences are changing, and how they want their food produced is opening new marketing opportunities for farmers. Lately, grass-fed beef has begun commanding higher premiums than feedlot-finished beef. MSU Extension beef educator Kable Thurlow will cover the results from a five-year MSU study that provides important insights on how to successfully implement grass-fed beef production on Michigan farms and what the cost analysis indicates for farm profitability. Jon Nelson, beef producer from Midland, MI. will discuss how he has successfully implemented grass-fed beef production on his farm. This will be an evening session.

Land-to-Market program. To further address new opportunities to meet changing customer preferences, MSU's Matt Raven and Jason Rowntree will demonstrate how the Savory Institute's Land-to-Market program can improve soil quality and forage quality for both beef and other ruminant animal farms, allowing them to tap into emerging markets requiring these production specifications. This session will address how farmers can improve the quality of their soil, boost forage production and access these emerging markets with products meeting specified attributes. This will be an evening session.

Two pesticide re-certification credits have been approved for the day. The day will be held rain or shine as tents and roofed people mover wagons will be used. It will conclude at 9:00 P.M. (dusk) so bring appropriate clothing for the cooling evening temps. Those not able to attend the full day are encouraged to attend for either half of the day and partake in dinner either way. The afternoon portion is weighted with more dairy topics and the evening has more beef/livestock topics.

Go online for more information on MSU Agriculture Innovation Day or call the MSU Extension Office in Osceola County at 231-832-6139.

MSU Ag Innovations Day 2017 – Don't miss it!



MSU Agriculture Innovation Day
Focus on **FORAGES** and the **FUTURE**
August 24, 2017
Lake City Research Center
Lake City, MI
msue.anr.msu.edu/msuaginnovationday



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Mid Michigan Cattle Network Warm Season Grazing Field Day

DATE & TIME:

**August 17, 2017
6-9p.m.**

LOCATION:

**Grove Farm
2093 Swanstra Rd.
Gladwin, MI 48624**

COST:

Free

Speakers for the event:

Cisco Seed Company
MAEAP Technician:

Ken Wawersik

MSUE Educators:

Paul Gross

Jerry Lindquist

Kable Thurlow

NRCS District

Conservationists

Dave Lehnert

Boyd Byelich

Hosted by:

**Thane and Trena
Grove**



WHO SHOULD ATTEND:

Beef Cattle Producers, persons interested in cover crops or annuals for livestock, those interested in Management Intensive Grazing and soil health.

DESCRIPTION:

Participants will be able to view warm season annuals that will be used for grazing beef cattle. There will also be a Rainfall Simulator demonstration from Michigan State University Extension. This event also qualifies as a MAEAP Phase 1 meeting.

HOW TO REGISTER:

<https://events.anr.msu.edu/mmcn/>

CONTACT:

Kable Thurlow call: 989-426-7741 or email thurlowk@anr.msu.edu

MSU is an affirmative-action, equal-opportunity employer, committed to achieving excellence through a diverse workforce and inclusive culture that encourages all people to reach their full potential. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, gender identity, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status. Persons with disabilities have the right to request and receive reasonable accommodations.

Wild Parsnip – Another Weed to Put on Your Watch List

As if poison ivy, spotted knapweed, Japanese knotweed, autumn olive, palmer amaranth and others were not enough to be watching and keeping off your property, another new weed is starting to spread in the Lower Peninsula of Michigan. Wild parsnip has now been identified by Michigan State University Extension Educators in the Mecosta, Osceola and Wexford Counties in multiple locations.

Wild parsnip is a member of the Umbelliferae family relating it to parsley and carrots. It has genetic lineage to domestic parsnip that is grown by gardeners for its edible root. It lives from two to three years and enters its reproductive stage in the second year of life, growing to a height of 3 – 5 feet. It has a distinctive yellow appearance, being most noticeable in July when it blossoms looking similar to Queen Anne's lace (sometimes called wild carrot) in size and shape, but because of its coloration, reminds people of domestic dill that gardeners raise for pickling.

Wild parsnip populations have been expanding for some time in Minnesota, Wisconsin, Ontario and the Upper Peninsula of Michigan. It is found commonly in those locations along roadways, recreational trails, fence rows, and in abandoned fields. What makes wild parsnip an un-wanted guest are the juices in the plant. When the plant is cut or broken plant juice or sap that comes in contact with human skin can cause severe skin irritation that can persist for some time. This burn can cause scarring that may last for a year or more. The plant chemical in the sap, furocoumarin, causes phyto-photodermatitis of the skin. It does this by absorbing into the skin, and then when exposed to sunlight within 8 hours, becomes energized by the ultra violet rays of the sun, destroying skin cells at the location of absorption.

The burning sensation of wild parsnip is no more severe than poison ivy, but the scarring side effect does last much longer. And unlike poison ivy that does not affect all people, wild parsnip burns almost all that are exposed to it regardless of their level of skin sensitivity. But the burning is only caused by the sap. If someone just touches the plant and gets no internal juice on their skin, they suffer no irritation. Often it will be the person that is cutting or mowing wild parsnip and in the process is spraying droplets of the plant's juices into the air, that will become affected.

Animals can also get parsnip burn on their skin if they have juice contact in areas with little hair or if they are eating cut portions of the plant. Fortunately most livestock do not like the taste of parsnip plants so they do not



readily graze it. And wild parsnip is not a rapid growing plant so agricultural fields for hay or silage that have parsnip creeping in from the field edge seem to keep controlled by mowing and chopping of the crop. The literature does report that wild parsnip can cause decreased feed consumption which can lead to fertility issues in cattle and other grazing animals if the animal is forced to eat it (in chopped feeds or in drought situations on pasture). But as with most toxic plants in forage crops, the solution to pollution (toxicity) is dilution, meaning if animals eat enough safe forage and other grains it will dilute out any toxic impact from unsafe plants. Thus if you do find wild parsnip on or near crop property, irradiate its population while it is still at a low level so that it cannot spread and become a more serious problem.

Mowing does not kill the plant but if done frequently enough to keep the plant from blossoming; it will prevent it from producing seed and spreading. The plant reproduces and spreads only by seed. We suspect that is one reason why it is showing up along recently paved roads and trails – it is being spread into new areas by construction ditch bank re-seeding projects that are using weedy hay or straw and possibly seed contaminated soil.

Many herbicides will provide effective control of wild parsnip. The common 2,4-D herbicide that is used to control lawn weeds will provide control of parsnip while not harming surrounding grasses in abandoned field settings. Best timing for control is to spray the plant any time in the spring or early summer before it blossoms, or in the fall after new fallen seeds have germinated. Parsnip found in crop fields, most commonly hay, pasture or others with permanent sod cover must be carefully controlled with herbicides or with cultural practices that will be safe for the crop and for the food supply. Consult with an MSU weed specialist or an MSU Extension Educator for control recommendations. Always read and follow all herbicide label directions before applying.



Wild parsnip is a new weed that we must add to our list of weeds to keep a watch out for and handle carefully when controlling. As with many of these invasion weeds early control when populations are low is much easier than letting the plant get a strong foothold. For more information contact an MSU Extension Agricultural Educator in your area.

Jerry Lindquist



Burke Teichert to speak at MSU Ag Innovation Day in Lake City

Leading beef cattle ranch consultant Burke Teichert to speak at MSU Lake City Ag Innovation Day on Aug. 24

One of the most highly respected cattle ranch consultants in the country, Burke Teichert, will speak at the 2017 MSU Ag Innovations field event that will be held on Aug. 24 from 12:30 p.m. until 9 p.m. at the MSU Lake City AgBioResearch Center.

Teichert will speak in the evening portion of the program multiple times beginning around 6:45 p.m. after dinner. His topic will be Creating Profitable Beef Operations Managing Land, Livestock and People. He will draw on his long career in the cattle business serving shortly at the University level before he began managing cattle ranches across the United States and even for a while in South America. For 10 years he served as the General Manager and Vice President of AgReserves Inc., better known as the Deseret Ranches, which were the largest beef cow/calf operations in the United States at the time. In his retirement, he serves as a ranch consultant, special events speaker and also as a featured writer for Beef Magazine.



According to Dr. Jason Rowntree, beef specialist at MSU, “there are few people in the world that have the broad range of understanding of the beef animal, the ecological ranch environment and the human factor and can tie them all together to make the operation more profitable, than can Burke Teichert. Michigan beef producers do not want to miss this opportunity to hear him speak!”

MSU Agriculture Innovation Day is an annual event focusing on in-depth education on critical topics. The event will provide opportunities to learn the latest research on corn silage production, double cropping with annual forage crops, reduced-lignin alfalfa, soil health improvement and grass-fed beef production, among others.

The event rotates to various locations throughout the state to give farmers access to experts who can help them improve their businesses while maintaining environmentally sound practices on their farms. This year’s focus on forages provides a special opportunity for beef, dairy and livestock producers in Michigan to learn the most innovative practices in the country. To learn more about the event and the sessions being offered, visit msue.msu.edu/msuaginnovationday. Pre-registration is encouraged, but not required. There is no fee to attend the event or to participate in the dinner. Restricted use pesticide credits and crop advisory credits are available for attendance.

This article was published by Michigan State University Extension. For more information, visit <http://www.msue.msu.edu>. To have a digest of information delivered straight to your email inbox, visit <http://www.msue.msu.edu/newsletters>. To contact an expert in your area, visit <http://expert.msue.msu.edu>, or call 888-MSUE4MI (888-678-3464).



SEPTEMBER 21 & 22, 2017

STARTING AT 8 A.M. ON THURSDAY & CONCLUDING AT 4 P.M. ON FRIDAY

W.K. KELLOGG FARM HICKORY CORNERS, MI

Past participants have included new and experienced grazers, and all have gained new knowledge and skills to integrate into their operations. Attendees have said that Grazing School has motivated them to make improvements to their farms' grazing systems.



FOR MORE INFORMATION

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Natural Resources Conservation Service



W.K. Kellogg Farm

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MSU EXTENSION GRAZING SCHOOL IN HICKORY CORNERS, MICHIGAN



SEPTEMBER 21 & 22, 2017

Grazing School is designed for farmers and landowners who graze dairy, livestock and small ruminant animals, and want the latest animal & forage research on grazing management.

MICHIGAN STATE UNIVERSITY Extension

MICHIGAN STATE UNIVERSITY EXTENSION'S GRAZING SCHOOL PROVIDES INFORMATION AND HANDS-ON EXPERIENCES FOR THOSE INTERESTED IN STARTING OR IMPROVING GRAZING MANAGEMENT.

Join us to learn methods of grazing that you can integrate into your farming practices and adapt to your specific needs, for greater profitability and reduced impact on the environment.

Grazing School attendees can expect to learn a variety of tools and choose to integrate methods that are most suitable for their grazing system. Additionally, attendees will have the opportunity to get hands-on experience with MSU experts, collectively grazing MSU livestock during Grazing School.

REGISTRATION

The registration deadline is Sept. 15, 2017. The workshop fee includes notebooks, resource materials, and all meals.

- \$125 for one participant (or \$95 for students and veterans)
- \$220 for two participants (same farm)
- \$315 for three participants (same farm)

LATE REGISTRATION

- \$150 for one participant
- \$270 for two participants (same farm)
- \$390 for three participants (same farm)

PRESENTATIONS

- Introduction to managed grazing
- Pasture management and decision-making
- Livestock nutrition and requirements
- Forage yield determination and allocation
- Grass and legume species identification
- Pasture soil fertility and management
- Grazing systems, layout and design
- Water systems and requirements
- Building and using fence for grazing
- Pasture establishment and improvement

EXPERTS

Grazing School is taught by a dedicated team of professionals with many combined decades of expertise in crop, soil, and animal sciences. Team members hail from all over the state to give a varied perspective on the variety of local conditions found across Michigan. Many have farms of their own from which to draw inspiration and examples.

- Dean Baas, Cover Crops Educator, MSUE
- Kim Cassida, Ph.D., MSU Forage Specialist
- Richard Ehrhardt, Ph.D., MSU Small Ruminant Specialist
- Kevin Gould, Beef Educator, MSU Extension
- Phil Kaatz, Forage Educator, MSUE
- Howard Straub III, Pasture Dairy Manager, W.K. Kellogg Biological Station
- Santiago Utsuni, Ph.D., Faculty, W.K. Kellogg Biological Station
- Brook Willke, Ph.D., W.K. Kellogg Farm

GRAZING SCHOOL COURSE REGISTRATION

Please mail this form by September 15, 2017

RETURN FORM TO
Kellogg Biological Station
Grazing School
3700 E. Gull Lake Dr.
Hickory Corners, MI 49060

Online registration:

<http://events.ansu.edu/GrazingSchool/>

PERSONAL INFORMATION

NAME _____

ADDRESS _____

PHONE _____

EMAIL _____

PAYMENT INFORMATION

LOCATION _____

NUMBER OF PARTICIPANTS ATTENDING: _____

AMOUNT ENCLOSED: \$ _____

☐ CHECK ☐ VISA OR MASTERCARD

CARD # _____

EXP. DATE ____/____/____

SIGNATURE _____