



Great Lakes Grazing Newsletter

MICHIGAN STATE UNIVERSITY Extension

Osceola County MSU Extension
301 W. Upton Ave
Reed City, MI 49677

Phone: 231-832-6139
Toll Free: 888-678-3464
Email: lindquis@anr.msu.edu

Volume 6, Issue 2

April 2017

Dear Michigan Grazer,

Great news! I am pleased to announce that there is free pasture land available for grazing this year across Michigan. Well, almost free anyway as everything has some type of cost to it. These lands are scattered across the State and I guarantee they are close to you. The owners are some very like-minded people that want the land utilized and love to see grazing animals like yours on the landscape. I also guarantee that you will get along very well with the owners should you decide that you need more pastureland to graze.

What's the story? What's the catch? Well the almost free land is land that you already own and graze. It's your land! Bear with me. The average stocking rate in Michigan of a beef cow weighing 1,300 lbs. and her calf weighing 275 lbs. is 3.5 acres for the five month grazing season. What if we could decrease that rate to 1.75 acres? In essence we doubled our carrying capacity on an 80 acre pasture from 23 pairs to 46 pairs. It would be like going out and renting or buying an extra 80 acres of land. Impossible you say. Well I know of people in the State that are doing 1.8 acres per pair in normal years and some are even below that (for the sheep flocks that is 6 – 8 ewes and their lambs per acre).

How can you make this improvement? Some of you are already there or very close to it. Whether you are far from this mark or close to it, the idea is to get more intense in your pasture management. If you rotationally graze and move the herd every two weeks, sub-divide the pastures and move them every four days using Managed Intensive Grazing. If you have not fertilized with nitrogen in the past, apply 130 lbs./acre of 46-0-0 around May 1. If you have grazed the grass shorter than 4" in height in the past begin pulling the livestock when it is 6" tall and move them to a new pasture. If in the rapid growth period of late May you already moved the herd/flock every 4th day try sub dividing the pasture down and moving them every 1 -2 days. All of these are improvements that will increase your stocking rates over time and will be like owning more land.

How much can you afford to pay for these improvements? Well if pastureland in your area is selling for \$1,800/acre prorated that over 30 years and it is a cost of \$60/acre/year plus \$10 for property taxes. Or if rent for pastureland is \$40/acre for the five month grazing period you could afford to make improvements somewhere between \$40/acre and \$70/acre per year. It would be land that you already know how to manage, would be free of an increase in property taxes because you already pay them, and would be no greater distance away than what you already farm. All the improvements that I have mentioned above, if you consider the fertilizer, the fencing, the labor, etc. will not cost you more than the \$70/acre/year figure to buy, and many will be cheaper than the \$40/a to rent.

Demand for farmland continues to grow in many areas of Michigan. Today's current beef prices cannot cash flow the price of additional farmland in many cases. Before you go looking down the road for more land to rent or buy take a look at pastureland in your back yard. It may be just the right price!

Jerry Lindquist

MSU Extension Grazing Educator

Inside this issue:

MSU Ag Innovation Day	2-3
Holistic Management	4-5
Wildfire Relief Efforts	6-7
Wildfire Plan for Your Farm	8-10
Bull Breeding Soundness Exam Clinic	11



Michigan State University (MSU) will host its second annual Agriculture Innovation Day: Focus on Forages and the Future on Thursday, August 24, 2017 at the Lake City Research Center located at 5401 W. Jennings Road, Lake City, MI, 49651. The event will begin with registration at 12:30 p.m. and wrap up around 9 p.m. The event is free and includes dinner.

The educational field day will deliver a cutting-edge, in-depth look at forages, livestock and the future to help farmers meet growing producer demands.

“Forage production plays a crucial role for livestock farmers across the state,” said Ron Bates, director of agriculture and agribusiness for MSU Extension. “This field day puts farmers in front of the leading experts, the latest research and the practical demonstrations they need to improve their bottom line with new strategies that also improve or protect the environment and allow producers to market to new consumer demands.” In addition, attendees will hear from MSU President Lou Anna K. Simon over dinner.

Throughout the afternoon and evening, farmers will have the opportunity to participate in nine sessions focused on:

- **Making the Most of Reduced-lignin Alfalfa in Your Operation.** Learn about the latest in reduced-lignin alfalfa genetics and results from a multiyear MSU study. Explore the differences in yield, quality and harvest timing, and what fits best for your operation and forage quality needs.
- **Precision is the Division in Silage.** Hear from Brian Luck, University of Wisconsin Extension specialist in biosystems engineering, as he shares the latest on a mobile app designed to help producers and custom harvesters view images of processed kernels, particle size and distribution. He will explain how combining this with moisture and starch value data allows producers to use the right equipment adjustments to make the best silage possible.
- **Expand Your Use with Double-cropping.** Extending your crop rotation to include cover crops can increase feed harvested per acre and extend the land base for manure application. Learn how double-cropping can provide an extra forage crop for heifers, open windows of opportunity for manure application, trap manure nutrients and remove more phosphorus from the system to virtually expand your land base.
- **Precision Dairy Cattle Monitoring.** Do you have a Fitbit fitness tracker? Do your cows? Come learn how researchers and producers



are using wearable technologies similar to Fitbit to monitor behavior, health and reproduction for each cow in their herd 24/7. Experts will discuss each technology and how or if it fits with various management styles, and when or if it makes economic sense.

- **Finding the Right Mix for Soil Health.** Healthy soils are an essential for food and feed production. What we grow can improve our soils and ultimately our bottom line. Experts will look at how forage crop selection, crop rotations, cover crops and manure can affect the productivity of the soil and improve soil health.
- **Baleage Made Tight, Made Right.** Take a look underneath the plastic wrap and see what is happening to the forage from a feed analysis and fermentation perspective. Explore proper moisture ranges, wrapping methods and techniques for ensuring a quality product so producers can improve their dairy and beef production.
- **Creating Profitable Beef Operations by Managing Land, Livestock and People.** Burke Teichert, past manager of the Deseret Land and Cattle Company, one of the largest beef cattle enterprises in the United States, a current beef ranch consultant and featured columnist for Beef Today magazine, will speak on the critical factors of blending land, cattle and people to be successful in today's beef farming environment.
- **Grass-fed Beef – Research and Experience.** The MSU Lake City Research Center is a leading research center on grass-fed beef production. See the results from the five-year grass-fed beef study completed at Lake City and hear from John Nelson of Midland about his experiences in switching from cash crop to grass-fed beef and how this research has helped his bottom line and increased markets for his products.
- **Is Your Land Regenerating? The Land-to-Market Program Provides the Answer.** The Savory Institute's Land-to-Market program, with partners such as Michigan State University, is working to provide beef, sheep and dairy producers a process to verify that the land they are raising their livestock on is improving in well-defined quality indicators. This regeneration effort creates an opportunity for certified farms to reach new consumers who are concerned about how their food is produced. Learn the basics of the program, timelines for implementation and opportunities for participation.

"We are excited to bring new topics and in-depth discussion on forages and livestock in place of our traditional field day this year to not only expand knowledge of producers but to also make more people aware of the research and education taking place at the Lake City Research Center," said Doug Carmichael, manager of the center. "These sessions will give farmers what they need to be successful environmentally, economically and socially."

MSU recruiters will be on hand to provide students with information about all of the degrees available through the College of Agriculture and Natural Resources.

MSU Agriculture Innovation Day is an annual event focusing on in-depth education on critical topics. 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.

To learn more, visit www.msue.msu.edu/msuaginnovationday or contact Bates at batesr@msu.edu.

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).

Holistic Management School to be Offered at MSU Lake City AgBioResearch Center

Jason Rowntree

Michigan State University Extension

Training on Holistic Management practices will help farmers restore and regenerate degraded land. Holistic Management allows you to plan, manage, and grow your business to build wealth while building biological capital, and meeting the needs of the people involved.

According to Allan Savory, the Savory Institute founder, and long time advocate of restoring/regenerating land, “Ultimately, the only wealth that can sustain any community, economy, or nation is derived from the photosynthetic process – green plants growing on regenerating soil.” Holistic management is centered around four key insights. They are, 1) Brittleness 2) Predator-Prey relationships 3) Timing and 4) Holism. Exploring the ecosystem processes of the water cycle, mineral cycle, energy flow, and community dynamics will help anyone improve their management skills, and allow for decisions that regenerate land as opposed to degrading it.

Understanding Holistic Management allows you to plan, manage, and grow your business to build wealth while building biological capital, and meeting the needs of the people involved. MSU AgBio Research, MSU Extension, and The Savory Institute are hosting a two-day workshop entitled, “The Foundations of Holistic Management”. This course exposes participants to insights into holistic management, holistic decision-making, environmental principles, and holistic planning procedures for increased success.

An introduction will be given on the following topics:

- Key insights supporting holistic management
- Reading the land’s ecosystem processes
- Understanding the use of tools on the land
- How to make decisions looking at economic, ecological, and social needs simultaneously
- How to plan for a profit, choose enterprises, and prioritize expenses
- How to plan and pay for infrastructure improvements
- How to monitor for biological capital growth

How to plan for animals to be at the right place, at the right time, and for the right reasons

The course will be held April 26 – 27 from 9:00 a.m. – 4:30 p.m. at the Lake City AgBio Research Center located at 5401 W. Jennings Road, Lake City, MI 49651. Cost of the event is \$150 per participant, \$75 for the second person from the same farm. Registration is limited to 20 people. More than one farm decision maker in attendance is highly encouraged but not required. A light breakfast, snacks, and lunch are included with the registration. The course will be taught by certified holistic management trainers Dr. Jason Rowntree and Doug Carmichael.

Holistic Management School to be Offered at MSU Lake City AgBioResearch Center (Continued)

Please register by April 18, 2017, at <http://bit.ly/HMIIntro> or by sending a check payable to Michigan State University to Lake City AgBio Research Center, 5401 W. Jennings Road, Lake City, MI 49651. Please be sure to include names of all attendees as well as email address.



Holistic Management Training Photo By Doug Carmichael

Wildfire relief efforts in Kansas, Oklahoma, Colorado, and Texas

Fires in Kansas, Oklahoma, Texas, and Colorado have taken the lives of seven people, burned more than 1 million acres of rangeland, have killed cattle and destroyed infrastructure including thousands of miles of fence.

Wildfires in early March swept across the plains in regions of Colorado, Kansas, Oklahoma, and Texas. Ranchers in those devastated areas scrambled to protect their families, neighbors, livestock and homes. Winds gusting 50 to 80 miles per hour moved the flames almost as fast across the landscape. Smoke from the approaching fire storm turned day into night in a matter of minutes with swirling cinder, ash and smoke enveloping many while giving no clue how near the actual fire line may be. Seven ranchers and rescue volunteers tragically were killed by the event. Those surviving ranchers will now be battling for years to save their ranching livelihoods. The total devastation is still being tallied but the results at the current time are staggering.

1 - 2 million acres of rangeland were burned in the center of one of our country's most concentrated beef cow regions. Those pastures were just approaching their most productive period of the grazing year and are projected now to gradually recover over the next 6 - 18 months. Hay and other feed supplies were lost, equipment and sheds were burned. Thousands of beef cows and their calves, along with horses perished and many more were scorched by the flames to the point where they will never be productive again. Over 30 homes were burned to the ground along with farming infrastructure including thousands of miles of fence which is critical to managing livestock from overgrazing the surviving good pasture lands. The losses, which are now only being grossly estimated, are in the millions of dollars. Because the beef industry has fallen on tough economic times and because these western ranches are often asset rich owning thousands of acres of land along with hundreds of head of cattle, while being cash flow poor, they were not highly insured. Most of these losses will come directly from their pockets.

How can this region survive? Enter the American spirit of strangers helping out those less fortunate. In the last month, it is estimated that semi loads of hay and other essential supplies have arrived from each of the 48 contiguous States. The American farming industry and trucking industry has come up big in the effort to help! From Michigan, multiple semi loads of hay began arriving in week one of the disaster and continue taking weekly caravans of 10 - 20 trucks out there. They are taking hay and almost any other supplies that will help and fit on a trailer. To really gain an eye opening and emotional perspective of how magnificent the American response has been go to the social media sources like Facebook and YouTube and search Great Plains Wildlife Relief and include Michigan in the search if you want to feel real proud of your fellow Michiganders!

The need for support will not end in the short term. Rebuilding will be taking place over the next few years and depending upon rainfall amounts, hay may be needed over the next year or more. Below are a few guidelines to consider if you are planning to take supplies out to the devastated area.

Wildfire relief efforts in Kansas, Oklahoma, Colorado, and Texas (Continued)

Hay: All donated hay is appreciated but supplies of grassy, lower quality hays are growing and agronomically many of the surviving cows are now raising a calf, along with maybe an orphan calf to boot, so they need a higher feed quality hay with alfalfa in it to better support the milking cow. Donors are advised to contact before departing the ranch or farm to deliver hay directly to make the process more efficient and avoid dropping hay, that may go unused and un-covered for months, at a central station. Hay coordinators are listed for each area to call to locate a ranch that is still in need. All loads including hay must be properly secured and must meet the Highway Motor Carrier Division weight load limits. Many of the in-route States have been cooperative on allowing oversized loads but those grace periods are ending and tickets have been written.

Fence Supplies Because of the remote locations of the fences the common fence is still barbed wire. To make the fencing installations as efficient as possible the standard fence material that will provide a long useful life is 12 ½ gauge barbed wire with either 2 or 4 barbed points that are 14-gauge wire points. Steel T posts are the common post used. They should be 5 ½ ft. in length and be rated at 1.33 lb/ft. Wood posts are also accepted and the wood should either be Osage Orange wood (not common in Michigan) or wood that has been pressured treated with a preserving chemical. Wood posts should be at least a minimum of 4" diameter and should be a minimum of 8' long.

Dollars Because the distance from Michigan to this area is over 1,100 miles on average the shipping cost to get these supplies there can be as much as the value of the donated items. Groups hauling these items need support for fuel costs. And often it makes more economic sense to just donate dollars and let the agencies and officials in those areas purchase what is really needed on their end. There are many organizations and groups that are collecting funds. You can visit those State Wildfire Relief web sites to find many of them. A simple way here in Michigan to donate funds is to go to the Michigan Department of Agriculture & Rural Development go fund me page that has been established at <https://www.gofundme.com/plains-wildfire-jamie-clover-adams>. In addition, cash or check donations can be made at any Chemical Bank location across the state. Make checks payable to Michigan Ag Community Wildfire Relief Fund.

Do You Have a Wildfire Plan for Your Farm?

Could a wildfire the magnitude of the recent Great Plains Fire occur in Michigan? In most of our State we have more roads, wetlands, and green areas that may stop the spread of a fire, but if we look at past history the evidence is there that the risk is still great even in the Great Lakes State. According to the Michigan DNR each year we experience 8,000 to 10,000 wildland fires. And whether a fire burns a million acres or five acres, if you suffer property destruction, or worse yet the loss of livestock, pets, or human life, it is tragic to you. Historic wildfires of a very large proportion occurred in Michigan's Thumb region way back in 1871 and 1881 during a period of severe droughts. In 1881 a series of fires that summer burned 1.2 million acres of land – much of it wooded at that time in the Thumb region, and killed 282 people.

Today's firefighting equipment and expertise is much greater. But still in any life threatening emergency panic sets in and minutes may be all you have to react and safely get out. Just like having an emergency plan for your family to evacuate a burning house and meet at a central location is critical; having a well thought out plan in place for your farm may be the difference between life and death.

First let's talk about preventing wildfires as the DNR says 98% of the wildfires in Michigan each year are started by human activity. Farms need to understand the current laws in Michigan regarding fire use:

- Burning without a permit is prohibited anytime the ground is not covered by snow (unless it is strictly for domestic use such as campfires, cooking/warming or approved burn barrel use)
- Burn barrel use does not require a permit but the barrel must have a covering nonflammable screen, grate, or lid with holes no larger than 3/4" in size and the burning of plastic, rubber, foam, chemically treated wood, textiles, electronics, chemicals, or hazardous materials is prohibited.
- Local laws and ordinances may be more restrictive than the State laws, check with your local officials to be sure
- The person that starts the fire is responsible for monitoring and managing the fire, as well as all damages and suppression costs to put it out, should the fire escape

Agriculture does have special exemptions for burning:

- If the fire is part of a cropping or disease/pest control system a permit is not required (but this does not include land clearing, burning road ditches, burning fertilizer bags, chemical containers, tires, etc.)
- When in doubt about Ag's exemptions check with the MI. Department of Natural Resources at www.michigan.gov/burnpermit or call 866-922-2876.

Do You Have a Wildfire Plan for Your Farm? (Continue)

Wildfire Planning for the Farm

First assess your situation. What are the risks of a ground fire reaching your farm? Depends on your surroundings – are they wooded, are they at certain times of the year covered with dry, burnable material such as dead grass in the spring, dried corn stalks in the fall or spring after harvest, etc. Think of the worst case scenario for fire spreading such as – winds gusts at +50 mph, drought like conditions, electrical power outage so the water hoses does not work, etc. At these wind speeds fires jump roads and small waterways moving quickly across the landscape. Do you have more than one escape roadway out of the farm? If wildfires have engulfed one exit route is there another?

Do not assume everyone will be around if you have to evacuate. If you are alone can you talk on the phone to the family members that are racing home, receive warnings from emergency personnel in your driveway, and still roundup the dog, hook up the livestock trailer, load livestock and evacuate in time? Maybe not. Wildfire planners say to plan for a 30 minute evacuation. No more than that. Hooking up the trailer may take most of that time alone. If you cannot find the hitch that the neighbor borrowed, or have a flat tire on the trailer that never got fixed, or the horses are in the back pasture you may not get out in time.

With an approaching wildfire that is fast moving the best plan is to leave the large animals in place. In your planning process select a pasture or paddock that is wetter or protected more than the rest, preferably with drinking water, and easy to move livestock and horses to. It is often easier for one person to move 30 head of cattle to a new pasture than it is to shove 3 head onto a trailer. Cattle in the Great Plain fires survived on wheat pastures that were green with roaring fires burning all the way around the edge. Never just turn the animals out of contained fencing to run free on neighboring lands to escape the fire. Wandering animals will just endanger humans on the roadways and distract rescue workers from doing their job. Plus there is the risk of the animals contacting downed power lines and being electrocuted.

If these protected pastures need to be reconfigured with fencing to keep animals in the wetter portions, do it sooner than later. And though we normally do not recommend steel post in today's electrified fencing systems because of greater shorting potential, if reconfiguring this protected pasture, consider using steel fence post that will withstand more fire than what a wood post will.

If you do have time to evacuate animals realize that emergency management staff in most communities do have locations identified to house evacuated pets, livestock, horses, etc. For large animals it will often be places like the county fairgrounds, livestock yards, etc. If animals are coming together from different farms/ranches and group stalled or co-mingled together it is advisable that you have vaccinations up to date for all communicable diseases. Talk to your veterinarian. Many folks in their planning process identify another farm that they can take animals to in an emergency to avoid the group housing option and reduce the risk of disease spread.

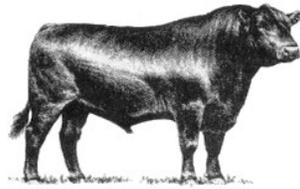
Do You Have a Wildfire Plan for Your Farm? (Continue)

As you are preparing these plans and as you finalize them talk to and share them with family members so the best ideas come out and so everyone is on the same page should a fire occur.

Farms and other landowners in general have many options to keep homes and buildings more fire safe. Green lawns, green pastures and green crops around the buildings are one of the best ways. In drought conditions tilling the soil for a fire break is another option and having a tillage tool hooked up to a tractor and ready to go during high fire danger conditions is another. Steel roofing is a safer choice than asphalt shingles, especially in wooded areas where fire sparks are more easily made airborne. For more fire proofing ideas go to www.firewise.msu.edu .

To obtain a burn permit or gain more information go to www.michigan.gov/burnpermit or call 866-922-2876. Hopefully a wildfire of a large magnitude will never threaten your farm. But spending a little planning time now may make the difference between life and tragedy should the unimaginable happen.

Jerry Lindquist



2017 Michigan Bull Breeding Soundness Exam Clinics

The MSU Beef Extension Team will once again be organizing regional Bull Breeding Soundness Exam Clinics. Last year, the program tested over 300 bulls for 110 different operations. By identifying these potential male fertility problems, producers were able to reduce the risk of a less than optimum breeding season. The MSUE Beef Team encourages you to have BSE conducted on your breeding bulls every year. Contact your veterinarian or take advantage of the following Breeding Soundness Exam Clinics organized by MSUE. Cost is \$60 per bull when done at one of the MSUE clinics. **To schedule an appointment at one of these BSE clinics, please call the appropriate contact person as soon as possible.** All Clinics start at 9:00 AM. *In addition, the MSU College of Veterinary Medicine regularly schedules in house appointments for BSE's. To schedule an appointment contact the MSU CVM Large Animal Clinic at 517-353-9710.*

Location: MSU Lake City Experiment Station, 5401 W. Jennings Road, Lake City MI

Date: Friday, April 14th, 2017

Contact: Kable Thurlow @ 989-426-7741 or Doug Carmichael @ 231-839-4608

Location: Wernette Cattle Company, 9144 50TH AVE, Remus MI

Date: Saturday, April 15th, 2017

Contact: Kevin Gould @ 616-527-5357 or Dr. Kevin Todd 231-832-3680

Location: Chuck Preston Farm, 4780 County Line Road, Prescott MI

Date: Saturday, April 29th, 2017

Contact: Phil Durst @ 989-387-5346 or Chuck Preston @ 989-873-4164