#### MSU EXTENSION 2020 BEGINNING FARMER WEBINAR SERIES



Join us for any or all of these interactive 60 minute webinars. \$5 registration fee for each webinar, 1/2 price for 'full series'.

Participate from your home or office computer (hi-speed internet required). Question & answer session with each presentation.

All paid registrants receive a URL to recorded webinars following 'live' program.

#### "Getting started with..."

All times "eastern time"

#### **New Farm Start-up**

Wednesday, Jan 15, 2020, 7pm, Jonathan Parsons, Uprooted Farm

Jonathan and Allison Parsons operate a new, certified organic farm selling vegetables locally. Jonathan will share practical insights into the planning, development and first-year operation of their farm in 2019.

#### **Wash-pack Facilites**

Wednesday, Jan 22, 2020, 7pm, Landen Tetil, Produce Safety Technician, Marquette Conservation District Landen will outline good post-harvest handling practices for vegetable and fruit crops on small farms.

Sytstem components, pitfalls to avoid and expected costs will be covered, emphasizing food safety.

#### **Michigan Cottage Food**

Wednesday, Jan 29, 2020, 7pm, Beth Waitrovich, MSU Extension Educator

Content will include: information about the Michigan Cottage Food Law, food safety aspects of preparing cottage foods for sale, including preparing, packaging, labeling, storing and transporting cottage foods.

#### **Growing Hemp in Michigan**

Wednesday, Feb 5, 2020, 7pm, James DeDecker, MSU Upper Peninsula Research and Extension Center James will provide an overview of the emerging hemp industry in Michigan and nation-wide. Regulation, production and marketing topics will be presented.

#### CSA's in Michigan

Wednesday, Feb 12, 2020, 7pm, Garret Ziegler, MSU Extension Educator

Results of the state-wide Consumer Supported Agriculture survey, conducted by MSU Extension in 2019, will be presented: What works well, what doesn't, and many highlights and tips for success included.

Each webinar will begin at 7:00pm eastern time, log-on early to test connection.

Download the ZOOM webinar application for your device at zoom.us/download

PC or Mac users: click "Zoom client for meetings", iOS users: under "Zoom mobile apps", click "Download in App Store"

For Android users: under "Zoom mobile apps", click "Download in Google Play"



#### "Getting started with..."

#### Safe Use of Animal-based Soil Amendments

Wednesday, February 19, 2020, 7pm, Charles Gould, MSU Extension Educator

Charles will cover current food safety regulations and best management practices for utilizing animalbased soil amendments, including manures and compost.

#### **Agroforestry: Silvo-pasture Options**

Wednesday, February 26, 2020, 7pm, Julie Crick and Kable Thurlow, MSU Extension Educators

The concept of agroforestry includes 'silvo-pasture', a blending of quality timber, forage and livestock production. Julie and Kable will provide an overview of agroforestry, and more detail on silvo-pasture.

#### Selling to Food Hubs

Wednesday, March 4, 2020, 7pm, Mariel Borgman, MSU Extension Educator

Including sales to a local food hub can provide a good marketing option for small farms. Mariel will present background on food hubs and how they may fit into your business operation.

#### **Farm Labor**

Wednesday, March 11, 2020, 7pm, Katie Brandt, MSU Student Organic Farm and Stan Moore, MSU Extension Educator

Recruiting, training and retaining good labor for small, diversified farms is a challenge. Katie will share her experiences with farm labor beginning as a farmworker, then as a farm owner and educator. Stan works extensively with labor issues on Michigan farms and will address regulatory issues and employee development.

#### **No-till Vegetable Production on Small Scale**

Wednesday, March 18, 2020, 7pm, Jonathan Parsons, Uprooted Farm

Limiting soil cultivation can improve soil health. Learn from farmers why they choose no-till technique and how it can be implemented successfully on diversified vegetable rotations grown on 30" beds.

#### **Pricing Products for Different Markets**

Wednesday, March 25, 2020, 7pm, Will Jaquinde, MSUE Sustainable Ag Educator, MSU Tollgate Farm

Explore pricing your farm products for diverse markets, including farmers markets, restaurants, wholesale and CSA. Determining a price that is both profitable and competitive is a difficult task that is at the center of farm viability and this discussion will shed light on that process.

#### "Getting started with..."

#### **Hosting On-farm Educational Events for Your Community**

Wednesday, April 1, 2020, 7pm, Abbey Palmer, MSU Upper Peninsula Research and Extension Center

Hosting educational events at your farm is a fun way to involve the community in your business and increase knowledge of local food systems—but where do you start? This webinar will offer ideas for hosting on-farm learning opportunities for other farmers, schools, and the general public.

#### **Measuring Soil Health**

Wednesday, April 8, 2020, 7pm, Sieglinde Snapp, MSU Professor—Soils and Cropping Systems Ecology Dr. Snapp will introduce how to measure soil health, from soil sampling strategies for soil health, to interepreting results to determine if soil health is improving.

#### MSU EXTENSION 2020 BEGINNING FARMER WEBINAR SERIES

### ଞ୍ଜ REGISTRATION FORM ֎

#### Select the webinars you wish to attend: (\$5 each) https://events.anr.msu.edu/begfrmr2020/ OR Complete and return this form with \$5 payment per selected ☐ FULL WEBINAR SERIES (Half price: 13 webinars—\$32.50) webinar in the form of check or money order, made payable ☐ Jan 15, New Farm Start-up to 'MSU Extension' ☐ Jan 22, Wash-pack Facilities And mail to: 2020 Beginning Farmer Webinar Alger Co MSU Extension ☐ Jan 29, Michigan Cottage Food E9526 Prospect St., Suite 1 ☐ Feb 5, Growing Hemp in Michigan Munising, MI 49862 ☐ Feb 12, CSA's in Michigan Name: ☐ Feb 19, Safe Use of Animal-based Soil Amendments Company/Organization: ☐ Feb 26, Agroforestry: Silvo-pasture Options Address: ☐ Mar 4, Selling to Food Hubs ☐ Mar 11, Farm Labor ☐ Mar 18, No-till Vegetable Production on Small Scale ☐ Mar 25, Pricing Products for Different Markets Amount enclosed: ☐ Apr 1, Hosting On-farm Educational Events PLEASE PRINT ALL INFORMATION CLEARLY ☐ Apr 8, Measuring Soil Health

All webinars will begin at 7pm eastern time, log-on early to test connection. You will receive a URL to connect prior to each webinar.





Questions? Contact Jim Isleib at isleibj@msu.edu or 906-387-2530

Register and pay ON-LINE at

## **MICHIGAN** COVER CROP RECIPE

MCCC-111 CC-05

# Post Wheat, Going to Soybean or Corn: Use Oats and Radish Mix

This publication is intended to provide a starting point for farmers who are new to growing cover crops. With experience, farmers may fine-tune the use of cover crops for their systems.

#### Introduction

The following recipe provides an introductory approach to integrating a cover crop into a wheat rotation with soybean or corn. Planting oat and radish cover crops after wheat (*see Figure 1*) and ahead of a soybean or corn cash crop is an easy way to introduce cover crops into your rotation because these cover crops both winterkill and add important diversity to agricultural fields.



Figure 1. A growing oats and radish mix (Paul Gross)

#### **Planning and Preparation**

- Planning—Educate yourself. Start small. Be timely. Prioritize management based on your purpose and objectives.
- Wheat variety and planting—No modifications to wheat variety and planting are required for the successful use of cover crops after wheat harvest.
- Residual wheat herbicides—Oats and radish are tolerant
  of most wheat residual herbicides, and few restrictions
  apply unless grazing is being considered. Oats and radish
  may be sensitive to Osprey\* and PowerFlex\*, and while

- data is limited, possible injury may result. See *Weed Control Guide for Field Crops* (in Resources section) for more details.
- Seed purchase—Order cover crop seed early. Named varieties generally perform more predictably and can produce substantially more growth than variety not stated (VNS) seed but are more expensive. VNS seed may be a good option when purchased from a reputable dealer if it has been cleaned, tested for germination, and has a seed tag. For cover crop radishes (daikon type), be sure to purchase a single variety from a reputable seed dealer since mixed varieties may have unpredictable emergence or immediately flower and produce seed rather than producing the desired large amounts of biomass and roots.

#### **Summer/Fall Work**

- Wheat harvest—Harvest wheat at the normal time in fields where a mix of oats and radish will be planted. If residue levels are high, consider removing straw or using light tillage to improve seed-to-soil contact.
- *Timing of planting*—Plant oats and radish any time in August after wheat harvest. Planting a coolseason annual, such as radish, prior to August is not recommended as it may result in flowering and seed production instead of quick coverage and biomass accumulation, which is the desired goal for this cover crop. Use the Cover Crop Selector Tool (in Resources section) for precise seeding dates for your county because both proximity to the Great Lakes and latitude influence planting dates.
- *Planting method*—Drill to a depth of 0.50–0.75 inch or broadcast with light incorporation. Note that disturbance of soil, if any, should be light since excessive disturbance of wheat stubble may negate any benefit of the cover crop. See *Recommended Cover Crop Seeding Methods and Tools* (in Resources section) for more details.

- Seeding rate in oats/radish mix—Mix seeds prior to planting at the following rates. Drilled: oats, 30–60 lbs./acre; radish, 2–3 lbs./acre. Broadcast: oats, 35–65 lbs./acre; radish, 3–4 lbs./acre. See Cover Crop Choices Following Winter Wheat (in Resources section) for more information.
- *Tillage or no-tillage*—To allow for adequate cover crop growth, it is best if no full-width tillage takes place until oats and radish have been killed by freezing temperatures. If tillage is used, it is usually better to wait until spring in order to maintain surface cover to prevent erosion.
- Fertility or liming—If applying P, K, lime, or manure, complete the application and incorporation prior to seeding or apply to the growing oats and radish before the ground freezes. If injecting manure, low-disturbance injectors are available that will minimize damage to oats and radish. Surface application of liquid manure on top of the cover crop is not recommended. Surface broadcast of dry manure or litter should be done prior to seeding, but 4 tons or less can be applied to growing oats and radish with minimal damage provided it is evenly distributed. See the manure management publication (in Resources section) for more information on generally accepted practices for manure management and utilization.

#### **Spring Work**

- Starter fertilizer—No modifications to your typical fertilization program are required for planting soybean or corn after oats and radish use.
- Termination—Oats and radish should both terminate by winterkill. However, mild winters and good snow cover sometimes allow overwintering of radish. If this occurs, radish is easily terminated with typical pre-plant herbicide applications.
- Soybean or corn planting—It is usually best to no-till plant cash crops into the dead/dry or standing cover crop. Almost all modern planters and drills are fully capable of planting soybean or corn into an oat and radish cover crop. Check planting depth and seed furrow closure shortly after beginning to plant into the cover crop residue (see Figure 2) as usually some adjustments are needed.
- Scouting—After soybean or corn planting, scout for crop emergence and population. Additionally, scout for weeds since cover crop residue can often delay emergence of annual weeds, which may delay the application of postemergence herbicides.



Figure 2. Residue of oats and radish mix in early March (Eileen Kladivko)

#### Resources

**Cover Crop Selector Tool,** http://mccc.msu.edu/selector-tool/—available from Midwest Cover Crops Council, www.mccc.msu.edu

Cover Crop Choices Following Winter Wheat (Michigan State University Extension), https://www.canr.msu.edu/news/cover\_crop\_choices\_following\_winter\_wheat

*Weed Control Guide for Field Crops* (Michigan State University Extension Bulletin E0434), https://www.canr.msu.edu/weeds/extension/2019-weed-control-guide

*Cover Crop Termination* (Michigan State University Extension publication CC-01), https://www.canr.msu.edu/resources/cover-crop-termination-2019

**Recommended Cover Crop Seeding Methods and Tool**s (Agronomy Technical Note)— available from USDA–Natural Resources Conservation Service, https://www.nrcs.usda.gov/Internet/FSE\_DOCUMENTS/nrcs144p2\_030986.pdf

Generally Accepted Agricultural and Management Practices for Manure Management and Utilization—available from the Michigan Department of Agriculture and Rural Development, https://www.michigan.gov/documents/mdard/2019\_MANURE\_MANAGEMENT\_AND\_UTILIZATION\_GAAMP\_651944\_7.pdf

#### Authors

Dean Baas, Michigan State University Extension (MSUE); Christina Curell, MSUE; Paul Gross, MSUE; Monica Jean, MSUE; Philip Kaatz, MSUE; and Elizabeth H. Schultheis, MSU (Note: This publication was adapted with consent from MCCC under a joint project to produce customized introductory guidance about cover crops for all member states/provinces.)

#### **Reviewers and Contributors**

Jerry Grigar, USDA-Natural Resources Conservation Service; Erin Hill, MSU; Eileen J. Kladivko, Purdue University; Anna L. Morrow, Midwest Cover Crops Council; Sieg Snapp, MSU

The Midwest Cover Crops Council (www.mccc.msu.edu) aims to facilitate widespread adoption of cover crops throughout the Midwest by providing educational/outreach resources and programs, conducting new research, and communicating about cover crops to the public.

Funding for this project was provided by McKnight Foundation.

#### MCKNIGHT FOUNDATION

August 2019

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720–2600 (voice and TDD). To file a complaint of discrimination write to USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250–9410 or call (800) 795–3272 (voice) or (202) 720–6382 (TDD). USDA is an equal opportunity provider and employer. ©2019 by MCCC. All rights reserved.

Join forage producers, graziers, custom forage harvesters, agribusinesses, MSU Extension Specialists and Educators for this annual conference and trade show.

Sponsored by the Michigan Forage Council, NC SARE and Michigan State University Extension.



MSU is an affirmative-action, equal opportunity institution. Michigan State University Extension programs and materials are open to all without regard to race, color, national origin, gender, religion, age, height, weight, disability, political beliefs, sexual orientation, marital status, family status or veteran status.

Accommodations for persons with disabilities may be requested by calling the local extension office one week prior to the event to ensure sufficient time to make arrangements.

# To register go online to: MSU Events Management

https://events.anr.msu.edu/2020GLFGC/

Pre-registration deadline is Sunday, March 1, 2019 All late registrations can register at the door.

In 2020, for first time attending non-members, the Michigan Forage Council will include, with paid registration, a 1-year membership into the Michigan Forage Council.

MFC benefits include magazines, newsletters, and educational discounts.

## If you do not have internet call:

Lapeer MSU Extension 1800 Imlay City Rd. Lapeer, MI 48446

Phone: 810-667-0341

Fax: 810-667-0355

Attention: Tina House

Email: houset@msu.edu

# Uncertainty in Producing Forages for 2020

Great Lakes
Forage &
Grazing
Conference

March 5, 2020

**Thursday** 

AgroLiquid 3055 W. M-21

St. Johns, MI 48879 (1.5 miles W. of Old 127)

9:00 A.M. -- 4:00 P.M.

MICHIGAN STATE UNIVERSITY Extension



### **Keynote Speaker:**

# Mike Rankin, Editor **Hay& Forage**Grower

Originally from northeast Ohio, in 1988, he was Crops and Soils Extension Agent in Fond du Lac County, Wis., the second largest dairy county in the state, and remained in that position for nearly 27 years. During that time, he chaired the University of Wisconsin Extension Forage Team for 15 years, authored numerous fact sheets, and gave many presentations, including ones in Mexico and Canada. He also initiated and coordinated Wisconsin's Alfalfa Yield and Persistence Project. As an extension agent, he wrote for many local, state, and national print media publications and did over 4,000 radio programs. In 2015, he retired from the University of Wisconsin and took the position as managing editor for Hay & Forage Grower magazine at the W.D. Hoard & Sons Company in Fort Atkinson, Wis., He is responsible for all of the magazine's content and also for information that appears in eHay Weekly, an email newsletter. During the last five years, he has traveled across the U.S., visiting forage farmers and ranchers of all types. He currently lives in Fort Atkinson with his wife, Nancy, and their Jack Russell Terrier, Henry. They have three grown and married children.

## **Conference Agenda:**

9:00 - 9:45 Registration & Trade Show Open

10:00 Keynote Speaker: Mike Rankin "Old dirt roads and new forage friends"

There are a multitude of ways to produce, utilize, and market forage crops for livestock systems. We'll take a road trip and look at unique individuals who have carved out a successful forage utilization path.

- 11:00 Forage Research Update
  Dr. Kim Cassida, MSU
- 11:30 How Forage Diversity Affects
  Grass-fed Beef
  Logan Thompson, Lake City Research

Noon - Lunch

- 12:30 Michigan Forage Council Annual Meeting
- 1:00 Keynote Speaker: Mike Rankin "The state of the alfalfa address"

What is its future? I'll look at some trends, attributes, and warts that currently exist with the "Queen of Forages" and what's ahead.

- 1:45 Recent weather trends and outlooks Dr. Jeff Andresen, MSU Weather
- 2:15 Tradeshow Break
- **2:45 Dealing with Rough Field Conditions** Panel discussion to discuss mitigation of fields

Panel discussion to discuss mitigation of fields with soil compaction and drainage issues.

3:15 Forage Spokesperson Contest

A showcase of Michigan forage producers vying for the opportunity to represent Michigan at the 2021 AFGC Conference in Savannah, GA.

4:00 Adjourn

### **Registration:**

#### **Registration Information:**

Michigan Forage Council members: \$45.00

Non-members: \$60.00

Students: \$20.00

At the door registration ADD \$10.00.

(Lunch not guaranteed with late registration)

Pre-registration deadline March 1, 2020

(covers all sessions, lunch, and breaks)

#### To register go to:

MSU ANR Events Management https://events.anr.msu.edu/2020GLFGC/

> Early registration deadline: Friday, March 1, 2020 (Those without Internet call Lapeer MSU Extension)

After March 1 all registrations will be at the door.

Accommodations for persons with disabilities or special diet restrictions may be requested by contacting the event contact two weeks prior to the start of the event. Requests received after this date will be honored whenever possible.

For questions about registration call: Lapeer County MSU Extension Attention: Tina House

Phone: 810-667-0341

# Mini Grants Offered to Forage Council Members to Conduct On-Farm Trials

The Michigan Forage Council (MFC) is again offering mini grants to farmers to conduct demonstrations and mini research trials in the areas of forage production, storage and utilization in Michigan which does include grazing. The MFC recognizes the valuable information that can be obtained from small scale on-farm trials and will consider funding up to \$250 per request, with as many as ten requests granted per year.

Applicants must be members in good standing of the MFC and must submit their requests by February 18, 2020. Applications must include a description and justification for the trial, the methods to be used to evaluate the results, as well as an itemized budget for the expenses of the trial. MSU Extension Specialists and/or Extension Educators may be contacted to help develop the trials prior to submission as well as for evaluation of the trial for final

reporting. Maximum application length is limited to two pages that includes all budget information.

Successful recipients will receive funds for the 2020 growing season and must submit a final brief report of trial results by December 15, 2020 to the MFC Secretary.

Proposals are to be sent to MFC Secretary, Jerry Lindquist, at 15680 190th Ave., LeRoy, MI. 49655 or to lindquis@msu.edu by February 18, 2020.

## Michigan Forage Council Mini Grant Request

Name:
Address:
Phone: Email:
Member of Michigan Forage Council? yes no
Title of Trial:
Description of Trial:
MSU Specialist, Extension Educator or others that will assist with trial:

Attach an Itemized Budget including the total amount requested from the Michigan Forage Council (\$250 max) and other funds or in-kind support that will be brought into this project from other sources.

# Mid Michigan Livestock Network

Connecting with Information, Experience, Ideas and Opportunities.

The Network typically gathers on the 3rd
Thursday of every month.
You are welcome to join us anytime.

Programs are presented in an informal, relaxed, Q/A discussion format.

Summer Programs are held "In the Field" in the Mid Michigan Region

Connect with other livestock producers for this continuing series of informative programs, tours and round table discussions.

#### **CONTACT:**

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



## **February 20, 2020**

7:30pm

Magnus Center
3200 South Clare Ave Clare MI 48617

#### Dr. Dan Buskirk

Assoc. Professor/Beef Extension Specialist MSU.

**Topic is**: Beef Cow Nutrition. seasonal and stage of life requirements; old vs young, dry vs. pregnant; plus, information on why cows need what they need —why is protein important, why is digestibility important and what does it mean?

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.