

2020 Virtual Beginning Grazing School Evaluation Report

Kable M. Thurlow, Extension Educator, Michigan State University Extension, East Lansing, MI
thurlowk@msu.edu

Murari Suvedi, Professor, Department of Community Sustainability, Michigan State University, East Lansing, MI
suvedi@msu.edu

Paul F. Gross, Extension Educator, Michigan State University Extension, East Lansing, MI
grossp@msu.edu

James D. Isleib, Extension Educator, Michigan State University Extension, East Lansing, MI
isleibj@msu.edu

Introduction: The MSU Extension Forage and Grazing Team has been hosting an annual Beginning Grazing School since 2010. The first school took place at the Lake City Research Center and was very well received. The school continued at Lake City until 2014 when the decision was made to host it at multiple locations around the state to increase attendance and serve farmers across the state. The locations were: Lake City, Chatham, and Kellogg Biological Station. The team utilized webinar technology to share experts from all locations, and then utilized staff at each location for the hands-on, in-field exercises.

The goal of the Beginning Grazing School is to sharpen graziers knowledge and skills by demonstrating how to make their farm productive and profitable. The participants can expect to learn a variety of pasture management tools and choose to integrate methods that are most suitable for their grazing system. They will have an opportunity for hands-on learning, participate in field days and pasture walks, share producer-led experience, meetings and webinars with MSU experts, and design grazing plan for their farm and/or ranch.

The Beginning Grazing School was designed to provide participants with detailed knowledge needed to start or advance their grazing practices. A variety of topics were included for presentation and discussion. Specifically, the objectives were to increase knowledge of farmer and rancher's about managed grazing, pasture management, livestock nutrition and requirements, forage yield determination, grass and legume species identification, pasture soil fertility and management, grazing systems, pasture layout and design requirements, building and using fence for grazing, and pasture establishment and improvement.

Typical enrollment was 35-40 participants. Between 2015-2020, enrollment ranged from 20 to 69, with one cancellation in 2019 due to low enrollment (i.e., 9 participants). The low enrollment in 2019 could have been the result of moving the school from its typical time in September, to July.

The 2020 Beginning Grazing School: Starting in March 2020 the COVID-19 pandemic prevented the Forage and Grazing team to conduct the traditional face-to-face school. It was decided that we would move the school completely to a virtual setting and offer eight topics in 1.5-hour blocks two times per week during the month of October. The intended audience of the course were beginning farmers and livestock owners who graze dairy, beef, and small ruminant animals and want the latest animal and forage research on grazing management. Not knowing what to expect in terms of enrollment and technology challenges, we carried on. It was not that our team did not know how to use the technology, rather that we were all working from home with internet that is not as fast or reliable as our office or campus connections. We were, however, able to make it all work, and the sessions went off without too many hitches. All sessions were recorded, and made available to the attendees, as well as stored for future use. Currently, these sessions are being closed captioned. For enrollment, we also did not know what to expect. But, we had 69 participants in 2020.

Table 1. Schedule, topics, and speakers in 2020 Beginning Grazing School.

2020 Schedule	Topic	Speaker(s)
October 6	Introduction to grazing school and overview of grazing terms	Kim Cassida & Kable Thurlow
October 8	Grazers are grass farmers!	Kim Cassida
October 13	Soil health and fertility	Paul Gross & Jim Isleib
October 15	Nutrition, health, and welfare of grazing animals	Richard Erhard & Kevin Gould
October 20	Pasture establishment and renovations	Kim Cassida
October 22	Fencing and water	Kevin Gould & Richard Erhardt
October 27	Pasture allocation, stock density, and costs	Frank Wardynski & Kable Thurlow
October 29	Designing a grazing plan	Kable Thurlow

The series was \$10 per session or \$65 for all eight sessions. The workshop fee includes access to the online trainings, 12 CEUs (1.5 per topic), recordings, additional videos and the Midwest Cover Crops Field Guide and Forage Field Guide.

The participants came from varied backgrounds, i.e., exploring grazing enterprises, beginning farmer/grazers with zero to two years of experience, and seasoned farmer/grazers with three to five years of experience. Few were consultants, agriculture industry representatives, and Michigan Agriculture Environmental Assurance Program Technicians.

Evaluation of 2020 Beginning Grazing School: Attendees were emailed an evaluation form designed to assess the School in December, 2020. The evaluation in the form was formatted in Qualtrics software. Participants were asked to voluntarily participate in the evaluation and that their responses would be anonymous. All attendees (N=69) were invited to participate in the evaluation, and 55% (n=38) completed the survey. The results are below in table format.

Table 2. Overall satisfaction with the Beginning Grazing School

Level of satisfaction	Frequency	Percent
Greatly exceeded my level of expectation	11	30.56
Significantly exceeded my level of expectation	13	36.11
Met my level of expectation	12	33.33
Below my level of expectation	0	0

Table 3. Impact on knowledge/skills gained from each session: Frequency (%)

Topic	Greatly improved my knowledge /skills that I can use in my farm	Significantly improved my knowledge/skills that I can use in my farm	Provided some increase in my knowledge /skills that I can use in my farm	Provided little increase in my knowledge/skills that I can use in my farm	Did not increase in my knowledge/skills that I can use on my farm	Did not attend session
Introduction to grazing management (N=37)	7 (18.92)	12 (32.43)	10 (27.03)	3 (8.11)	1 (2.7)	4 (10.1)
Grazers are grass farmers (N=36)	8 (22.22)	13 (36.11)	11 (30.56)	1 (2.78)	0 (0.0)	3 (8.33)
Soil health and fertility (N=38)	9 (23.68)	18 (47.37)	9 (23.68)	0 (0.0)	0 (0.0)	2 (5.26)
Nutrition, health and welfare of grazers (N=37)	12 (32.43)	13 (35.14)	8 (21.62)	0 (0.0)	0 (0.0)	2 (5.26)
Pasture establishment and renovation (N=38)	12 (31.58)	21 (55.26)	5 (13.16)	0 (0.0)	0 (0.0)	0 (0.0)
Fencing and water (N=37)	8 (21.62)	15 (40.54)	9 (24.32)	2 (5.41)	0 (0.0)	3 (8.11)
Pasture allocation, stock density and costs (N=37)	11 (29.73)	12 (32.43)	6 (16.22)	2 (5.41)	0 (0.0)	6 (16.22)
Designing a grazing plan (N=37)	9 (24.32)	15 (40.54)	10 (27.03)	0 (0.0)	0 (0.0)	3 (8.11)

As shown in Table 3, more than 50% of the respondents indicated that they greatly improved or significantly improved knowledge/skills that they can use in their farm. The sessions on pasture establishment and renovation, soil health and fertility, and designing a grazing plan were rated highly.

Participants were asked to indicate how they intend to apply the knowledge and/or skills gained in the Grazing School. Findings in Table 4 show that percent of respondents who are

likely to make behavioral changes in grazing practices. About 7 out of 10 respondents indicated that they will share the knowledge that I gained in this school with others, indicating the educational efficacy of the School. Over two-thirds indicated that they will select the forage most suited to the pasture and livestock grazed. Almost 2 out of 3 also indicated that they will reduce their animal feeding costs by utilizing grazing as primary forage source. Over 50% of the respondents indicated that they are likely to implement other pasture management practices, except for use of a different watering system. It is worth noting that many pasture management practices are not already in use by most participants.

Table 4. Areas of behavioral change attributed to the Grazing School

Statements	Likely to implement	Maybe implement	Will not implement	I already use this
I will have written goals for grazing	55.56%	33.33%	2.78%	8.33%
I will add new species to my pastures	52.78%	25.00%	13.89%	8.33%
I will use an integrated parasite program for my pasture animals.	52.78%	22.22%	11.11%	13.89%
I will extend the grazing season with annual crops and residues.	50.00%	44.44%	2.78%	2.78%
I will use a soil testing program as a basis for fertilizer inputs.	58.33%	16.67%	0.00%	25.00%
I will review and adjust my pasture fertility program	61.11%	19.44%	0.00%	19.44%
I will use a different watering system.	40.00%	28.57%	22.86%	8.57%
I will assess and meet the macro and micro nutritional needs of animals in pasture.	50.00%	33.33%	0.00%	16.67%
I will consider new fencing options for my pastures.	54.29%	25.71%	14.29%	5.71%
I will select the forage most suited to the pasture and livestock grazed.	69.44%	19.44%	0.00%	11.11%
I will reduce my animal feeding costs by utilizing grazing as my primary forage source.	66.67%	13.89%	2.78%	16.67%
I plan to share the knowledge that I gained in this school with others.	72.22%	25.00%	2.78%	0.00%

Participants were asked, on a 1-7 scale with 1 being extremely easy and 7 being extremely difficult, to rate the logistical arrangements. Findings in Table 5 show that the registration process was easy, participating in the event was easy and Login instructions were clear.

Table 5. Ratings on logistical arrangements for 2020 Virtual Beginning Grazing School

Statement/ Question	Extremely easy	Moderately easy	Slightly easy	Neither easy nor difficult	Slightly difficult	Moderate ly difficult	Extremel y difficult	Mean (SD)
Registration Process	32 (84.21)	4 (10.53)	1 (2.63)	1 (2.63)	0 (0.00)	0 (0.00)	0 (0.00)	1.24 (0.63)
Login Instructions	29 (76.32)	5 (13.16)	1 (2.63)	2 (5.26)	1 (2.63)	0 (0.00)	0 (0.00)	1.45 (0.97)
Joining the event	29 (76.32)	5 (13.16)	1 (2.63)	2 (5.26)	1 (2.63)	0 (0.00)	0 (0.00)	1.45 (0.97)
Participating in the event	30 (78.95)	5 (13.16)	0 (0.00)	2 (5.26)	1 (2.63)	0 (0.00)	0 (0.00)	1.39 (0.93)
Accessing the Recordings and Resources	22 (57.89)	12 (31.58)	1 (2.63)	3 (7.89)	0 (0.00)	0 (0.00)	0 (0.00)	1.61 (0.87)

When asked, “If given the choice on the format for the grazing school, which would you prefer?” 2 out of 3 respondents indicated that they would prefer a combination of face-to-face and online instruction. About one-fourth preferred only online, whereas only one-tenth preferred face-to-face instruction (Table 6).

Table 6. Preferred format of the Grazing School

Response	Frequency	Percent
Face to face	4	10.53
Online	9	23.68
Combination of face to face and online	25	65.79

Comments: Participants were asked to provide comments on any areas that should be addressed or areas of improvement concerning future Beginning Grazing Schools. Several attendees offered highly positive comments and feedback and these are listed below in verbatim:

“Definitely missed the face to face. As good as pictures are, they don't replace actually seeing pastures.”

"I thought the program was great! I've never had livestock but if I decide to start, I have a good basic knowledge on getting my pastures ready for animals. I enjoyed the online course and if it was only in person, I would not be able to attend. Thank you for this super informative series. Happy Holidays!"

"Very helpful, good content, organization, and presentation of it. One request: as beginners at this, it will always be helpful and appreciated for staff to define terms and avoid jargon. You as field educators can assume a common base of knowledge when you are talking to each other, but don't assume your students know those same things. We don't. That's why we are taking the beginning grazer's class."

"The school was very comprehensive with a great deal of information - really too much to take in fully which is why I'm really glad to have all the resources available on a Google Drive so I can access again in the future. Maybe one suggestion would be a follow-up (perhaps quarterly) with class participants to check-in, see how grazing plans are coming along, reminder of resources or seasonal things participants should be thinking about. Thanks so much for all the great information!"

"For me, [would like to focus] more on the mechanics of small pasture renovation."

"We loved Grazing School and did all but the last two sessions which we had to miss. The resources sent were very helpful and we saved them for future reference. The price for the entire course was very reasonable. We would be interested in joining more if they are offered."

"Spend more time on implementation of grazing systems, with real-world examples, costs, and outcomes."

"I like the ability to re-watch the online sessions and really appreciate the extra, printable materials. Thanks for an excellent grazing school."

"Good program, well executed, and practical."

"My internet isn't always reliable, so I was glad to be able to access recordings of the classes I missed, but it would have been better to be able to download them so I could watch even when my internet is slow."

“If the grazing school was only in class in person it would not be feasible for me to attend.”

“If the school is online, the registration costs should be lower. I would pay the full price for an in-person event where MSU has higher costs associated with putting on the program, but it seemed too high for an online only event.”

“I loved doing the course online. I probably wouldn't have been able to take the course if it had been in person.”

Conclusions and Recommendations:

The 2020 Virtual Beginning Grazing School was very effective and impactful. Participants were satisfied as the School met their expectations. A majority indicated that they greatly improved or significantly improved their knowledge/skills on various aspect of pasture management which they can use in their farm. Participants benefitted greatly from the School.

The logistical arrangements such as registration profess and login instructions for online sessions were easy to follow and a similar process should be followed in the future.

It should be noted, however, that participants definitely missed the face to face interaction. As good as pictures are, they don't replace actually seeing and walking through the pastures. Although the Internet-based technology could be cost effective, a combination of face to face and online instruction is recommended for future Beginning Grazing School.