



Minnesota Agriculture in the Classroom, Inc. Foundation

NRCS Partnership 2025

Ann Marie Ward Executive Director, Minnesota Agriculture in the Classroom, Inc. Foundation



Minnesota Agriculture in the Classroom

- Vision: Agriculture is Valued by ALL • Mission: Increasing Agricultural Literacy through K-12 Education
- An agriculturally literate person understands and can communicate the source and value of agriculture as it affects our quality of life.



Organization Structure



MINNESOTA Agriculture in the Classroom



DEPARTMENT OF AGRICULTURE

Minnesota Agriculture in the Classroom, Inc. Foundation



Our Team is comprised of both state and foundation staff.



Sue Knott **Education Specialist** MDA



Jessica Blosberg

Resource Specialist Foundation



Keri Sidle Education Specialist MDA



Emily Ponwith

Resource Specialist Foundation





Sarah Kuschel

Resource Specialist Foundation



Brandi Wulkan

Program Director Farm Camp -Foundation



Ann Vote Career Video Producer Foundation

Ann Marie Ward

Executive Director Foundation







Empower and inspire all K-12 educators to use agriculture as a context for learning!



Programs and Resources

K-12 Educator Opportunities	Educator Workshops and Webinars	Outstanding Teacher Award	Agricultural Literacy and First Year Teacher Grants	Teacher Tour
Curricular Resources	Curriculum Matrix	Food for Thought	Video Library	
Student Engagement	AgMag Print and Online	Farm Camp Minnesota	Virtual Field Trips	Farm and Food Book Week



Educator Opportunities



Teacher Tours





Educator Advisory Team



2024 Summer Teacher Tours

• The Hands that Feed Us

- Tour Stops: Compeer Financial
- Format changed due to weather

• Orchard to Market

Tour Stops: Pine Tree Apple Orchard, Bix Produce
 Co., and Bailey Nurseries

• Farm, Fiber and Fabrication

- Tour Stops: Wells Technology, Bemidji Woolen Mills, Gustafson Farms, Table for 7
- Out of 85 total participants, 28% were from the metro and 72% were from greater Minnesota.











Summer Teacher Tour Celebrations

"We pick a different agriculture topic each year to share with the students at the different grade levels. This year is 'apples.' I have so many ideas now of what to teach the kids."

"It was really neat how the lessons opened up group discussion and we were quickly looking at social studies standards while talking about food. 2) Our group was a mix of educators, food service and home school and we found that the same lesson provided value to each of our roles in education." "I have new perspectives and a better understanding of the full circle of agriculture. I loved learning about new ways to be able to teach lessons in the classroom!"









Curriculum Connections

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12:22:1:12



Educator Workshops

• Inservice workshops = **427** teachers

- Professional conferences
- School district in-service days
- Virtual and in-person
 - After School PD with MAITC
- Pre-service workshops = 295 students
 College education classes









LEARN MORE ABOUT SEEDS

Tuesday, January 13, 2025 OLIVE 3:45-4:45 p.m.





Educator Advisory Team

- Launched in August 2022 with 6 educators
- 6 additional educators added since launch
- Advisory Team members:
 - Attend quarterly meetings
 - Develop and deliver hands-on professional development sessions to peers using MAITC resources
 - Provide feedback and insight on MAITC resources and program elements
- MAITC 101 professional development course created







Curricular Resources

• Curriculum Matrix

• Searchable database of agriculture-themed, standards-based lessons and activities.

Food for Thought

• Lessons and maps developed with MAGE. Address Minnesota's Geography Standards.

Monthly Focus Areas

• Seasonal agricultural topics are used to highlight curricular resources, AgMag issues, virtual field trips and teacher professional development.





Curriculum Matrix

Food for Thought



Fall Harvest

FIELD TRIP



Tuesday, Nov. 26th at 10:00 a.m.







Curricular Resources

Curriculum Matrix Searchable database of over 400 standards-based, agriculture themed lessons and activities



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soil Search Lessons	Search Companion Resourc
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Agricultural Land Use

Students explore the impact of fertilizer on algae growth, soil erosion, and agricultural soil and water conservation practices. Grades 9-12

Caring for the Land

Students explain why people have different opinions regarding soil management and identify cause and effect relationships relating to agriculture and the environment. Grades 3-5

CURRICULUM MATRIX

earch Result(s)



Lesson Plans (67)



Student Engagement



AgMag



Virtual Field Trips

























WATER: Where does it come from?

Water is always moving through a cycle. Water outside is heated by the sun and slowly turns from a liquid into water vapor. This is called evaporation. You can see this easily: pour some water on the sidewalk on a warm, sunny day and in a few hours the water will have dried up. The water hasn't disappeared, it has turned into water vapor. The water vapor rises up due to the sun's heat. Once it rises high enough, the vapor turns back into water droplets. This is called condensation. Once enough water droplets form, the water begins to fall to the earth as rain, snow, or hail. This is called precipitation. The cycle then repeats itself, which is why this is called the water cycle. Even when water is in solid form (like ice), it can sometimes turn straight into water vapor without ever melting; this is called sublimation.





sarms and forests need soil so that holds roots in the ground so plante is grow well. Soil all over or blow away. Soil helps plants absorb me as well as provide nutrients the plants use for food, Fa and forests make up wo-thirds of our state's landscape ners and foresters a a big role in caring for the soil. eare things we all can do: we also must help.

Cover bare soil with new plants so soil won't

Say on sidewalks and trails. Your feet and bicycle tires

AIR: How do we keep it fresh? We all do better when the air is clean. We all do better when the air is clean. Many people are working hard to clean the air. Car makers build engines that dispose of waste in a way that work cause as much air pollution. Many people including farmers, are making electricity of cleaner sources so the air doesn't field crops as energy sources for our cars, homes, and factories all help make

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ranchers who manage their land in a way that protects water quality. Courtney helps farmers and ranchers keep their soil from washing away after a heavy rain into streams and lakes by planting a buffer strip or creating a windbreak with trees and shrubs. She can help a farmer plan the right time to spray pesticides or apply manure to fields to make sure it doesn't blow away in a heavy wind. Courtney's goal is to help farmers and ranchers grow healthy crops and livestock and keep the water the cleanest it can be for years and

Caring for Our Water

An in unamia, minnesota, together with their wokids they raise beef cattle, pigs, turkeys, lambs and chickens for eggs. Andre and Morgan re serious about protecting the water on their arm. Recently they worked to become Minnesota Ag Water Quality Certified. This means that they are ranching in a way that not only produces althy animals, but keeps the ground and face water healthy too.

ome of these practices include moving their cattle around their arm often so the manure is spread out and has less of a chance to into streams and lakes when it rains. This farming practice is

re and Morgan want to make sure their kids have a healthy farm we on and raise animals on for years to come. Keeping the water an is one way they can do that.

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transported by natural forces such as wind or water.

MINNESOTA SOIL REGIONS

Mny lakes formed where blocks of glacial ice melted. The glaciers until deposits, and winds added to them. Broadleaf trees grow will here. Much of the land has wen cleared for farms and towns.

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Virtual Field Trips

- Targeted K-5th grade students and 30-minutes in length
- 5 Virtual Field Trips
- **10,352** Total Students Impacted (duplicated)
- 478 Classrooms Impacted













Midtown Global Market Minneapolis, MN





2024-2025

What is Farm Camp? 3 Part Immersive Agricultural Experience

"Our AgHost taught us more than we could have learned from any textbook."

- Kelliher Science Teacher



What are the 3 Parts of Farm Camp?

IN CLASSROOM LEARNING



Curriculum matrix lessons are matched to experiences to be learned at the farm or agribusiness.

Each experience is tailored to connect to standards-based classroom curriculum and engage students.

HANDS-ON EXPERIENCE



Brought to y

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There are 3 unique options to choose from:

- 1. Single-Stop Farm Camp
- 2. Farm Camp Field Day
- 3. Virtual Farm Camp

Transportation grants available.

$\mathbf{\hat{e}}$ CAREER EXPLORATION

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Student experiences are connected to careers through:

- In-classroom lesson
- Outside speaker
- Interactive career explora activity
- Lessons
- Videos
- Resources

Connect with us today to support or participate in a Farm



Farm Camp Minnesota

- Increasing Ag Literacy for 5th-12th Grade Students.
- FarmCampMinnesota.org
- A great year with fantastic feedback



Anticipated 2024-2025 Impact

1,250 Students

FAMM CAMP MINNESOTA

















"Thank you for a WONDERFUL day!! Your presenters were terrific, kept the kids engaged and excited about the future! Thanks for all of your hard work on this fantastic event!" -

Educators, Westbrook-Walnut Grove Schools



Food for Thought

Designed to engage K-12 students and inspire interest in the geography of Minnesota agriculture

- 18 K-12 lessons
- 42 static maps
- Interactive online map layers







2023-2024 IMPACT REPORT

Over 149,534+ Students and 88% of Minnesota's Public School Districts Impacted.

MAITC Resources are being used in all 87 counties!



Experiences with Impact!







Our Impact Amplified

Outreach Organizations Who Utilize MAITC Resources

- Farmamerica
- Children's Museum of Southern Minnesota
- Farmers Union Summer Camps
- Twin Cities Road Crew
- NRCS
- FFA Chapters
- 4-H Youth Development
- MN Farm Bureau
- MN Cattlewomen
- MN Beef Ambassadors
- Public Libraries
- Career Fairs

Digging Deep into Soil

The soil beneath our feet is as important as the air we breathe and the water we drink. Soil holds water and nutrients plants need. Animals and nearly decode on plants for food so we need soil too.

Soil is made up of five main elements: water, air, minerals, organic matter, and organisms that are the decaying remains of once-living things. Soil is formed on the surface of the earth and is needed to grow and support plant life. We could not survive without on the surface of the earth and is needed to grow and support plant life. We could not survive without

Soil provides an anchor for plants to secure themselves to the earth so they aren't blown away or destroyed. Plants absorb nutrients from the soil so they can continue to grow.

Soil is also an important factor in cleaning and regulating water. When it rains, healthy soil can absend and regulate the rainfall to reduce flooding. Filtering and cleaning the groundwater we drink is also an important role that soil plays.

It is important to protect soil, otherwise erosion can occur. Erosion is when soil is carried away by wed or water. You can see signs of erosion when the water draining from fields looks like chocolate mix the means soil is being carried away in the water. Erosion is something farmers like to prevent locuse the topsoil is needed to grow healthy crops. What would you do to stop erosion from happening in the fields below?

Holding Onto Soil

Read the descriptions of the four erosion prevention actions below. Match each action with its picture by writing the number in the circle.

1 Cover Cropping Plants grown to cover the soil betwee rows of crops. They are usually not harveside but help hold the soil in plac control weeds and peets. 2 Windbreak Rows of trees or bushes are planted where they will block proventing winds This reduces wind erosion and protect crops - and gives the bonys of winds.

No Tillage Instead of traditional plowing that leaves long rows of bare soil exposed to wind and rain, stubble from last years crops left on the field. This helps hold soil in place.

Grassed Grass is planted in waterways in the field Waterways to slow running water and hold soil in place.



A BELLINE is and Patra Wise live in Sawyer, Mo matern Thousands of years ago De

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we cover crops and their hooves help to toosen the soil and allow we despice. Bringing back bison to their land is one more important a crefor the environment, their community and their of

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How would thinking like this make

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e grown every year.



Coming to Minnesota In June of 2025...





The National Agriculture in the Classroom **Conference!**



THANK YOU!













Minnesota Agriculture in the **Classroom, Inc. Foundation** Ann Marie Ward, **Executive Director PO Box 553** Luverne, MN 56156-0553



maitcfoundation.org mn.agclassroom.org mnagmag.org farmcampminnesota.org



annmarie@maitc.org



218-556-1436















FOCUS AREAS 2024-2025

- Sustainability & Growth Programming & Impact
- Career Videos & Lesson Expansion
- Educator Driven Advisory Team Expansion
- Monthly Focus Areas & Prof Development
- Enhance reporting: Salesforce capture detailed statistics
- Increase partnerships with Investors
- Charities Review Council Goal FY25



Minnesota Agriculture in the Classroom







Student & Educator Audiences

We work towards achieving our mission through connecting with Minnesota

- K-12 Students
- Educators
 - PreService
 - InService





Resource Specialists

Emily Ponwith Southern MN Jessica Blosberg Metro Sarah Kuschel Northern MN

- Build relationships with educators in region to promote agriculture literacy in K-12 classrooms.
- Support educators in implementation of MAITC resources in their classrooms.





Student Experiences: K-12th Graders

AgMags
Virtual Field Trips
Journey 2050
Farm Camp













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Corn has lots of vitamins B and C, and magnesium. Vitamin B helps you have energy and good health. Vitamin C helps you graw and maintain good bones and teeth. Magnesium helps your heart keep a steady beat.

There are two kinds of corn that are eaten: Field corn and sweet corn. Animals eat field corn. Humans eat sweet corn on the cob. They also eat kernels that have been canned or frozen. Humans eat field corn after it is processed into other foods like tortific chics and cereal.



d Sweet Corr

Soybeans have lots of vitamin C, protein, iron, and calcium. Protein is important for building strong bones, muscles, skin, and blood. The body uses iron to build immunity, improve concentration, and reduce tiredness. Calcium is needed to grow and keep strong bones and teeth.

Soybeans are used to make many different things we can eat and drink. Soybeans are found in cooking oil, milk. tofu, and baked goods made







Increasing Ag Literacy for **5th-12th Grade Students** www.farmcampminnesota.org













Career Focus

• AgHost Connections to Careers • Highlight Careers that Support the Farm • Career Lessons Spark Curiosity









Docuseries Partnership Agriculture Career Videos

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Farm Camp Successes

Student Engagement



AgHost Preparation



Educator Investment



