

Do you Know an Outstanding STEM Teacher?

Nominate them today for the Iowa STEM Teacher Award! Nominations close on October 9.

Do you know a STEM teacher that goes above and beyond? Someone whose passion for science, technology, engineering or math has inspired students in the classroom and potentially to pursue future careers in STEM? It's time to recognize their hard work. Nominations are now open for the 2021 Iowa STEM Teacher Award sponsored by Kemin Industries. This award celebrates teachers whose leadership and dedication increases student interest in STEM.

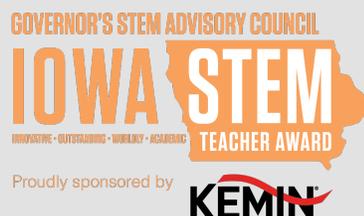
One teacher from each of the six STEM regions will receive a \$1,500 award for their classroom, along with an additional \$1,500 for personal use. Deadline for nominations is Friday, October 9. Recipients will be announced January 2021.

Past NC STEM Awardees:

- 2020** Melissa Taft, Forest City Elementary School
- 2019** Sharon Jaeschke, Southeast Valley High School
- 2018** Teresa Green, Edwards Elementary School
- 2017** Benjamin Jass, Webster City High School
- 2016** Ed Birkey, Fort Dodge Senior High School
- 2015** Shelly Vanyo, Boone High School

Nominate a STEM teacher today:

<https://iowastem.gov/teacheraward-application>



STEM Externship Experience Helping to Develop Natural Resources and Wildlife Management Course

Family STEM Bags La Luz Centro Cultural

STEM Bags containing hands-on activities for families are available for free at the La Luz Centro Cultural in Hampton during food bank hours on Sept. 28.

The bags contain materials and instructions for five activities appropriate for children in grades K-8. All bags contain instructions in both Spanish and English. Stop by to receive a free bag during food bank hours, 5-7 p.m., on Monday, Sept. 28.

Partners in the effort are La Luz Centro Cultural, the Iowa Governor's STEM Advisory Council, Iowa State University Extension and Outreach Franklin County, and Iowa State University School of Education. Iowa 4-H staff assisted in the development of content and translation of materials.

Monthly STEM Challenge: Exploring Fall Foliage

As temperatures begin to dip and leaves change color, it is an optimal time to take a nature walk and collect a variety of leaves.

Challenge 1:

Collect several different types of leaves. Place the leaves under a sheet of white paper and rub a crayon or pencil over the leaf beneath the paper. What shapes do you see? What parts do you see? How are the parts different for different leaves?

Challenge 2:

Can you identify and collect fallen leaves from a variety of Iowa trees: Ash, Elm, Hickory, Maple (soft), Maple (hard), Bur Oak,



During a STEM Teacher Externship, educators work side-by-side with knowledgeable and skilled industry employees who help bring the classroom curriculum to life. North Central STEM summer Extern, Jamie Pudenz, shares below how he plans to use what he learned to develop his classroom courses.

What was your role at the Big Marsh Wildlife Management Area and what project(s) did you work on?

My role at the Big Marsh Wildlife Management Area was an assistant to Justin Clark and Logan McEwan, both Iowa DNR Technicians at the location. The projects I worked on dealt with wildlife management and wildlife recreation improvement (hunting).

What skills did you utilize in your position? What new skills did you learn?

Communication, Teamwork, Critical Thinking were skills constantly being used in this position. The skills I worked on and had further developed were Adaptability and Conflict Resolution, especially enhanced due to uncertain weather that was always changing and disrupting plans for wildlife management practices.

What did you learn that you can take back to the classroom?

Unquestionably, the greatest thing I learned was plant, wildlife, and insect identification. It is truly exciting to discover a species of plant or animal I never knew about before. I think for students to be able to identify species that are native to the state of Iowa is important. I found myself baffled that there were so many important species that we need to protect for diversity purposes that I NEVER heard of. There are turtles, snakes, skinks, birds, and so much more that need to be protected or intensively managed. That message will be at the core of my class I am developing for students. My "Natural Resources and Wildlife Management" course will focus on appreciating and further understanding the natural world that surrounds us and is often ignored.

How will you be able to improve students' educational experience after being a STEM Extern?

Prior to starting the externship, I had a little bit of knowledge surrounding natural resources and wildlife management. I come from a production agriculture background and did not have a very well developed idea of what this area of agriculture really entailed. My goal during the externship was not to learn everything there was to know about wildlife management. Rather I walked in with the ultimate goal to gain a holistic view that included a greater breadth of what natural resources technicians, researchers, and biologists come to work each day to do. The insight to the various careers that exist within natural resources will certainly help me provide opportunities to students that are real-world and truly exist. My ultimate goal is to help funnel students who may have interest into this line of work and guide them towards pursuing those careers.

Oak (red) and Oak (White).

Tree identification resource:
[Iowa Tree Guide](#)

Upcoming Events and Deadlines

October 5

[2021-2022 STEM Scale-Up Program Provider Applications Close \(Programs Only\)](#)

October 9

[Nominations Close for Iowa STEM Teacher of the Year Award](#)

October 22

North Central Regional STEM Advisory Board Meeting

At-Home STEM Resources

The STEM Bingo Challenge Board contains simple activities designed to inspire kids! Download your copy here:
[STEM Bingo Challenge](#)

Iowa State Fair STEM activities and demonstrations that can be done at home:
[Watch Demonstrations Activity Guide](#)

The STEM Council has partnered with the Iowa Department of Education, AEA Learning Online, Iowa PBS and the Iowa Reading Research Center to develop a curated list of resources for students, parents and educators.
[Teachable Moment](#)



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Did you have any "aha" moments during the Externship?

My 'aha' moment really was born out of ignorance. Prior to starting the externship, I had no idea that endangered native species existed in the state of Iowa. Once you hear that these populations are in such bad shape, the bell goes off in your head that of course these animals need to be protected! We lose a very important part of our ecosystem if these animals vanish. Just as it's important to protect livestock breeds worldwide for genetic diversity purposes, it is even more important to protect an animal from disappearing.

STEM SCALE-UP PROGRAM PROVIDER RFP Now Open (Programs Only)

For the 2021-2022 academic year the Iowa Governor's STEM Advisory Council is seeking program providers for the Iowa STEM Scale-Up Program. If you are interested in providing STEM programming in Iowa and would like to be considered for this initiative, please click on the link below. The deadline for proposal submissions is October 5.

STEM programs that serve PreK-12 grade audiences in or out of school with the capacity to deliver professional development/training and materials in Iowa are eligible for the STEM Scale-Up Program. Professional development/training is appropriate for Iowa STEM Scale-Up Programs when preparing an educator to implement a student kit, curriculum, activity, lesson or new course of study in STEM.

Visit the [Provider STEM Scale-Up](#) page for more information.

2019-20 NC STEM Advisory Board

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