Missouri Environmental Education News
October 2018

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Getting Started on Becoming a Green School

Getting started on becoming a Green School is not rocket science, but it does take some people and organizational
skills. Review the 6 steps listed below. If you think your school is ready, visit
http://www.missourigreenschools.org/getting-started.html which will have links to all the resources listed below.

1. **Set up a team.** Ideally your team will include an educator, an administrator (this person is essential), and folks who
handle facility operations, health, food, and PE. For middle and high schools, representatives from a student
organization are also important. Teams are important because the MGS program takes a comprehensive approach to
evaluation, and the knowledge and expertise of many different people are needed.

2. **Get everyone on the same page.** Meet with your team and use this checklist and the levels below to do a quick
assessment of how your school meets the criteria based on the knowledge of the people in the room. Come to a
shared understanding of how joining the program aligns with the school's vision and mission. (If your school
doesn't have a vision and mission, it needs one - which may be a whole other thing.) Then set 2 or 3 goals for
yourselves to accomplish in the next year. Choose a lead person to handle the documentation and paperwork.
Identify the folks who are missing that need to be part of the process. Assign tasks and set your next meeting time.

3. **Enroll.** Have your lead person enroll in the MGS program. This person will be the point of contact for the MGS
program. They will need your school information, a list of team members and some goals you have for your school.

4. **Start with Level 1.** Download the Level 1 form and begin collecting data to document your accomplishments. If you
have accomplishments in Level 2 or 3, document those as well.

5. **Work the Program.** Proceed through the levels at a pace that is comfortable with the time, talent and treasure you
can commit to the program.

6. **Consider Nomination.** If you have completed Levels 1 and 2, and have some steps in Level 3 completed, contact
the MGS Program coordinator, Jan Weaver, about submitting a nomination for USED Green Ribbon Schools
recognition.

*Would you like to see what other schools are doing that you might try? Send someone to the Green Strides Tour
October 24-25 to see how easy it can be to go green.*

MO Green Schools and EE Conference

Taking Learning Outdoors

The greatest opportunities to learn science, math, English and social studies can be found by looking out the window.
The school yard and the back yard are the first and best places for students to develop their understanding of place,
because they are so accessible and can be experienced in so many ways over a day, a year or a life time. Once students
connect to one place, they have a more solid context for broadening the boundaries of "place" from their community to the planet. Join us as we explore ways to use place-based learning as a way to develop knowledge, skills and understanding.

Register for the Conference

Kudos to MEEA and MELAB Members!

Congratulations to the four Missouri Schools that received US ED Green Ribbon School Awards this year. Check out the video of the ceremony. Missouri's recognition begins with about 46:43 left in the video. See screenshots of each school below.

Bellerive Elementary  Green Trails Elementary

W. W. Keysor Elementary  St. Louis University HS

Did you get a promotion? Take on a new job? Win an award? Receive a Grant? Let us know so we can share the news with your peers!

Things to Look for (or Look Out for) in October

- Vegetarian Awareness Month - [http://www.worldvegetarianday.org](http://www.worldvegetarianday.org) - North American Vegetarian Society
- 1 World Vegetarian Day (annually) - [http://www.worldvegetarianday.org](http://www.worldvegetarianday.org) - North American Vegetarian Society
- 4 World Animal Day (annually) - [http://www.worldanimalday.org.uk](http://www.worldanimalday.org.uk) - Nature Watch Foundation (animal welfare organization)
- 8-12 Cephalopod Awareness Days (annually) - [http://laughingsquid.com/international-cephalopod-awareness-days](http://laughingsquid.com/international-cephalopod-awareness-days)

What to Look for Right Now - MDC's list of What's Out There in October!

MEEA News

- People Team
  - Memberships - Welcome to new members from the KC area, Jennifer Crouks, Brenda Meerkatz, Brittan Wilson, Caitlin Davis, Liz Biron, Joyce Bledsoe, Janel Gunananda, Jean-Claude Diatte, Jennifer Tyler, Jill Porter, Krista Cubiterson, Cele Wood, Amanda Johnson, Marsha Cowan, Michele Martin, Mika Scholey, Nancy Link, Rebecca Gooding, Roberta Vogel Lentung, and Samantha Waicekauskas. Also welcome to Tonia Scherer from St. Louis and Bethany Hughes from Columbia. Thanks to renewing members Deb Ballin, Lucy Herlieth, and Shari Wilson.
  - Networking - MEEA is attending the North American Association for EE meeting in Spokane this month. Jan will attend the affiliate's workshop and present - A Picture is worth 1000 Words: Visual Literacy and EE.

- Purpose
  - Conference - Registration is open! Learn more and sign up at [www.meea.org/conferences/conference-2018.html](http://www.meea.org/conferences/conference-2018.html)
  - Missouri Green Schools - [Sign up](https://www.meea.org/conferences/missourigreenschools) for the October 24-25 Green Strides Tour. Visit 9 schools in St. Louis that have received US ED Green Ribbon School Recognition
  - Grants - MEEA is now accepting proposals for its [Environmental Education Grants](https://www.meea.org/conferences/missourigreenschools). Deadline November 5.

- Resources
  - Accounting - Jan is preparing the Q3 statements for review
  - Fund Development - MEEA is seeking sponsors for the 2018 MOGSEE Conference.

- Governance Team
  - Board of Directors - No Updates
  - Administration - No Updates

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Coming Up in the Next Two Months

- Grants, Contests and Awards Details here
  - Project Green Challenge (10/1 to 10/30); Electricity Match Energy Lesson Plan (10/12); Keep America Beautiful Recycle Bowl Competition (10/12); Lexus EcoChallenge I (10/15); Wild Ones Seeds for Education (10/15); Samsung Solve for Tomorrow (10/30); State Farm Good Neighbor Citizenship Grants (10/31); State Farm Education and Youth Advisory Board Service Learning Grants (10/31); 7th Annual Missouri Snapshtags Photo Contest (10/31); Get to Know the Outdoors Art Contest (11/1); MEEA Environmental Education Grants (11/5); International Compost Awareness Poster Contest (11/5); Metro Photo Challenge (11/20)

Unsure about how to go about or write a grant proposal? There's a hands-on workshop for that at the MOGSEE Conference!!

- Conferences and Meetings Details here
  - October 6-7 - Vaskebjorn 2018 Forest School Congress of the Midwest, featured speaker Richard Louv - http://www.raintreeschool.org/conference
  - October 24-25 - Green Strides Tour of US ED Green Ribbon Schools, sign up required - www.missourigreenschools.org
  - November 2-3 - MO Green Schools and Environmental Education Conference - www.meea.org/conferences/conference-2018.html

- Workshops and Events around Missouri Details here
  - Nature Unbound (10/18)- Chillicothe
  - Nature Revealed (10/27) - Kirkville
  - Wildlife: Grossology Lab (10/13) - Blue Springs
  - Primitive Skills (10/20) - Jefferson City
  - Nature Unleashed (10/12) - New Haven
  - Introduction to Kayaking (10/9) - Springfield
  - Nature Unhooked (10/18) - West Plains
  - Nature Unfolds (10/25) - Puxico

Special online course in Civic Ecology from Cornell University - September 18-November 5 - https://civicecology.org/Course-CE/

(These count for Environmental Educator Certification categories 1, 2 or 3. Visit the EE Certification page here)

- Outdoor, Nature, Environmental and Sustainability Event Calendars - visit our page of organization and agency calendars - if you would like to have your organization's regularly updated calendar added, email Executive Director Jan Weaver

EE Jobs Details here

- Environmental Health Specialist, Johnson Co. KS, Conservation
- Leadership Development Program Manager, Nature Conservancy, Little Rock AR
- World Bird Sanctuary Intern (unpaid, housing provided), Valley Park Mo.
- Site Specialist I and II SW Management Unit (Prairie St. Park, Stockton State Park, Battle of Island Mound)
- Director of State Operations for Environment MO, St. Louis
- School Programs Educator (part time) St. Louis Zoo

Teaching and Learning: Solar Power

(Solar Power Week is the 3rd week in October)


Solar Energy Activities PreK, EE Children are never too young to learn about solar energy, and they learn best when using their senses. That's why these interactive solar energy activities are a perfect way to help your preschoolers understand how the Sun works. Come on, soak up the Sun! https://www.brighthubeducation.com

Solar Classroom Lesson Plan UE Learn solar basics, experiment with solar ovens and other projects, explore solar decathlon team projects. https://www.energy.gov

Here Comes the Sun UE, MS, HS Lesson focuses on solar panel design, and its application in the standard calculator. It explores how both solar panels and calculators operate and explores simple circuits using solar power - http://tryengineering.org

From Sunlight to Electric Current MS The lesson will first explore the concept of current in electrical circuits. Photovoltaic (PV) cell properties will then be introduced. This will lead to the principle of "Conservation of Energy." Finally, with a basic understanding of the circuits through Ohm's law, students will see how the energy from the sun can be used to power everyday items, including vehicles. This lesson utilizes the engineering design activity of building a solar car to help students learn these concepts. From TeachEngineering - http://www.teachengineering.org

Energy Resources and Systems MS Several activities are included to teach and research the differences between renewable and non-renewable resources and various energy resources. Students work with a quantitative, but simple model of energy resources to show how rapidly finite, non-renewable energy sources can be depleted, whereas
renewable resources (like sunlight) continue to be available. Then students complete a homework assignment (or a longer, in-depth research project) to learn how various technologies capture energy resources for human uses, and their pros and cons. Fact sheets help students get started on their investigations of assigned energy sources.

**Solar Energy Lesson Plan MS, HS** Using the Ameren.com solar energy website, students will explore, compare and analyze available solar technologies, determining the effectiveness of each when utilized in the Midwest - [https://www.ameren.com](https://www.ameren.com)

**Concentrated Solar Power HS** Students learn how the total solar irradiance hitting a photovoltaic (PV) panel can be increased through the use of a concentrating device, such as a reflector or lens. This is the final lesson in the Photovoltaic Efficiency unit and is intended to accompany a fun design project (see the associated Concentrating on the Sun with PVs activity) to wrap up the unit. However, it can be completed independently of the other unit lessons and activities. From TeachEngineering - [http://www.teachengineering.org](http://www.teachengineering.org)

**Solar Power: When and Where is Best? HS** Students learn about solar energy and how to calculate the amount of solar energy available at a given location and time of day on Earth. The importance of determining incoming solar energy for solar devices is discussed - [http://www.teachengineering.org](http://www.teachengineering.org)

Check out other energy related lessons [here](http://www.teachengineering.org)