



2017 Montana Environmental Education Association Conference

Time Thursday, March 9th, Professional Development Workshops

9:00 AM Professional Development Experiences Start

5 Continuing Education Units are available and included in these workshops!

Location	Montana Wild	Flesher Pass & Blackfoot Pathways
Presenter	Liz Burke & Kurt Cunningham	Rebecca Skeldon, Jerry McCarthy & Blackfoot Pathways
Topic	Project Learning Tree & Project Wild Training	Snowshoe/Tracking Excursion & Sculpture Park Exploration
Description	"Project Learning Tree uses trees and forests as windows on the world to increase students' understanding of the environment and actions they can take to conserve it" (www.plt.org). "From the tiny minnow to the majestic grizzly, wildlife and humans are integrally connected. Project WILD links students and wildlife through its mission to provide wildlife-based conservation and environmental education that fosters responsible actions toward wildlife and related natural resources" (www.projectwild.org).	This workshop is led in partnership with the Montana Discovery Foundation and the Montana Wilderness Association. We will begin by taking a snowshoe hike to learn about MWA's tracking and monitoring program on Flesher pass. Then we'll head to Lincoln for a guided tour of Sculpture in the Wild and some fun outdoor education including Goldsworthy Art and Survival Fire-building.

3:30-4PM Professional Development Experiences End

3:30-5PM Exhibitor Fair at the Great Northern Best Western Hotel- Come check out the amazing resources!

5:30-7:30PM MEEA Social & Awards Ceremony Extravaganza at ExplorationWorks Science Center!



2017 Montana Environmental Education Association Conference

Time **Friday, March 10th, Main Conference Schedule**

8:00 AM Registration Opens

8:30 AM Kick Off Keynote

9:00 AM Session 1 Begins

Engaging Methods for Hands-On Teaching			
Theme	Oriental A/B	Oriental C/D	Iron Horse
Room			
Presenter	Jennifer Stadum, Office of Public Instruction, Indian Education	Elizabeth Green, Montana Outdoor Science School	Matt Wilhelm, Invasive Species Network
Topic		The MOSS-ome 5E Instructional Model in Action	Teaching Conservation Topics for K-3 Using Songs
Description		Join Montana Outdoor Science School's Education Director for a look at how MOSS builds exciting science curriculum. MOSS is known for its hands-on, inquiry based, outdoor science lessons. MOSS instructors teach in schools and host summer programs, utilizing the 5E Instructional Model. The 5 E's (Engage, Explore, Explain, Elaborate, and Evaluate) help MOSS foster a constructivist approach to student engagement. Get ready to get hands on with MOSS!	Get kids started young on conservation and EE! Using songs to relay a conservation or EE message is a great way engage younger students and solidify their knowledge of different topics. Step back in time, become a Kindergartner all over again, and sing along and learn during this interactive presentation.

9:45 AM Session 1 Ends



10:00 AM Session 2 Begins

Theme Empowering students with Project-based Learning			
Room	Oriental A/B	Oriental C/D	Iron Horse
Presenter	Rob Pudner, Recycle Montana	Demetrius Fassas, National Center Of Appropriate Technology	Stephanie Potts, Montana Natural History Center
Topic	Don't Waste Montana	Harvest of the Month: Hands-on Montana's Food System	Creating natural play spaces through service learning partnerships
Description	Talk trash with Recycle Montana and bring relevance to one of society's taboo topics – waste. Sharing the Why and How of recycling and waste diversion is a major challenge in most communities, but that can change by using a special collection of science-based classroom activities and hands-on demonstration items. Educators and ecosystems benefit from education trunks that show how society's waste is transformed into a resource. Students can experience the value of sorting recyclables while learning the chemical properties of metals and plastics. Conduct a waste audit and discover new resource-saving habits that are easy to adopt!	Montana Harvest of the Month is an exciting new program that features a different Montana food each month in school meals and snacks, taste tests, and educational activities. This free program provides an easy framework for starting or growing farm to school programs. Explore how schools can encourage adventurous eaters, provide engaging learning experiences, and promote school meals and snacks. Learn how to implement the program and how it can benefit students and support healthy communities.	The Montana Natural History Center recently installed a new natural play space on our property through a partnership with Willard High School Students. Join us for a discussion of the first year of this place-based service learning project to learn about our planning and teaching process, our experiences, and the results—and what we have planned for the future.

10:45 AM Session 2 Ends



11:00 AM Session 3 Begins

Theme		EE resources in Montana		
Room	Oriental A/B	Oriental C/D	Iron Horse	
Presenter	Carolyn Wiley, Missoula Insectarium	Jess Haas & Greg Malloure, Yellowstone National Park	Deb Fassnacht, Watershed Education Network	
Topic	Insect Engineering	Deep Learning through Discussion on Science & Ethics	Build Your Own Aquifer	
Description	In keeping with this year's theme of hands-on learning we'll be doing a bit of prototyping and hands-on learning of our own during this session. Insect Engineering is one of the most popular field trip programs at the Missoula Insectarium and we will explore what makes this program so successful: prototyping, use of the engineering design process, inquiry and project based learning and a dash of biomimicry. Teachers will go home with a simple introductory lesson plan to get them started using a few of these techniques in their own classrooms.	Is student discussion an afterthought during your lessons? Does a look of fear cross your face when side conversations begin between students? For a student, formulating and putting their thoughts into words, listening to others' ideas, and becoming aware of contradictory conclusions provides a way to make better sense of topics they're learning. Through various BEETLES activities, learn how to facilitate a meaning-making discussion while still holding the reins on classroom management. Resources to engage students in examining the ethics of controversial decisions will be provided.	Do you wonder where your drinking water comes from and if it is healthy? You will gain solid understandings about how groundwater and aquifers work. As an environmental educator, you'll build an aquifer yourself. We'll begin with an interactive groundwater flow model demonstration, share information and surprising connections of groundwater and surface water. Lastly, we'll showcase some Montana groundwater resources, and you will come away with a groundwater lesson plan for class demonstration and a 'hands-on' aquifer lab easily adapted for G4-12.	

11:45 AM Session 3 Ends

12:00 PM Lunch

12:20 PM Montana Institute on Ecosystem Climate in my Backyard Project

12:30 PM Keynote: Frank Finley

Frank Finley is a member of the Confederated Salish and Kootenai Tribes. Frank is the eldest son of Octave Finley, who was the last Salish War Dance Chief. This interactive presentation will share the power of storytelling, hands-on instruction and indigenous science. With Frank's guidance, attendees will make cordage from provided materials while experiencing how learning is deepened through story and art.



1:30 PM Extended Session Begins

Room	Oriental A/B	Oriental C/D	Iron Horse
Presenter	Robyn Duff, Art Educator	Mike Jetty & Jennifer Stadum, Indian Education Specialists at OPI	Ilana Abrahamson, Missoula Fire Sciences Lab
Topic	Place-Based Prints	Mni Wiconi – Water is Life	Wildland fire science with hands-on activities
Description	Roll up your sleeves and get your creative juices flowing in this fantastic afternoon session! Join Helena High School art and photography educator, Robyn Duff, as she shares a place-based art project that you can apply to your own program. Make a print during this 90 minute session that can be used to create a field guide for your school yard. See how this project is integrated into an entire school unit. Excellent resources, websites and artists will be shared to complement your project.	How can educators teach controversial environmental issues faced by tribes, such as the Dakota Access Pipeline at Standing Rock, or the Blackfeet Water Compact in Badger-Two Medicine? Conservation and tribal rights are games with many players, and prominent issues are valuable tools to help students gain perspective and understanding. This interactive workshop will demonstrate how Indian Education for All resources can be used to enhance instruction regarding environmental issues. Relevant connections with the Essential Understandings and content standards will also be shared.	Wildland fire draws the public’s attention every summer, but public understanding of fire is limited. The FireWorks Educational Program is designed to increase public understanding of the science of wildland fire. The program consists of a curriculum of over 30 hands-on activities and trunks of materials, targeted for K-12th grade students. This session includes hands-on activities that cover fire ecology, fire history, and wildland fire behavior in the northern Rocky Mountains. Participants will learn how fire-scarred tree cross-sections tell tree’s fire stories, and how to model and measure fire behavior using matches and simple physical models.

3:00 PM Conference Concludes