



Michigan Department of Natural Resources
2014 Academy of Natural Resources
STEM from Nature
July 13-18, 2014 MacMullan Conference Center

A G E N D A

Sunday, July 13

4:00 p.m. Check-In Begins – Conservation Education Center
5:30 p.m. Dinner – Resource Center Dining Hall
7:00 p.m. Welcome, Introductions, Overview of the week, Intro to the DNR
with Kevin Frailey, DNR Education Services Mgr.,
(*Conservation Education Center, Main Branch of Au Sable Room*)

Monday, July 14

Getting Started with STEM

Lead Instructors: Natalie Elkins, Tom Kelly, Cindy Fitzwilliams- Heck

7:30 a.m. Breakfast
8:00 a.m. What is STEM and how nature applications strengthen it
10:00 a.m. Break
10:15 a.m. How STEM and NGSS grow together
Noon Lunch at the RAM
1:00 p.m. The STEM of Invasive Species
3:00 p.m. Break
3:15 p.m. Curriculum Connections
4:00 p.m. Adjourn for the day
5:30 p.m. Dinner
7:00 p.m. Evening Program: *Wetlands, Waterfowl and a Legacy You can Protect* with Barb Avers, DNR Waterfowl Specialist

Tuesday, July 15

STEM is for the Birds

Lead Instructors: Natalie Elkins, Tom Kelly, Cindy Fitzwilliams- Heck, Tracy Page

6:30 a.m. Early Morning Bird Hike
7:30 a.m. Breakfast
8:00 a.m. Cornell Ornithology Lab Resources
10:00 a.m. Break
10:15 a.m. Modelling and Engineering with Birds
Noon Lunch in the Field
1:00 p.m. Landscape Ecology Lab
3:00 p.m. Adjourn for the day
5:30 p.m. Dinner
7:00 p.m. Evening Program: *Michigan's Response to High Volume Hydraulic Fracturing* with Marc Snow, DEQ's Office of Oil, Gas, and Minerals

Wednesday, July 16**STEM in the Forest**

Lead Instructors: Natalie Elkins ,Tom Kelly, Cindy Fitzwilliams- Heck, Craig Kasmer and Kevin Frailey

7:30 a.m.	Breakfast
8:00 a.m.	How to measure the volume of a Forest
10:00 a.m.	Break
10:15 a.m.	Finding Your Way: Compass Skills
Noon	Lunch at the RAM
1:00 p.m.	Timber Cruise on Your Own
3:00 p.m.	Break
3:15 p.m.	Curriculum Connections
4:00 p.m.	Adjourn for the day
5:30 p.m.	Dinner
7:00 p.m.	Optional Evening Program: : Iditarod in Your Classroom with Steve Tchozeski and Katie Kunze

Thursday, July 17**Surviving STEM**

7:30 a.m.	Breakfast
8:00 a.m.	Nature Solo
10:00 a.m.	Break
10:15 a.m.	Explore and Observe
Noon	Lunch in the field
1:00 p.m.	Survival in a STEM world
3:00 p.m.	Break
3:15 p.m.	Curriculum Connections
4:00 p.m.	Adjourn for the day and return to RAM Center
5:30 p.m.	Dinner
7:00 p.m.	Optional Evening Program: <i>Outdoor Skills Potpourri</i>

Friday, July 18**Seeking STEM**

Lead Instructors: Natalie Elkins, Tom Kelly, Cindy Fitzwilliams- Heck

7:30 a.m.	Breakfast
8:00 a.m.	Finishing TouchEs
10:00 a.m.	Break
10:15 a.m.	Ideas to Share
11:00 a.m.	General Assembly
Noon	Lunch

Happy Trails