



# STEM From Nature

Track Facilitator: Natalie Elkins, DNR K-12 Specialist  
South Branch AuSable Classroom

## AGENDA

### Sunday, July 19

- 4:00 p.m. Check-In Begins – Conservation Education Center
- 5:30 p.m. Dinner – Resource Center Dining Hall
- 6:30 p.m. Welcome to ANR with Kevin Frailey, DNR Education Services Mgr.
- 6:45 p.m. Northwoods Trade Intro
- 7:00 p.m. Class Orientation/Introductions
- 8:00 p.m. Ferris State Credits/SCECH Overview and Sign-Up  
(*Conservation Education Center, Main Branch of Au Sable Room*)

### Monday, July 20

- 7:30 a.m. Breakfast
- 8:00 a.m. Overview of STEM and of the week, 4 groups...and handouts
- 9:00 a.m. So that's what the E stands for...the Engineering Matrix w/ Jennifer Degazio, Cranbrook Schools.
- 10:15 a.m. An Un-Bearable problem to solve w/Kevin Frailey
- Noon Lunch
- 1:00 p.m. Robotics in the classroom w/ Josh Nichols, Stockbridge Schools
- 3:15 p.m. AFWA, NGSS, MAEOE, NCLI and other Acronyms and Resources
- 3:30 p.m. Recap the day, reflect, questions, daily formative evaluation
- 4:00 p.m. Adjourn
- 5:30 p.m. Dinner
- 7:00 p.m. Evening Program: *Live Bat Encounter* with Rob Mies, Executive Director, Organization for Bat Conservation.

### STEM From the Beginning (Manistee Room)

### Tuesday, July 21

- 7:30 a.m. Breakfast
- 8:00 a.m. Questions from yesterday? Formative evaluation review.
- 8:30 a.m. Magnetic North: Applications of the compass w/ Kevin
- 10:15 a.m. Break
- 10:30 a.m. True North: Applications with topographic maps w/Kevin
- 11:15 a.m. Forest Navigation Adventure on your own.
- Noon Lunch
- 1:00 p.m. Mapping, Technology and STEMing the Tide of Invasive Species. w/Heidi Frei, DNR and Amos Ziegler, MISIN
- 3:30 p.m. Curriculum connections, reflect and formative evaluations, group time
- 4:00 p.m. Adjourn
- 5:30 p.m. Dinner
- 7:00 p.m. Optional Evening Program: ANR Film Fest beginning with *The Big Year*

### STEM Across the Landscape (Manistee Room)

**Wednesday, July 22****Large STEMS and Forest Measurement (Manistee Room)**

7:30 a.m.	Breakfast
8:00 a.m.	Questions from yesterday? Formative evaluation review.
8:30 a.m.	Learning the Tools of the Trade w/Craig Kasmer, Hartwick Pines SP
10:15 a.m.	Cruise Timber on your Own
Noon	Lunch
1:00 p.m.	What Did your Forest tell You? Applying the Data w/Craig
2:30 p.m.	Using Trail Cams to do Field Investigations w/Tom Kelly and Brian Jarsma
3:30 p.m.	Curriculum connections, reflect and formative evaluations, group time
4:00 p.m.	Adjourn
5:30 p.m.	Dinner
7:00 p.m.	Evening Program: <i>Dammed if we Do, Dammed if we Don't</i> w/ Steve Largent, Boardman River Program Coordinator

**Thursday, July 23****Surviving STEM (Manistee Room)**

7:30 a.m.	Breakfast
8:00 a.m.	Questions from yesterday? Formative evaluation review.
8:30 a.m.	Surviving with STEM –the criteria w/ Tom Kelly and Brian Jarsma
10:15 a.m.	Surviving with STEM –the constraints
Noon	Lunch
1:00 p.m.	Surviving with STEM –choosing the best solution
3:15 p.m.	Curriculum connections, reflect and formative evaluations, group time
4:00 p.m.	Adjourn
5:30 p.m.	Dinner
7:00 p.m.	Optional Evening Program: <i>Outdoor Skills Potpourri (archery/shooting/canoeing/fishing)</i>

**Friday, July 24****Seeking STEM**

7:30 a.m.	Breakfast
8:00 a.m.	Final group project work time
8:30 a.m.	Presentation Showcase
9:30 a.m.	ANR Outdoor Challenge
11:00 a.m.	Graduation!
Noon	Lunch

# Happy Trails!