



CREED

Curriculum Resources for
Environmental Education Development

Summer 2018



CREED features:

- **President's Letter**
- **Conference Registration Open**
- **Call for Posters**
- **Paul-itics**
- **Envirothon Update**
- **One Man's Perspective**

A Letter from Ann

I hosted a Neighborhood Nature Play Day in my backyard a few years ago. Parents and caregivers were invited over to hang out in my wild yard and cook s'mores. It wasn't as hot that day. I asked the adults to share one of their earliest memories of connecting with nature. I was most entertained by the story of my neighbor's memory. On summer vacations while at her grandmother's, she remembered tying strings to June bugs like a leash. (Insert your own cute drawing here.) To me that is a real image of summer.

Summer is here and EEAI is hot. Behind the scenes, we continue to work. There have been meetings with the Secretary of the Board of Education regarding the Environmental Literacy Guidelines, ICAN continues to host brown bag lunches and facilitate the Nature Play Days, and

the conference planning committees are in full swing getting ready for fun-ology in September. We will be having a full board meeting July 2nd to learn more about the best use of social media.

Read on to get more details about all that is happening. If you want to be more involved in any of these or want more information, let me know.

Ann Niednagel

President

Ann.niednagel@gmail.com



@Camp Mack

Milford, IN

September 28-30

with special guest Banana Slug String Band

Conference Registration is open!

Reserve your spot today! EEAI Conference 2018 – FUN-OLOGY at Camp Mack in Milford, IN, September 28-30! To register for the conference, go to <http://www.eeai.org/2018-Conference>

Register by August 27 to receive the early bird discount! Bring a new member and receive \$40 off your registration fee!

Here is the conference flyer to share: [EEAI Final Color 2018.pdf](#)

EEAI is pleased to announce the Call for Poster Abstracts for our 2018 Annual Conference.

Are you a student working on a research project? Or an educator that has implemented a fun project in your classroom? Happen to fall somewhere in between? Well, we want you to share it with us during the poster session lunch hour on September 16th! Students, faculty, community professionals, and others are encouraged to submit abstracts about their research, programs, innovations, or projects for presentation.

Formatting guidelines: Text should not exceed 250 words, excluding title and authors. Free structure is allowed but can also be submitted in the typical form of a scientific abstract (Introduction - Methods - Results - Conclusion).

Please submit your abstracts and questions to Megan Gunn at mlgunn@purdue.edu by September 1st.

Paul-itics: EE in the factory

By Paul Steury

I am a blue collar worker.

I'm a buyer of metal for the Aluminum Trailer Company (ATC).

Why? At Merry Lea Environmental Learning Center of Goshen College, I would condemn business because it promotes consumption, pollutes in many ways and is alive for the profit.

I became friends with Steve Brenneman, the owner of ATC, and we eco-philosophize about a utopian society over beers that included sustainability, regeneration, ecological thinking and beer.

He offered me a job that will eventually turn into a Sustainability Director position but currently I am a buyer of the large coils of aluminum that you sometimes see on flatbed train cars, a forklift operator, a transporter of cut sheet, a “water spider” that moves parts needed to the line - and I’m a waste eliminator.

I think constantly about waste.

ATC is a lean manufacturing organization. According to the Business Dictionary “Lean manufacturing involves never ending efforts to eliminate or reduce 'muda' (Japanese for waste or any activity that consumes resources without adding value) in design, manufacturing, distribution, and customer service processes.”

ATC works at addressing the 8 wastes. And that’s part of my job.

I look for defects. Inferior product does not enhance ATC.

I look for overproduction — or making too much of something that will produce waste — too much of something — which includes too much pollution, too much recycling, too much.

I look for times that are spent waiting around for a part or the line stops and there’s nothing to do.

I look for people’s talents that are not being utilized.

I look for “the movement of products from one location to another” that’s not needed.

I look for excessive motion because it might harm the worker which then harms the worker.

I look for excess or inappropriate processing, like cracking black walnuts with a sledgehammer.

I look for eight different kinds of wastes.

My job is to help ATC not have the need for even recycling.

Steve Brenneman, owner of ATC, answered my question “Why lean?” by saying “I see physical waste and recycling as a byproduct of good processes brought about by our lean journey. Originally, I decided to begin our journey out of a need to create an organization that would be operationally excellent and be able to withstand a downturn while thriving not just surviving.

“The more I learned about what we were actually doing the more I realized that it is a holistic system based on proper scientific thinking, which solves all problems eventually. In the beginning it’s all about eliminating waste. Soon our efforts moved to creating stability and eventually it focuses on people changing the way they work.”

Steve wants to create a product that people don’t have to buy again because it’s created with quality in mind — which then means less production, which means fewer natural resources, which means thinking about our future assets.

Steve comments that “seven of the wastes of lean are forms of wasted energy or waste that turns into wasted energy. Anything consumed needlessly is waste that could have been eliminated.”

Hunter Lovins who is a renown author and the president of Natural Capitalism Solutions said, “It is unfortunate, and it has remained a mystery to me why the lean community, which is making it’s way

The eighth waste is the waste of skills - very understandable. into industry, is not in conversation, except for this conference, with the green community. Because it is essentially the same argument, and you can’t do one without the other. You’re not going to succeed at either.”

XXXXX

My wife continuously said, “Honey, instead of condemning, go be part of the change, because we can’t live without business to help our daily lives.”

All environmental educators should work in the factory for a while to see how a very influential part of our society lives, works and breathes.

What I am really really enjoying is that I am thinking about a whole different arena that affects our society - the for profit society.

I also am enjoying becoming friends with people who I would never had met outside of this new profession. I am seeking to learn the Psychology of the line worker, the Sociology of each plant (ATC has 3), the Anthropology of this culture of workers that want to make a world class trailer and is committed to Steve, and Political Science - dialoguing and joking with people who have quite opposite core values than i do. It is pretty cool working with the Amish community because close to half of those employed at ATC come from that society and they are just like you and me.

But I'm glad I'm there to hopefully influence our future.

My office mate and the receiver was looking at Yahoo News prior to work and he commented that it said it's been the warmest ever at the north pole. He chuckled and said "Paul - is it because of guns?" I said "No - it's because of all the idling of trucks. What can we do to get people to think about climate change and how its related to climate change?" He said "You can't do anything. It's their truck."

I've heard people say the "Best snake is a dead snake!"

It helps me think about how to impact the 20 to 65 year old consumer and manufacturer / androogy - the theory of adult learning that states that adults tend to be more self-directed, internally motivated, and ready to learn. Quite a bit different that my ivory castle chapter of my life.

I too am constantly learning about business, supply chain management and other businesses that are striving for good.

Oh ATC has a lot of work ahead of them but I'm glad I can assist them in this adventure. They have applied for B Corp Certification. "B Corp is to business what Fair Trade certification is to coffee or USDA Organic certification is to milk. B Corps are for-profit companies certified by the

nonprofit B Lab to meet rigorous standards of social and environmental performance, accountability, and transparency.” (www.bcorporation.net)

I'm thankful for my wife and ATC because now I'm beginning to combine my love for academia, seeing how businesses can be truly working toward sustainability and thinking about caring for this planet via the consumer and producer.

I am also hopeful that ATC's sustainability success will impact other industries in our area.

And since I work factory hours I rise and shine at 3:50 a.m. to go to work so now I know naps are not a waste!

One of the field trips for this year's conference will be visiting ATC and meeting with Steve to talk about Lean and his desires. ATC is also one of this year's sponsors!! Thanks, Steve! This beer is for you!!

<http://www.aluminumtrailer.com>

Indiana Envirothon: Pocatello Here We Come!!

By Darci Zolman



Congratulations to the Rossville FFA Team, Indiana Envirothon Overall State Winners!

Indiana's State Envirothon Competition was held at the end of April at the Beck Agricultural Center at Purdue University. Seventeen teams from around the state, who were winners from the eight regional contests, competed for the honor of representing Indiana at the National Conservation Foundation (NCF) Envirothon competition in July at Idaho State University, Pocatello, Idaho.

The state competition gave high school students the opportunity to assess their knowledge of soils, aquatics, forestry and wildlife, as well as this year's current issue, rangeland management. The contest included a written test, field test and oral presentation. The goal of

Envirothon is to build a holistic environmental awareness leading to more informed leaders for the future.

Students compete for awards in three areas – written, oral and overall. This year's Written Awards were: Rossville FFA Team Hannah, 1st place; Gibson Homeschool, 2nd place and Noblesville High School, 3rd place. Oral Presentation Awards went to: Rossville FFA Team Idaho, 1st place; Rossville FFA Team Hannah, 2nd place and Gibson Homeschool, 3rd place. Overall winners were: Rossville FFA Team Hannah, 1st place; Rossville FFA Team Idaho, 2nd place and 3rd place went to Gibson Homeschool. The Rossville Team Hannah students will represent Indiana at the NCF Envirothon contest July 22 – 28th at the Idaho State University in Pocatello, Idaho.

A special thanks to the Environmental Education Association of Indiana for their sponsorship of t-shirts and to EEAI members who assisted with the state contest. EEAI was well-represented!

One Man's Perspective: Name that Tune

by Sam Carman

My columns often address serious or thought-provoking topics, but this one's just for fun. As anyone who knows me can attest, I am very interested in music and enjoy many genres. Below is a collection of 25 songs whose titles have an arboreal connection. See if you can fill in the blanks to complete the titles. All of the titles can be completed with the word “tree”, “trees”, “wood”, “woods” or “wooden”. The only exceptions are where asterisks appear in the blank. Those require the name of a specific type of tree, and the number of asterisks correspond to the number of letters. Example: ***** might be “walnut”. Some of these will be very easy, others nearly impossible unless you happen to know the song. This is a very small sampling of songs that have tree-related titles, and only a tiny fraction of the number of songs that have nature-related titles or lyrics—confirming the inspirational impact of the natural environment! Have fun!

- 1. “_____ Ships” by Crosby, Stills & Nash
- 2. “_____ and Wire” by George Jones
- 3. “_____ Song” by Indigo Girls

- 4. “Wind in the _____” by Joe Satriani
- 5. “Wild _____ Flower” by The Carter Family
- 6. “Whispering *****” by Dar Williams
- 7. “Weeping *****” by The Verve
- 8. “_____ fingers” by Radiohead
- 9. “Three _____ Crosses” by Randy Travis
- 10. “Thorn _____ in the Garden” by Derek & the Dominos
- 11. “The _____” by Rush
- 12. “The Dreaming _____” by Dave Mathews Band
- 13. “The ***** _____” by Sting
- 14. “Out of the _____” by Nickel Creek
- 15. “One _____ Hill” by U2
- 16. “Not Even the _____” by Hootie & the Blowfish
- 17. “Norwegian _____” by The Beatles
- 18. “No More Walks in the _____” by The Eagles
- 19. “Little _____ Guitar” by Sugarland
- 20. “Don’t Sit Under the ***** _____” by The Andrews Sisters
- 21. “Bare _____” by Fleetwood Mac
- 22. “Black Horse and the ***** _____” by KT Tunstall
- 23. “Boys in _____” by Carly Simon
- 24. “Carolina in the *****” by Michael Martin Murphey
- 25. “***** _____” by Kenny Chesney (this tree is NOT native to Indiana)

- ANSWERS TO NAME THAT TUNE:
1. "Wooden Ships" by Crosby, Stills & Nash
 2. "Wood and Wire" by George Jones
 3. "Wood Song" by Indigo Girls
 4. "Wind in the Trees" by Joe Satriani
 5. "Wildwood Flower" by The Carter Family
 6. "Whispering Pines" by Dar Williams
 7. "Weeping Willow" by The Verve
 8. "Treefingers" by Radiohead
 9. "Three Wooden Crosses" by Randy Travis
 10. "Thorn Tree in the Garden" by Derek & the Dominos
 11. "The Trees" by Rush
 12. "The Dreaming Tree" by Dave Matthews Band
 13. "The Cherry Tree" by Sting
 14. "Out of the Woods" by Nickel Creek
 15. "One Tree Hill" by U2
 16. "Not Even the Trees" by Hootie & the Blowfish
 17. "Norwegian Wood" by The Beatles
 18. "No More Walks in the Wood" by The Eagles
 19. "Little Wood Guitar" by Sugarland
 20. "Don't Sit Under the Apple Tree" by The Andrews Sisters
 21. "Bare Trees" by Fleetwood Mac
 22. "Black Horse and the Cherry Tree" by KT Tunstall
 23. "Boys in Trees" by Carly Simon
 24. "Carolina in the Pines" by Michael Martin Murphey
 25. "Coconut Tree" by Kenny Chesney

Have something that you would like to be included in The CREED?

The CREED is published seasonally. Submissions to CREED will be accepted at the discretion of the CREED board. Submission deadlines are the first Wednesday of March, June, September, and December. Email your articles to the EEAI secretary Sarah Wolf at swolf@hcparks.net and include "CREED submission" in the subject line.

Don't forget to register for the EEAI Conference!

Check out the website for more details! <http://www.eeai.org/2018-Conference>