

## ***Creating an iSWOOP Evening Program in Acadia National Park: A Conversation***

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Researcher: Jacquelyn Gill (paleoecologist)

Secondary Researchers: George Jacobson (paleoecologist), Stephen Norton (geochemist), Duane Braun (geologist), and Caitlin McDonough-MacKenzie (ecologist)

### ***To start, what research was Acadia National Park (Acadia) interested in exploring?***

The research the park wanted to feature or highlight was landscape succession, to give visitors a picture of how the landscape has changed since the last ice age. The park and the iSWOOP project leaders sought out Jacquelyn Gill, a paleoecologist, whose research focuses on understanding past plant communities and climate conditions through the collection and processing of sediment cores.

### ***How did you become involved in iSWOOP?***

My supervisor chose me to take part in iSWOOP. This year was my third season working at Acadia, and it seemed like a great opportunity for professional development and to continue to learn about Acadia National Park.

### ***What did you know about iSWOOP prior to working on an iSWOOP program?***

I had very little knowledge about iSWOOP prior to becoming a member of the interpretive iSWOOP team at Acadia. I had heard a little bit about the research from coworkers who were involved the previous year. When I was asked to be part of the iSWOOP team, I was interested in exploring ways to bridge the gap between current research in parks and the interpretation the public receives.

### ***What type of program did you design?***

The program that I iSWOOP-ed was an evening program. The location was the campground amphitheater. During the summer the program did not begin until 9 o'clock and would typically last anywhere from 45 minutes to an hour, utilizing the traditional evening program elements of a slide show and stationary audience. My program typically drew 50 people of all ages.

### ***What were your first impressions of the research?***

At the beginning I was apprehensive about the research for two reasons.

The first is a bit silly, but I was concerned how approachable the research was going to be to visitors. People inherently find connections to things with faces and that are living. It is harder to connect to things you cannot see like pollen and the climate 10,000 years ago.

The second concern I had was the articles assigned did not describe research taking place at Acadia or even in Maine. I started to panic a little and wondered, "What am I going to have to show or discuss that is specific to Acadia?" As an interpreter, it is important to interpret site specific information. I knew that Jacquelyn had cored in Acadia, but those results are years from being analyzed. I felt better when Dr. George Jacobson was introduced to the group and I realized that we could discuss his paleoecology research some of which had been done in Acadia National Park.

### ***After learning more about the research did your feelings change?***

Yes, my feelings changed - for the worse! Unfortunately the primary researcher, Jacquelyn Gill, was unable to attend the initial meetings and that left a void that was filled by three of her colleagues. The two days devoted to their research were overwhelming! All of a sudden we were talking about geology and phosphorus levels in lakes. I felt like I had missed the introductory course and jumped straight into an upper division seminar! I also started to think, "Paleoecology is going to be hard enough to build connections with visitors, now you are throwing in chemistry?!" All the information was said very scientifically. I was left wondering, "So what?" It made me understand why iSWOOP was here. Those researchers are incredibly knowledgeable, but they don't always make the information digestible or easy to connect with.

### ***How did you start building a program?***

Usually when I create a program, I have a general idea or theme that I am trying to convey, and I find more specific examples or information that would then support that theme. This time I was given the topic "plant succession and paleoecology" and told "now go connect visitors to that idea!" The research was interesting, but it just wasn't making my heart sing or making me excited to go and create a program.

### ***You mention struggling to come up with a central theme or a "so what", did you ever find that and if so what was that theme?***

It took some trial and error. The first theme I attempted was the history of research at Acadia National Park. Research on Mount Desert Island, where Acadia is located, spanned more than 100 years and was written into the foundation document.

That being said, the first iteration of the program focused too much on research. The program started at 9 o'clock at night and most visitors had spent the majority of their day in the park hiking and sightseeing. I would look out into the audience and see these glazed looks staring back at me half way through the program. I had jammed 13,000 years of landscape change into 40 minutes talking about geology, botany, and paleoecology. The visitors were drowned in information. After giving that program a couple times, I knew something had to change. I needed to get better audience participation and find a way to emotionally connect them to the material.

### ***How did your program change?***

After having the "ah-ha" moment that I didn't need to include everything I had learned from the iSWOOP training sessions, I was free to focus more on the story I was interested in. Although my appreciation for the research and topic of paleoecology had grown, the aspect I enjoyed most about iSWOOP was the idea of the human story in the research and how we can apply that research to better understand our role in the natural world.

The theme I ended up developing was how our interactions with these natural places can shape not only our perceptions of place, and individual lives, but also society. The research presented by the iSWOOP scientists became one tool in analyzing our relationship with Acadia and how that has changed the landscape over time. This theme was born out of the conversations I had with the scientist and visitors. Every scientist I had talked to became interested in their field through being exposed to the outdoors, whether that was hiking around in their backyards to going on a trip in college. Visitors experiences in national parks, including Acadia, varied. Some visitors were inspired to become scientists or work in the outdoors, others came for artistic inspiration, some came for the physical challenges, and others found peace or to spend time with family and friends. All these human stories can reveal what public lands provide for society. By understanding that link, we can cement connections and ultimately inspire stewardship.

This final theme allowed more room for both intellectual and emotional connections and a way for visitors to see their stories as part of the large story of Acadia National Park.

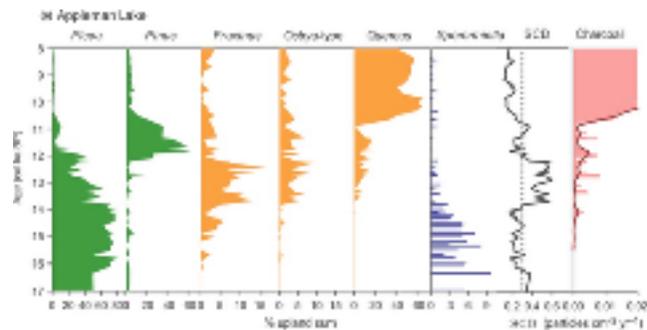


landscape. It was powerful to have research and concrete examples to that make it easier to discuss these complex ideas.

### *Did you find that the visualizations helped interpret the content?*

Absolutely! Plant succession is such an abstract concept to think about and having any sort of visual is helpful. It was also great that there were a variety of visuals from stationary images to moving illustrations and maps.

One of my favorite visuals to use was the graph of pollen data found in a sediment core. I would ask what visitors' first impression were and they ranged from laughter, to an "ugh", to some people showing excitement. It really demonstrated the different ideas and perceptions visitors had towards science. My favorite response was that it looked like a heart monitor. That statement really exemplified how pollen research shows the changes in the life of the life landscape.



### *Was there anything about the visuals that you would change?*

The fantastic thing about the iSWOOP project is that the visualization are a work in progress. The main change I suggested was that more site-specific data be represented in the charts. With this slight change, I think the visuals could better connect the audience to the material. I think it is also important to not rely completely on the visuals provided. In my first rendition of the evening program I used a lot of them. This created a bit of a problem because they are visually similar and that diluted their impact.

It would also be interesting to look into tactile props to complement the visuals. I found an old core sediment from a torn down display and started to bring it to the program. Everyone clambered to hold the "forest primeval." It was a great tool to start conversations.

### *Looking back on the season, what was the goal of your program and do you think you accomplished it?*

The goal of the program was to examine our connection with these natural spaces, to discuss how they impact our lives and ultimately how we impact them. I wanted people to think about how climate change would affect the forests of Acadia, to think about how much of human influence there is in managing these landscapes, and really inspire them to look at the forests of Acadia in a new light.

Those were pretty lofty goals and I don't think I reached all 600 people that attended my program. However a bit of science reached their vacations and hopefully they will think about the research when hiking around the park. The visitor interactions that I had after the program were amazing. In those conversations it was clear that people were intrigued and saw the park in a new way.

### *Any words of wisdom for your past self or future iSWOOP rangers?*

If I could go back to the start of the season, I would tell myself not to get overwhelmed in the amount of information. Once I started reading articles and books about forests, larger themes started to jump out that I could apply to frame the research. I think I would also tell myself that the research can be one aspect of the program; don't get consumed by it. For future iSWOOP rangers, I think the most important thing to know is you don't have to find the research itself fascinating to have a successful program that incorporates research because often times that is just one part of the story. Find that one aspect - the fit with park, a little understood part of the research process, a compelling character, something - that sparks your interest or a thought and build on that.