

Turning Camp Counselors into Nature Specialists

THE PEMI NATURE INSTRUCTION CLINIC

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INTRODUCTION

Richard Louv, in his book *Last Child in the Woods*, “links the absence of nature in the lives of today’s wired generation to some of the most disturbing childhood trends: the rise in obesity, attention disorders, and depression” (2008). While, as a physical scientist, I am naturally a bit skeptical of some of his claims, intuitively I feel that his premise is true. This is partly based on my own experience. When outdoors, in formal and informal settings, in large and small ways, we are “amazed” by nature every day. We develop a sense of wonder. It keeps us going. I’m sure you, like me, have found yourself in a place where you were uplifted, calmed, and elated all at once. We need to provide an opportunity for our campers to have these same feelings and experiences.

The Camp Pemigewasset Nature Instruction Clinic was born after an overwhelmingly positive response to a workshop I presented with former Camp Pemigewasset (Pemi) director Rob Grabill and former associate nature head Russ Brummer titled “Building a Camp Nature Program: Twelve Keys to Success.” That was at the 1992 International Camping Congress in Toronto. We have now been running this clinic for twenty-one years. It is still taught by me and Russ Brummer (now head of the science department at the New Hampton School). We have been joined by Deb Kure, current associate head of Nature Programs at Pemi and an educator with Quarrybrook Outdoor Learning Center in Windham, New Hampshire.

The clinic is specifically designed to teach “regular” camp counselors to become nature specialists. Our idea from the start was not to hand our participants a set curriculum or train them to duplicate our nature program, but rather to give them the tools that they needed to create



a science-based nature program suited to their own camp, its setting, its clientele, and its overall program structure. We hope that we can inspire you to create your own training clinic, perhaps using ours as a model, and through these clinics and their participants, we can introduce many, many more children to the pleasures and benefits of nature study.

Clinic Goals

The basic objectives of the clinic, established from the outset, were to: 1) help the participants become familiar with the flora and fauna of northern New England, 2) show them how to plan and execute lessons for teaching about nature and natural history in the outdoors, and 3) familiarize them with the resources available to help them with their teaching. These might include books, state and federal agencies (such as the U.S. Geological Survey or NASA), nonprofits (Audubon Societies), and museums or science centers. Of course, for the first of these, you could easily substitute your area (“help the participants become familiar with the flora and fauna of southern coastal California”). The clinic is very much place-based, and it needs to begin with learning about your “place.”

Beyond these goals, we want to train the participants to meet other objectives. The first is to be able to plan activities that will get the campers to look at and observe the world around them. We want to help campers “see.” This idea is stated in the mission statement for Pemi’s Nature Program (modeled after one written by Allen H. Morgan of the Massachusetts Audubon Society):

To capture the attention of the inquisitive mind, bring to it an affection for this planet and all of life, and to foster an intelligent understanding of man’s position in the natural balance of things.

We want to help campers and participants “take a closer look.” In order to do this, we lead them into nature; we don’t just talk about it. We explore our surroundings together, noticing the action of life all around us.

Second, good activities have detailed lesson plans. So, the clinic includes a discussion of these and a full day devoted to planning and executing a nature-based lesson plan. We emphasize that one of the goals of a lesson is to bring the campers to the point where they will formulate their own questions. “Why do moths fly toward light?” “Why are the leaves on the seedlings in the forest so big?” “Why can’t the piece of coal that I found in Mahoosuc Notch come from there?” Science is about questions, *not* memorization of facts. You must seek answers directly from nature and only observation of what’s “out there” can lead you to them. This gets us back to the first objective that I mentioned: getting the campers to look at and observe the world around them. If they do this, then the questions (and maybe the answers) should follow.

The Clinic Structure

We break the clinic into two halves. For the first days, we focus on natural history. We do this mostly in the field, modeling some of the teaching techniques that we’ll be talking about later and introducing the participants to the resources that we’ve used to create our lesson plans. The second half of the clinic focuses on teaching. Here, too, it is “hands-on,” as they have to create and teach an actual lesson with the rest of us acting as the “campers.” They also will create and build a display as an example of how you can teach without actually being there. Both of these activities further serve to introduce them to the area’s natural history and to the resources available to help them with their teaching.

The Clinic Schedule

Here is an example of one day’s activities, taken from last year’s schedule:

Tuesday (June 12)

Early Morning (6:30 a.m. – 7:30 a.m.)

Tweet, Tweet: Birding with Russ

Morning

Creepy Crawlies: Workshop on Insect Ecology, Collection, and Preparation

Afternoon

A Colorful Feast: Wild Foods and Natural Dyes
Field Walk and Cooking Lesson (Wild Foods)
Nature Crafts, Natural Dyes (Demonstration and Activity)

Evening

Rocks and More: Workshop on Rock and Mineral Activities, Weird Science Stargazing, Nature Drawing and Journals, and More

Students will participate in these activities.

Of course, this is only one day. The week’s pace is fast and the schedule is intense. In fact, this year’s participants nicknamed it “Nature Boot Camp.” Because the clinic takes up an entire week, it is very different from other precamp instruction clinics such as lifeguarding, archery instruction, or sailing, which last only two or three days.

I’d like to expand upon a few of the key activities we use during the clinic.

Key Activities

Sunday Evening: In the Dark

We jump right into this activity on the first evening. Nighttime can be scary or entrancing. There are new sounds and sensations, colors fade, and shapes loom out of the dark. We want kids to be comfortable in the dark and fascinated by it. This activity is a two-hour night walk. We get out the bat detector and listen to the bats use their sonar to chase a tennis ball thrown in the air or moth. We watch the female fireflies signal for mates and the males answer. Each species has its own unique “Morse code.” Some females, however, will also mimic the flashes of another species, lure the males to them, then eat them — true “femme fatales.” There is a constant chorus of frogs — at that time of year, mostly the chirps of grey tree frogs. Occasionally, there is the plucked banjo call of the green frog or the “jug-o-rum” of a bull frog. Russ imitates the call of the Barred Owl (“Who cooks for you? Who cooks for you all? Hawwwwwww, hawwww”). They are highly territorial and will call back to defend their territory. We look at the flashes generated when one bites into Wint-O-Green Lifesavers and by scratching two pieces of smoky quartz together. All of these activities can be used to safely introduce children to the wonders of nature at night.

Camp Pemigewasset, founded in 1908 and still under the same family ownership and management, is a private camp for boys ages eight to fifteen located on Lower Baker Pond in Wentworth, New Hampshire. It has four equally important program areas: athletics, nature, trips, and music and the arts.

Tuesday Afternoon: A Colorful Feast

Many children think that nature is just for nerds. What we need is a “hook” to catch them and reel them in. Two great hooks are wild foods and natural dyes. On this afternoon we do both, collecting plants to eat and collecting plants to dye wool that can then be used for weaving or other nature crafts. These can also be powerful tools to introduce children to where their food and clothing come from. For wild foods, we try to show our participants sure-fire and safe plants to use. We also try to show them how to deliver a message about how hard the Native Americans had to work to keep themselves fed. These activities could be combined with gardening or raising animals (which is done at some camps). This year, at the clinic, we had deep-fried black locust flowers, milkweed shoots, and unopened flowers (yes, you can eat milkweed if you change the water frequently while cooking it), wintergreen tea, yellow wood-sorrel, and Indian cucumber root (these last two are trailside nibbles).

Wednesday Afternoon: All Together in the Field

This is the “capstone” of the first half (the natural history half) of the clinic. We spend the entire afternoon walking the trail around Quincy Bog in Rumney, New Hampshire. The bog is formed by beavers. Their dams and lodges are clearly visible, as is their recent (the night before?) work. It is a fantastic ecosystem, and the trail moves up and down through hardwood forest and bog. There are even rock outcrops. It is a perfect summation of all we have done before; a chance to review what we’ve seen; a chance to discuss some of the teaching techniques that we have been demonstrating.

Wednesday Evening and Thursday: Putting It Together, Getting Ready, Trying It Out

Wednesday evening marks the start of the teaching part of the clinic. We introduce the participants to the concept of a lesson plan, explain why it is needed, and do a simple exercise that shows how one is written and executed. The next day (Thursday), we break the participants into four groups and ask them to plan a new lesson. The “rules” are that it must last fifty minutes; it must deal with a natural subject; it must be taught mostly outdoors; and it has to stand alone (i.e., not be part of a multiday

continued on page 30

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Turning Camp Counselors into Nature Specialists continued from page 29

series). The students also need to select an age group to which they will be teaching the lesson. The entire morning is devoted to preparing the plan. The groups have access to all of the resources in our 1,000-volume nature library, and Deb, Russ, and I circulate to answer questions and help out where we can. One of the things that we have to keep emphasizing is that games and activities must serve the objectives of the plan and not the other way around. It is very tempting to find a great game and put it first.

In the afternoon, each group teaches its plan while everyone else acts as campers. After each presentation, we ask first the teachers, then the other participants, then Deb, Russ, and I to comment on what went well and what they would do differently next time. This year, we had lessons with two different approaches to learning about leaves and trees, one about ponds and streams, and one about sensory awareness on the trail.

This last lesson had the memorable activity, “Who is a naturalist?” As the kids shouted out answers about who and what a naturalist is, one of the “instructors” was busy writing on a white board, but no one could see what she was writing. When it was revealed, the answer was “YOU!” This activity is probably the most important thing that we do. Everyone finds out how hard teaching is and how hard it is to plan and execute a lesson plan. It is a humbling experience, but the participants also finish feeling empowered because they know what to expect and what they need to do.

Thursday Evening and Friday: Teaching When You're Not There and HELP!

Because we had such a large group this year, we had our final lesson plan presentation on Thursday evening, before retiring to a well-deserved campfire and s'mores feast. On Friday morning, we repeated the exercise, but with displays. These are ways to teach when no one is there. (It's how museums work.) It is also a way to familiarize everyone with the resources that are available to them. Each group spends the morning (and part of the afternoon) working on a project that, when completed, is evaluated in the same way as the lesson plans (“What worked?” “What would you do differently?” “What

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could be improved?”). This year we had a habitat map of camp with fold-up cards that showed “what lives where,” a model bat and a model wolf spider with cards that discussed different parts and different activities, and a do-it-yourself food web game that allowed the user to connect different parts of the food web here at camp.

We finish with a brief discussion of resources available, including museums, organizations, state and federal agencies, and more. We try to make this as specific as possible based on the camps and locations that our participants come from. The last thing is filling out the evaluation form (this is where we first received the idea of expanding the clinic), the awarding of completion certificates, and hugs all around for a job well done and new friends made.

Results

The clinic has both direct and indirect benefits. Our Pemi campers benefit from it because we use it to train our own nature staff. Our regular preseason is jam-packed (as is, I’m sure, yours) with workshops on child development, training on behavior management, discussions of safety issues and risk management, and lots of work preparing camp for the campers. There is little time for in-depth discussion of specific program-teaching techniques such as we do in the clinic. I imagine that many of your staff attend other specialty clinics during the pre-preseason. You don’t expect an archery counselor, for example, to teach archery unless he or she has been properly trained (as the American Camp Association standards require). Why shouldn’t this be true for something as important as nature?

We hope that the clinic itself may serve as a model for similar clinics that could be developed elsewhere. As I said earlier, because one of the goals of the clinic is to teach participants to teach about nature *in nature*, you must know your own area. Hence, the clinic is very much place-based. So, versions need to be developed for other places besides northern New England. I hope that this article will inspire some of you to do so. This would truly spread the benefits to a much, much wider audience and help camps to deal with the unfortunate results of our detachment from nature. I, and my colleagues, stand ready and willing to help you do it.

Editor’s Note: Read about the Camp Pemigewasset Nature Instruction Clinic from a participant’s perspective on page 64.

Photos on pages 1, 26, and 27 courtesy of Camp Pemigewasset, Wentworth, New Hampshire.

Reference

Louv, R. (2008). *Last child in the woods*. Chapel Hill, North Carolina: Algonquin Books.

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