

Cedar Point Biological Station News

A Newsletter for Friends and Alumni of CPBS
Winter 2008

Directors Message

Two newsletters in one year— I think we are finally catching up! As you will read in this newsletter, this was a great year. We had an increase in enrollment and have been successful at developing some novel courses.

Undergraduate education is a prime mission for us and we have been busy working on our facilities to better accommodate students. We have upgraded the electricity and placed a motion detector light and a ceiling fan in each cabin. We have received support from the National Science Foundation and the Vice Chancellor of Academic Affairs to build a new student wash house and we are trying to come up with an affordable plan, which is turning into a much longer affair than I thought, but we should have something in place within the next year.

Currently, room and board for a three-week course is \$575 and in-state tuition is \$720, for a total of \$1,295. Non-resident tuition is \$2,135. We have a small endowment that pays for room and board for around 6 undergraduate students. I would really like to increase the number of fellowships available and include a tuition fellowship, too. If you can, please contribute on our website: <http://cedarpoint.unl.edu/alumni/>. Also, to keep costs low, in the last year, we have purchased two SUVs which seat up to nine people. Vehicles are essential for field trips, and purchasing SUVs that stay at Cedar Point is a much better economic option than rental vans. We could use one more SUV. If you have one available, or would like to contribute to the purchase of one, please contact us. And finally I wish all our users and supporters a merry Christmas and a happy new year.

Johannes (Jean) M.H. Knops



Staff

Director- Jean Knops
Interim Associate Director- Katie Potter
Facilities Manager- Roy Bailey
Head Cook/Facilities Assistant- Kathy Bailey

Courses

Once again, we offered 8 great courses this past summer. Enrollment was up— the highest since 2000! Our new course, Field Epidemiology, taught by Dr. Devin Nickol, was a success. We will be offering it again in 2009, along with another new course, Field Forensic Science, taught by Dr. David Carter. Other 2009 courses are Ornithology, General Botany, Field Animal Behavior, Ecology & Evolution, Organismic Biology and Field Parasitology. Classes are filling up fast! Check our website for more information on course offerings and instructors: <http://cedarpoint.unl.edu>

Adrian M. Srb, J. Ve Srb and Edna I. and William H. Linder Fellowships

Through the generous support of **Jozzetta Srb** and **Greg Linder**, we were once again able to offer fellowships to several bright and talented graduate and undergraduate students doing research at Cedar Point this past summer. UNL School of Biological Sciences graduate students, **Alaine Knipes, Gabe Langford and Natalie West** were recipients of the Adrian M. Srb Fellowship. The J. Ve Srb recipient was undergraduate **Ken Shum**, who continued his Western Painted Turtle research project with Dr. Larkin Powell; and graduate student, **Ian Waterman**, was the recipient of the William H. Linder Fellowship. All recipients were very grateful for the support provided by these fellowships. We look forward to the next round of proposals for the summer of 2009!



UNL School of Biological Sciences graduate students Alaine Knipes and Natalie West on a collecting trip near CPBS

Devin Nickol and Field Epidemiology

Catching insects and toads, getting dirty and having a blast while doing it— things weren't much different this past summer for Devin Nickol, M.D., than from his childhood years at Cedar Point. Well... except for this past summer he instructed a new exciting class, Field Epidemiology.

Dr. Nickol spent many childhood summers out at Cedar Point accompanying his father, parasitologist and former director of the station, Dr. Brent Nickol. From his experience at the station, he sees the value in field-based courses and knows what amazing and unique resources are available to him in Cedar Point's surrounding ecosystems. As an assistant professor in

UMNC's Internal Medicine Department, Dr. Nickol decided to take an increasingly important part of modern clinical practice, evidence-based medicine, which is difficult to learn in a traditional classroom lecture setting, and construct a new field-based course; and then, Field Epidemiology was born.

"Cedar Point offers students the opportunity to learn about the basic concepts of epidemiology by putting them into real-world practice," Dr. Nickol said. "For example, we don't just read and talk about randomized trials, we do one. We also do field-based experiments to learn about ideas like disease incidence and prevalence, test characteristics and study design. These ideas become much more meaningful when you see them in action, and it's exciting for students when they realize they can start to draw meaningful conclusions about the natural phenomena they observe."

Field Epidemiology is not a course for someone who wants to be spoon-fed the material in an air-conditioned lecture hall, but for someone who wants to learn hands-on and make the most of the resources available to them at Cedar Point. You work hard in this class, but it is worth it.

"I am approached all the time by medical students, UNMC faculty and other folks who have spent time at CPBS and look back on it as the best educational experience of their lives," Dr. Nickol said.

Field Epidemiology is ideal for students interested in medicine, public health, or research and study design.

"Students who take Field Epidemiology will have the opportunity to experience the excitement that comes with the realization that relationships they are observing, which may at first appear completely chaotic, can often be described in a logical and scientific way. This leads one to many interesting insights into the role of science and medicine in modern society," Dr. Nickol said.

Because of Dr. Nickol's thorough planning and design and a great group of students, Field Epidemiology's first run was a success.

"I was very impressed with the way last year's class was able to move beyond the simple framework of the field exercises in order to consider the fundamental questions of the

course,” Dr. Nickol said. “In several instances, class members were able to suggest a better way to demonstrate a key concept, and many of their ideas will be incorporated into the course this summer!”

There are many things Dr. Nickol is looking forward to enjoying again next summer, including the unlimited supply of breakfast sausage; but, what he is looking forward to the most is seeing what creative ideas the 2009 Field Epidemiology class will have for their projects.

“I really was blown away by some of the things people came up with last year, and I’m sure that the next class will be up to the challenge as well,” Dr. Nickol said.

Field Epidemiology is offered during the third three-week session from June 28 – July 17, 2009. Like all Cedar Point classes, it is 4 credits. You can visit Dr. Nickol’s course website for more information about the course: <http://darwin.unmc.edu/fieldepi/index.html>



Dr. Devin Nickol, TA Gabe Langford and the CPBS 2008 Field Epidemiology class

Field Forensic Science

Pig carcasses at Cedar Point? Yes, that’s true! This coming summer, we will have a new class at the station, Field Forensic Science, taught by Dr. David O. Carter from the Forensic Science Degree Program at UNL. Offered as a biology and forensic science course, the class will be four credit hours of lecture and lab, providing a course format that is very exciting to Dr. Carter, and unlike any forensic science class available at UNL.

“I am excited about moving from lecture to laboratory in the same day,” Dr. Carter said. “It will be incredible to discuss an aspect of the

study in the morning, allow the lectures to click while we are looking at carcasses in the field, and analyze our samples all in the same day. In reality, it is very similar to the briefing and debriefing of a crime scene investigation. I think that is a fun way to conduct science.”

Dr. Carter was motivated to design this course for several reasons: Forensic taphonomy is his area of research expertise and he has been eager to teach a course in it since he joined UNL in early 2006. In addition, forensic taphonomy courses are offered at very few universities, and no university offers such a course in a setting like Cedar Point.

“The opportunity to offer students an experience that they can not find anywhere else is very appealing to me,” Dr. Carter said.

A great deal of thought and preparation has been put into the design of the course. His goals for Field Forensic Science students are an improved understanding of experimental design, interpretation of data and communication of results.

“More specifically, I want students to learn how natural processes can be used in death investigations to estimate postmortem interval, determine cause and manner of death, and locate clandestine graves,” Dr. Carter said.

Dr. Carter believes that anyone with an interest in ecosystem function should take this class since little is known about the contribution that carcasses make to an ecosystem. The class will provide the opportunity to learn about terrestrial ecology in a forensic context. He also believes anyone with an interest in crime scene investigation should take this course as well.

“Fortunately, death scenes represent the minority of crime scenes. However, this means that most investigators get relatively little training in the processes of decomposition and their use in an investigation. This course can provide that,” Dr. Carter said.

Not only does the location and unique format lend itself to providing a great experience, but Dr. Carter’s enthusiasm and dedication also make the course appealing as well. Field Forensic Science will be offered in the second session from June 7 – June 26, 2009. More information

about the course can be found on the Cedar Point website.

Dr. Carter concludes, "I think Cedar Point is going to allow the students in this class to learn a great deal. Learning the fundamentals of forensic taphonomy while spending time in the field and analyzing samples will provide each student with a strong fundamental foundation that most crime scene investigators would love to have."

Rocky Mountain Conference

This fall, Cedar Point was the location for the 39th Annual Meeting of the Rocky Mountain Conference of Parasitologists, hosted by Dr. Matthew Bolek and held September 18-20, 2008. It was wonderful having a great group of parasitologists at the station. The weather was perfect and everyone had a good time! For a summary of the annual meeting, visit: http://asp.unl.edu/asp_societies/RMCP/content.html Cedar Point is a perfect location for events such as this, and we look forward to hosting similar events in the future.



Dr. Matt Bolek welcoming attendees to the 39th Annual Meeting of the Rocky Mountain Conference of Parasitologists at CPBS

Congratulations

We want to congratulate **Dr. Matthew Bolek** on his new position as Assistant Professor of Zoology at Oklahoma State University! Dr. Bolek has taught several classes at Cedar Point, including Natural History of Invertebrates, Introduction to Zoology and most recently, Organismic Biology. He is also actively conducting research on frog lung flukes at the station. We always look forward to having Dr.

Bolek at the station as an instructor and a researcher!

We would also like to congratulate **Alaine K. Knipes** and **Heather Tracy** for being awarded student awards at the Rocky Mountain Conference of Parasitologists this fall. Alaine Knipes, a graduate student in Dr. John Janovy Jr.'s lab, was awarded the Datus M. Hammond Award for Best Paper Presentation by a Graduate Student. The title of her paper was "Host specificity and differential success of *Dactylogyrus* spp. (Platyhelminthes, Monogenoidea) in Nebraska minnows: local and global implications." Alaine has spent five summers out at Cedar Point conducting research, taking classes and working as a teaching assistant.

Heather Tracy, a graduate student in Dr. Matt Bolek's lab at Oklahoma State University, was awarded the Datus M. Hammond Award for Best Poster Presentation by a Graduate Student. Her poster was titled "Helminth community structure in seven species of tadpoles from Nebraska," and her research was partly conducted at Cedar Point. Heather was a teaching assistant last summer for Organismic Biology at Cedar Point and she will return again next summer for her research and teaching.

Alumni News

We enjoy hearing from CPBS alumni! Thank you to all who have stayed in touch or recently reconnected. Here are a couple alumni updates and stories:

Jane (Palmer) Horlings attended CPBS in the late 1970s to 1980 and went on to receive her PhD in Ecology in 1986. She is teaching biology for the 16th year at Saddleback College in Orange County, CA and is still close friends with 2 other CPBS alums, Dr. Robert Schmidt and Jo Jacobson Sandelin.

"I have the fondest (and some of the silliest) memories of CPBS," Jane said. "Dr. Hergenrader teaching me to fish for trout in the spillway. That magic moment when my research subject, the long-billed marsh wrens fledged the first chick of the year. The Sip n' Sizzle. Volleyball. Getting hand-cuffed to another gal, spending all day searching for clues for the key. Being a TA for the Phycology and Limnology classes. Feeding Harry the great blue heron baby food and minnows as he was being

rehabilitated...Black fly larvae, diatoms, red-winged blackbirds.”

Jane also referred to CPBS as “a magic place that had a very significant impact on my life!”

Abby (Rogers) and **Bob Kula**, two CPBS alumni who met at the station in 1997 in Natural History of Invertebrates, also shared similar feelings saying they “often talk about how influential our experiences at CPBS were in our professional AND personal lives!”

Abby spent the summers of '97, '98 and '99 taking classes and she worked as an undergraduate for Dr. Svata Louda. She is currently working toward her PhD at the University of Maryland (after earning a Masters at Kansas State). Her husband Bob conducted independent research with Dr. Rich Clopton, and went on to complete a M.S. in Entomology at Texas A&M and a PhD at Kansas State. Bob is a Research Scientist at the USDA's Systematic Entomology Lab and is based at the Smithsonian's Natural History Museum.

Most alumni have fond stories of their summers at CPBS and would agree that CPBS was very influential in their lives as well. Send us your stories via email to cpbs2@unl.edu or to:

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Gifts to Cedar Point

Cedar Point has impacted the lives of hundreds of students since the 1970's. With rising tuition and room and board expenses, the experience is increasingly more difficult for some students to afford. Help us assure that the Cedar Point experience remains available for thousands more by considering making a contribution to the station. A gift that provides tuition or room and board coverage for students in need of assistance would be of enormous value. We would also like to share this experience with students from all over the country and beyond. A gift that provides tuition scholarships to out-of-state students would also have a significant impact. For more information on giving to Cedar Point, visit the alumni section of our website: <http://cedarpoint.unl.edu/alumni> and click on the link to the University of Nebraska Foundation; or call 402-458-1182 or toll-free 1-800-432-3216



We want to hear from you

Fill out the form to let us know what is new. Tell us what is going on with you, where are you employed, any new family additions, or even news of other alumni you may have run into recently. Send Via email (cpbs2@unl.edu) or to:

Cedar Point Biological Station
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Name _____ Address _____

E-mail address _____

What years were you at Cedar Point? _____

Which courses did you take? _____

Occupation _____ Employer _____

Comments _____

Please continue to send me a paper version of the Cedar Point News. I understand that I will be asked to make a small donation to cover printing and postage.