

PD FOR TEACHERS

Fresno Chaffee Zoo Teacher Training Workshops

Two workshops are available for teachers this summer. **Pablo Python Looks at Animals** for K to 2nd teachers and **Voyage from the Sun** for 4th to 6th grade teachers. These one-day workshops are aligned to science standards and include a behind-the-scenes opportunity and will demonstrate how to use the Zoo's animal collection to enhance your curriculum. For more information, visit <http://www.fresnochaffeezoo.com/education/schools.html>. Look for teacher workshops at your local zoo.



Grounding in Botany: Integrating Plants into the HS Science Classroom



Grounding in Botany offers high school science teachers an exciting and challenging professional development opportunity. Grounding in Botany bridges between the widely adopted Wisconsin Fast Plants program and current investigative research topics using the related species *Arabidopsis*. This four-week summer institute and five follow-up workshops hosted by the Huntington Botanical Gardens in San Marino, bolsters the professional skills of science teachers who are looking to enrich their classroom with inquiry based lessons using plants. These lessons will not only incorporate state standards for biological sciences, but expand on them, including state-of-the-art techniques and information. Participating teachers will receive \$1,500 stipends and \$500 classroom grants. For information, visit <http://www.huntington.org/Education/profdev.html>. Look for other teacher workshops at your local botanic garden.

CREEC Leadership

State Administration

Director: **Celeste Royer**
Phone: 805-782-7224
Email: croyer@slocoe.org

Admin Asst: **Linda Sorensen**
Phone: 805-782-7298
Email: lsorensen@slocoe.org

Region 1—North Coast

Coordinator: **Allison Poklemba**
Phone: 707-445-4321 ext. 104
Email: allisonp@arcatarecycling.org

Region 2—North East

Coordinator: **Dave Ewart**
Phone: 530-225-0267
Email: dewart@shastacoe.org
Coordinator: **Francesca Huntsman-Siemer**
Phone: 530-225-0111
Email: fhuntsman@shastacoe.org

Region 3—Capitol

Coordinator: **Deborah Bruns**
Phone: 530-668-3781
E-mail: bruns@ycoe.org
Coordinator: **Leslie Smith**
Phone: 530-277-4910
Email: lsmith.tls@gmail.com

Region 4—Bay Area

Coordinator: **Laura Powell**
Phone: 707-665-5505
Email: bacreec@comcast.net

Region 5—South Bay

Coordinator: **Pat Kent**
Phone: 831-479-5327
Email: pkent@santacruz.k12.ca.us
Coordinator: **Sarah Ferguson**
Phone: 831-334-0402
Email: creec@santacruz.k12.ca.us

Region 6—Delta Sierra

Coordinator: **Tricia Dunlap**
Phone: 209-238-1314
Email: tdunlap@stancoe.org

Coordinator: **Wendy Harrison**
Phone: 209-736-6009
Email: wandw1@comcast.net
Coordinator: **Conni Bock**
Phone: 209-468-9119
E-mail: cbock@sjcoe.net

Region 7—Central Valley

Coordinator: **Manuel Aquino**
Phone: 209-381-5903
Email: maquino@mcoe.org

Region 8—Central Coast

Coordinator: **Teresa Lees**
Phone: 805-782-7265
Email: tlees@slocoe.org
Coordinator: **Mary Maranville**
Phone: 805-386-4685, ext 110
Email: mary.maranville@vcred.org

Region 9A—SanDCREEC

Coordinator: **Adrienne Marriott**
Phone: 858-292-3733
Email: creec9a@hotmail.com

Region 9B—Orange County

Coordinator: **Helen de la Maza**
Phone: 714-838-8990
Email: HdelaMaza@ocde.us

Region 10—RIMS

Coordinator: **Katharine Havert**
Phone: 909-386-2797
Email: katharine_havert@sbcss.k12.ca.us
Coordinator: **Jennifer Futterman**
Phone: 909-799-7106
Email: jennifereve111@hotmail.com
Coordinator: **Aaron Walker**
Phone: 760 245-1661 ext. 6101
Email: awalker@mdaqmd.ca.gov

Region 11—Los Angeles

Coordinator: **Candice Russell**
Phone: 818-623-4876
Email: crussell@treepeople.org

CREEC Connections is a publication of the California Regional Environmental Education Community (CREEC) Network. The CREEC Network is supported by the California Department of Education in partnership with state and local agencies and organizations.



Connections

California Regional Environmental Education Community (CREEC) Network

Volume 4, Issue 3

Spring/Summer 2008

PROFESSIONAL DEVELOPMENT FOR TEACHERS



Celeste Royer
Director
CREEC Network

California educators are expected to teach a diverse student population and meet some of the highest education standards ever. This presents a constant need for continuing education in order to be well versed in numerous subject areas in addition to knowing effective strategies for working with students who are English Language Learners or have special needs. To meet the diverse and changing needs of students, teachers must participate in professional development programs.

What is Professional Development? The *Science Framework for California Public Schools* states that professional development means "a planned, collaborative, educational process of continual improvements for teachers" that helps them develop various proficiencies. These proficiencies include enhancing their capacity to help students master the standards, deepen their knowledge of the subjects, sharpen their teaching skills in the classroom, keep up with new developments in the field, and increase their ability to monitor students' work so they can provide constructive feedback to students and redirect their own teaching.

Professional development programs should be designed to provide depth and breadth of knowledge that are required to support successful standards-based teaching. The professional development of teachers is important to raise the quality of instruction and ensure that instruction is aligned with content standards and that all programs must strive for improved student achievement as the primary objective.

Many teachers receive little or no specific training in the area of environmental education however. Emphasis has been placed on the core disciplines but content specific to the environment is often set aside. We must provide teachers ways to incorporate learning about the environment with the content standards they must teach.

One way is to link environmental education workshops and institutes with the implementation of the most recently adopted science instructional materials in our classrooms. Teachers seeking workshops and seminars that support science instruction can also learn to teach students about the environment. Professional

development programs around the state recognize the challenges teachers face and are helping them meet these challenges with numerous workshops, seminars, institutes, and conferences focused on science and the environment.

In this issue of CREEC Connections, I identify several professional development programs that offer workshops and institutes this summer. These professional development programs have a strong history of providing teachers with content knowledge in science, environment, and teaching pedagogy. They offer teachers and non-formal educators with wonderful opportunities to explore and study different environments, reinforce standards-based instruction in science, and generate enthusiasm for teaching their students about the environment in their classrooms.

Teachers interested in learning about forestry and geology can attend one of several institutes including the Forestry Institute for Teachers (FIT), the Sierra Nevada Classroom Teacher Institute, and the Pacific Forest Institute. Institutes focused on marine life will be hosted by the Monterey Bay Aquarium, Lawrence Hall of Science, and the Aquarium of the Pacific.

Teachers seeking workshops in energy education, agriculture, nutrition education, plants, and animals, will also find workshops to attend. The NEED National Energy Conference will be held in Las Vegas, the National Ag in the Classroom Conference in Costa Mesa, and the Education and Agriculture Together (EAT) Foundation Ag Tour and Seminar in Hanford. The Fresno Chaffee Zoo is hosting workshops on animals and the Huntington Botanical Gardens in San Marino is hosting a plant workshop for high school teachers.

Teachers seeking quality environmental education professional development opportunities can participate in one of a number of workshops, seminars, conferences, or institutes offered by trained environmental education staff this summer. For the sake of our students and the environment, let's hope they take advantage of the professional development opportunities available. For additional resources or to find a workshop near you, visit the CREEC Network website at www.creec.org.

PROFESSIONAL DEVELOPMENT FOR TEACHERS

Forestry Institute for Teachers

The **Forestry Institute for Teachers (FIT)** is a multi-day residence workshop held at four northern California locations. The goal of FIT is to provide K-12 teachers with knowledge, skills and tools to effectively teach their students about forest ecology and forest resource management practices. The program brings together natural resource specialists and teachers from rural and urban settings for one week, working side by side to gain a deeper understanding of the intricate interrelationship of forest ecosystems and human use of natural resources. The environment becomes the basis for integrating the learning of many subject areas, including environmental science, physical science, social science, biology, forestry, and history. Each institute can accommodate 30 to 45 participants. All meals and lodging are **free**. Teachers are provided with curriculum materials and a \$200 stipend on completion and implementation of a forest related curriculum unit or project conducted in their classrooms. Spaces for the June and July 2008 sessions are still available. To enroll, visit <http://www.forestryinstitute.org>.

Sierra Nevada Classroom Teacher Institute



The **Sierra Nevada Classroom Teacher Institute** participants will settle at the Jack L. Boyd Outdoor School and explore the varied habitats of the Sierra Nevada focusing on biodiversity and climate change. Participating teachers will explore the Yosemite region with experienced guides and learn about the geology and ecology of the landscape. The California Institute for Biodiversity is excited to partner with naturalist and illustrator John Muir (Jack) Laws, the Yosemite Institute, and the California Academy of Sciences for this professional development institute. The course will integrate California science content standards for 4th through 8th grade. Two Friday to Sunday sessions will be held in July 2008. For more information or to register, visit <http://eureka.org/main/node/66>.

Pacific Forest Institute



Funded by the USDA Forest Service and William Jessup University, the **Pacific Forest Institute** exists to equip educators to learn more about our environment and Sierra forests. The institute is free and taught by experts from federal and state agencies, educators, and people from businesses and environmental organizations. Participants will learn about how natural systems, plants and animals, and people create the Sierra forest landscape. Topics include plant and animal identification, watersheds, wildfires, logging resource management issues, and curriculum design. Educators are invited to apply for the free week-long institute scheduled for July and August 2008. To enroll, visit <http://www.jessup.edu/pfi>.

NEED National Energy Conference

The **NEED National Energy Conferences** for Educators are hosted each July to train teachers to incorporate energy programs into their classroom and extracurricular activities. These five-day programs cover all aspects of energy education and offer three graduate credits to participating educators. Each conference includes a one-day field experience, allowing educators an opportunity to learn about a variety of energy topics. California educators invited to attend the conference on July 20-24, 2008 in Las Vegas. For more information or to register for the conference, visit <http://www.need.org/summertraining.php>.

National Conference for Ag in the Classroom



The **National Conference for Agriculture in the Classroom** will be held in Costa Mesa on June 25-28th. This year's theme: *The Most Bountiful Place on Earth* will provide educators with an opportunity to learn how agriculture compliments the growing emphasis on nutrition education and school gardens. For more information, visit <http://www.cfaic.org/>.

PROFESSIONAL DEVELOPMENT FOR TEACHERS

EAT Ag Tour & Seminar

E.A.T. Foundation Education & Agriculture Together Are you interested in learning about the environment through agriculture? The **Education and Agriculture Together (EAT) Foundation** is hosting several summer Ag Tours and seminars in Hanford. This three-day intensive, hands-on seminar for teachers includes a tour of processing plants, dairies and farms. There will be hands-on gardening and irrigation classes with expert speakers. For more information, visit http://www.eatfdn.org/ag_tour_and_seminar.htm.

Center for Ecoliteracy



Rethinking Food, Health and the Environment: Making Learning Connections is a residential institute for educators, parents, and activists dedicated to helping schools and districts create learning connections between healthy school food and curriculum. It will be co-presented by the Center for Ecoliteracy and Teachers College Columbia University and held in San Anselmo on June 22-27. **Environmental Sustainability: Making Learning Connections** is an institute on how to introduce sustainability into K-12 classes across the disciplines. It will also examine ways to make facilities, food service, landscaping, student gardens, and community service more environmentally sustainable. This institute is offered August 14-15 in San Francisco. For information, visit <http://www.ecoliteracy.org/seminars/index.html>.

Monterey Bay Aquarium Teacher Institutes



The Monterey Bay Aquarium offers several different institutes for teachers. The **Splash Zone Institute** is designed for K to 2nd teachers; the **Coastal Systems Teacher Institute** is designed for 3rd to 5th grade teachers; and the **Dynamic Cycles Institute** is designed for 6th to 12th grade teachers. The summer institutes are free and a stipend and credit are available. Three follow-up sessions are required. For more information or to register, visit http://www.mbayaq.org/lc/teachers_place/edu_program_workshop.asp.

MARE Summer Leadership Institute

The **Marine Activities, Resources & Education (MARE) Summer Leadership Institute** conducted by the Lawrence Hall of Science for teachers, school administrators and informal educators will be held at UC Santa Cruz from July 31st through August 8th. Daily instruction includes a fascinating array of ocean science content, hands-on activities from the MARE curriculum and leadership activities delivered by a talented group of educators, scientists, and storytellers. Instruction includes: inquiry-based science; leading effective field experiences for students; the MARE On-Line Support System; building comprehension and science content through reading; addressing the needs of English learners; and incorporating storytelling and art into your science program. Participants receive the MARE curriculum, an inquiry-driven grade-level specific, standards-based teacher's guide appropriate for all students, in addition to other high quality supplemental materials. For more information, visit <http://www.lawrencehallofscience.org/mare/profdev/summer.html>.



Boeing Teacher Institute: Exploring California Marine Life

Educators can sign up for the one week hands-on **Boeing Teacher Institute**, offered by the Aquarium of the Pacific in Long Beach, on August 25-29. Throughout the week, teachers will receive an intensive introduction to the Aquarium, marine biology and Southern California's diverse marine life, habitats and ecosystems. Guided tours, standards-based activities and field trips to such locales as Santa Catalina Island will provide teachers with an up close look at California marine life. Each teacher will also receive their own aquarium complete with filtration and a guidebook on how to incorporate aquariums into their curriculum. For K-12th grade teachers, and it's FREE! Space is limited. For information, visit <http://www.aquariumofpacific.org/education>.

