

Connecting  
People, Place  
and Community

Winter 2003-2004  
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ENVIRONMENTAL

news

Palouse - Clearwater Environmental Institute

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*Kajsa Stromberg in front of the PCEI office. Photo: PCEI.*

## PCEI welcomes new Watershed Program Coordinator

by Amanda Cronin

In October of 2003, Kajsa Stromberg joined the PCEI staff as our Watershed Program Coordinator. Kajsa replaces Amanda Cronin who has left PCEI after two years to pursue graduate studies. Currently, Kajsa is putting the finishing touches on her University of Idaho master's thesis on Northern Pikeminnow management in the Columbia Basin. Kajsa completed her undergraduate work at Kansas State University in biology, natural resources and environmental science. She has extensive experience working in natural resource issues. While in Kansas, Kajsa worked on constructed wetlands with Kansas State University. After three years in Moscow, Kajsa considers the Palouse her home. She has worked with Moscow based EcoAnalysts on water quality monitoring, The Idaho Department of Fish and Game and University Idaho Department of Fish and Wildlife. When she is not hanging out with her boyfriend Joseph and her new puppy Johnny, Kajsa enjoys reading, being outside, sitting in hot springs, playing the guitar and hanging out with her family. Kajsa is excited to begin working with you to improve the health of our watersheds. Feel free to stop by our office and say hello to Kajsa.

### PCEI Holiday wish list:

- ATV (4 wheeler)
- Garden Cart
- Work Gloves
- Raingear
- Shovels (digging spades, including kids sizes)

*If you have any of these items that you would like to donate to PCEI to help us get our work done, please give us a call!*

## Introducing the Watershed Interns!

by Sara Robson

Two interns, Tracy Brown and Dave Langill, enhanced the watershed program by coming on board late this summer. Together they support the watersheds department with a broad range of skills, both in the office and along the streambanks of the Palouse. We are delighted to work with such dedicated and capable team members.

Dave has an impressive background in watershed restoration, including experience with native riparian plants and engineering techniques. In addition to his ecological expertise, he isn't afraid of getting his hands dirty and is an extremely quick and conscientious tree planter! When not helping out the Watersheds crew, Dave is studying for a bachelor's of science degree from the University of Waterloo via correspondence. Dave and his wife Michelle (who is studying neuro-psychology at WSU) recently moved here from Coquitlam, British Columbia. The Langills enjoy dining on seafood and are avid hockey fans (aren't all Canadians hockey fans?). Dave also enjoys the gamut of outdoor recreational activities in the great Northwest - especially mountain biking and snowboarding.



*Tracy puts together blue tubes. Photo: PCEI.*

Tracy has extensive wildlife field experience and moved to Moscow from just outside Boulder, Colorado to pursue a master's degree in natural resources at the University of Idaho. Tracy joined us in part to balance out the work associated with advanced studies, and to gain experience in watershed restoration. Although Tracy maintains a busy schedule living the life of a grad student, she finds time to practice yoga and photography, and in her spare time she likes to take long walks. Her favorite foods are chocolate, coffee, and anything Italian. She and her husband, Alan, have a dream to purchase some land in Montana after completing her degree.

The PCEI Watersheds Program is fortunate to have Tracy Brown and Dave Langill. With their help we will finish our restoration work on Paradise Creek and develop a watersheds monitoring plan to help track our success. Thanks Dave and Tracy for your hard work, flexibility, and positive attitudes.

**Cover Photo:** Watershed Program Assistant, Sara Robson takes a well-deserved break in September after planting trees all day at the South Fork of the Palouse River with 200 4th grade students. Sara begins work towards her Masters degree in Rangeland Ecology at the UI starting this January. Photo: Pam Palmer.



*Dave with his shovel. Photo: PCEI.*

## The world of "E-Planes" according to Garf

by Garf Cooper

Today, energy attitudes, prices and formulas are changing. As the nation recovers from the "Blackout 2003" electric energy is on the minds of many Americans. Recently, a rapid rise in gasoline prices has fueled a renewed interest in electric powered vehicles.

For several years scientists, educators and entrepreneurs have developed some of their best ideas, resulting in some very interesting and promising projects. One such project is the E-Plane. It's now a real airplane being developed by the Foundation for Advancing Science and Technology Education (FASTec). Founded in 2000, FASTec's chief goal is to provide education and stir interest among students and the general population in pursuing careers in science and technology. The foundation supports the exploration and application of emerging technologies, especially alternate energy technology (such as fuel cells) for all types of transportation vehicles. FASTec is funding the development of the world's first fuel cell and electric-powered airplane, with special funding from NASA, under the revolutionary Aero Propulsion Concepts Program.

The Electric Airplane, or E-Plane, is a modified design of an all-carbon 2-place French-built DynAero Lafayette III aircraft, donated by American Ghiles Aircraft of Deland, Florida. The plane is currently powered by an advanced Unique Mobility (UQM) Brushless DC 100HP electric motor. Advanced high energy, rechargeable batteries provide electric energy. Future planned program phases will integrate an onboard electrical generating power source provided by a Proton Exchange Membrane (PEM) type Hydrogen Fuel Cell. There will be three flight development stages. First, the plane will be equipped with and flown on batteries to test the basic electric propulsion system. It will have a very limited range. Next, it will be modified with two 10KW PEM fuel cells, augmented by rechargeable batteries for take-off, thus increasing the operating range to about 250 nautical miles. In its final form, it will fly principally on the electrical power generated by a 60-75KW fuel cell with an approximate range of 500 miles.

The E-plane project is primarily staffed by an enthusiastic group of volunteers and engineering students. This past July at the Experimental Aircraft Association (EAA) gathering in Oshkosh, WI, the FASTec Foundation volunteers spent a week conducting briefings and demonstrations, and educating the public on the E-plane project.

The exciting possibilities presented by the E-plane have also attracted several notable professionals to the team. They provide critical test pilot skills, adding experience and credibility to the team. The test pilots for the project are a trio of aerospace stars, including Robert L. "Hoot" Gibson, former space shuttle astronaut and "Top Gun" fighter pilot in Southeast Asia who holds the world record for altitude in horizontal flight for a Class 1A aircraft, as well as a record for time-to-climb to 9000 meters; Bruce Bohannon, holder of virtually all piston engine time-to-climb and absolute altitude records in the Exxon "Flying Tiger"; and Wayne Handley, former Naval aviator and aerobatic champion who in 1989 became the world record holder for inverted flat spins, having done 67 consecutive turns.

For more info, contact James. P. Dunn, Executive Director of FASTec, President of Advanced Technology Products, at ATP, 100 Grove St., Worcester, MA 01605; E-mail: <jdunn@ctc.org>; Phone: 508-560-9421.

*Garf Cooper, is a Lockheed Martin Systems Engineering Manager, an E-plane volunteer, Flight Test Plan coordinator, and the father of PCEI AmeriCorps member, Tiffany Cooper.*



*Winners of the NASA Electric Aircraft Design Oshkosh WI, EAA air show, July 2002. Photos, Jim Dunn and the FASTec team.*

This newsletter (ISSN# 1087-9374) is published quarterly by the Palouse-Clearwater Environmental Institute (PCEI). 3rd Class postage paid in Moscow, ID. The Mission of PCEI is to increase citizen involvement in decisions that affect our regional environment. Through community organizing and education, we strive to enable members of our community to find effective and sustainable solutions to local and regional environmental problems. PCEI is a non-profit organization. Donations are tax deductible. Articles for publication and letters to the editor are welcome and must include the name and address of the author. Opinions expressed in the newsletter are those of individual authors and not necessarily those of PCEI.

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People interested in being on our mailing list should join PCEI (see page 7).

This newsletter is printed on 100% recycled paper with 30% post-consumer content.



*The Electric Airplane, or E-Plane*

# A photographic tale of the 3rd Annual Watershed Festival

by Tiffany Cooper

All was quiet on this unusually warm September morning at the South Fork of the Palouse River. Some refer to it as the calm before the storm. Before we knew it, the festival was in full swing with nearly 200 Moscow 4th graders from Lena Whitmore, McDonald and Russell Elementary Schools. It was a day of outside learning that we will never forget.....Check out these great pictures!



*Talk about hands-on wildlife!*



*Look, a giant water bug!*



*Palouse ground water is interesting to learn about.*



*Restoring native habitat with sweat and determination.*



*Painting outside makes me feel more creative.*

## PCEI welcomes two new LCSC AmeriCorps Members

by Aly Bean

Lewis-Clark Service Corps (LCSC) serves Idaho in conjunction with the AmeriCorps Program. Their mission is to improve school success for 'at risk' Idaho students, assisting teachers, students and their families. We are pleased to welcome both our new LCSC AmeriCorps members, Jake Smulkowski and Aly Bean, as well as recognize our returning environmental educator, Tiffany Cooper.

Jake grew up in the Puget Sound area, but fell in love with the Palouse during his stay at Washington State University, where he received his B.S. in wildland recreation. While pursuing his M.S. through the Department of Resource Recreation and Tourism at the University of Idaho, Jake has researched environmental education projects and wilderness therapy programs for adjudicated youth. He directed a summer camp in the Sierra Nevada for the past several summers and is passionate about working with children. Jake has



*Jake Smulkowski (second from right) sits with students by a stream at the McCall Outdoor Science School. Photo: PCEI.*

worked with the McCall Outdoor Science School (MOSS) since its inception in 2001. When not working or actively participating in college football games (by screaming at the television), Jake is backpacking, fly-fishing, or strumming his guitar.

Lewis-Clark Service Corps member Aly Bean is a 26 year-old Colorado native with a B.A. in political science. Studying in Durango, Colorado increased her passion for the outdoors. This enthusiasm led her to the Pacific Northwest and Alaska, where she served as a youth corps project leader for adjudicated youth. While spending a total of 39 weeks in the backcountry, she worked on myriad projects including trail construction and maintenance, outdoor education, on-site job training, community living, and backcountry skills. She will be an asset to our education program at PCEI, sharing her love for the outdoors and its mysteries with local students.



*Aly carries a load of blue tubes during one planting project this fall. Photo: PCEI.*

Tiffany Cooper is a second year AmeriCorps member. For those of you who have not had the opportunity to meet Tiffany, she is an integral part of PCEI's education program. She moved here from upstate New York. Tif graduated with a B.S. in geo-science from Middle Tennessee State University in 1998 and later with a M.S. in environmental education and outdoor recreation from the State University of New York in Cortland. Since then, she has been teaching kids and adults about the natural world. She loves to be outside, to inspire people, big and small, and to do great things for the earth! As an AmeriCorps member, Tif enjoys a positive effect on all the students she teaches and the greater Palouse community.



### PCEI Education committee needs you!

Would you like to help connect children to their local natural environment? PCEI's education staff already offers more than 32 different environmental education programs to school-children. If you would like to offer more children the opportunity to dissect owl pellets, study the water quality of Paradise Creek and practice math skills while learning how to use forestry tools, join the PCEI education committee. Email your interest to Greg Fizzell at <fizzell@pcei.org>.

## McCall Outdoor Science School Extends its Reach in 2003

by Greg Fizzell

Efforts to develop Idaho's first public, year-round residential science school continued this fall as 450 5th-8th grade students spent 3-5 days each on the University of Idaho's McCall Field Campus learning ecosystem science. The McCall Outdoor Science School (MOSS) is a collaborative effort between PCEI, the Idaho State Department of Parks and Recreation, and the UI Colleges of Education and Natural Resources. For a comprehensive list of our partners, please visit <[www.pcei.org/education/moss.htm](http://www.pcei.org/education/moss.htm)>

Schools participating in MOSS this fall included:

- Pocatello Community Charter School
- Rose Hill Montessori School, Boise
- Kamiah Elementary
- Clearwater Valley Elementary, Kooskia
- Elk City School
- Moscow Charter School
- St. Marys School, Moscow
- St. Stans School, Lewiston
- McDonald Elementary, Moscow
- Lena Whitmore Elementary, Moscow
- Highlands Elementary, Boise
- ANSER Charter School, Boise
- Amity Elementary, Boise

The program will also graduate its first cohort of eight graduate student field instructors. The Graduate Teaching Practicum in Environmental Education and Natural Science is a one semester training program for natural resource, education, or environmental science majors. Its major components include a

teaching practicum in field science education, graduate level courses in the natural sciences and education, training in outdoor leadership, and hands-on experience in non-profit administration. We are currently recruiting for the class of 2004! For more information on the MOSS Graduate Teaching Practicum, please visit <[www.pcei.org/education/mossgrad.htm](http://www.pcei.org/education/mossgrad.htm)>



*Students practice their observation skills at MOSS. Photo: PCEI.*



*Much of the students' day is spent outside learning about their surroundings. Photo: PCEI.*

Recently acquired funding from the EPA's National Environmental Education Grant Program allows MOSS to continue at the same level in the fall 2004.

For more information, please contact Greg Fizzell, MOSS Program Director, at 882-1444 or <[fizzell@pcei.org](mailto:fizzell@pcei.org)>.



## A PCEI Primer - Environmental Leadership

by Laurie Gardes

PCEI board and staff are involved in many community outreach activities. Our role as environmental leaders extends beyond our work directly with PCEI. Each board and staff member indirectly represents PCEI and furthers our mission of involving citizens in local environmental issues, in the many ways we interact in our community and the outside world. Some of our outside work relates directly to PCEI projects, some of it does not. A recent issue of *Environmental News* outlined some activities of the PCEI staff. Below is a list of some of the many places where our board members are involved. For more information on our board and staff visit our web page at <[www.pcei.com](http://www.pcei.com)>.

**Mary Silvernale Shook**, PCEI Board President  
Member Fundraising Committee, Moscow Parent-Toddler Cooperative  
Publicity Chair, Palouse Patchers, Quilt Show  
Web Master, Palouse Patchers  
Volunteer, P.S. I Love You

**Theo Mbabaliye**, PCEI Board Vice-President  
PhD Candidate, Washington State University

**Shelly Gilmore**, PCEI Board Treasurer  
Principal Consultant, Resource Planning Unlimited  
Member, Society of Wetland Scientists  
Member, Soil and Water Conservation Society  
Member, International Erosion Control Association

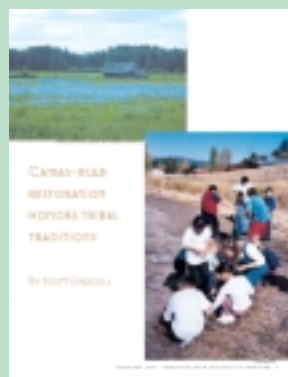
**Rosemary Streatfeild**, PCEI Board Secretary  
Science Librarian & Map Coordinator, WSU Owen  
Science & Engineering Library  
Member, WSU Arboretum Committee

**Ivar Nelson**, PCEI Board Member  
Director, University of Idaho Press  
Chair, Kenworthy Performing Arts Centre Board  
Board Member, Latah/Moscow Economic Development Council

**Nick Gier**, PCEI Board Member  
University of Idaho Philosophy Department, retired  
Member, Latah Human Rights Task Force  
Member, American Academy of Religion  
Member, American Philosophical Association  
Member, Society for Asian and Comparative Philosophy  
Member, International Chinese Philosophical Association

**John Larkin**, PCEI Board Member  
President, Machine Language Inc.  
Secretary of RDesign Inc.  
Board member, TechHelp (a Boise State University-based manufacturing outreach program designed to assist Idaho manufacturers with product development)  
Professional member, IDSA, Industrial Designers Society of America

**Renee McNally**, PCEI Board Member  
2nd grade teacher, Lena Whitmore School  
Member, Palouse Peace Coalition  
Member, Moscow Food Co-op Education Committee  
Member, Moscow School District Science Curriculum Committee  
Master's Degree Student, UI College of Education



*The PCEI Camas Project was featured in the November issue of the Horizon Air in-flight magazine. You can download and read the article at <[www.pcei.org](http://www.pcei.org)>.*

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- Please contact me about volunteering  
 Please keep my membership anonymous  
 \$35 Basic Membership  
 \$75 Palouse Protector  
 \$150 Friends of the Palouse-Clearwater  
 \$15 Limited income/Student  
 Additional gift of \$ \_\_\_\_\_

Please direct my gift to the following program:

- Environmental Education  
 Community Garden  
 Watersheds  
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**Mail to:** PCEI POBox 8596 Moscow, ID 83843

**Patrick Vaughan**, PCEI Board Member  
Advisory Board, Moscow-Pullman Daily News  
Volunteer Writer, Moscow Food Co-op  
Community Newsletter

**Michelle Hazen**, PCEI Board Member  
Student, University of Idaho  
Baker, Moscow Food Co-op  
Outreach Coordinator, Friends of the  
Clearwater  
Co-leader, Justice Alliance, University of Idaho  
Volunteer DJ, KUOI  
Member, FLAME (Feminist-Led Activist  
Movement to Empower), UI

## UI Environmental Club needs your support!

by Erin Manderville, ASUI Director of Environmental Responsibility

As a student at the University of Idaho, I'm here to tell you that the UI Environmental Club has projects and ideas up to its eyeballs, and we need the support of our community! The Environmental Club, or E-Club, has many ideas to make our campus more environmentally sound, but we have few members; we need active students and community members to participate in the projects. That's where you come in. Although you may not have time to attend meetings, we would appreciate support and guidance as we move forward on many important and exciting projects.

**Energy conservation:** We map locations of incandescent bulbs in campus buildings. UI Facilities then changes the bulbs to energy-efficient fluorescent bulbs. Light bulb surveying meets every Wednesday, 10:30 am, in Morrill Hall room 202.

**Water conservation:** E-Club plans to coordinate with the Moscow Water Department and campus residents to replace all inefficient water devices on campus with water saving sink aerators and low flow showerheads.

**Recycling:** Volunteers are needed to pick up recycling in the dorms and at fraternities and sororities during the week. E-Club is working to get efficient recycling stations in dorms, campus buildings and at sporting events. Interested? Contact Lucas Littlefield at <lucasl@sub.uidaho.edu>.

**Organic Coffee:** E-Club is circulating a petition to have only organic, fair trade, shade grown coffee in all the coffee shops on campus. Interested? Contact Marysue Crawford at <craw4374@uidaho.edu>.

If you are interested in environmental issues on campus, check out an Environmental Club meeting and/or sign up on our mailing list. We meet Mondays at 5 p.m. in Morrill Hall, room 202. Everyone is welcome. To join the University of Idaho Environmental Club's mailing list and receive minutes and updates, visit <www.lists.uidaho.edu/mailman/listinfo/uiiec>.



*UI E-Club distributing information at the UI commons building. Photo: Erin Manderville.*

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- Choices in Community Giving
- Washington Environmental Council
- United Vision for Idaho
- Western Sustainable Agriculture Working Group
- River Network

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