

## Wisconsin Environmental Science Teacher Network Newsletter May 2009

It is a busy time of year but there are many great opportunities for you and your students in the coming months. Take a few moments to browse the listings below so you don't miss out. I hope to see you this summer at the Wisconsin Environmental Science Teacher Summit August 17-18.

~ Sunshine Buchholz, Network Coordinator ([www.uwsp.edu/cnr/wcee/envsci](http://www.uwsp.edu/cnr/wcee/envsci); [sbuchhol@uwsp.edu](mailto:sbuchhol@uwsp.edu))

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### 2009 Wisconsin Environmental Science Teacher Summit – August 17-18, 2009

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Back by popular demand, this year's Summit will focus on *Field Techniques and Classroom Enhancements*. The 2009 Wisconsin Environmental Science Teacher Summit is your opportunity to network and expand your teaching repertoire in a relaxed environment with like-minded teachers. Enjoy the forested setting on Sunset Lake at the Central Wisconsin Environmental Station in Amherst Junction, WI. Day one will focus on field experiences including a guided canoe exploration, naturalist-led hike, forestry sessions, pond mucking, and wildlife tracking. Day two includes keynote speaker Stanley Temple and workshops on biofuels and sustainability. Register by July 6 for great rates - \$25 for one day or \$40 for both. Graduate credit is available. Lodging and meals provided onsite at reasonable prices. Full information:

[www.uwsp.edu/cnr/wcee/envsci/summit](http://www.uwsp.edu/cnr/wcee/envsci/summit)

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#### News

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**1) Gibraltar Teacher Named Conservation Educator of the Year**

David Tupa, science teacher at Gibraltar High School in Fish Creek, has been named the 2009 Conservation Educator of the Year by the Wisconsin Conservation Congress. Tupa teaches environmental science, biology, human anatomy, forensic science and earth science at Gibraltar, where he has worked since 1996. Over the years, his students have built and installed bird nest boxes, assisted the Wisconsin Department of Natural Resources in salmon egg harvesting, participated in bird counts, and written letters to the U.S. Department of Agriculture Wildlife Services. Full press release: [www.uwsp.edu/cnr/wcee/envsci/pdf/News/TupaPressRelease05009.pdf](http://www.uwsp.edu/cnr/wcee/envsci/pdf/News/TupaPressRelease05009.pdf)

**2) Middleton High School Students Win Wisconsin Envirothon**

Twelve high school teams competed in the 2009 Wisconsin Envirothon on Friday, April 24, 2009 at the Wisconsin Lions Camp in Rosholt, Wisconsin. The theme for this year's Wisconsin Envirothon was Biodiversity in a Changing World. Congratulations to the first place winners from Middleton High School. They will compete in the Canon Envirothon at the University of North Carolina in Ashville, North Carolina on August 2-8, 2009. For information about the Wisconsin Envirothon visit: <http://wlwca.org/Pages/EnvirothonInfo.htm>

**3) Sea level rise could bust IPCC estimate**

March, 2009. Sea level rises could bust official estimates – that's the first big message to come from the climate change congress in Copenhagen, Denmark. Researchers presented evidence that Greenland and Antarctica are losing ice fast, contributing to the annual sea-level rise. By 2100, sea levels could be 1 meter or more above current levels. It looks increasingly unlikely that the rise will be much less than 50 centimeters. In 2007, the Intergovernmental Panel on Climate Change forecast a rise of 18 cm to 59 cm by 2100. But the numbers came with a heavy caveat that often went unnoticed by the popular press. Full article: [www.newscientist.com/article/dn16732-greenland-and-antarctica-meltingfaster-than-forecasts.html?DCMP=OTC-rss&nsref=climate-change](http://www.newscientist.com/article/dn16732-greenland-and-antarctica-meltingfaster-than-forecasts.html?DCMP=OTC-rss&nsref=climate-change)

**4) Regrowing Forests Could Provide Climate Change Help (Wisconsin)**

April 2009. Temperate forests in eastern North America are storing only part of their historic carbon sequestration potential, according to ecologists at McGill University and the University of Wisconsin. As North American settlers moved west in the early 19th century, they cleared land for timber and agriculture, producing a third of the net carbon dioxide emissions since 1850, the researchers write. But as farms were abandoned and forests were allowed to regrow, the trees began sequestering more carbon, Rhemtulla said. "Ecosystems provide all sorts of services, and this is a service that is often overlooked. It's an invisible thing that's happening with a great benefit that isn't always factored into decision-making." Full article: [www.scientificamerican.com/article.cfm?id=regrowing-forests-helps-climate](http://www.scientificamerican.com/article.cfm?id=regrowing-forests-helps-climate)

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**Events**

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**5) Focus on Climate Change in Wisconsin Workshop – June 16, 2009**

Location: Aldo Leopold Nature Center, Monona, WI; 9:00 am – 3:00 pm. This workshop, designed for 7th - 12th grade educators, will provide participants with the fundamental knowledge to help students understand and address the central concepts of climate change. Educators will receive the brand new curriculum Climate Change: A Wisconsin Activity Guide developed by the Wisconsin Department of Natural Resources. Designed to teach students about how climate change affects all of us in Wisconsin, it includes twelve engaging activities suitable for classes in English and language arts, environmental education, math, science, art, and social studies. **Registration deadline: Tuesday, June 9, 2009.** Fee: \$15/person (lunch included). For more information: [www.naturenet.com/alnc/workshopsretreats.htm](http://www.naturenet.com/alnc/workshopsretreats.htm)

**6) LEAF 2009 Annual Field Day – June 17, 2009**

You are invited to join Wisconsin's K-12 Forestry Education Program to explore three exceptional outdoor classrooms. The day runs from 9 am to 4 pm and begins at Boston School Forest, Stevens Point, WI. LEAF's Annual Field Day is an opportunity meet others who share your commitment to environmental education and using forests as outdoor classrooms. Whether you spend time teaching

outdoors every day, or just once or twice a year, Field Day is a wonderful opportunity to share your experiences and learn more from your peers. The field day is free of charge and includes lunch and free resources. Please RSVP to Chris Kuntz at [ckuntz@uwsp.edu](mailto:ckuntz@uwsp.edu) or 715-346-4956 by **May 28th**.

**7) 20<sup>th</sup> Annual Energy Fair – June 19-21, 2009**

Location: ReNew the Earth Institute, Midwest Renewable Energy Association, Custer, WI. Each summer the Energy Fair transforms rural Custer, WI into the global hot spot for renewable energy education. The Energy Fair is the world's largest renewable energy, energy efficiency, and sustainable living educational event of its kind. The Energy Fair features hundreds of workshops and exhibits all emphasizing clean energy & sustainable living and is fun for the whole family. In 2008, the Energy Fair hosted over 22,500 attendees. The Wisconsin K-12 Energy Education Program (KEEP) hosts Educator Resource and Workshop Tents. For more information visit: [www.the-mrea.org/energy\\_fair.php](http://www.the-mrea.org/energy_fair.php)

**8) The Midwest Regional Collaborative for Sustainability Education Workshop - June 22-26, 2009**

The goal of this workshop is to create a space where people who have a shared interest in community-based sustainability initiatives can collaborate over an extended period to share ideas, find solutions, build innovations, and take action. Attend this workshop to learn from others' experiences, share your own expertise, discover the power of systems thinking, explore transformative learning techniques, find a team of co-collaborators, and help us build a lasting learning community for sustainability education. Held at Northland College in Ashland, Wisconsin. More information: [www.mrcse.org/](http://www.mrcse.org/)

**9) The Leopold Education Project National Conference - June 25 - 27, 2009**

Explore The Community Concept: Strengthening our Human and Ecological Communities through Conservation Education at the Leopold Center, Baraboo, WI. The conference focuses on teaching skills for formal and non-formal environmental educators and methods for incorporating the thinking of Aldo Leopold, including the concepts of a land ethic and land health, into educational programs and discussions. This conference will offer new skills to develop and lead conservation and environmental education projects in your home community. Sessions will inspire attendees with success stories of projects that creatively link individuals and their natural communities to benefit both. They will also provide participants with practical skills to take home. Registration: \$300 regular; \$175 one - day; \$30 - \$60 for pre - conference workshops. For more information visit: [www.aldoleopold.org/lep](http://www.aldoleopold.org/lep) or call 608.355.0279.

**10) Carbon Cycle and Climate Modeling Teacher Workshop – July 14-16, 2009**

Where: Atmospheric, Oceanic and Space Science building, UW-Madison campus. Compensation includes lunches, overnight lodging for educators from outside of Dane County, and \$100.00 tuition-offset stipends for educators opting to earn college credit. This workshop will provide an overview of climate mechanisms and global climate change, with a particular focus on the carbon cycle. Expert presentations, group discussions and interactive computer training, including classroom applications of the EdGCM (Educational Global Climate Model) will be central activities in this 2.5 day workshop. Participating teachers will develop the skills and knowledge necessary to incorporate carbon cycle and climate modeling tools into their classrooms while simultaneously deepening their overall comprehension of climate system science. Cost: \$25.00 non-refundable registration fee for all participants. **Applications due by May 29.** More information: <http://cimss.ssec.wisc.edu/teacherworkshop/CC&CMworkshop09.pdf>

**11) Forestry Education in the WI K-12 Classroom Workshop with Outdoor Activities – August 10-11, 2009**

Location: Maywood Environmental Park - Sheboygan, WI. Eager to teach your students the critical thinking skills they need using a topic that relates to the world right outside their door? If you are interested in helping K-12 students understand the incredible value of Wisconsin's forests, both urban and rural, LEAF's classroom-based workshop offers you this opportunity. The workshop teaches you key principles, activities and techniques to easily integrate forestry education into your classroom. Cost: \$25. Workshop may be taken for 1 graduate credit as NRES 740 for only \$100. **Registration deadline: July 27, 2009.** More information: [www.uwsp.edu/cnr/leaf/Adobe/740/MaywoodNR740Sm09.pdf](http://www.uwsp.edu/cnr/leaf/Adobe/740/MaywoodNR740Sm09.pdf)

**12) Summer Institute for Climate Change Education – August, 19, 2009**

The Will Steger Foundation presents the fourth annual conference for educators at the University of Minnesota Twin Cities or online via webinar. The 2009 Summer Institute invites 100 teachers experience a full day of interactive exploration of international climate solutions and related curriculum. Keynote presentations from renowned author and environmentalist, Bill McKibben, and polar explorer Will Steger on the critical need for international cooperation on climate change solutions. Curriculum for 9-12 grade students provided. The cost is only \$75.00 per person, \$100.00 per pair of educators from the same school/district, to attend the Summer Institute in person or \$25.00 per person to attend the Summer Institute via online webinar. More information:

[www.globalwarming101.com/images/stories/education/si2009/SI2009\\_Application\\_May0409.pdf](http://www.globalwarming101.com/images/stories/education/si2009/SI2009_Application_May0409.pdf)

**13) 2009 High School Conference on the Environment – November 18, 2009**

Mark your calendars and start making plans to attend the 2009 High School Conference on the Environment with your students on November 18, 2009 at UW-Stevens Point. This year's theme is *Our Changing Forests: Challenges and Opportunities for Wisconsin's Students*. This fun conference will showcase what students throughout the state are doing to sustain Wisconsin's forests. Students will learn about issues affecting Wisconsin's forests, opportunities to address these challenges, and forest-related careers. They will develop personal, class, and community action plans to help sustain Wisconsin's forests. Learn more: [www.uwsp.edu/cnr/wcee/youthconference](http://www.uwsp.edu/cnr/wcee/youthconference)

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**Opportunities**

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**14) 2009 Classroom Earth Professional Development Grants**

Classroom Earth Professional Development grants are designed to support teachers new to the field of environmental education who want to increase the environmental literacy of their students. Twenty grant awardees will be chosen receive \$1,500 grants to take two graduate level courses online offered by University of Wisconsin Stevens Point's Environmental Education and Training Partnership. The Fundamentals of Environmental Education will occur in the fall of the 2009 and Making Environmental Education Relevant for Culturally Diverse Audiences will occur in the spring of 2010. Applications due **June 12, 2009**. More information: [www.classroomearth.org/professional-development-grant-2009](http://www.classroomearth.org/professional-development-grant-2009)

**15) Renewable Energy Academy for High School Students**

Midstate Technical College in Wisconsin Rapids is offering high school students an opportunity to explore the fundamental design, operation, maintenance and installation techniques to work with renewable technologies. Students will receive one MSTC college credit for participating Wednesday – Friday, June 17-19, 2009 from 9 am – 3 pm. Topics include biofuels, personal energy efficiency, renewable electricity, solar water heating, and a trip to the MREA Energy Fair in Custer, WI. There is no cost to students and lunch is provided! Registration due June 12. More information:

[eeinwisconsin.org/net/calendar/details.aspx?c=2490423&s=82736.0.0.2209](http://eeinwisconsin.org/net/calendar/details.aspx?c=2490423&s=82736.0.0.2209)

**16) Student Presenters Sought for 2009 High School Conference on the Environment – Proposals due June 17, 2009**

Here is a great opportunity for high school students to present about forestry projects they have conducted at the 2009 High School Conference on the Environment. The conference will be November 18, 2009 at UW-Stevens Point. The theme for this year's conference is *Our Changing Forests: Challenges and Opportunities for Wisconsin Students*. Projects can be part of class work, independent research, or club activities. Forestry projects include experiments, research, and community action plans. The goal is to showcase to other students around the state the various types of projects that are being done. More information about the event and a presenter form can be found at:

[www.uwsp.edu/cnr/wcee/youthconference](http://www.uwsp.edu/cnr/wcee/youthconference)

**17) Special Teacher Prices on the S/V Denis Sullivan – August 11, 2009**

Enjoy Lake Michigan from the deck of a re-created 19th century three-masted Great Lakes schooner as you experience the S/V Denis Sullivan at Discovery World in Milwaukee. The Denis Sullivan is an educational sailing vessel connecting learners of all ages to the Great Lakes, oceans and our world of water through experiential learning and technology. A special showcase of the ship's educational features will be offered to teachers for only \$25. More information:

<http://eeinwisconsin.org/net/calendar/details.aspx?s=82543.0.0.2209>

**18) Teachers Needed to Field Test Biocomplexity Units – Fall 2009**

TERC, a not for profit education research and development center in Cambridge MA, is seeking high school science teachers to field test at least one of its Biocomplexity and the Habitable Planet curriculum during the fall 2009 school semester. Biocomplexity is an innovative 11th-12th grade capstone course in Ecosystem and Environmental Science. There are three units of 6-8 weeks each that focus on: (i) The Arctic - explore evidence of rapid impacts of climate change on Arctic species, make forecasts and recommend conservation strategies for these species. (ii) Amazonia - analyze patterns of deforestation, explore the economic ecology of ranching, farming and forestry, and propose conservation strategies such as carbon trading, ecosystem service payments, establishment of parks, and reforestation. (iii) Suburban sprawl and agriculture - explore the impact of habitat fragmentation on biodiversity, carbon flow, social factors and ecosystem subsidies as they consider the proposed conversion of farmland to suburban housing. Support materials and stipend provided. More information: <http://eeinwisconsin.org/resource/about.aspx?s=82835.0.0.2209>

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**Resources**

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**19) Rise and Fall of the Great Lakes Video**

Enjoy this modern media revival of a classic favorite (in 2 parts) on YouTube at [www.youtube.com/watch?v=3nYy\\_UciBy0](http://www.youtube.com/watch?v=3nYy_UciBy0). Both a documentary and a comedy. It features a man on a canoe tour of the Great Lakes while the geological time frame changes around him. He finds himself atop the great glacier, and then suddenly falling from the sky as it is removed. His canoe teeters from a cliff after the shoreline vanishes. He sips pure water from the lake as it suddenly changes to a modern polluted state.

**20) Energy in Brief – What everyone should know about energy**

Energy in Briefs explain important energy topics in plain language. Each Brief answers a question relevant to the public and recommends resources for further reading. Explore topics such as biofuels, renewable energy, foreign oil dependence, and natural gas. Resources include statistics and charts/graphs. Check out the renewable energy section for a slide show with audio. [http://tonto.eia.doe.gov/energy\\_in\\_brief/index.cfm](http://tonto.eia.doe.gov/energy_in_brief/index.cfm)

**21) Free Climate Change DVD**

The University of Colorado CIRES Education and Outreach group is offering this free educational DVD about climate change and its effects on polar regions. Polar Visions is an exciting, visually stunning film by Ryan Vachon, about the causes and effects of climate change in polar regions. The film contains seven stand-alone segments appropriate for use in all kinds of science classrooms and informal settings from the middle level through college, and was developed to align with the National Science Education Standards across all science subjects. To obtain copies and standards alignment information, email Tina Arthur at [tina.arthur@colorado.edu](mailto:tina.arthur@colorado.edu) with your: Full Name, Work Title, Employer/Program, Grade Level(s), # of copies requested, Email Address, Full mailing Address.

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This email was generated by the Wisconsin Environmental Science Teacher Network at UW-Stevens Point.

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