

2nd Annual DAEE Conference

February 26, 2011

St. Thomas More Preparatory School

Magnolia, Delaware

“Environmental Education in a Changing Climate”



Delaware Association for Environmental Education promotes environmental and outdoor education to facilitate positive community impact on the conservation and sustainability of Delaware's resources.



“Environmental Education in a Changing Climate” Conference Exhibitors

Delaware Forest Service/Project Learning Tree
Delaware State University, Claude E. Phillips Herbarium
DuPont Nature Center/Jr. Duck Stamp Program
Delaware State Parks
Delaware Sea Grant
Coastal Delaware National Wildlife Refuge Complex – Bombay Hook and Prime Hook National Wildlife Refuges
University of Delaware Cooperative Extension - Renewable Resources Program
Delaware Center for the Inland Bays
Delaware National Estuarine Research Reserve
New Castle Conservation District
Partnership for the Delaware Estuary
Delaware Envirothon
Delaware State Parks AmeriCorps Program
Delaware Adopt-a-Wetland Program
Alaska Wilderness League
Delaware Wetlands Restoration

“Environmental Education in a Changing Climate” Conference Sponsors

Delaware Division of Fish and Wildlife
Delaware State Forest Service
Friends of the DuPont Nature Center
New Castle Conservation District
U.S. Fish and Wildlife Service, Delaware Bay Estuary Project Office
University of Delaware, Cooperative Extension – Renewable Resources Program

Thanks to the Conference Planning Committee!

The Delaware Association for Environmental Education (DAEE) began with the first focus group meeting April 29, 2008. With input gathered from several focus group meetings, a strategic planning workshop was held June 1, 2009. Officers were elected February, 2009 and the DAEE’s first Open House was held on August 12, 2009. In 2010, DAEE sponsored their first conference, a “Coding to State Standards” workshop, a Project WET and Project Learning Tree workshop, exhibited at the Delaware State Fair, and became a member of the statewide “Children in Nature” Task Force. In early 2011, the DAEE by-laws were approved. **“Environmental Education in a Changing Climate”** is the second statewide conference sponsored by DAEE. For more information about DAEE contact the resources listed below.



www.daeonline.wordpress.com

Twitter: DAEEOnline

302-832-3100 x 113



“Environmental Education in a Changing Climate” Conference Schedule

9:00 am	Welcome – Ray Bivens, Operations and Program Section Manager, Delaware State Parks	
9:15 am	Keynote: Becoming Justice: A Native Perspective on Place & Honor Chief Dennis Coker - Lenape Indian Tribe of Delaware - Cheswold, Delaware	
Concurrent Session I 10:10 am – 11:00 am		
Getting Down with Data: Using Local Real-time Data in Your Classroom – Jennifer Holmes LOCATION: Media Room	Environmental Experiences for Early Childhood (Project Learning Tree and Growing up WILD) – Ashley Pebbles & Edna Stetzar LOCATION: Art Room	Environmental Education for Children with Special Needs or Working with Special Populations – Dr. Kristina Failing LOCATION: Music Room
Concurrent Session II 11:10 am – 12:00 noon		
STEM Education? It Has Little to Do With Flowers – Tonyea Meed LOCATION: Media Room	A WILD Classroom - Dawn Webb and Cathy Martin LOCATION: Art Room	Environmental Education for Children with Special Needs or Working with Special Populations – Dr. Kristina Failing LOCATION: Music Room
Lunch – Ray Bivens - Children in Nature 12:00 noon - 1:00 pm		
Concurrent Session III 1:10 pm – 2:00 pm		
Climate Change – Gregory Breese and Kelly Valencik LOCATION: Media Room	Outdoor Learning Areas: Case Studies – David Pragoff LOCATION: Art Room	How to Design a School Vegetable Gardening Program – Thianda Manzara LOCATION: Music Room
Concurrent Session IV 2:10 pm – 3:00 pm		
Climate Change – Gregory Breese and Kelly Valencik LOCATION: Media Room	A WILD Classroom – Dawn Webb and Cathy Martin LOCATION: Art Room	How to Design a School Vegetable Gardening Program – Thianda Manzara LOCATION: Music Room
DAEE Annual Meeting and Concluding Remarks 3:10 pm – 4:00 pm		



“Environmental Education in a Changing Climate” Presentation Descriptions

Keynote: Becoming Justice: A Native Perspective on Place & Honor

Chief Dennis Coker, Lenape Indian Tribe of Delaware

Despite the plethora of environmental injustices across the planet, and despite popular tendencies to tie the Environmental Justice movement to issues of race, Chief Dennis Coker, of the Lenape Indian Tribe of Delaware, will define Environmental Justice in light of his ancestors and for the sake of the children, this talk will point to a reality that says, as Wendell Berry puts it, “When going back makes sense, you are going ahead.” Challenging the audience to evaluate what Henry David Thoreau called “that culture which is exclusively an interaction of man to man,” to consider their personal and institutional struggles in defining environmental justice, and to come to common conclusions for practical applications, Mr. Coker will share his perspective on “environment” and “justice” as well as “our place in it” through the eyes of the Sacred Hoop. Mr. Coker will discuss his connection to his ancestors, his hopes for the future of his Tribe, their children’s children, and their teacher’s teachers.

Environmental Experiences for Early Childhood

Project Learning Tree: Environmental Experiences for Early Childhood

Ashley Peebles, Delaware Forest Service

PLT is widely recognized as one of the premier environmental education programs in the world. Through hands-on, interdisciplinary activities, PLT helps young people learn how to think, not what to think, about complex environmental issues. The introduction of environmental education at the early childhood level reaches children at a key developmental period in their lives and has the potential for influencing lifelong attitudes, values, and patterns of behavior toward the natural world. Project Learning Tree’s *Environmental Experiences for Early Childhood* guide integrates nature-based exploration, art, literature, math, music and movement, and outdoor play into early childhood education programs. It allows children to explore, discover, and communicate in expressive ways.

Growing Up WILD: Exploring Nature with Young Children

Edna Stetzar, Delaware Division of Fish and Wildlife

Growing UP WILD is an early childhood education activity guide that builds on children’s sense of wonder about nature and invites them to explore wildlife and the world around them. Through a wide range of activities and experiences, it provides a foundation for developing positive impressions about nature while also building lifelong social and cognitive skills.

Getting Down with Data: Using Local Real-Time Data in Your Classroom

Jennifer Holmes, Delaware National Estuarine Research Reserve

Want to use real data and student-driven inquiry in the classroom? This hands-on session is designed for you! You’ll learn where to find and how to use online tools and sources of real time, local data. This session will equip you with the knowledge, tools, skills, and confidence to use the local environment in your curriculum.

Environmental Education for Children with Special Needs or Working with Special Populations

Kristina Failing, ED.D. – John S. Charlton Program

Resources, strategies, and techniques will be provided to participants regarding working with and teaching special populations. More and more children are being identified and serviced through Individualized Education Programs (IEP) or 504 plans. With these programs and plans come accommodations and/or modifications. Attendees will be provided with information and ideas as to how one can navigate through this type of paperwork and then how to create activities and lessons that take in to mind the types of supports children with specials needs may benefit from.

STEM Education? It Has Little to Do With Flowers

Tonyea Mead – Delaware Dept. of Education

This presentation will address what we think STEM is and how it got started nationally. It will address how the Department of Education is moving forward with STEM. This presentation will showcase some of the STEM activities and how they might be woven into our public schools and filter out to other agencies throughout the state.



“Environmental Education in a Changing Climate” Presentation Descriptions

A WILD Classroom

Dawn Webb - Delaware Div. of Fish & Wildlife and Cathy Martin - Delaware Council of Wildlife Rehabilitators and Educators

Let’s create a WILD classroom, from owls to opossums, toads to turtles, and ducks to deer. What can you legally possess to incorporate into your wildlife teachings? Can students collect things from state parks or wildlife refuges? What about live animals in the classroom? Participants will learn how to utilize wildlife pelts, skulls, replicated scat and tracks, mounted specimens, and some live animals within the classroom. Indoor and outdoor activities will also be discussed.

Climate Change - Seas the Day! Planning Today for Sea Level Rise Tomorrow

Kelly Valencik - Delaware National Estuarine Research Reserve

Come learn about the latest research on the impacts of sea level rise on the state of Delaware! Find out what changes may occur not just along our coastline, but to our state’s communities and economy as well. The Offices of Delaware Coastal Programs and the Delaware National Estuarine Research Reserve are working to help the State adapt to the impacts of sea level rise through research, outreach, and education initiatives that you should to hear about too so you will be ready to “seas” the day!

Climate Change - Red Knots, Horseshoe Crabs and Climate Change

Gregory Breese - U.S. Fish and Wildlife Service

The red knot migrates 10,000-miles from the southern tip of South America to their breeding grounds in the Arctic. These birds stop at Delaware Bay to feed on eggs laid by horseshoe crabs. Climate change could affect this relationship between horseshoe crabs and red knots. Red knots spend most of their time at the extreme latitudes of the Western Hemisphere, two areas that are expected to show effects from climate change most rapidly. Changes in snow cover in the Arctic breeding grounds could affect the birds survival and productivity. Changing temperatures could affect the timing of spawning and/or arrival of the birds in Delaware Bay. Warming waters in the Delaware Bay area could shift the location where horseshoe crabs spawn. Increased variation in weather, including more frequent and intense storm events, could make spawning more difficult for horseshoe crabs. Now that restrictions on crab harvesting are in place, climate change is likely to move to the forefront as a factor in the red knots’ survival.

Outdoor Learning Areas: Case Studies

David Pragoff - Delaware Nature Society

Schoolyard gardens provide excellent opportunities for hands-on, cross-curricular learning while fostering awareness of the environment, wildlife, nutrition, life skills, and gardening. There are a variety of means by which even the most sparse school landscapes can be transformed into outdoor classrooms that enhance learning, engage students, and promote community within the school. This session will introduce you to some of the fundamental considerations of planning and implementing successful schoolyard gardens. Learn strategies for addressing common barriers to establishing a garden project on your school grounds and hear stories of successful projects and how they have been utilized to enhance classroom learning.

How to Design a School Vegetable Gardening Program

Thianda Manzara, Ph.D. - Healthy Foods for Healthy Kids, Inc. (HFHK)

First we will review how Healthy Foods for Healthy Kids works with schools to start vegetable gardening programs that are integrated into the curriculum, and which engage every student in the school in garden activities each semester. Then we will discuss key elements of designing a successful program, as well as other models for starting and running a program. Resources for starting a school garden will be provided, and participants will be encouraged to ask questions and share their experiences.



“Environmental Education in a Changing Climate” Presenters Biography

Greg Breese

Biologist

Delaware Bay Estuary Project
US Fish and Wildlife Service

Greg joined the US Fish and Wildlife Service in 1978 at the John Heinz National Wildlife Refuge in Philadelphia where he developed environmental education, interpretation, and volunteer programs. In 1991, Greg transferred to the Delaware Bay Estuary Project, where among other duties he is one of the Service representatives to the Delaware Bay Ecosystem Technical Committee of the Atlantic States Marine Fisheries Commission. This Committee provides technical expertise to the Commission on shorebird and horseshoe crab ecology.

Chief Dennis Coker

Lenape Indian Tribe of Delaware
Cheswold, Delaware

Lifelong Delawarean and Lenape Indian Tribe of Delaware Chief, Dennis Coker chairs the Confederation of Sovereign Nentego-Lenape Tribes. As Bureau of Ocean Energy Management's Delaware Renewable Energy Task Force member and Indigenous Cultural Landscapes consultant to the Chesapeake Bay Initiative, Chief Coker builds relations between Tribal, state and federal governments.

Kristina Failing, Ed.D.

John S. Charlton Program
278 Sorghum Mill Road, Camden, Delaware 19934
302-697-3103 or 302-242-4045
kristina.ritchey@cr.k12.de.us

Kristina Failing has been an assistant principal at the John S. Charlton Program in the Caesar Rodney School District since 2004. The Charlton Program provides special education services to students (ages two to twenty-one) with moderate to severe disabilities in Kent County, Delaware. Charlton is the Kent County site for the Delaware Autism Program.

Prior to joining the Charlton Program, Dr. Failing was a special education teacher and worked with students with varying degrees of needs and educational classifications. She holds standard certificates in the following areas: Elementary Teacher (Grades 1-8), Teacher of Exceptional Children (Grades 1-12), Principal/Assistant Principal, School Leader I, and School Leader II. While working on doctoral studies, Dr. Failing focused on the Individualized Education Program (IEP) process and parental involvement.

In Dr. Failing's current position, she works with students with cognitive and communicative needs paired with emotional and behavioral challenges. She has learned from and taught strategies to the students, teachers, and caregivers she has encountered regarding working with children with cognitive, communicative, and emotional/behavioral needs.

It is Kristina's hope that she can share strategies with the attendees of today's conference to better assist them when working with special populations.

Jennifer Holmes

Delaware National Estuarine Research Reserve
818 Kitts Hummock Road, Dover, Delaware 19901
Jennifer.Holmes@state.de.us

Jennifer is the Education Coordinator for the Delaware Department of Natural Resources and Environmental Control, Delaware National Estuarine Research Reserve and the Coordinator for Delaware Project WET. She also serves as the Vice-Chair of the Delaware Association for Environmental Education and serves on the Delaware Children in Nature Task Force. On a national level, Jennifer serves on the National Estuarine Research Reserve Association Board of Directors as the Director of Education.



“Environmental Education in a Changing Climate” Presenters Biography

Thianda Manzara, Ph.D.

Healthy Foods for Healthy Kids, Inc. (HFHK)
P.O. Box 847, Hockessin, DE 19707
302-235-2692 (office), 302-981-0043 (cell)
thianda@msn.com

Thianda Manzara is the founder and Executive Director of Healthy Foods for Healthy Kids, a non-profit organization that works with schools to start vegetable gardening programs that are integrated into the science curriculum. Before starting HFHK, Dr. Manzara's career focused on biology research and teaching. She holds a master's degree in Agronomy from Colorado State University, and a Ph.D. in Genetics from Washington State University. She completed her postdoctoral training at the University of California, Berkeley, then became a faculty member in the Department of Biological Sciences at the University of Illinois at Chicago, and later taught at the University of Pennsylvania. More recently, motivated by a desire to improve children's health, Dr. Manzara combined her love of science and her passions for food, cooking and gardening to create HFHK. In 2005, she started the original HFHK program in partnership with Springer Middle School Principal Michael Gliniak. In 2008, with a goal of expanding the program to more schools, she founded the HFHK non-profit organization. HFHK currently works with 11 public schools, and serves approximately 5,000 students.

Inspired by her Greek mother and grandmother, it's her fervent desire to share her appreciation for gardening, cooking, and fresh vegetables with the next generation.

Cathy Martin

Delaware Council of Wildlife Rehabilitators and Educators

As a Fish and Wildlife Fisheries Biologist since 1968, Cathy manages Delaware's public ponds and the freshwater fishes of tidal streams. She has been a licensed wildlife rehabilitator for the past 21 years and currently serves as President Elect for the Delaware Council of Wildlife Rehabilitators and Educators. She is also a member of the planning committee for the Becoming an Outdoors-Woman Program, a Project Leader of the Chestnut Grove 4-H Club, and a member of the Ladies Auxiliary for Cheswold Fire Company.

Tonyea Mead

Science Curriculum Director
Delaware Dept. of Education

Tonyea Mead has been in the education field for more than 25 years. She has been an elementary, middle, and high school teacher, associate principal, science specialists, a teacher on loan for the Department of Education, and is currently the Education Associate for Science, K-12th, and Delaware's Department of Education. During her years in the education field she has won many state and national awards. She has been past president of Delaware Teachers of Science, and is still active in the National Science Teachers Association. She was one of the founding members of the Delaware Science Coalition. In her spare time she is a small mammal wildlife rehabilitator and travels up and down the east coast talking about the importance of bats. She resides in Lewes, DE with her husband, Philip Mead.

Ashley Peebles

Education Coordinator
Delaware Forest Service
2320 South Dupont Hgwy, Dover, DE 19901
302-698-4551
Ashley.Peebles@state.de.us

Ashley Peebles has been the Education Coordinator for the Delaware Forest Service since 2004. She serves as the state's Project Learning Tree (PLT) Coordinator and manages two education centers at Blackbird and Redden State Forest. Ashley currently serves as the NAAEE Liaison for the Delaware Association for Environmental Education. In 2009, Ashley was awarded the Bronze Smokey, a national award for outstanding public service in wildfire prevention. Ashley is a native Delawarean and received her Bachelor's of Science in Plant Science from Delaware State University. She works as a botanist for the US Forest Service on the Forest Inventory Analysis (FIA) project for the East Coast.



“Environmental Education in a Changing Climate” Presenters Biography

David Pragoff

School and Group Programs Team Leader
Delaware Nature Society

David Pragoff is the School and Group Programs Team Leader with the Delaware Nature Society (DNS). Based at the Ashland Nature Center, David oversees education programs for audiences from school and community groups at all Nature Society sites. David has worked in environmental education for over 15 years at a residential camp in Maine, with an urban school education and gardening program in Baltimore City, and with DNS.

Edna J. Stetzar

Natural Heritage and Endangered Species Program
Division of Fish and Wildlife, Department of Natural Resources and Environmental
4876 Hay Point Landing Rd, Smyrna, DE 19977
302-735-8654
Edna.Stetzar@state.de.us

Edna Stetzar is a biologist with the Delaware Natural Heritage and Endangered Species Program (DNHESP) which is within the State's Division of Fish and Wildlife. Edna has worked for the Division since 1992 and has built a career as both a scientist and an educator.

Edna currently represents the Division coordinating with regulators, planners, engineers, and other scientists in an effort to protect wildlife habitat and rare, threatened and endangered species. Prior to this work she conducted research on sturgeon, striped bass and freshwater fish populations and served as a state coordinator for marine mammal and sea turtle strandings. Hailing from the great state of Ohio, she earned a bachelor's degree in Natural Resources from Ohio State University in 1991. Edna conducted field research on sea turtles and earned a Master's degree in 2002 from Delaware State University.

Edna also has a desire to foster stewardship through environmental education, a desire that was first sparked when she worked as a teacher naturalist for the Delaware Nature Society. She currently volunteers for the DuPont Nature Center and has been a committee member/instructor for 'Becoming and Outdoor Woman' for more than a decade. As much as time allows, Edna conducts educational programs as a trainer/facilitator for Project Wild, 4-H leadership training, Growing Up Wild and the Academy for Lifelong Learning. She became a Certified Interpreter Guide in 2009.

Kelly Valencik

Coastal Training Program Coordinator
Delaware National Estuarine Research Reserve
Kelly.Valencik@state.de.us

Kelly Valencik is the Coastal Training Program Coordinator at the Delaware National Estuarine Research Reserve. The Coastal Training Program addresses critical coastal resource management issues in Delaware by providing current scientific information, access to technologies and skill-building opportunities to Delawareans responsible for making decisions about the state's coastal resources. The program focuses on addressing current coastal issues such as land use, sea level rise, global warming, and biodiversity through trainings, workshops, and technical assistance.

Kelly has a Master's Degree in Urban Affairs and Public Policy with a concentration in Water Resource Management and Policy from the University of Delaware. She also has broad experience with natural resource policy through her time working for Delaware General Assembly's House Committees on Natural Resources and Agriculture, a U.S. Congressional office, the Water Resources Agency, the Mid-Atlantic Fishery Management Council and the National Wildlife Federation.



“Environmental Education in a Changing Climate” Presenters Biography

Dawn L. Webb

Delaware Division of Fish & Wildlife
The DuPont Nature Center *at the Mispillion Harbor Reserve*
2992 Lighthouse Road, Milford, Delaware 19963
302-422-1329
Dawn.Webb@state.de.us

Dawn has been employed with the Delaware Division of Fish and Wildlife since 1992. Beginning as an Outreach Coordinator, she created and organized the wildlife exhibit at the State Fair, coordinated the Duck and Trout Stamp Programs, and conducted educational programs on wildlife to schools and youth groups. From 1999 to 2005, Dawn coordinated the Hunter Education Program. Currently, she is the curator of the DuPont Nature Center in Milford, Delaware. The facility overlooks the Delaware Bay on the Mispillion River. The center serves as a science-based education and interpretive facility for schools, families, and other organized groups.

A native Delawarean, Dawn was born and raised on a dairy farm in Wyoming, Delaware. She has worked with both domestic and wild animals all of her life. Since 1988, she has been a licensed state wildlife rehabilitator specializing in the care of injured and/or orphaned wild mammals, mainly white-tailed deer.

Also:

- State Project WILD Coordinator
- State Junior Duck Stamp Coordinator
- DE Association for Environmental Educators Board of Directors Member
- Serve on the Community Outdoor Experiences Committee for the DE Children in Nature Initiative
- Executive Board Member of the DE Council of Wildlife Rehabilitators & Educators
- Volunteer 4-H Leader
- Member of the Camden-Wyoming Lions Club
- Volunteer Hunter Education Instructor
- Wild Game Cooking Instructor
- Member of the DE State Chapter of the National Wild Turkey Federation
- Ducks Unlimited Member



www.daeonline.wordpress.com

Twitter: DAEEOonline
302-832-3100 x 113