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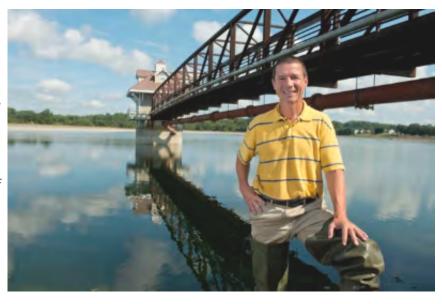
No. 3

Celebrating Our 50th Year!

View the newsletter online

Jerry Kauffman named Third Director of the DWRC

In January 2015, Dr.
Jerry Kauffman was
named the third
Director of the Delware
Water Resources Center.
Dr. Kauffman succeeds
Dr. Tom Sims, Deputy
Dean of the University
of Delaware's College of
Agriculture and Natural
Resources who skillfully
served as the second
Director of the DWRC
for a decade and a half



and made a real and substantial difference in the careers and lives of many students, faculty, and staff who conducted research in water science and policy here at the University of Delaware.

DWRC Celebrates 50 Years!

The DWRC's 50th Anniversary was celebrated at the University of Delaware on April 17, 2015!

The DWRC is one of the 54 National Institutes for Water Resources (NIWR) funded by the U.S. Geological Survey at land grant universities in the 50 states, District of Columbia, and the three island territories of Guam, Puerto Rico, and US Virgin Islands. This year the DWRC celebrated our 50th anniversary of the center's designation at the University of Delaware in 1965, one year after Lyndon Baines Johnson signed the Water Resources Research Act (WRRA) that



At the annual April luncheon, DWRC Director, Jerry Kauffman, leads DWRC graduate and undergraduate students in a celebratory cakecutting.

established the NIWR program on July 17, 1964. The DWRC belongs to the mid-Atlantic NIWR region that includes our colleagues at Cornell, Penn State, Rutgers, Maryland, Virginia Tech, West Virginia and the University of District of Columbia.

View a slide show <u>here</u>
View a celebratory video <u>here</u>
Read the UDaily article <u>here</u>

DWRC Advisory Panel

The DWRC Advisory Panel serves many essential functions, including peer review and ranking of research proposals, planning of annual conferences, promoting the interaction of the DWRC with other agencies, and advising the director on state priority water resource focal areas as well as the best ways to accomplish the center's mission.

The DWRC Advisory Panel is appointed by the Director for a three-year term and includes:

- Jayme Arthurs, USDA Natural Resources Conservation Service
- Chris Bason, Center for the Inland Bays
- Luc Claessens, Department of Geography
- Tom Coleman, City of Newark Water Department
- Jeff Downing, Mt. Cuba Center
- Asia Dowtin, UD student section of the American Water Resources Association
- Mingxin Guo, Department of Agriculture and Natural Resources, Delaware State University
- LeeAnn Haaf, Partnership for the Delaware Estuary
- Stephen Hokuf, New Castle County Department of Planning
- Paul Imhoff, Department of Civil and Environmental Engineering
- Shreeram Inamdar, Department of Plant and Soil Sciences

- Janet Johnson, Department of Political Science and International Relations
- Richie Jones, The Nature Conservancy
- Thomas McKenna, Delaware Geological Survey
- Matt Miller, City of Wilmington Department of Public Works
- Martha Narvaez, UD Water Resources Agency
- Ginger North, Delaware Nature Society
- Betzaida Reyes, U.S. Geological Survey
- Kash Srinivasan, Kash LLC
- Bob Struble, Brandywine Valley Association
- Jennifer Volk, Kent County Cooperative Extension, Department of Plant and Soil Sciences
- Jennifer Walls, Delaware DNREC, Division of Watershed Stewardship

DWRC Undergraduate and Graduate Internship Program

DWRC undergraduate and graduate internships are funded by Congress through the USGS to provide a unique opportunity for students and faculty to become directly involved in research and education programs that address water resource-related issues of critical importance to Delaware and the Mid-Atlantic region. Interns are from a variety of disciplines and programs throughout the University of Delaware campus. The 2014-2015 program included the following 12 undergraduate interns with faculty members and research topics:

Environmental Engineering major Katelyn Csatari

Advisor: Dr. Rodrigo Vargas, UD Department of Plant and Soil Sciences

Greenhouse Gas Emissions from Sediments in Floodplains of the Delaware Piedmont, Christina River Basin

Environmental Science major Sandra Demberger

Advisor: Dr. Luc Claessens, UD Department of Geography

Mushroom Farming and Its Effect on Nitrogen Loading in the Brandywine-Christina Watershed

Environmental Science major Amanda Doremus

Advisor: Dr. Carmine Balascio, UD Department of Plant and Soil Sciences

Water Quality Performance for Paired Bioretention Basins

Environmental Engineering major Jessica Fedetz

Advisor: Ms. Jennifer Volk, UD Department of Plant and Soil Sciences

Advisor: Ms. Marcia Fox, Delaware Dept. of Natural Resources and Environmental Control,

Watershed Assessment Section

Quantifying Conservation Practices in the Chesapeake Bay Basin

Ecology and Marine Science double major Amelia Harrison

Advisor: Dr. K. Eric Wommack, UD Department of Plant and Soil Sciences

Fine-scale Temporal Dynamics of Estuarine Virioplankton and Bacterioplankton Populations

Mechanical Engineering major Sarah Hartman

Advisor: Dr. Steven Dentel, UD Department of Civil and Environmental Engineering

Enhanced Pollutant Biodegradation by Electrode Use

Environmental Science and Environmental Engineering double major Erica Loudermilk

Advisor: Dr. Angelia Seyfferth, UD Department of Plant and Soil Sciences

Understanding Greenhouse Gas Fluxes in Estuaries

Environmental Engineering major Danielle Notvest

Economics, and Environmental and Resource Economics double major Radhika Samant Advisor: Dr. Gerald Kauffman, UD Water Resources Agency

Wetland Restoration and Mitigation Banking Along the Cool Run Watershed at the UD Farm

Environmental Engineering and Economics double major Christophet Youngquist Advisor: Dr. Paul Imhoff, UD Department of Civil and Environmental Engineering Integrating Biochar Amendments in Green Stormwater Management Systems for Enhanced Nutrient Treatment of Stormwater Runoff

Environmental Engineering major Katja Burke Environmental Science major Marc Latham Environmental Science major Chloe Ng

<u>Advisors</u>: Dr. Gerald Kauffman and Mr. Andrew Homsey, co-leaders of the UD WATER project (Watershed Action Team for Ecological Restoration)

Stormwater Modeling in the Fairfield Run Watershed in Newark, Delaware

The current DWRC graduate students include:

Lauren Lechner

Began her Ph.D. program in Environmental Engineering in September 2014

<u>Advisor</u>: Dr. Pei Chiu, UD Department of Civil and Environmental Engineering

Nutrient Removal from Stormwater, Wastewater, and Agricultural Runoff Using Scrap Iron and

Biochar

Daniel Sanchez Carretero

Began his Ph.D. program in Environmental Engineering in September 2014 <u>Advisor</u>: Dr. C.P. Huang, UD Department of Civil and Environmental Engineering Electrochemical Reduction of Dissolved Carbon Dioxide in Water to Hydrocarbons

The DWRC Advisory Panel selected the following 2015-2016 class of 15 water resources:

Environmental Engineering major Samuel Dever

<u>Advisor</u>: Dr. Paul Imhoff, UD Department of Civil and Environmental Engineering The Effect of Organic Matter on Mineral Weathering

Environmental Engineering major Xiaolun Guo

<u>Advisor</u>: Dr. C.P. Huang, UD Department of Civil and Environmental Engineering Effect of Temperature on the Kinetics and Thermodynamics of Mineral Solubility

Environmental Engineering major Ryan Hall

<u>Advisor</u>: Dr. Paul Imhoff, UD Department of Civil and Environmental Engineering Integrating Biochar Amendments in Green Stormwater Management Systems for Enhanced Nitrogen Treatment of Stormwater Runoff

Environmental Science major James Hanes

<u>Advisor</u>: Mr. A. Scott Andres, Delaware Geological Society Determination of Daily Net Primary Production in Coursey Pond, Delaware

Environmental Engineering major Kelli Kearns

<u>Advisor</u>: Dr. Angelia Seyfferth, UD Department of Plant and Soil Sciences Biogeochemical Controls on Metal and Nutrient Fluxes in a Protected Estuary in Delaware

Environmental Engineering major Andres Kwart

Advisor: Dr. Anastasia Chirnside, UD Department of Entomology and Wildlife Ecology

Development of a Fungal Biocell Reactor for Treatment of a Food Processing Wastewater

Environmental Science major Alyssa Lutgen

Advisor: Dr. Delphis Levia, UD Department of Geography

The Isotopic Composition of Throughfall in Relation to Drop Size Diameter Distribution

Environmental Science major Jillian Matz

Advisor: Dr. Shreeram Inamdar, UD Department of Plant and Soil Sciences

Pulse of the Watershed: Studying Rapid (Sub-hourly) Changes in Stream Water Quality Using

High-frequency, In-situ Sensors

Environmental Engineering major Marcos Miranda

Advisor: Dr. Daniel Cha, UD Department of Civil and Environmental Engineering

Breathable Membrane Enclosures for Fecal Sludge Stabilization: Application in Eco-vapor Toilets

Energy and Environmental Policy, and Economics double major Adam Nesbitt <u>Advisor</u>: Dr. Lawrence Agbemabiese, UD Center for Energy and Environmental Policy Application of the DESEU to Water Resources

Environmental Science major Margaret Orr

Advisor: Dr. Shreeram Inamdar, UD Department of Plant and Soil Sciences

Assessing the Impact of Severe Storm Events on Exported Sediment, Particulate Organic Matter, and Nutrients and Stream Water Quality

Natural Resources Management major Erica Rossetti

Advisor: Dr. Gerald Kauffman, Delaware Water Resources Center

First State National Park: Brandywine-Piedmont Watershed Planning

Environmental Engineering major Samantha Serratore <u>Advisor</u>: Dr. Gerald Kauffman, Delaware Water Resources Center Brandywine-Piedmont Watershed Plan (BPWP)

Plant Science major Nicholas Villari

Advisor: Dr. Amy Shober, UD Department of Plant and Soil Sciences

Understanding the Role of Ditch Sediments in the Transport of Phosphorus in Agricultural

Drainage on the Delmarva

Chemistry major Ha Vu

<u>Advisor</u>: Dr. Deb Jaisi, UD Department of Plant and Soil Sciences Remineralization of Organic Matter and Chesapeake Bay Hypoxia

Award-winning Student Chapter

The DEAWRA Student Chapter at the University of Delaware has been selected as the American Water Resources Association (AWRA)
Outstanding Student Chapter for 2015.
The official award will be presented to President Asia Dowtin of the DEAWRA

student chapter in November at the

2015 AWRA Annual Conference in Denver, CO. Past winners of the outstanding student chapter include the University of Florida, University of Wisconsin and Oregon State University.



river clean up event in spring 2015.

Narvaez Receives WRADRB Achievement Award

On April 22, 2015 AWRA
President-elect Martha Corrozi
Narvaez received the prestigious
Achievement Award from the
Water Resources Association of
the Delaware River Basin
(WRADRB).

The award was presented at the WRA 33rd Annual Recognition Dinner held at the Downtown Club in Philadelphia, PA. Jerry Kauffman, Director of the DWRC and the University of Delaware Water Resources Agency,



Left to right, Jerry Kauffman, Dennis Palmer (WRADRB Chairman), Martha Narvaez and Kathy Klein (President, WRADRB) at the WRADRB awards dinner in April 2015.

presented the award. The award was given for Narvaez's leadership, contributions and commitment to promoting and advancing practices of conservation and sound management of water and natural resources in the Delaware River Basin.

Jobs in Water Resources

Community Organizer

The TTF Watershed Partnership is seeking to fill a Community Organizer position (half-time) for community outreach efforts for the Philadelphia Water Department's District 4 "Green City Clean Waters" projects. Please see <u>posting</u> for details. Deadline:September 4.

Partnership for the Delaware Estuary

Watershed Outreach Specialist

The Partnership for the Delaware Estuary (PDE) is looking for a creative, organized and energetic individual to implement educational programs for the protection and enhancement of the resources of the Delaware Estuary. The Specialist will be responsible for duties such as maintaining current and establishing new partnerships with organizations within the Delaware Estuary Watershed to advance the work of PDE. Candidate must demonstrate an ability to work effectively in teams and with diverse public and private constituencies. A Bachelor's degree in an environmental science, outreach or related field is required. A more detailed job description is available on the website. Interested applicants are encouraged to submit a resume by September 10 to: Partnership for the Delaware Estuary, 110 South Poplar Street, Suite 202, Wilmington, DE 19801; or by email.

Coordinator of Grants

The Partnership for the Delaware Estuary, a regional environmental nonprofit organization based in Wilmington, Delaware, seeks a full-time Coordinator of Grants to aid in maintaining and growing PDE's grant funding to support PDE's efforts in the Estuary. This includes researching and prioritizing funding opportunities, working with PDE Directors and staff to develop new proposals, communicating with grant funders, maintaining accurate records and handling grant reporting and administration. A more detailed job description is available on the website. Interested applicants are encouraged to submit a resume, writing sample and names/addresses of three references by September 30 to: Partnership for the Delaware Estuary, Attn: Debbie Heaton, 110 South Poplar Street, Suite 202, Wilmington, DE 19801; or by <a href="emailto:em

Delaware Center for Inland Bays

The Delaware Center for the Inland Bays invites applications for its Watershed Coordinator, who will coordinate with partner organizations in the implementation, tracking, and progress reporting for the Inland Bays Comprehensive Conservation and Management Plan, including the Inland Bays Pollution Control Strategy. Position description and application information can be found <a href="https://example.com/here/beta/bays-new-market-new-ma

UD College of Agriculture and Natural Resources

GET ENRICHED! The UD College of Agriculture and Natural Resources internships are listed here.

UD College of Earth, Ocean, and Environment

Visit the <u>website</u> for news about jobs and internships through the UD College of Earth, Ocean, and Environment.

Delaware Environmental Institute

Visit the DENIN <u>website</u> for news about fellowships and internships through the Delaware Environmental Institute.

Delaware Nature Society

Job listings with the Delaware Nature Society, celebrating its 50th anniversary, can be found here.

Upcoming Water Conferences and Events

Sep. 8, 2015 -- Protect Your Groundwater Day

The National Ground Water Association (NGWA) reminds that everyone can and should do something to protect groundwater. Find out more <u>here</u>.

Sep. 25, 2015 — 2nd Annual Water Science and Policy (WSP) Symposium
The public is invited to hear presentations from graduate students in the
Interdisciplinary WSP Graduate program from 2:00 – 6:00 PM in UD's Townsend Hall
Commons. To learn more about the WSP program, click here. Directions to Townsend
Hall can be accessed here.

Sep. 29, 2015 — Eat for Change (DEAWRA Student Section Fundraiser)
Support the University of Delaware Student Chapter of the American Water Resources
Association (AWRA) at Chipotle on 136 Main St. in Newark on Tuesday, September 29th
between 5:00pm and 9:00pm. Bring this <u>flyer</u>, show it on your smartphone or tell the
cashier you're supporting the cause and 50% of the proceeds will be donated to the
student chapter.

Oct. 4, 2015 -- University of Delaware's Coast Day

This annual event, organized by UD's College of Earth, Ocean, and Environment, will feature the Robotic Discovery Laboratory TEACH FLEET, food festivals, and interactive learning to promote marine stewardship and environmental awareness. More information is available here.

Oct. 5-6, 2015 -- 3rd Annual Delaware River Watershed Forum, University of Delaware

Learn about a range of protection and restoration efforts underway, contribute your insights to the development of a watershed-wide vision, tour local sites for a hands-on perspective of different conservation issues and network with your peers at the 3rd Annual Delaware River Watershed Forum sponsored by the Coalition for the Delaware River Watershed and the William Penn Foundation. More information is available here.

Nov. 16–19, 2015 — 2015 AWRA Annual Water Resources Conference This year's American Water Resources Association (AWRA) Annual Conference on Water Resources will be held in Denver, CO. Join water resource professionals and students for an engaging week of cutting edge presentations on timely water resource issues, and for dialogue with fellow water resource movers and shakers from across the country and throughout the world. More information is available here.

Delaware Sea Grant and local partners have adapted a popular rain garden app for the mid-Atlantic region to help homeowners build their own rain gardens and improve water quality. More information about the app can be found here.

The Delaware Section of the American Water Resources Association meeting information can be found here.

The Delaware Student Section of AWRA activities can be found here.

The Delaware Nutrient Management Commission (as well as other State of Delaware departments) public meeting and workshop information is found here.

Welcome new subscribers! Contributions, comments and questions are always appreciated. Water News serves citizens interested in topics on Delaware water resources and is published by the Delaware Water Resources Center, University of Delaware.

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