

CONSERVOGRAM > The newsletter of the Soil and Water Conservation Society

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Nutrient Management and Edge of Field Monitoring Conference

In Collaboration with Healthy Soils for Healthy Waters

December 1-3, 2015
Sheraton Memphis Downtown Hotel—Memphis, Tennessee

We are excited to announce that Dennis Demick, the executive editor of National Geographic Magazine, will be presenting during the luncheon on Wednesday, December 2, at 12:00 p.m. Demick is the recipient of the 2013 Sprague Memorial Award from the National Press Photographers Association for outstanding service to photojournalism. We are thrilled he has accepted our invitation!



Conference Highlights

The conference will kick off with the Healthy Soils for Healthy Waters Symposium on Tuesday, December 1, at 10:00 a.m. Presenters include leading crop consultants and producers Joe Nester, Dave Brandt, Kristin Weeks Duncanson, and Mike Taylor. Participants will also hear from noted agricultural experts Warren Dick, Randall Reeder, and Andy Ward, The Ohio State University; Nick Goeser, National Corn Growers Association; and Mike Daniels, University of Arkansas.

On Wednesday, December 2, the conference will begin with a keynote plenary panel that includes Ann Bartuska, deputy under secretary for USDA's Research, Education, and Economics (REE) mission area, Ellen Gilinsky, senior advisor at the US Environmental Protection Agency (USEPA), and Matt Lechtenberg, water quality coordinator at the Iowa Department of Agriculture and Land Stewardship.

For complete details on this conference, visit www.swcs.org/nutrientmanagement. The online registration cut-off date is November 16. You may also register for this event on-site.

This event is a collaborative effort made possible by the Soil and Water Conservation Society; the University of Arkansas; the Healthy Soils for Healthy Waters Initiative, The Ohio State University; and GreenLeaf Advisors.



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Join Give Journal



71st SWCS International Annual Conference

Galt House Hotel • Louisville, Kentucky

July 24-27, 2016

www.swcs.org/16AC

Theme Announced: Great River Landscapes

From the Mississippi, Tennessee, Cumberland, and Ohio rivers of Kentucky to the other great rivers of the world, human values and uses of these rivers and their landscapes impact the soil and water resources upon which civilization and natural environments depend. These rivers tell the story of agriculture, human civilization, and the complexity of natural-human systems. However, these landscapes are increasingly challenged by the risks and uncertainties associated with changing and variable climates; redistributed populations; increased demands for food, water, and energy security; and aging, fragmented transportation infrastructure.

The 71st SWCS Annual Conference will provide a forum for exploring and promoting science-based knowledge about management practices that protect land and river ecologies and make them productive and more resilient. The conference will offer unique opportunities to showcase conservation efforts in both the uplands and bottomlands of great rivers and their tributaries, including nutrient management, erosion and sediment control, nonpoint source pollution and watershed policy, flood and drought management, and other issues influencing the health and functionality of our soil and water. There is great need for continued strong partnerships among innovative scientists that propose and evaluate best practices, practitioners that adapt and monitor those practices to suit their own unique locales, and public and private organizations that invest in and advocate for the preservation of river ecology while using the water and soil resources to society's benefit. Not only will this year's conference be a time to reflect on decades of achievements and advancement efforts, but it will serve as an opportunity to explore the work not yet completed and search for solutions to current and emerging challenges.

Call for Presentations – Now Open

The SWCS Call for Presentations is now open, and abstracts are being accepted for oral presentations, posters, symposia, and workshops.

This year's conference will feature three special interest areas of focus as well as the eight traditional/general topic areas. Special consideration will be given to presentations that cater to the conference theme.

- Conservation Systems in the Riparian Corridor
- Water Quality Trading: The Good, the Bad, and the Ugly
- Protecting Water Quality at the Multi-State Scale

- 2015 General Conference Submissions – Great River Landscapes
 - o Adaptive Management of Conservation Efforts
 - o Conservation Economics and Policy
 - o Conservation Models, Tools, and Technologies
 - o Conservation in Nontraditional Agriculture
 - o Conservation Policy and Program Design
 - o Outreach, Education, and Community Engagement
 - o Social Sciences Informing Conservation
 - o Soil Health Resources, Indicators, Assessment, and Management
 - o Water Resource Assessment and Management

Detailed information regarding the Call for Presentations may be found at www.swcs.org/16ac.



Honoring Conservationists and Fostering Young Scientists: 2015 Awards and Scholarships

The submission period for SWCS awards and scholarships is now open! Do you know someone who deserves to be honored for their efforts in the world of soil and water conservation and education? Show them their value through an SWCS award! The awards nomination process is simple to complete and there are opportunities for both members and nonmembers.

Take this time to reward conservationists for their worthy efforts! Log onto www.swcs.org/awards for further details.

Are you a SWCS student or SWCS young professional looking for financial assistance to further your education in soil and water conservation and science? Apply for an SWCS scholarship! Scholarships are open to those who have been with the Society for at least one year and will be disbursed for the 2016-2017 school year.

Log onto www.swcs.org/scholarships for further details on the available scholarships.

Awards for SWCS Members

- The **Fellow Award** recognizes exceptional professional achievement coupled with service to the Society. This award is given first and foremost for professional excellence.
- The **Outstanding Service Award** recognizes distinguished service to the Society over a long and sustained period (10 years minimum).
- The **Commendation Award** recognizes members for service to their chapters (members having received other Society awards are also eligible).
- The **Conservation Research Award** recognizes SWCS members or teams of members whose research has led to exceptional improvements in soil conservation, water conservation, and/or related natural resources research.

Awards for SWCS Members and Nonmembers

- The **Hugh Hammond Bennett Award** recognizes extraordinary national and international accomplishments in the conservation of soil, water, and related natural resources.
- The **Harold-Kay Scholl Excellence in Conservation Award** recognizes individuals who creatively and effectively provide technical assistance in conservation planning and plan application.
- The **Honor Award** recognizes people for outstanding accomplishments compatible with Society objectives.
- The **Merit Award** recognizes noteworthy conservation activity or products of organizations, agencies, or firms.

Student and Professional Soil Conservation Scholarships

The **Donald A. Williams Soil Conservation Scholarship** provides financial assistance to members of SWCS who are currently employed but who wish to improve their technical or administrative competence in a conservation-related field through course work at an accredited college or through a program of special study.

The **Melville H. Cohee Student Leader Conservation Scholarship** provides financial assistance to members of SWCS who are in their junior or senior year of full-time undergraduate study or are pursuing graduate level studies with a natural resource conservation orientation at properly accredited colleges or universities.

The **Kenneth E. Grant Scholarship** provides financial aid to members of SWCS for graduate-level research on a specific conservation topic that will extend the SWCS mission of fostering the science and the art of soil, water, and related natural resource management to achieve sustainability. SWCS actively promotes multidisciplinary research.

Upcoming Events

[Hoosier Chapter Fall Meeting](#)

Angel Mounds, Indiana
November 20, 2015

[Cover Crop and Soil Health Forum \(webinar\)](#)

1:00-2:00 PM EST
November 20, 2015

[Nutrient Management and Edge of Field Monitoring Conference: From the Great Lakes to the Gulf](#)

Memphis, Tennessee
December 1-3, 2015

[Workshop: Saving the Soil Resource](#)

Jamestown, North Dakota
December 3, 2015

[Missouri Natural Resources Conference](#)

Osage Beach, Missouri
February 3-5, 2016

Recent Advances in Cover Crops

The [November/December 2015 issue](#) of the *Journal of Soil and Water Conservation*, "Advances in Cover Crops," brings readers the latest news and research findings related to the use of this key soil and water conservation tool.

Feature articles describe recent innovations in cover cropping, explore implementation concerns, and provide an overview of the work of the North Central Region Sustainable Agriculture Research and Education program and the Conservation Technology Information Center to track cover crop adoption through farmer surveys. In a policy-related Viewpoint article, Lal considers the role that cover crops can have in achieving the carbon sequestration goal of the French government's recent "4 per Thousand" proposal. Also in the features section, a research introduction article by Delgado and Gantzer provides a short orientation to the findings published in the issue.

The research section contains the results of ten cover crops projects within a variety of cropping systems. Below are just a few of the findings:

- Using satellite imagery, Hively et al. identified levels of winter vegetative groundcover over four years in four southeastern Pennsylvania counties. They determined that between 2010 and 2013, winter vegetation on agricultural fields increased in all four counties. They also found, however, that between 25% and 48% of corn fields remain without winter vegetation cover.
- Franzluebbers and Stuedemann investigated the effects of tillage and cover crop grazing on biologically active soil carbon and nitrogen fractions and report that grazing did not have negative effects on biologically active soil carbon or nitrogen fractions in conventional or no-till systems, and that grazing may have a minimal positive impact. They suggest that grazing of cover crops can be recommended to farmers as a potential incentive of adoption.
- Due to water use concerns, cover crops are less often planted in semiarid crop production systems. Mitchell et al. conducted a long-term study of cover crop biomass production and soil water balances in the San Joaquin Valley of California. They acknowledge that there may be environmental benefits from the use of cover crops in this region but caution that these benefits may come at the cost of soil water depletion.
- Thorup-Kristensen and Rasmussen tested 20 plant species to identify those that may provide deeper rooting than ryegrass and may be effective in preventing nitrogen leaching. They found many differences among the species, but identify dyer's woad and chicory as most effective in uptake of nitrate-nitrogen from the soil.

- In order to gain a better understanding of farmer attitudes toward the adoption of cover crops, Arbuckle and Roesh-McNally analyzed survey data and in-depth interviews from Iowa farmers. They conclude that when promoting cover crops to farmers increased efforts should be made to communicate potential adoption benefits, to quantify potential risks, and to share strategies to minimize these risks.

Due to the overwhelming popularity of the topic and large number of submissions accepted for the issue, a second set of cover crops research articles will be published in the January/February 2016 issue. Be sure you don't miss these additional findings in the field of cover crops!



Giving Thanks for Our Soil and Water

November is a time to give thanks. We often forget to give thanks for soil and water and take the time to recognize their importance in our daily lives.

- Soil and water are the basis for healthy plants, plants which in turn provide all of us a source of food, fuel, and fiber.
- Healthy soil helps filter water for clean streams, lakes, and oceans, and helps store water, lessening the effects of droughts and floods.
- Soil sequesters carbon helping to mitigate the effects of climate change.
- Water is a necessity for life. It provides an ecosystem for a valuable food source, provides economic opportunities for many, and offers recreational opportunities for enjoyment.

How can you help support the protection of soil and water resources and make a difference during this time of thanks? [Make a donation to SWCS](#). Every donation helps the Society's efforts to continue to protect and repair our natural resources. Donations help support many activities throughout the year:

- Educational conferences on precision conservation, watershed management, and soil health for soil and water conservationists.
- Publication of pertinent soil and water information through the *Journal of Soil and Water Conservation*, Conservation NewsBriefs, and other specialty publications.
- Efforts to put science in front of lawmakers to further conservation policies.

Thank you for supporting another 70 years of conservation with your donation to the Soil and Water Conservation Society!

"Soil and water resources are our most important assets in meeting the needs of a hungry world. I am proud to be a part of this organization that is taking a science-based, rational approach to encouraging good stewardship of these precious materials." – SWCS Member



**We have made it easier to
make an instant, online donation!**
www.swcs.org/give

News from DC

Courtesy of SWCS DC Representative John Peterson

- On October 9, 2015, the 6th US Circuit Court of Appeals halted the US Environmental Protection Agency's (EPA's) changed definitions of the Waters of the United States (WOTUS) in the Clean Water Act (CWA), saying more time was needed to determine if the changed definitions and the new regulations are legal, and issued a nationwide stay.
- The USDA Forest Service (USDA FS) is seeking applications for the Community Forest Program through January, 15, 2016. The program provides financial assistance grants to local governments, nonprofit organizations, and federally recognized tribes to establish community forests that provide defined public benefits. More information can be found [here](#).
- A prominent USDA Agricultural Research Service (ARS) entomologist, Jonathan Lundgren, alleged that he was suspended after complaining that the agency was blocking his research on the harmful effects that certain widely used pesticides were having on pollinators such as bees and butterflies. An ARS spokesman said the agency is committed to maintaining scientific integrity. Lundgren's work has drawn national attention as well as the ire of some in the ag industry.
- America's largest seawater desalination plant will open this year. The San Diego Carlsbad plant will help determine the future of seawater desalination in the United States. Supporters say such plants are a partial answer to drought. Opponents say the high costs and threats to marine life make them not worth it.
- According to a new poll by the Associated Press-NORC Center for Public Affairs Research, most Americans know about the climate changes, but they are not worried about it.
- Congress, for the first time in 50 years, has not reauthorized the Land and Water Conservation Fund that was created in 1965. Since it started, almost US\$20 billion has been used to help acquire about 7 million acres of land and easements for more than 41,000 projects in all 50 states. Representative Rob Bishop (R-UT), Chairman of the house Committee on Natural Resources, has concerns the fund was being used for activities far beyond its original purpose and was being used to buy property of questionable public value.
- California officials said last Friday they fined four urban water suppliers, including Beverly Hills, for failing to meet strict conservation standards. This is the toughest enforcement yet of an order to cut water use statewide amid a historic drought.
- On November 4th, the Senate voted to legislatively repeal the "Clean Water Rule," recently adopted by the USEPA and Army. The link to the Senate Committee Report, with views of proponents and opponents, is [here](#).

Corporate Member Spotlight: Verdesian

As a corporate member of SWCS, Verdesian Life Sciences seeks to showcase what the agricultural industry can accomplish by addressing issues concerning nutrient runoff, water quality, and sustainable soil health.



Verdesian was built from the ground up in 2012 with a mission to help row crop and specialty crop farmers,

as well as ornamental and turf growers, maximize the performance of their crops. Verdesian provides solutions to everyday agronomic challenges that impact plant health and nutrition, and ultimately help farmers to improve their bottom lines.

“It’s really important to Verdesian that we partner with grassroots movements of key environmental, governmental, and commodity groups who are currently addressing water quality and soil health issues,” said J.J. Grow, chief executive officer of Verdesian Life Sciences. “We are huge supporters of the Soil and Water Conservation Society’s mission and look to help extend their impact through our partnership.”

Verdesian remains committed to the development of environmentally sustainable products through its partnerships with third-party organizations, such as the 4R Nutrient Stewardship Program and research facilities at the Los Alamos National Laboratory. With increasing food demand, supply, and safety pressures on the agriculture industry, Verdesian is focused on maximizing every crop’s potential by providing essential nutrients that are delivered when and how the plant needs them.

More efficient applications of nutrient inputs means stronger, healthier crops, and that equates to better yield potential, as well as limiting the amount of unused nutrients left behind in the soil. Verdesian provides solutions to the environmental losses of nitrogen (N) and phosphorus (P) from application of fertilizers and manure through a broad portfolio of nutrient enhancement products. NutriSphere-N Nitrogen Fertilizer Manager from Verdesian has been shown in research, when applied with urea, to hold 47% of applied N in soil more than six months after application. AVAIL Phosphorus Fertilizer Enhancer is proven to get 20% to 25% more P into plants, versus leaving it in the soil where it is subject to offsite movement.

“Being able to provide farmers with products that can help them to be good environmental stewards and still deliver a strong return on investment will be pivotal to the agricultural community’s future,” Grow said. “We want to promote the hard work and positive impact the industry is having on the environment and will work in tandem with the

SWCS to connect that message to the agriculture community.”

Further information about Verdesian is available at vlsci.com.



Chapter Spotlight: Hoosier Chapter

Chapter location: Indiana

Current chapter president: Rafael Vega

History of the chapter. Hoosier Chapter was founded on September 7, 1948, with 38 members. The first council meeting was held in Indianapolis on October 26, 1948. On December 9, 1948, Hugh Hammond Bennet spoke privately to 16 of the local Hoosier Chapter members, urging them to conserve our remaining natural resources and to go out to the world and spread the gospel of soil and water conservation. The chapter was incorporated in 1961.

What was the most successful chapter event in the last year? Last June 18 we held our summer meeting. This meeting was focused on a nutrient trading project that was unique in the nation. A group created a partnership that included private organizations, local, state, and federal government to implement nutrient trading activities on farms on southeast Indiana. The majority of us would not have had an opportunity to see how nutrient trading works without this training.

What other activities has your chapter been involved in this year? Our chapter had booths in the Governors’ conference in Conservation and the Indiana Association of Soil and Water Conservation Districts (IASWCD) Annual Conference in Indianapolis. This provided the opportunity to speak to legislators, congressmen, and other leaders within the state about soil and water conservation concerns.

What is your membership’s preferred method of communication? Our Chapter utilizes several methods of communication. The preference will depend on what the discussion will include. We firmly believe in great face to face interactions as this allows us to develop professional relationships that benefit everyone. Local leadership understands the great benefits that remote resources like social media, a newsletter, and a website bring to our ever-busy life. Currently the chapter is evaluating alternative methods for meetings, such as web meetings.

What would you say are the most important current conservation concerns for your region? The pressure to convert wetland sites to production seems to be an increasing demand. The department of agriculture should keep on striving to seek technically sound and efficient ways to provide stakeholders with the information that is required in a timely matter.

What is your favorite part of membership in SWCS? Being able to develop and expand our professional network while exchanging technical information.

What advice would you give to a new chapter? Ensure that you partner with more seasoned chapters, and presidents and council members from your chapter should mentor the newer chapter leaders.

New Members

Welcome members who joined in October!

International

Masakazu Komatsuzaki

Arkansas—Razorback

Haley Bond

California/Nevada

Arlene Adviento-Borbe

Brittany Jensen

Canada—Ontario

Doug Thompson

DC—National Capital Chapter

JoAnn Coates-Hunter

Iowa

Libby Atwater

Matt Lechtenberg

Bill Molison

Iowa—Iowa State University

Student Chapter

Emma Bravard

Adam Donovan

Joel Grimm

Brayton Grote

Alex Hansen

Emily Jonas

Jackie Klindt

Josh McDanel

Lauren Suhi

Illinois

Ryan Smith

Mollie Waller

Indiana—Hoosier

Jennifer Kipper

Kentucky—Bluegrass

Zak Danks

Mississippi—Mississippi State

University Student Chapter

Sandra Guzman

North Dakota

Kevin Misek

Ohio—All Ohio

Chris Eidson

Mary Griffith

Oklahoma

Nancy Keithline

Tennessee

Pamela Hoskins

Jason McAfee

Melissa Oliver

Eston Williams

Texas—Post Oak

Jacqui Aitkenhead-Peterson

Virginia

Kathy Holm

Washington—Olympic View

Skyler Elmstrom

Corporate Members

Please contact corporate.info@swcs.org for more details.

Gold



Silver



VERDESIAN



The Fertilizer Institute

Bronze



From the Leadership: Live Life Abundantly

By John Rissler, At-Large Director



We live in an exciting time for agriculture! I love seeing farmers focus on how more life can be added to their operations. Recent grassroots efforts have started a soil health renaissance. Farmers are seeing the benefits of increasing the “life” in the soil with great results.

Our soils, our rivers, and our gulfs were designed to be alive. Life as we know it is dependent upon our topsoil, rainwater, and sun shining on green fields. Some farming practices have been treating soil like dirt, causing limited infiltration, impacting filtration of our water and underutilizing solar energy. It makes sense to me that the Dead Zone in the Gulf of Mexico will be solved by life on the land.

We need living leaves to harvest the sun’s energy through photosynthesis and to give a hard rain a soft landing. We need living roots to penetrate the earth, utilizing nutrients, increasing infiltration, and increasing organic matter. We need living organisms such as bacteria, fungi, protozoa, nematodes, and microarthropods doing a host of beneficial activities while making their homes in the soil. We can learn so much by studying food webs and comparing them to how we live today. We can actually see progress by using a shovel in our fields. We don’t know everything, but we do know that life is good.

In these exciting times, we also need sound farm-scale research more than ever before. What we really need is to share knowledge and scientific information. No one does this better than the Soil and Water Conservation Society. I hope that you continue to support SWCS as we all engage in sharing knowledge that will help us solve the great challenges of our time.