# JOURNAL OF SOIL AND WATER CONSERVATION The science and art of natural resource management for sustainability



# **Table of Contents**

# **A SECTION**

## **HOMEFRONT**

103A Reflections on 2010 International Annual Conference

Jim Gulliford

#### **CONSERVATION IN ACTION**

The road to clean water: Building collaboration and stakeholder relationships
William L. Hargrove and Dan Devlin

#### **FFATURES**

- Crop residue is a key for sustaining maximum food production and for conservation of our biosphere
  Jorge A. Delgado
- 117A Radionuclides in soils along a mountain—Basin transect in the Koratepa Mountains of Uzbekistan
  Tolib Muminov, Muhtor Nasyrov, R.Scott Van Pelt, Akmal A. Safarov, Amriddin V. Halikulov, and Shaymon X. Hushmuradov

#### **TECH TRANSFER BRIEFING**

- Impacts of the corn grain ethanol industry on the United States agricultural sector James Larson
- 123A Transport of thifensulfuron-methyl and tribenuron-methyl in runoff Jane Elliott
- 124A Outreach and the adoption of conservation practices by farmers

  Maria Lemke
- 125A Tillage translocation and erosion by the disk plow
  Kevin Tiessen

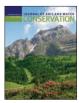
### **A SECTION Call for Papers**

Are you working on cutting edge research in soil and water conservation? Does your work involve new tools, technologies, or materials that others should be aware of? Have you observed or been a part of conservation practices that are worth sharing with the journal audience?

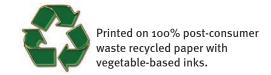
If you answered "Yes" to any of these questions, you are invited to submit your article ideas for the A Section of the *Journal of Soil and Water Conservation*.

Your work could be published in one of the A Section topic areas: Conservation in Practice, Viewpoint, Ideas & Innovations, Conservation in Action, In the News, Feature, etc.

To submit your article ideas or for more information, contact the editor Oksana Gieseman at oksana.gieseman@swcs.org.



On the Cover View of the mountain Brenta Dolomites, Italy. Photo by Vaclay Volrab.



# RESEARCH SECTION

- **Economic and environmental impacts of the corn grain ethanol industry on the United States agricultural sector**J.A. Larson, B.C. English, D.G. De La Torre Ugarte, R.J. Menard, C.M. Hellwinckel, and T.O. West
- Grassed waterway planning model evaluated for agricultural fields in the western coal field physiographic region of Kentucky

J.D. Luck, T.G. Mueller, S.A. Shearer, and A.C. Pike

- Do plot studies generate "directionally" correct assessments of field-level phosphorus losses?

  D.R. Smith and E. Pappas
- Transport of two sulfonylurea herbicides in runoff from border dyke irrigation
  J.A. Elliott and A.J. Cessna
- Effects of outreach on the awareness and adoption of conservation practices by farmers in two agricultural watersheds of the Mackinaw River, Illinois

A.M. Lemke, T.T. Lindenbaum, W.L. Perry, M.E. Herbert, T.H. Tear, and J.R. Herkert

Assessment of tillage translocation and erosion by the disk plow on steepland Andisols in Costa Rica K.H.D. Tiessen, F.M. Sancho, D.A. Lobb, and G.R. Mehuys

CONSERVATION

o n i n e

The Journal of Soil and Water Conservation has launched online.

#### **AUTHORS**

Please submit manuscripts using the new online manuscript review system.

MORE INFORMATION
Go to www.jswconline.org

# JOURNAL OF SOIL AND WATER CONSERVATION

Soil and Water Conservation Society 945 SW Ankeny Road, Ankeny, IA 50023 USA www.swcs.org

EXECUTIVE DIRECTOR Jim Gulliford Soil and Water Conservation Society Ankeny, Iowa, USA

EDITOR & DIRECTOR OF PUBLICATIONS Oksana Gieseman Soil and Water Conservation Society Ankeny, Iowa, USA

RESEARCH EDITOR & CHAIR OF EDITORIAL BOARD Jorge A. Delgado Soil Plant Nutrient Research Unit USDA Agricultural Research Service Fort Collins, Colorado, USA

EDITORIAL ASSISTANT Jacqueline Pohl Soil and Water Conservation Society Ankeny, Iowa, USA

EDITORIAL BOARD Mahdi M. Al-Kaisi Department of Agronomy Iowa State University Ames, Iowa, USA

Francisco Arriaga National Soil Dynamics Laboratory USDA Agricultural Research Service Auburn, Alabama, USA

Meni Ben-Hur Institute of Soil, Water and Environmental Sciences Agricultural Research Organization, Volcani Center Bet-Dagan, Israel

Lorenzo Borselli Research Institute for Geo-Hydrological Protection and National Research Council Florence, Italy

Darrell J. Bosch
Department of Agricultural and Applied Economics
Virginia Polytechnic Institute and State University
Blacksburg, Virginia, USA

Warren J. Busscher Coastal Plains Soil, Water, and Plant Research Center USDA Agricultural Research Service Florence, South Carolina, USA

Grant E. Cardon Extension Utah State University Logan, Utah, USA

Adrian Chappell Digital Soil Mapping Team Commonwealth Science & Industry Research Organisation Canberra, Australia

Zhibao Dong Key Laboratory of Desert and Desertification Chinese Academy of Sciences Lanzhou, Gansu Province, China

Moustafa A. Elrashidi National Soil Survey Center USDA Natural Resources Conservation Service Lincoln, Nebraska, USA

LeRoy Hansen USDA Economic Research Service Washington, DC, USA

Chunsheng Hu Center for Agricultural Resources Research Shijiazhuang, Hebei, China

Peter J.A. Kleinman Pasture Systems & Watershed Management Research Unit USDA Agricultural Research Service University Park, Pennsylvania, USA

Raúl S. Lavado College of Agronomy University of Buenos Aires Buenos Aires, Argentina

Birl Lowery Department of Soil Science University of Wisconsin–Madison Madison, Wisconsin, USA

Loretta M. Lynch Department of Agricultural and Resource Economics University of Maryland College Park, Maryland, USA

Maurice J. Mausbach Soil Survey and Resource Assessment USDA Natural Resources Conservation Service Fort Collins, Colorado, USA Machito Mihara Faculty of Regional Environmental Science Tokyo University of Agriculture Tokyo, Japan

Tom Mueller Department of Plant and Soil Sciences University of Kentucky Lexington, Kentucky, USA

Thanos Papanicolaou Department of Civil and Environmental Engineering The University of Iowa Iowa City, Iowa, USA

Kenneth N. Potter Grassland Soil and Water Research Laboratory USDA Agricultural Research Service Temple, Texas, USA

Felix Kolawole Salako Department of Soil Science and Land Management University of Agriculture Abeokuta, Nigeria

M.S. Srinivasan National Institute of Water and Atmospheric Research Ltd. Christchurch, New Zealand

Peter Strauss Institute for Land and Water Management Research Federal Agency for Water Management Pöchlarn, Austria

Mary E. Stromberger Department of Soil and Crop Sciences Colorado State University Fort Collins, Colorado, USA

R. Scott Van Pelt Wind Erosion and Water Conservation Research Unit USDA Agricultural Research Service Big Spring, Texas, USA

Anita Veihe Department of Environmental, Social and Spatial Change University of Roskilde Roskilde, Denmark

John Westra Department of Agricultural Economics and Agribusiness Louisiana State University Baton Rouge, Louisiana, USA

John D. Williams Columbia Plateau Conservation Research Center USDA Agricultural Research Service Pendleton, Oregon, USA

Wanhong Yang Department of Geography University of Guelph Guelph, Ontario, Canada

BOARD OF DIRECTORS
William W. Boyer, President & Northeastern Director
Gary Steinhardt, Vice President & East North Central Director
Clark Gantzer, Secretary & At-Large Director
Dan Towery, Treasurer & At-Large Director
Mark Berkland, Southeastern Director
Peggie James, West North Central Director
Danny Hughes, South Central Director
Rich Kann, Student Director
Melinda L. McClanahan, At-Large Director
Anita Nein, Northern Plains Director
Marsha L. Paley, Canada Director
Jerry Pearce, Southwestern Director
Don Wysocki, Western Director

The Journal of Soil and Water Conservation (print ISSN 0022-4561, online ISSN 1941-3300) is published bimonthly by the Soil and Water Conservation Society. © 2010 by the Soil and Water Conservation Society. All rights reserved.

For subscriptions or membership, please visit www.swcs.org or call 80o-THE-SOIL\_POSTMASTER: Send address changes to *Journal of Soil and Water Conservation*, 945 SW Ankeny Road, Ankeny, IA 50023 USA. Periodicals postage paid at Ankeny, IA, and additional mailing offices.

Submit comments, contributions, advertising queries, and requests for reprints and permissions to the editor at pubs@swcs.org, Articles in the Research Section have undergone peer review. The Soil and Water Conservation Society assumes no responsibility for statements and opinions expressed by contributors.

# Soil and Water Conservation Society Corporate Membership

#### **GOLD CORPORATE MEMBERS**

Agren Inc. www.agren-inc.com

Agri Drain Corporation www.agridrain.com

#### SILVER CORPORATE MEMBERS

The Nature Conservancy www.nature.org

#### **BRONZE CORPORATE MEMBERS**

Ag Business Consultants www.van8.com

Agricultural Engineering Services PLLC www.aes-office.com

APS Forestry www.aps.com

Casey's General Store Inc. www.caseys.com

EnSave Inc. www.ensave.com

Forrest Keeling Nursery www.fknursery.com

Logiag Inc.
www.farmnutriadvisor.com

Propane Education and Research Council www.propanecouncil.org

Stock Seed Farms www.stockseed.com

Thomas Carpenter, CPESC www.scourstop.com

Validus Services LLC www.validusservices.com

White River Irrigation District www.whiteriverirrigation.com

For information on becoming a corporate member, please contact

Sue Ann Lynes

515-289-2331 ext. 112

sueann.lynes@swcs.org