

Table of Contents

A SECTION

FEATURE

37A **To protect and conserve: Fifty years of Nebraska's Natural Resources Districts**

Alan J. Bartels

VIEWPOINT

43A **Sustaining soil for advancing peace: World is one family**

Rattan Lal

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 editor Annie Binder at annie.binder@swcs.org



On the Cover
Irrigated field in west
central Texas.
Photo by Joel Dunn.



Printed on 100% post-consumer
waste recycled paper with
vegetable-based inks.

RESEARCH SECTION

- 221 **Crop residue cover dynamics for wind erosion control in a dryland, no-till system**
C. Schnarr, M. Schipanski, and J. Tatarko
- 230 **Influence of poultry litter on nutrient availability and fate in plant-soil systems: A meta-analysis**
Y. Lin, D.B. Watts, and G.B. Runion
- 240 **Soil loss due to harvesting of peanut and cassava under traditional farming systems: Cost implications of soil nutrient loss**
S.O. Oshunsanya, V.M. Samson, and H. Yu
- 249 **Simulating behavioral heterogeneity in watershed models: A systematic review of fertilizer use in SWAT studies**
L. Arrueta, D. Jackson-Smith, and M. Kalcic
- 261 **Cover crops may exacerbate moisture limitations on South Texas dryland farms**
S. Kasper, F. Mohsin, L. Richards, and A. Racelis
- 270 **“How can you put a price on the environment?” Farmer perspectives on stewardship and payment for ecosystem services**
A.C. White, J.W. Faulkner, D.S. Conner, V.E. Méndez, and M.T. Niles
- 284 **Capture of surface water runoff for irrigation of corn in western Illinois: Implications for nutrient loss reduction**
O. Oladeji, G. Tian, R. Cooke, A. Cox, H. Zhang, and E. Podczewinski
- 292 **Estimates of soil erosion and best management practice effectiveness at forestry stream crossings in North Carolina**
A.J. Lang, W.A. Coats, T.A. Gerow Jr., and W.A. Swartley
- 305 **Management of nutrient export from diffuse sources in watersheds for environmental protection under uncertainty**
Q. Rong, M. Su, W. Yue, and Y. Cai
- 322 **Physicochemical properties of biochar derived from wood of *Gliricidia sepium* based on the pyrolysis temperature and its applications**
S. Wakamiya, Y. Kurimoto, H. Sugimoto, Y. Aoki, S. Kato, M. Ogasawara, N. Kanazawa, N. Hosokawa, A. Hayakawa, T. Takahashi, and Y. Ishikawa

JOURNAL OF SOIL AND WATER
CONSERVATION
o n l i n e

The *Journal of Soil and Water Conservation* is online.

AUTHORS

Please submit manuscripts using the online
manuscript review system.

MORE INFORMATION

Go to www.jswconline.org

RESEARCH EDITOR & CHAIR OF EDITORIAL BOARD

Gretchen Sassenrath
Department of Agronomy
Kansas State University
Parsons, Kansas, USA

RESEARCH EDITOR EMERITUS

Jorge A. Delgado
Soil Management and Sugar Beet Research Unit
USDA Agricultural Research Service
Fort Collins, Colorado, USA

EDITORIAL BOARD

Naveen C. Adusumilli
Department of Agricultural Economics and Agribusiness
Louisiana State University Agricultural Center
Baton Rouge, Louisiana, USA

Vladimir Alarcon
Department of Civil Engineering
Diego Portales University
Santiago, Chile

J. Gordon Arbuckle, Jr.
Department of Sociology
Iowa State University
Ames, Iowa, USA

David W. Archer
Northern Great Plains Research Laboratory
USDA Agricultural Research Service
Mandan, North Dakota, USA

Eli Argaman
Ministry of Agriculture and Rural Development
Beit Dagan, Israel

Francisco Arriaga
Department of Soil Science and UW-Extension
University of Wisconsin-Madison
Madison, Wisconsin, USA

Karl Auerswald
Technische Universität München
Freising, Germany

Jamiu Oladipupo Azeze
Department of Soil Science and Land Management
Federal University of Agriculture Abeokuta
Abeokuta, Ogun, Nigeria

Claire Baffaut
Cropping Systems and Water Quality Research Unit
USDA Agricultural Research Service
Columbia, Missouri, USA

Yazidhi Bamutaze
Makerere University
Kampala, Uganda

Chongfa Cai
College of Resources and Environment
Huazhong Agricultural University
Wuhan, Hubei Province, China

Aaron L.M. Daigh
Department of Soil Science
North Dakota State University
Fargo, North Dakota, USA

Mary Doidge
Department of Natural Resource Sciences
McGill University
Sainte-Anne-de-Bellevue, Quebec, Canada

Charles Gachene
University of Nairobi
Nairobi, Kenya

Clark J. Gantzer
Soil, Environmental, and Atmospheric Sciences
University of Missouri
Columbia, Missouri, USA

Margaret W. Gitau
Agricultural and Biological Engineering
Purdue University
West Lafayette, Indiana, USA

Valentin Golosov
Lomonosov Moscow State University
Moscow, Russia

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

Thomas Iserloh
Department of Physical Geography
Trier University
Trier, Germany

Gergely Jakab
Research Center for Astronomy and Earth Sciences
Hungarian Academy of Sciences
Budapest, Hungary

Narayanan Kannan
Tarleton State University
Stephenville, Texas, USA

Mohammad Khakbazan
Brandon Research Center
Agriculture and Agri-Food Canada
Brandon, Manitoba, Canada

Andreas Klik
Institute of Hydraulics and Rural Water Management
BOKU-University of Natural Resources and Life Sciences
Vienna, Austria

Sheng Li
Fredericton Research and Development Center
Agriculture and Agri-Food Canada
Fredericton, New Brunswick, Canada

Xiaomao Lin
Department of Agronomy
Kansas State University
Manhattan, Kansas, USA

Lisa Lobry de Bruyn
School of Environmental and Rural Science
University of New England
Armidale, New South Wales, Australia

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

Daniel Moriasi
Great Plains Agroclimate and Natural Resources Research Unit
USDA Agricultural Research Service
El Reno, Oklahoma, USA

Rachid Mrabet
Institut National de la Recherche Agronomique (INRA)
Rabat, Morocco

Paulo Tarso Sanches de Oliveira
Federal University of Mato Grosso do Sul
Campo Grande, Mato Grosso do Sul, Brazil

Zeyuan Qiu
Department of Chemistry and Environmental Science
New Jersey Institute of Technology
Newark, New Jersey, USA

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

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

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

Wendong Zhang
Department of Economics
Iowa State University
Ames, Iowa, USA

EDITOR & DIRECTOR OF PUBLICATIONS
Annie Binder
Soil and Water Conservation Society
Ankeny, Iowa, USA

EDITORIAL ASSISTANT
Jody Thompson
Soil and Water Conservation Society
Ankeny, Iowa, USA

CHIEF EXECUTIVE OFFICER
Clare Lindahl
Soil and Water Conservation Society
Ankeny, Iowa, USA

BOARD OF DIRECTORS
Dale Threatt-Taylor, Chair & Southeastern Director
Rebecca Power, Vice-Chair & North Central Director
Jane Hardisty, Secretary & At-Large Director
Steve Kadas, Treasurer & Southwestern Director
Keith Berns, Northwestern Director
Christopher Hartley, Northeastern Director
Ellen Gilinsky, At-Large Director
Jerry Hatfield, At-Large Director
Jason Weller, At-Large 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. © 2022 by the Soil and Water Conservation Society. All rights reserved.

For subscriptions or membership, please visit www.swcs.org or call 800-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.

Justice, Equity, Diversity, and Inclusion: SWCS seeks diverse voices, actively listens, engages in dialogue, thinks critically, and takes meaningful action toward creating institutions and systems that serve and value people equally.

**Soil and Water
Conservation Society
Corporate Partners**

PLATINUM CORPORATE PARTNERS

The Nature Conservancy
www.nature.org

Syngenta
www.syngenta.com

GOLD CORPORATE PARTNERS

Agri Drain Corporation
www.agridrain.com

Hickenbottom Inc.
www.hickenbottominc.com

SILVER CORPORATE PARTNERS

The Fertilizer Institute
www.tfi.org

BRONZE CORPORATE PARTNERS

Iowa Learning Farms
www.iowalearningfarms.org

For information on becoming a corporate member, please contact
515-289-2331 ext. 114
corporate.info@swcs.org