

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Water Current Newsletter

Water Center, The

8-1997

Water Current, Volume 29, No. 4, August 1997

Follow this and additional works at: https://digitalcommons.unl.edu/water_currentnews



Part of the [Water Resource Management Commons](#)

"Water Current, Volume 29, No. 4, August 1997" (1997). *Water Current Newsletter*. 215.
https://digitalcommons.unl.edu/water_currentnews/215

This Article is brought to you for free and open access by the Water Center, The at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Water Current Newsletter by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.

Water Current

Fifth Annual Festival of Color Highlights Landscaping, Youth Activities Near Mead

By Steve Ress

Landscaping demonstrations and youth activities are expanded attractions at this year's fifth annual Festival of Color near Mead.

The lawn and garden open house, that attracts thousands, will be Saturday, Sept. 6 at the University of Nebraska's John Seaton Anderson Turfgrass and Ornamental Research Area. The area is part of NU's Agricultural Research and Development Center.

Festival demonstrations, displays and how-to sessions are from 10 a.m. to 4 p.m. Featured this year are demonstrations on creating a new or renovating an existing landscape to one that is both attractive and environmentally-sensitive.

"Landscaping shouldn't just beautify the yard, it should also provide shade and privacy. It should help define patio and deck areas as outdoor 'rooms' that add useable space to the home," said NU landscape horticulture specialist Steven Rodie.

Guided tours on tree and shrub selection, perennials, ornamental grasses and turfgrass also will be offered, along with talks on landscape water management, seasonal wreaths and centerpieces and current fads in perennial gardening.

A landscape problem-solving session features the panel from the popular Backyard Farmer television program. Those attending can bring plant samples for the panel to identify and diagnose.

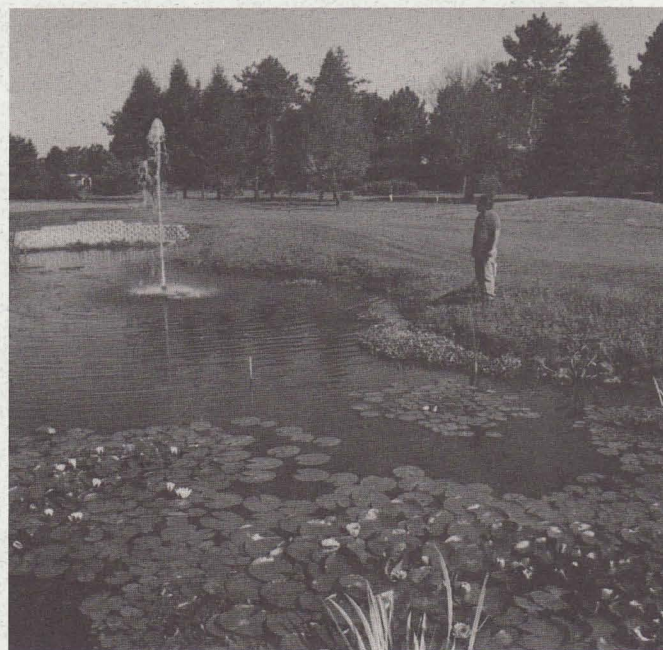
Demonstrations will address best lawn management practices, tree and shrub selection, pond maintenance, houseplant propagation, backyard wildlife and more.

Children can learn about soil and water conservation in the hands-on family fun center. Activities there help children understand the water cycle, soil and the importance of Nebraska's groundwater. A children's garden will also be featured.

Environmental and gardening organizations will be highlighted in the organization tent. Nursery retailers will offer a large selection of plant material for sale, as well.

The Great Plants for the Great Plains program is another festival feature. "The goal of this program is to

(Continued on page 6)



Extension turfgrass specialist Roch Gaussoin looks over one of the pond displays at NU's John Seaton Anderson Turfgrass and Ornamental Research Area near Mead. The area will host the fifth annual Festival of Color on Saturday, Sept. 6.

INSIDE

- 3 UNICAMERAL MOVES ON INSTREAM APPROPRIATION
- 4 NATIVE PLANTS CLEANSE TOXIC WASTE
- 8 DROUGHT PLANNING CENTER AT UNL

Retirement, New Staff Welcomed, USGS Funds Nebraska Proposals

from the DIRECTOR



Bob G. Volk

I would like to bring you up to date on several staffing changes in our unit. Chris Grant, secretary for the Pesticide Applicator Training Program, is retiring after a long and successful career with the University of Nebraska and Jean Klasna, our accountant-clerk, has accepted another position at UNL. We appreciated their dedicated service to us and will miss them.

Brenda West is working on a part-time basis to replace Jean and Vida Eden has replaced Chris. Both have considerable experience within the university system. We welcome them to our unit.

We have completed the USGS regional competition for funds and Nebraska again did very well. Proposals by Dr. Gary Hergert, of North Platte, on the use of best nitrogen management practices to prevent groundwater contamination and by Dr. Kyle Hoagland, of Lincoln, studying the effects of herbicides on algae as related to water quality were accepted for funding. Congratulations to these investigators. It appears that regional competitive grant funds will again be available from USGS next year.

Another hot research area deals with the "Hypoxia" problem in the Gulf of Mexico. A large decrease in Gulf shell fish is being attributed to increased levels of nitrogen in surface waters. The midwest is an extremely large user of nitrogen fertilizer and spring runoff may be causing some of the higher nitrogen

levels in the Mississippi River. Several states are planning to join to put forth a research proposal to study the problem and recommend possible solutions. Many states are conducting research on nitrogen management and now may be the time to pool our energies and resources into a regional project.

As of Aug. 1 our unit became part of the new School of Natural Resource Sciences. Dr. Blaine Blad will be director for the coming two years. Being part of the new SNRS should enhance our ability to conduct research and educational programs in the water sciences. A future issue of the *Water Current* will more closely examine the new school.

On a personal sad note, I lost my daughter Caren, age 24, to brain cancer on July 10. We battled this cruel disease for 18 months trying every treatment available. Caren died with great faith and as a witness to many. Her memorial service was a celebration of her life and a journey into His presence. We all miss her a lot.

Water Current

Water Center/
Environmental Programs
103 Natural Resources Hall
Lincoln, NE 68583-0844
Phone: (402) 472-3305
Fax: (402) 472-3574
E-mail: sress@unlinfo.unl.edu
World Wide Web
<http://ianrwww.unl.edu/ianr/waterctr/wchome.html>

Bob G. Volk — Director
Roy F. Spalding — Associate Director,
Water Sciences Laboratory Director
Edward F. Vitzthum — Coordinator of
Environmental Programs
Robert D. Kuzelka — Assistant to the
Director
Steven W. Ress — Editor

This newsletter is published with partial financial support from the Department of the Interior; U.S. Geological Survey. The content does not necessarily reflect the views and policies of the Department of the Interior, nor does mention of trade names or commercial products constitute endorsement by the U.S. Government.

Unicameral Moves Quickly on Changes to Instream Appropriations Process with LB877

By Bob Kuzelka

With near lightning speed the 95th Nebraska Legislature enacted major changes to the state's instream appropriations process earlier this year.

LB877 was introduced on January 22 and signed into law by Governor Ben Nelson on June 12. Though the five months spent enacting this significant legislation was relatively brief, efforts to bring about its passage were major.

Prompting introduction of the bill was a pending application for instream appropriations in the Platte River by the Nebraska Game and Parks Commission (NGPC). This highly controversial application already had been subjected to an unsuccessful mediation process prior to its early public hearings, shortly after the New Year.

The potential to apply for instream appropriations has been available to the NGPC and the state's natural resources districts (NRDs) since 1984.

The law defines instream appropriation as the undiverted application of waters of a natural stream within or bordering upon the state for recreation or for fish and wildlife purposes. Such authorized instream uses of water are considered a beneficial use of water.

To date the NGPC has obtained an appropriation on Long Pine Creek and the Central Platte NRD has an appropriation on part of the Platte River within its district. Both of these appropriations, as well as the pending NGPC application, are for fish and wildlife purposes.

Changes to Nebraska's instream appropriation law made by LB877 include:

Required review of all appropriation permits every 15 years. The hearings would proceed under the arguable presumption that the appropriation continues to provide the beneficial use for which the permit was granted and is in the public interest. This review would be somewhat similar to the continuing reviews of all existing water rights now done by the Nebraska Department of Water Resources.

Provides that existing or pending instream appropriations be modified to not interfere with applications for certain small and limited uses, such as for public water supply and flood and sediment projects. The bill does not address the potential impact on an instream appropriation from a large number of such use exceptions in a single basin area.

Increases from 0 percent to 20 percent the time period when the requested stream flow would be

available. This requirement is retroactive to Jan. 1, 1997 and thus requires a reopening of the pending NGPC application hearings.

Requires parties disputing future applications to undergo mediation. As previously noted, the pending NGPC application was subjected without success to a similar process before the public hearings.

The impacts of these changes in statutes could run the gamut from creating less controversy over future instream applications to no further applications being filed. Specific impacts of the legislation probably won't be realized quite as quickly as the five months spent moving LB877 through the legislative process.

First impacts of the new law will undoubtedly be felt by the pending NGPC application.

Further and future impacts might be seen in attempts to implement the recently signed agreement between Nebraska, Colorado, Wyoming and the U.S. Department of the Interior. This agreement would lead to a Basinwide Recovery Program for the Platte River Watershed.

(Kuzelka is assistant to the director, Water Center/Environmental Programs and associate professor, Forestry, Fisheries and Wildlife Department, University of Nebraska-Lincoln).

Schulze One of Three Extension Staff Honored

University of Nebraska extension pesticide coordinator Larry Schulze, of Lincoln, was one of three NU faculty honored at last month's 82nd annual National Association of County Agricultural Agents (NACAA) meeting.

Schulze and Gary Hall of Holdrege, Phelps/Gosper County extension educator, received Distinguished Service Awards for their contributions to extension programs.

John Fech of Omaha, Douglas

County extension educator, was awarded an Agricultural Achievement Award for his horticulture and environmental stewardship efforts.

Schulze, of the Water Center/Environmental Programs unit, has worked with NU Cooperative Extension for 17 years, becoming NU pesticide coordinator in 1987.

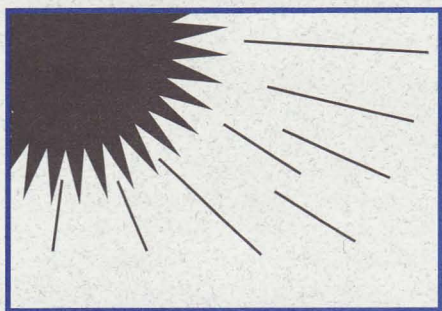
He was the first extension educator to use computers to analyze irrigation costs and the first in the nation to create a pesticide educa-

tion resources page on the Internet. He has developed more than 50 pesticide training resources, many of which are used nationally.

He is responsible for the certification training of private and commercial pesticide applicators statewide. This is one of Nebraska's largest extension programs, reaching 10s of thousands of Nebraskans each year.

NACAA meetings were held in Burlington, VT. July 13-17 with more than 2,000 members attending.

Native Plants Help Clean-up Toxins



Switchgrass, bluestem, bromegrass, tall fescue and green foxtail are frequent targets of herbicide applications. But if Garald Horst and his colleagues are successful, large amounts of these 'pests' may be planted in Nebraska for very specific purposes.

"We are currently evaluating a number of grasses for remediation of TNT," the University of Nebraska-Lincoln plant physiologist said.

TNT was once widely used in making bombs and other munitions at several munitions plants in Nebraska, all of them now closed. Procedures used in making the ammunition has left large areas of the former ordinance plants contaminated with chemical residues from making the explosives.

These sites often prove difficult and expensive to clean up using more conventional methods. An alternative is phytoremediation, the process being explored by Horst and his colleagues at UNL and other institutions.

According to experts in the field, it can take more time than some traditional or intensive treatments, but the financial and environmental savings often offset the additional time. Contaminated sites also look better when plants are growing on them.

Different plants are used to clean-up different toxic materials, based on their tolerance level for that material and their absorption rate.

Some examples include mustard greens and pumpkin vines, which are being used to clean-up lead at an

old Magic Marker factory site, that formerly hosted a battery manufacturer in Trenton, NJ.

Horst is also working with an environmental firm in the use of Indian mustard and corn plants for extracting lead from contaminated soils.

A downside of this method is its inherent slowness, as many plants used in remediation grow slowly, thus removing contaminants slowly.

Another possible downside of this method is the imported, exotic plant species sometimes used in the remediation process.

*Plants are
being used to
clean-up sites
contaminated
by toxic wastes.*

"There is always a risk that an apparent 'miracle plant' brought from abroad will prove to be a ram-paging pest, like kudzu has in the south, or Japanese bamboo in New England," said Carolyn Keiffer, botany professor at Miami University in Oxford, OH.

Relying on native species for phytoremediation is preferable, but can also be more difficult.

Phytoremediation is sometimes used in conjunction with other remediation processes in helping to clean-up a contaminated site.

Some native plants, and how they work to remediate toxins, include the following:

Indian Mustard Greens: A broccoli cousin that sucks lead, chromium, cadmium, zinc and other heavy metals out of soil. It can also

be used to reduce selenium levels.

River Reeds: In tests, the reeds rapidly broke down glycol antifreeze (an airplane de-icing agent) into water and carbon dioxide. It is not yet clear whether the reeds or microbes they attract do the job.

Horseradish: Minced horseradish, mixed with hydrogen peroxide has removed wastes from water in tests. These wastes include chlorinated phenols and anilines (common industrial waste from metal production, paper bleaching and other processes). Now being tested for remediation of contaminated soil.

Kochia and Multiflora Rose: Used in combination, the tumbleweed-like kochia plant and the woody multiflora rose halt the spread of herbicides in spills at agrichemical dealer lots. The kochia must be mowed before it goes to seed in order to prevent excessive spread, however.

Wetland plants (such as duckweed and parrot feather): These can be used to remediate explosives wastes, such as TNT and RDX, from water and sediments.

Grasses and legumes: Can be used to removed hydrocarbons, such as oil spills, from soil and groundwater.

(Editor's Note: Some information in this article was taken from the June, 1997 edition of U.S. Water News).



Spalding Recognized for EPA 'Superfund' Cleanup Technique

An NU researcher who developed a unique and cost effective way to clean-up contaminated groundwater was recognized by the U.S. Environmental Protection Agency (EPA) last month.

Roy Spalding, director of the Water Sciences Laboratory at the University of Nebraska-Lincoln, was presented a certificate of excellence in leadership by Dennis Grams, regional administrator of the EPA. Spalding was recognized for researching and developing a simple, cost effective technique for cleansing groundwater of volatile organic compounds (VOCs) using readily available sprinkler irrigation systems. Grams presented the certificate during a tour of Superfund cleanup sites near Hastings.

The EPA accepted the technique as a new innovative technology and is now using it to help remove groundwater contaminants from a Superfund subsite in Lindsey. This alternative technique was pivotal in gaining EPA's acceptance of using

the Hastings Energy Center for treatment of the chemicals at the two subsites.

Where cleanup costs for just one Superfund subsite can approach \$25 million using traditional cleanup methods, Spalding's sprinkler irrigation technique can reduce that to \$500,000, officials estimate.

The NU researcher has been involved with assessing and helping to remove VOCs from the Hastings Superfund sites for the past 15 years.

Also recognized at last month's Hastings ceremony were Hastings mayor Phil Odom, Kenneth Morrison of Morrison Enterprises and John Lainson of Dutton-Lainson Co. The city of Hastings and Dutton-Lainson are liable, in part, for cleanup of a landfill site. Morrison is liable, in part, for cleanup of a Far-Mar-Co grain storage facility.

EPA officials estimate cleaning up the two Hastings Superfund sites will take more than a decade.

Education and Action Join Forces

Educators and members of The Groundwater Foundation's Groundwater Guardian program will join forces for a workshop and conference at McDonald's Corporate Campus in Chicago, IL.

"This combination of groundwater educators and Groundwater Guardians makes this conference a landmark event and we hope everyone working on groundwater issues, especially on the local level, can be with us," said Groundwater Foundation President Susan Seacrest.

The Nov. 22-24 conference will explore what's new and innovative in groundwater education, policies and technologies to make groundwater protection more effective. Community-based projects, including an exhibition of Groundwater Guardian activities and interactive educational displays, will also be featured.

Representatives from Groundwater Guardian communities will share experiences and issues they face. Educators will relate their successes in groundwater education.

Among the speakers will be Patricia Beneke, assistant secretary of the U.S. Department of the Interior for water and science.

Proposed presentation topics include education and public outreach, pollution prevention, public policy, conservation, best management practices and program administration.

Within these will be presentations on such areas as planning water festivals, water education programs, innovative technologies for waste management and recycling, developing community partnerships, reuse of waste water, irrigation scheduling, storm water management, wetlands restoration, working with the media and fundraising strategies.

The conference is being cosponsored by the University of Nebraska's Water Center/Environmental Programs.

For more information, contact Cindy Kreifels or Amy Killham at The Groundwater Foundation, 1-800-858-4844. Information is also available on the Internet at <http://www.groundwater.org>

Mailing List Update

We are updating our mailing list. If you have a change of title, name and/or address, or would like to have your name added or removed from the *Water Current* mailing list, please complete this form. If you know of individuals who might be interested in receiving our publications, please submit their names.

☐ revise my address ☐ delete me from your list ☐ add to your list

Name: _____

Address: _____

City, State, Zip: _____

Send update to:

Water Center/Environmental Programs
103 Natural Resources Hall • University of Nebraska
P.O. Box 830844 • Lincoln, NE 68583-0844
Phone (402) 472-3305 • FAX (402) 472-3574



Water News Briefs

42nd Annual Midwest Groundwater Conference

The 42nd Annual Midwest Groundwater Conference will be at the Clarion Hotel and Conference Center in Coralville, IA Oct. 22-24, 1997.

Session topics are expected to cover non-point source pollution prevention, watershed protection/monitoring, groundwater modeling computer applications, point source case studies, solid waste/animal waste contamination, groundwater contamination/remediation, wellhead protection, aquifer studies, till hydrology, legal/policy issues, groundwater monitoring issues and groundwater/surface water interactions.

For more information, contact Robert Buchmiller, USGS, MWGWC, P.O. Box 1230, Iowa City, IA 52244. Or email mw-gwc@usgs.gov.

Symposium Focused on Water Act and Groundwater

Protecting groundwater under the new Safe Drinking Water Act of 1996 will be the focus of The Groundwater Foundation's 1997 fall symposium, Sept. 3/4 at San Francisco's Parc Fifty-five Hotel.

"The goal is to help everyone who cares about groundwater, professional and public alike, to assume greater personal and community level responsibility for groundwater and public health protection," said Groundwater Foundation president Susan Seacrest.

Making presentations and leading workshops will be national experts in risk management; public officials from major federal agencies; and citizen activists who have implemented innovative local programs, Seacrest said.

Bob Perciasepe, EPA Assistant Administrator for the Office of Water, is slated to deliver the keynote speech.

Registration information and an agenda are available at www.groundwater.org or by phoning (402) 434-2740.

Nineteen Attend Groundwater U.

Nineteen students from six states and Washington D.C. attended The Groundwater Foundation's annual Groundwater University (GU) in June.

Students participated in water quality experiments and learned about careers in hydrology, geology, agriculture, chemistry and environmental education.

Some GU graduates will now enroll in "Groundwater Grad School" where they will develop a groundwater research or service project in their home community.

Attending from Nebraska were: Molly Albrecht, Kearney; Sara Bankson, Hordville; Jason Harper, Jodi Harper and Gabe Robbins, Grand Island; Emily Hunter, Omaha; Michelle Kuskie, Hays Springs; Elizabeth Rasmussen, York; Megan Sullwold, Elm Creek; and John Wahlmeier, Juniata.

Attending from other states were: Michael Darling, Casper, WY; Devann Pinkham, Henniker, NH; Carl Reeverts, Jenny Reeverts and Andy Serfass, Washington, D.C.; Rachel Rose, Tampa, FL; David Schweinfurth, Columbia, MD; Rachel Scudder, Concord, NH; and Hillary Spencer, Newberg, OR.

GU is based at Jeffrey Lake, near Brady. Tours include wellfields and groundwater springs in central Nebraska and the Sandhills. It is sponsored by Nebraska Public Power District, with additional support from the U.S. Geological Survey, Natural Resources Conservation Service and the Central Nebraska Public Power and Irrigation District.

Environment97

Cyberconferencing comes to life with 'Environment97,' an event that promises to be the world's first environmental conference to take place entirely on the Internet.

The conference will take a broad look at environmental issues. Papers range from global issues on climatic change to environmental philosophy. Highlights include more than 150 technical and general papers, discussion groups, downloadable images of

environmental bad practices and a 'Chat bar' so you can talk with your colleagues around the globe. There also will be a life cycle assessment comparing an Internet conference with a real conference.

For more information on the conference, access <http://www.environment97.org>.

AWWA Research RFPs

The American Water Works Association Research Foundation (AWWARF) is advertising requests for proposals (RFPs) for new research projects to be funded later this year.

The AWWARF sponsors practical, applied research for the drinking water community. Since 1986 it has managed research projects worth more than \$100 million.

New research projects will cover topics including resources, treatment chemistry, customer issues, health effects and epidemiology. RFPs for the new projects are available on the AWWARF Internet web site at www.awwarf.com. For more information, contact the AWWARF at (303) 347-6100.

AWWARF is a non-profit organization dedicated to advancing the science of water.

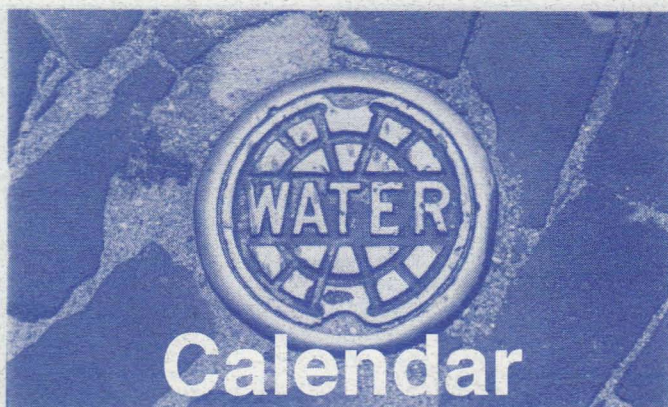
Festival of Color

(continued from page 1)

raise awareness of new and underused plants with exceptional merit," said Luann Finke, president of the Nebraska Nursery and Landscape Association.

Festival of Color remains free to the public, but donations will be accepted to help defray rising costs. Internet users can access Festival of Color at <http://hort.unl.edu/fallfest/>.

The event is supported by the U.S. Environmental Protection Agency, Region VII through the Nebraska Department of Environmental Quality; Nebraska Nursery and Landscape Association; Nebraska Turfgrass Foundation; Earl May Seed and Nursery, Limited Partnership; Bluebird Nursery; Lilypons Water Gardens, Buckeys Town, MD; the Lower Platte North Natural Resources District; Campbell's Nursery and Garden Center; NU Cooperative Extension and the Water Center/Environmental Programs.



Ground Water Protection Council Annual Forum in Cleveland, Ohio

AUGUST

14-15: Chemistry for non-chemists. Chemistry basics for environmental health and safety specialists. Government Institutes, 4 Research Place, Rockville, MD 20850, or call (301) 921-2345.

SEPTEMBER

3-4: "Groundwater Protection Tools For A New Era," The Groundwater Foundation's 13th annual fall symposium. Parc Fifty-five Hotel, San Francisco, CA. Contact The Groundwater Foundation at (402) 434-2740 or email info@groundwater.org for information.

3-6: National Groundwater Association convention and exposition, "Biological Aspects of Groundwater," Las Vegas Convention Center, Las Vegas, NV. Contact Jackie Mack (614) 898-7786.

16-17: Watersheds 105: "Watershed Management Tools Primer," Dallas TX. Contact Susan Branning at (214) 665-8022.

17-20: The Great Basin Symposium on Glacial and Postglacial Drainage, University Park Hotel, Salt Lake City, UT. Contact Don Curry (801) 581-6419.

20-24: The Ground Water Protection Council's annual forum, "Technical Conference on Ground Water, Watersheds, Source Water, Wellhead Protection and Underground Injection Control." Sheraton Cleveland City Centre. For information, contact Jeff Bryant at (405) 858-9566 or email jeff@gwpc.site.net

23-24: Watersheds 101/102: "Principles of Watershed Protection and Management/The Statewide Approach to Watershed Management." Contact Trish Garrigan via FAX at (617) 565-4940.

22-26: Symposium to highlight national watershed water quality projects, Hyatt Regency, Capitol Hill, Washington, D.C. The symposium will highlight water quality achievements made possible by watershed projects. For

more information, contact Lyn Kirschner at (765) 494-9555 or access <http://www.ctic.purdue.edu/Releases/WQSymposium.html>.

OCTOBER

13-14: Conference announcement and call for posters: Nutrients in the Neuse River: Working Toward Solutions. Sheraton Hotel, New Bern, NC. Sponsored by North Carolina State University, Cooperative Extension Service. Posters and exhibits on water quality research, education and management topics are being sought. If interested in presenting a poster or exhibit, contact Greg Jennings via FAX (919) 515-6772 or e-mail at greg.jennings@ncsu.edu no later than June 30.

20-23: The Geological Society of America 1997 Annual Meeting, "Global Connections," Salt Lake City, UT. Phone (303) 447-2020 or 1-800-472-1988. E-mail: meetings@geosociety.org.

19-23: Annual Conference and Symposium on Conjunctive Use of Water Resources: Aquifer Storage and Recovery, Long Beach, CA. American Water Resources Association, Herndon, VA. Phone (703) 904-1225. Email awrahq@aol.com.

NOVEMBER

16-19: International Conference on Advances in Groundwater Hydrology - A Decade of Progress, Tampa, FL. Contact American Institute of Hydrology at (612) 484-8169. Email AIHydro@aol.com.

22-24: "Priming the Pump," water educators workshop and Groundwater Guardian Designation Conference. McDonald's Corporate Campus, Chicago, IL. Contact Cindy Kreifels or Amy Killham at The Groundwater Foundation, 1-800-858-4844 for more information.

Groundwater, watersheds, source water, wellhead protection and underground injection control are the principal topics for the Ground Water protection Council's (GWPC) upcoming annual forum.

Billed as a technical conference by the GWPC, the gathering is scheduled for September 20-24 in Cleveland, OH.

Conference sponsors include the U.S. Environmental Protection Agency, other federal and state agencies, local governments, citizen groups and industry.

Conference topics will include source water - wellhead protection, groundwater - surface water interaction, groundwater management and agricultural chemicals, local government role in groundwater protection, educational approaches to protecting groundwater and deep injection well issues.

The forum and accompanying proceedings are comprised of a mix of invited presentations, papers, concurrent sessions and special poster sessions on the above topics and others that are closely related.

Abstracts for poster sessions are still being accepted.

The conference will be based at the Sheraton Cleveland City Centre. For reservations, phone (216) 771-7600.

For more information, contact Jeff Bryant, Member Services Director, Ground Water Protection Council, 827 N.W. 63 Suite 103, Oklahoma City, OK 73116 or phone (405) 858-9566. Internet users may email jeff@gwpc.site.net

National Drought Planning Center Headquarters at UNL

by Steve Ress

Nebraskans have felt the sting of droughts as much or more than anyone on earth, making it appropriate for an internationally known drought planning center to be located here.

"Even with all the planning strides we've made in recent years, drought is still the one natural disaster that seems to get no respect," said University of Nebraska-Lincoln climatologist Don Wilhite.

Wilhite has studied and tracked these Rodney Dangerfields of the meteorological world for more than 20 years, always wanting to find ways to help people and governments reduce their vulnerability to them.

"Every year we spend between \$6 billion and \$8 billion nationally on drought relief and research. Doesn't it follow that we should be spending at least a portion of that amount on planning and risk management," Wilhite said.

A series of severe droughts in the late 1980s and early 1990s gave Wilhite's ideas the support he needed. The support was founded in the highest levels of the U.S. Congress and led to the formation of the National Drought Mitigation Center (NDMC) in 1995. The center built on the success of the International Drought Information Center he established seven years earlier. Both are part of NUS Institute of Agriculture

and Natural Resources (IANR) and both are directed by Wilhite.

The NDMC has focused on helping planners bridge the gap between climatology and policy planning. At the time of its inception, there was no national program focused on drought and few states had dealt with the subject comprehensively.

Even today, there is no single federal authority for drought planning. Much of that responsibility rests with the states.

Today, 33 states have or are developing drought plans and two more have delegated that responsibility to local water suppliers.

Thanks in part to Wilhite and others, these state plans almost universally stress early warning systems, assessment procedures for measuring the impacts of a drought and strategies to deal with it.

The NDMC helped both directly and indirectly with developing many of these "drought mitigation" plans.

In February, the 17-state Western Governors' Association and several key federal agencies signed a "memorandum of understanding" regarding future management of drought in the west. This memorandum establishes a more comprehensive and integrated response to drought emergencies in the western states and pledges cooperation in planning for future droughts.

It also established a Western Drought Coordination Council

(WDCC) which Wilhite will administer with the help of NDMC resources and expertise.

The center continues to help on a daily basis by:

- Making an archive of drought monitoring and planning information available on the Internet (access <http://enso.unl.edu/ndmc>).

- Advising policy makers and serving as an international advisor to governments and agencies.

- Conducting workshops, seminars and conferences.

- Conducting and fostering research to monitor and mitigate drought.

- Staying in touch with regional, state and federal drought planners.

"Many of the worst effects of drought can be reduced or even eliminated when measures are introduced in advance of a drought. This doesn't happen as often as it should because policy makers, climatologists and others often have radically different perspectives," Wilhite said.

Wilhite hopes the center's involvement with the WDCC, will allow it to mediate differences in perspective and ideas and to strengthen growing response to drought planning in the western states.

"First and foremost, however, we want to be an information clearinghouse on drought and drought mitigation," he said.

WATER CENTER/ENVIRONMENTAL PROGRAMS

103 Natural Resources Hall

University of Nebraska

P.O. Box 830844

Lincoln, NE 68583-0844

ADDRESS CORRECTION REQUESTED



Printed with soy ink on
15% post-consumer recycled paper

Non-Profit
U.S. Postage
PAID
Permit 46
Lincoln NE



It is the policy of the University of Nebraska-Lincoln not to discriminate based on gender, age, disability, race, color, religion, marital status, veteran's status, national or ethnic origin, or sexual orientation.

