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Water Current

Tent Talks, Demonstrations Highlight Sixth Annual Festival of Color, Sept. 12

by Steve Ress

More than 10,000 are expected for landscaping demonstrations, lawn and garden displays and guided tours at the sixth annual Festival of Color near Mead.

Last year's lawn and garden open house attracted over 9,000 and more are expected this year.

Main program areas are: "Trees, Flowers and Shrubs", "Landscape Management and Maintenance" and "Environmental Landscape Design." This last area has topics on backyard weather, landscape design for acreages, saving water in the landscape and yard landscaping tips.

There will be guided tours on pruning, insects, perennial flowers, wildflower basics and other topics throughout the day. The festival's "Tent talks" feature panelists from Nebraska Educational Television's "Backyard Farmer" series and focus on trouble shooting plant problems, carefree floral arrangements, edible flowers and an "Ask the experts" segment.

A much visited site is the children's vegetable and flower garden featuring a pizza, taco and salsa garden, plant petting zoo, and couch potato garden.

Festival of Color remains free to the public, though donations are encouraged to help defray rising costs. To access the festival on the World Wide Web go to <http://hort.unl.edu/fallfest/>.

The event is supported by the U.S. Environmental Protection Agency, Region 7 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; and UNL's Cooperative Extension Division, NU School of Natural Resource Sciences, and Water Center/Environmental Programs.



Admiring the variety of plants and gardening supplies for sale at last year's Festival of Color, near Mead. More than 10,000 are expected for this year's sixth annual lawn and garden extravaganza at NU's Agricultural Research and Development Center (photo: Steve Ress).

"The event grows each year in terms of demonstrations, displays and public interest," said NU horticulturist Amy Greving. The festival is Saturday, Sept. 12 at NU's John Seaton Anderson Turfgrass and Ornamental Research Area. This area is part of NU's Agricultural Research and Development Center near Mead. Demonstrations, displays and how-to sessions are from 10 a.m. to 4 p.m.

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USGS Project Funding, Drinking Water Tabloid, Wyoming Institute Closes

from the DIRECTOR



Bob G. Volk

I am pleased to report to you that again, Nebraska was very successful in the U.S. Geological Surveys regional competition for research grants. Two projects were funded. Dr. Vitaly Zlotnik in cooperation with Kansas researcher's will be studying stream flow and groundwater pumping on the Republican River for \$105,000 and Dr. Xun-Hong Chen received \$50,000 for a study on aquifer properties and their role in streamflow depletion. A total of \$805,000 was available for 13 states in the Midwest so one can see that Nebraska again was very competitive in this region.

I would remind everyone of the Water Tour this year. We have over 80 signed-up for the Kearney Area Chamber of Commerce/Nebraska Water Conference Council Summer Water Tour of the Arkansas and Republican River basins. Several state senators, as well as representatives from Senators Bob Kerrey and Senator Chuck Hagel's offices will be attending.

Increasing our outreach educational efforts on drinking water has long been one of my priorities as Water Center Director. Thanks to a special grant from Region VII of the U.S. Environmental Protection

Agency, this goal soon will be accomplished.

The Center will produce a "Drinking Water Tabloid" for insertion in Nebraska newspapers and will print and distribute the tabloid next spring. This is a good example of the activity in our Center with the success of the three previous tabloids we published. Also, EPA asked if we would produce the tabloid on computer disk and send it to surrounding states. This would enable our counterparts in regional states to take the material and adapt the information for their use as well.

In what looks like a highly political and very controversial decision, the State of Wyoming has closed the doors on their Water Institute. This decision is very sad in that the Wyoming Water Institute was a national leader and highly thought of by all of us. Wyoming is losing a tremendous resource and will soon feel the lack of a viable Water Institute. Most notably it will seriously inhibit their ability to attract grants and provide information on water resources to the public.

Please feel free to contact us for information you would like on Nebraska's water resources.

Water Current

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Summer Water Tour Generates Strong Turn-Out

by Steve Ress

This summer's Kearney Area Chamber of Commerce/Nebraska Water Conference Council tour has generated tremendous interest, no doubt due in part to Kansas bringing suit against Nebraska over Republican River water usage.

Shortly after the July 1 registration date the "Back to the Future - Arkansas/Republican Rivers" tour had over 80 signed-up to attend.

Among registrants were legislators, congressional staff, public and private sector water professionals and agricultural producers all interested in hearing perspectives on the results of the Arkansas River dispute between Colorado and Kansas, and more current issues between

Kansas and Nebraska on the Republican River.

The tour was scheduled Aug. 11-13, beginning and ending at Kearney's Regency Inn.

Among those registered were representatives from U.S. Senator Bob Kerrey and Chuck Hagel's offices, representatives from several state senators, representatives from at least nine Natural Resource Districts and the Nebraska Association of Resource Districts (NARD), the Nebraska Department of Water Resources, NU's School of Natural Resource Sciences, Water Center/Environmental Programs, Conservation and Survey Division, South Central Research and Extension Center and Groundwater Chemistry Laboratory, The Nebraska Farm Bu-

reau Federation, the Twin Loups Reclamation District, Central Nebraska Public Power and Irrigation District, Frenchman-Cambridge Irrigation District, U.S. Bureau of Reclamation, Kansas Department of Agriculture and many others.

Many private well-drilling, irrigation, water metering, implement, financial/credit institutions and others were also represented, as were individual producers from as far away as Texas.

Tour participants will be exposed to a variety of water use projects and water-related research in both Nebraska and Colorado as well as commentary on what could be at stake in the ongoing dispute between Nebraska and Kansas over Republican River water.

Highlights on the three-day tour were scheduled to include an overview of Republican River drainage, a tour of the Rock Creek Fish Hatchery, a history and results of the Colorado/Kansas compact by Steve

(Continued on page 5)

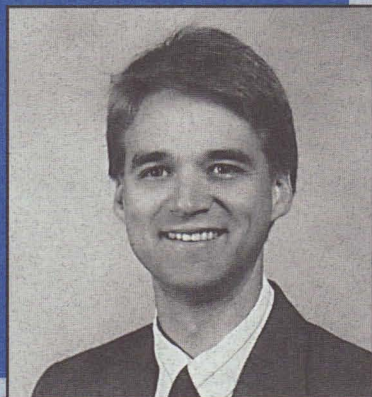


Environmental Winner. Jon Loutzenhiser's drawing was the winner in the 1998 environment poster competition of the Nebraska Association for Family and Community Education. The rural O'Neill resident was one of many third and fourth graders entering the annual competition. Winning posters were displayed in June at the association's state convention.

NebFacts Suggest Ways to Reduce Blue River Basins Runoff Pollution

by Steve Ress

A series of four University of Nebraska-Lincoln Cooperative Extension NebFacts suggest more ways farmers can reduce nonpoint source pollution from pesticide runoff in Nebraska's Blue River Basins area.



Tom Franti

More than 300 farmers in the basins were surveyed about tillage, fertilizer and pesticide use, pest management, conservation and irrigation practices to show what practices they are using to conserve and protect resources, as well

as reduce costs and increase yields.

The survey was conducted by the Nebraska Agricultural Statistics Service as part of a joint University of Nebraska-Lincoln/Kansas State University study aimed at reducing nonpoint source (NPS) runoff pollution from the basins.

Survey results are included in the four new NebFacts, written by UNL surface water management specialist Tom Franti.

They are titled "Blue River Basins Agricultural Survey" and subtitled "Herbicide and Insecticide Use" (NF98-368), "Weed and Insect Management" (NF98-369), "Tillage, Conservation and Cropping Practices" (NF98-370) and "Fertilizer Use and Irrigation Management" (NF98-371). All are available free from local NU Cooperative Extension offices.

Randomly selected fields from within the basins were surveyed. The surveyed fields include more than 2.2 million acres of corn and 850,000 acres of grain sorghum.

"The survey, like the rest of this joint project, was developed in the context of improving surface water quality in the Blue River Basins area," said Franti. He is one of several principal investigators from UNL and KSU.

Runoff water from the basins contains atrazine herbicide and sediments that ultimately affect Kansas' Tuttle Creek Reservoir, which provides drinking water to many municipal systems in Kansas, including Kansas City and Topeka.

"Farmers in the basins rely heavily on herbicides to control weeds and the most commonly used herbicide is atrazine," said Franti.

"The survey gives us a good picture of what producers in the basin are doing now and will ultimately lead us to additional informational and educational efforts aimed at reducing surface water runoff while maintaining yield potential," he said. Analyzed survey results will also help guide the joint UNL/KSU project's future programming.

Among best management practices (or BMPs) thus far targeted for increased use to help reduce runoff in the basins are:

- Band applications of herbicide, or using post emergence products to reduce the risk of herbicide runoff.
- Using integrated pest management (IPM) to help reduce insecticide and herbicide use and save money.
- Incorporating herbicides through tillage and cultivation on soils not prone to erosion.

"The survey was developed in the context of improving surface water quality in the Blue River Basins area" — Tom Franti

Co-sponsors in the project include: The Nebraska and Kansas Departments of Agriculture, NU and KSU cooperative extension, corn and grain sorghum producer associations in both states, Nebraska and Kansas Agricultural Statistics Services and NU's Institute of Agriculture and Natural Resources and Water Center/Environmental Programs.

Wetlands Tabloid Available

Copies of "Wetlands — Understanding A Resource," a 16-page tabloid on Nebraska wetlands, remain available from the UNL Water Center/Environmental Programs.

The tabloid has information on the importance of wetlands; a pull-out map of Nebraska's major wetland complexes; wetland plants, animals and habitats; wetland policy issues, a youth page and a listing of agencies dealing with wetlands.

Many state and federal agencies joined UNL in sponsoring the publication, which has been distributed to Natural Resource District offices, Natural Resource Conservation Service offices, University of Nebraska Cooperative Extension offices, Educational Service Units, public school districts and Nebraska Game and Parks Commission, State, and District offices.

Copies are available for personal use or distribution by contacting Water Center/Environmental Programs, School of Natural Resource Sciences, University of Nebraska, P.O. Box 830844, Lincoln, NE 68583-0844. Phone (402)472-3305 or e-mail sress@unlinfo.unl.edu.

Summer Tour Generates Strong Turn-Out

(Continued from page 3)

Witte of the Colorado Department of Water Resources, Colorado's Pueblo and John Martin reservoirs, discussions with Arkansas River producers and discussions with a Kansas delegation on Kansas' perspectives of the present Republican River dispute with Nebraska.

Rolling commentary will focus on local water-use projects and the effects of the Arkansas River dispute from points of view of state and local officials and producers.

In addition to the Kearney Chamber and the Nebraska Water Conference Council, the tour is sponsored by Central Nebraska Public Power and Irrigation District, Nebraska Public Power District, Gateway Farm Expo and UNL Water Center/Environmental Programs.

AWWA Research Proposals

The American Water Works Association Research Foundation (AWWARF) has announced three new research projects approved for funding in 1998.

Requests for proposals for these projects will be available on the AWWARF web site at <http://www.awwarf.com> after Aug. 17. Proposals must be postmarked by Nov. 2. Unless otherwise indicated, project proposals must include 25 percent of the total project budget as in-kind or cash contribution.

New projects and their maximum finding levels are:

Impacts of Fire Flows on Distribution System Water Quality, Design and Operation (RFP 2554, AWWARF/Kiwa Collaborative Project).

Determine the economic and water quality impacts of designing water distribution systems to meet fire flows. Determine if fire flow requirements are appropriate for modern situations and identify possible alternatives (\$300,000).

Innovative Biological Treatment Processes in Conjunction with Membrane Filtration for Advanced Water Treatment (RFP 2560, Tailored Collaboration Project).

Explore the potential of integrating several innovative biological and filtration processes for advanced treatment of surface water. Target processes include slow sand filtration followed by membrane filtration, slow sand/catalytic conditioner/nanofiltration, and rapid sand filtration operated in a biological mode followed by membrane filtration (\$400,000).

Comparing Basins, Galleries, and Shallow Wells for the Recharge of a Deep Aquifer (RFP 2529, Tailored Collaboration Project).

Compare and determine the feasibility of three different methods of aquifer recharge for an aquifer system where depth of the water table is over 350 feet and suitable storage volume is available (\$170,000).

For additional information, visit the AWWARF web site, or phone (303)347-6100.



Groundwater 101. Fifth graders at Lincoln's Meadowlane Elementary School were introduced to groundwater flow and contamination by means of the UNL Water Center/Environmental Programs' groundwater flow model. The model gets much use at fairs, displays and in classrooms each year (photo: Steve Ress).



Water News Briefs

EPA State Water Pollution Survey

The U.S. Environmental Protection Agency (EPA) says 40 percent of U.S. waters are too polluted for fishing or swimming.

That finding concludes the 1996 Water Quality Inventory, released by the EPA in May. The report is the result of surveys conducted by states in 1994 and 1995 of 19 percent of the nation's river miles, 40 percent of lake surface area and 72 percent of estuary surface area.

Agriculture is the most widespread source of pollutants to surveyed lakes, rivers, and streams. Industrial and urban runoff were the largest polluters of marine estuaries.

Copies of a 12-page summary entitled "National Water Quality Inventory: 1996 Report to Congress" (EPA 841-F-97-003) are available from the National Center for Environmental Publications and Information (NCEPI) at (800) 490-9198. The document is also available on the World Wide Web at <http://www.epa.gov/305b/>

Nebraska's Major Aquifer Detailed

Major aquifer systems in Kansas, Missouri and Nebraska are described in a recently published segment of the "Ground Water Atlas of the United States" by the U.S. Geological Survey (USGS), U.S. Department of the Interior.

The atlas presents the most important aspects of the geology, hydrogeology, groundwater flow system, general water quality and use of water withdrawn from the

major aquifer in the three states.

Copies of this 24-page report (published as USGS Hydrologic Atlas 730-D) are available for \$4 each from USGS Information Services or from the UNL Water Center/Environmental Programs. For more information, contact USGS at 1-800-USA-MAPS, 1-800-HELP-MAP, (402)472-3305 or e-mail sress@unlinfo.unl.edu

Bringing Groundwater to Life

The 1998 combined Groundwater Guardian National Designation Conference and Priming the Pump Water Educator Workshop will be at the Hyatt Regency Alicante in Anaheim, CA Nov. 12-15.

Sponsored by the Lincoln-based Groundwater Foundation, the conference features a combination of classroom presentations, workshops and community and educational exhibits. Topics will include education and outreach, pollution prevention, public policy, conservation, best management practices and program administration. There will be hands-on activities and displays and a mini-groundwater festival will kick-off the conference.

For registration information, contact The Groundwater Foundation at (800)858-4844 or e-mail info@groundwater.org

Designing Water Quality into Landscaping

Designing Water Quality Into Landscaping is a nonpoint source pollution workshop dealing with urban landscape management Sept. 10-12 at Omaha's Best Western-Central Executive Center, 3650 S.

72nd St.

The workshop offers opportunities to learn from researchers and practitioners in the fields of landscape design and management. It is designed for community or facility policy makers and individuals who provide advice or services to homeowners on landscape design.

Topics include: Concept of Landscape Health, Fate of Chemicals in Urban Lawns, Turf Myths: Movement and Management of Water in the Lawn and Key Elements of Environmental Landscape Design. There will be a panel discussion on beneficial landscaping and a field trip to the annual Festival of Color at the University of Nebraska Agricultural Research and Development Center, near Mead.

The workshop is sponsored by the Nebraska Department of Environmental Quality and U.S. Environmental Protection Agency, Region VII. Brochures are available from the UNL Water Center/Environmental Programs by calling (402)472-3305 or e-mailing sress@unlinfo.unl.edu. For additional information phone NDEQ at (402)471-2585 or e-mail deq107@mail.deq.state.ne.us.

Glossary of Ecosystem Terms

A glossary of ecosystem terms is available from the University of Nebraska-Lincoln.

Glossary of Ecosystem Terms is a UNL Cooperative Extension Circular (EC 98-787) that describes Nebraska's ecosystems in general, and describes portions of the Platte River ecosystem in particular. It includes terms related to water management within the Platte River system.

The glossary is a useful resource for teachers, administrators and the public. To order copies, contact your local Cooperative Extension office, or contact Tom Franti at (402)472-9872 or e-mail tfranti@unl.edu

AUGUST

11-13: "Water Quality Enhancement Techniques for Reservoirs and Tailwaters," Tulsa, OK and Sep 15-17, Atlanta, GA. Limnological processes and water quality management opportunities, sampling methodologies and data collection, watershed management and in-reservoir and tailwater engineering technologies. No registration fee. To register or for further information, contact Laurin Yates at (601) 634-3792, FAX: (601) 634-4158, email: laurin.i.yates@wes01.usace.army.mil, World Wide Web site: <http://chl.wes.army.mil/train-ing/lectures/wqual98>

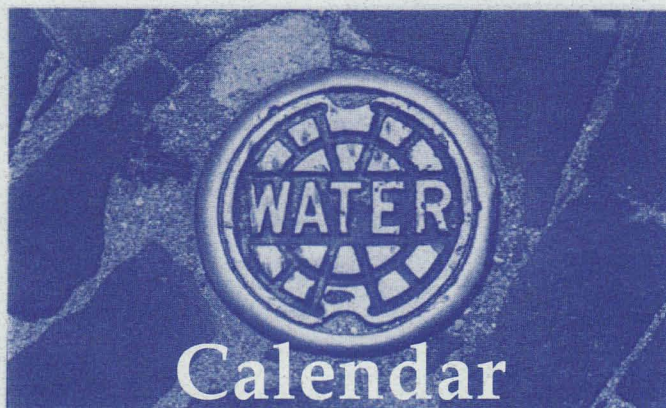
24-28: Meeting on Water Quality Standards, Water Quality Criteria and Implementation, including Water Quality-Based Permitting, Philadelphia, PA. Contact the Cadmus Group, (703)998-6862, email mrm98@cadmusgroup.com; www.epa.gov/OWM

SEPTEMBER

9-10: "It's Just Common Sense: Practical Approaches to Groundwater Management," The Groundwater Foundation's 14th annual fall symposium, San Antonio, TX. To register phone (800)858-4844, FAX (402)434-2742 or e-mail wendy@groundwater.org. For questions, contact Wendy Conrad at (402)434-2740.

10-12: Designing Water Quality Into Landscaping, a nonpoint source pollution workshop dealing with urban landscape management sponsored by the Nebraska Department of Environmental Quality and U.S. EPA Region VII. Best Western-Central Executive Center, Omaha. Contact Elbert Traylor, NDEQ, (402)471-2585, FAX (402)471-2909 or e-mail DEQ107@MAIL.DEQ.STATE.NE.US

19-24: Ground Water Protection Council (GWPC) annual forum, "A Technical Conference on Ground Water, Watershed, Source Water, Wellhead Protection and Underground Injection Control." Sacramento, CA. Contact Ben Grunewald (405)848-0690, FAX



(405)848-0722 or ben@gwpc.site.net.

20-24: National/International Biodiversity and Water Resources Symposium: "Wetlands '98, Integrating Wetland/Floodplain Ecosystems into Water Resources/Watershed Management." Regal Riverfront Hotel, St. Louis, MO. Coordinated by Institute for Wetland Science and Public Policy, The Association of State Wetland Managers. For information, contact The Association of State Wetland Managers at (518)872-1804 or FAX (518)872-2171.

21-24: Sixth National Nonpoint Source Monitoring Workshop, Cedar Rapids, IA. Contact Lynett Seigley or Carol Thompson, Iowa Department of Natural Resources, Geological Survey Bureau, 109 Trowbridge Hall, Iowa City, IA 52242-1319, phone (319)335-1575, email lseigley@igsb.uiowa.edu or thompson@igsb.uiowa.edu

OCTOBER

4-6: "RuralTeleCon '98," Aspen Institute, Aspen, CO. Making technology work for rural communities. For information, or to register go to <http://ruraltelecon.org> or contact Toni Black at Colorado Mountain College at (970)947-8365 or black@coloradomtn.edu

4-8: "MODFLOW '98," international conference for users and developers of modeling programs, sponsored by the Colorado School of Mines and International Ground Water Modeling Center, Golden, CO. For registration information, call (303)273-3321, FAX (303)273-3314 or e-mail space@mines.edu

5-8: Association of State Drinking Water Administrators (ASDWA) 13th annual con-

ference. Keystone Resort, Keystone, CO. For information visit www.asdwa.org, e-mail asdwa@erols.com, phone (202)293-7655 or FAX (202)293-7656.

20-29: River Restoration and Natural Channel Design, Pagosa Springs, CO. One of eight short courses presented by Dave Rosgen with Wildland Hydrology. Contact Wildland Hydrology, 157649 US Hwy 160, Pagosa Springs, CO 81147, phone (970)264-7120, email wildlandhydrology@pagosasprings.net

21-23: State of the Lakes Ecosystem Conference (SOLEC), Buffalo, NY. Contact Paul Bertran

at (312)353-0153 or Nancy Stadler-Salt at (905)336-6271. On the web at www.cciw.ca/solec or www.epa.gov/gindicator

28-31: Conference on Shared Rivers: "River Basin Management to Meet Competing Needs," Park City, UT. Co-sponsored by U.S. Committee on Irrigation and Drainage and U.S. Bureau of Reclamation. For information, call (303)628-5430, e-mail stephens@uscid.org or go to www.uscid.org/uscid

NOVEMBER

12-15: "1998 Bringing Groundwater to Life." Combined Groundwater Guardian National Designation Conference and Priming the Pump Water Educator Workshop, Anaheim, CA. Sponsored by The Groundwater Foundation, includes a mini-groundwater festival, hands-on activities and displays. To register, or for information, phone (800)858-4844 or e-mail info@groundwater.org

17-19: Nebraska Cooperative Extension Association (NCEA) annual meeting, "Guide to the future - Monument to the Past." Scottsbluff-Gering. For information, contact Chuck Burr, 111 West Fairfield, Clay Center, NE 68933-1499, phone (402) 762-3644.

4-5: 1998 NGWA Animal Feeding Operations and Ground Water: Issues and Impacts Conference, St. Louis, MO. A forum for discussing the issues and impacts of AFOs and the ground water resources of the nation. If interested in presenting or for information, contact Dennis Goldman, Science Education Counsel, 601 Dempsey Rd, Westerville, OH 43081, phone (800)551-7379 or e-mail dgoldm@ngwa.org

Four Cities Hosting Third Wetlands Month Conference

The Third Annual American Wetlands Month Conference will meet in four "Communities Working for Wetlands" across the nation from February - May, 1999.

The conferences begin in New Orleans, LA Feb. 18-20, continue to San Francisco, CA March 18-20, to Indianapolis, IN April 8-10, then

officially open American Wetlands Month in Andover, MA May 6-8.

Hands-on, interactive workshops will involve participants in creating activities and solving their own wetland problems.

On Saturday morning — in each city — attendees will board buses with spades and boots for a "Work

for Wetlands" morning to help a local group with a wetland project.

The conference is co-sponsored by federal agencies and private corporations and organizations. For more information, contact the Terrene Institute, 4 Herbert St., Alexandria, VA 22305; (703)548-5473; FAX (800)813-1925; or email terrist@aol.com; www.terrene.org.

UNL Seminar Series VCR Tapes Available

Video tapes of the University of Nebraska-Lincoln's past three annual water resources seminars are now available for purchase or rent from the Water Center/Environmental Programs.

Tapes of individual, hour-long presentations from the 1996, 1997 and 1998 seminars may be purchased for \$19.95 (includes shipping) or checked-out and returned for \$5.

Send inquiries to Tricia Liedle, Water Center/Environmental Programs, School of Natural Resource Sciences, P.O. Box 830844, University of Nebraska, Lincoln, NE 68583-0844, phone (402)472-3305, FAX (402)472-3574 or e-mail sress@unlinfo.unl.edu

Tapes by year and presentation topic include:

1998: "Interrelationship of Water, Native Grassland and Wetlands:"

Jan. 14, *The Natural Vegetation of Nebraska*, Robert Kaul; Jan. 21, *Climate of Grasslands*, Ken Hubbard; Jan. 28, *Nebraska's Dynamic Natural Landscape: A Photographic Study*, Jim Stubbendieck; Feb. 4, *Characteristics of Lowland Grasses, with the Emphasis on Sandhill Crane use of These Habitats Along the Platte River*, Tammy Vercautereen; Feb. 11, *The Future of Prairie Mammals: Examining the Impact of Habitat Changes*, Russ Benedict; Feb. 18, *The Ecology of the Colorado Bursage*, Jim Locklear; Feb. 25, *Grass and Water Relations in the Loess Hills of Central Nebraska* (Williams lecture), Charles Bicak; Mar. 4, *Plant Germplasm Resources of the North American Tallgrass Prairie*, Ken Vogel; Mar. 18, *Hydrology of the Sand Hills*, Ed Harvey; Apr. 1, *Wetlands Assessment Methods* (Kremer lecture), Jon Kusler; Apr. 8, *Sub-irrigated Meadow Management Practices*, Jerry Volesky; Apr. 15, *Wetlands Programs of the Nebraska Game and Parks Commission*, Ted LaGrange; Apr. 22, *Electromagnetic Remote Sensing of the Wetlands*, Ezekiel Bahar.

1997: "Drought, Climate Change and Water Management:"

Jan. 15, *The Climate of Nebraska*, Ken Dewey; Jan. 22, *Drought: A Normal Part of Nebraska's Climate?*,

Don Wilhite; Jan. 29, *Monitoring and Detecting Drought: the HPCC's Automated Weather Data Network*, Ken Hubbard; Feb. 5, *Monitoring Drought from Space: the Role of Satellites*, Don Rundquist; Feb. 12, *Drought, Water and Agricultural Development: The Expansion of Irrigation in Nebraska*, Dean Eisenhower; Feb. 19, *Factors Influencing Future Demand for Water*, Ray Supalla; Feb. 26, *Crop Management: Challenges of Nebraska's Variable Climate*, Norm Klockel/Joel Schneekloth; Mar. 5, *Drought Management on Range and Pastureland*, Pat Reece; Mar. 19, *The Effects of Drought on the Management of Natural Resources*, John Turnbull/Dayle Williamson; Apr. 2, *Drought Management in the Missouri River Basin: Resolving Conflicts Between Upstream and Downstream Users* (Kremer lecture), John Ferrell; Apr. 9, *Can We Mitigate the Effects of Drought*, Don Wilhite; Apr. 16, *The Science of Climate Change: Certainties and Uncertainties*, Bill Easterling; Apr. 23, *The effects of Weather Cycles and Climate Change on Prairie Wetlandscapes* (Williams lecture), Carter Johnson; Apr. 30, *Planning for an Uncertain Climate: Policy Implications* (Williams lecture), Rosina Bierbaum.

1996: "Platte River Management Goals:"

Jan. 10, *History of Platte River Use and Development*, Steve Gaul; Jan. 17, *Overview of Current Issues*, Leroy Sievers; Jan. 24, *A Colorado Perspective* (Kremer lecture), Doug Robotham; Jan. 31, *A Wyoming Perspective* (Kremer lecture), Mike Purcell; Feb. 7, *A Nebraska Perspective* (Kremer lecture), Jim Cook; Feb. 14, *Irrigation and Power Production Management*, Brian Barels/Jim Lundgren; Feb. 21, *Endangered Species Act Enforcement*, Dave Mazour/Bob McCue; Feb. 28, *Ecosystem Management*, Paul Tebbel/Dick Mercer; Mar. 6, *Instream Flow Rights*, Ron Bishop/Wes Sheets; Mar. 27, *Conjunctive Use Implications*, J. David Aiken/Jim Goeke; Apr. 3, *Flood Plain Development Issues*, Glenn Johnson/Norm Nelson; Apr. 10, *Economic and Municipal Impacts*, Allan Jenkins/Bob Cappel.

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