

www.fayettevillenatural.org

Newsletter

Volume 8 Issue I

Boy, Gramp! Nature's so much <u>bigger</u> in person than it is on TV!

Dennis the Menace -by Hank Ketchum, 2001

Mark Your Calendar!

April 7: Workshop on invasive removal and native planting, 5:30 pm, south end of Frisco Trail. Rain date April I I

April 12: City of Fayetteville trail clean-up, 4:00 to 8:00 pm; FNHA meets in WRMC parking lot at Gregg and Appleby to do its section.

April 16: Bird box maintenance and installation with Master Naturalists and tour of Wilson Springs with Joe Neal

May 8: FNHA Annual Meeting Sharpridge, 2-4 pm



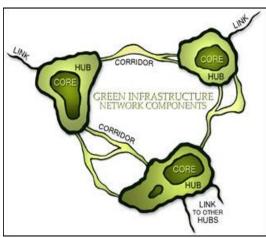
Breathtaking Yellow Lady-slipper orchids will soon begin their graceful dance while hidden in our woodlands

Project Wins Prestigious Award I FHNA Featured at National GI I Jonesboro Trail Funding Hearing 2 Wilson Springs Restoration 2 Newsletter Transitions to 3 Water Quality in Beaver Lake 4 Membership Form 5

FNHA's Project Wins Green Infrastructure Implementation Award

The Fayetteville Natural Heritage Association's innovative project designed to address environmental and economic challenges in Washington and Benton Counties received national recognition during the National Green Infrastructure Conference held February 23-25 in Shepherdstown, W.Va. Green Infrastructure Planning: Linking Arkansas Communities was honored with an inaugural National Green Infrastructure Implementation Award for demonstrating results in increasing stakeholder engagement and partnership. FNHA shared the award with its partners, the Arkansas Forestry Commission's (AFC) Urban and Community Forestry Program and Beaver Water District

The goal of the cutting-edge strategy was to initiate a Green Infrastructure Plan to help Northwest Arkansas communities address rapid land use changes with strategic conservation planning. The pilot project began with a conservation assessment funded by the AFC and the U.S. Forest Service that identified key ecological sites for conservation in the cities of Farmington, Greenland, Fayetteville and Johnson, as well as a stretch of land between the city boundaries and the Wedington Wildlife Management Area of the Ozark National Forest. A Green Infrastructure Network Map was developed to summarize the findings and to serve as a starting point for community discussions on resource value and conservation priorities. With the help of the Northwest Arkansas (NWA) Regional Planning Commission, cities and towns have



begun to adopt resource priorities suggested in the Network Map in their land use planning.

"The Linking Arkansas Communities project is an exemplary model of communities focusing on their conservation priorities in conjunction with their economic goals," said Kris Hoellen, Director of The Conservation Fund's Conservation Leadership Network. "We applaud their ability to embrace the priorities and needs of a broad spectrum of local communities in the planning process."

"For the last 20 years, population growth in Northwest Arkansas has created the need for innovative tools to address urban forest and water quality opportunities," said Bob Caulk, Chairman of the FNHA. "Bob Morgan from Beaver Water District along with Patti Erwin and Jim Jolley with the Arkansas Forestry Commission attended the Strategic Conservation Training Program offered by The Conservation Fund and saw that green infrastructure planning could be a powerful strategy for growth and development and help to achieve our respective missions." (Continued on page 6)

FNHA Stands Out at National Green Infrastructure Conference

Article by Karen Rollet-Crocker

Along with over 250 representatives of land preservation organizations and federal, state and local agencies, FNHA's Karen Rollet Crocker and Barbara Boland traveled to the National Conservation Training Center in Shepherdstown, WV. They found that Green Infrastructure planning is being used in some unusual ways, including by senior military personnel who create natural green buffers for training installations, and by highway administrators who are including environmental stewardship in their planning. Many other attendees want to preserve natural

areas and farms in fast growing communities or wish to rebuild poor communities with community Green Infrastructure projects.

Barbara Boland presented the FNHA project as part of a panel on Strategies for Engaging both Traditional and non-Traditional Partners when Developing Leadership Groups. Fayetteville Natural Heritage Association, The United States Forest Service through the Arkansas Forestry Commission's Urban Forestry Program and the Beaver Water District received a national award from the Green Infrastructure Community of Practice (see p. 5)

Jonesboro Hearing on Trail Funding Disappointing, but Opportunities for Input Remain

The six people from Fayetteville (Pete Heinzelmann, Dot Neely, Ken and Terry Eastin, and Judy and Duane Woltjen) who drove a grueling 300 miles to Jonesboro in constant rain on February 24, 2011, found little opportunity to make their case at the public hearing held by the U.S. House of Representatives Committee on Transportation and Infrastructure (T & I).

Duane Woltjen observed, "If you attended as a trail advocate, you came away very hacked off, frustrated, and determined more than ever to fight for trail funding. Written testimony was accepted for a few minutes after the hearing closed, so the Fayetteville Natural Heritage Association's written testimony is in the record, but as Pete Heinzelmann said in retrospect, 'It was a long way to go for a corndog."

The only testimony taken was from predesignated witnesses who were politicians, a highway construction contractor, a trucking industry lobbyist, and the Director of the Arkansas Highway Transportation Department, Dan Flowers.

Congressman Steve Womack 1508 Longworth H.O.B. Washington, DC 20515 http://womack.house.gov

Congressman Rick Crawford 1408 Longworth H.O.B. Washington DC, 20515 http://crawford.house.gov/contact

Senator John Boozman SRC1 Russell Senate Office Bldg. Washington DC, 20510 http://senator@boozman.senate.gov

Senator Mark Pryor 255 Dirkson Senate Office Bldg. Washington DC, 20510 http://pryor.senate.gov/contact Mr. Flowers stated his satisfaction with Transportation Enhancement and Recreation Trails Programs. These grant programs are only 1.5% of the T & I budget. His statement was appreciated by the NWA trail advocates who attended.

The Chairman of the Committee, Congressman John L. Mica, stated at the beginning of the two hour session that he would allow time at the end for public statements, but he ended the hearing abruptly, saying that written testimony would be taken for the next two weeks; "This hearing is closed."

Even though the two-week period has elapsed, there are still opportunities to be heard on the issue of trail funding. Write to Congressman John L. Mica, Chairman, Committee on Transportation and Infrastructure, 2165
Rayburn House Office Building, Washington, D.C., 20215, or

www.transportation.house.gov.

Ask for Transportation Enhancement and Recreation Trails Program grants to continue to be funded at 1.5% of the transportation budget; ask that Tiger II funds be restored

for the Razorback Greenway Trail. Inform the Committee that the Tiger II grants made last October but now withdrawn were matched with a very large private Walton Family Foundation grant and local funding.

Mr. Mica is interested in public-private partnerships. Point out that most of our existing trails are there because of privately-donated money and property and donated labor, combined with Federal grants and local funding. Tell the Committee these public-private partnerships have been vital to our trails and transportation enhancements, and they are a great investment for the country and for northwest Arkansas.

Copy your letter to Congressmen Steve Womack and Mike Crawford. Both are on the Transportation and Infrastructure Committee, and both represent Arkansas districts. Copy Senator Boozman and Senator Pryor, as the Senate will consider this funding bill too. (See box below for addresses.)

Information for this articles provided by Duane Woltjen





Wilson Springs Restoration Project

Wilson Springs is among the last remaining tallgrass prairies and perennial wetlands in Northwest Arkansas. Officially owned by the Haynes Irrevocable Trust and located in an urban matrix of residential and commercial areas in Fayetteville, this site still retains several important ecological indicators of its former natural state. As the site has been developed over the last decade, several nonnative, invasive species have established on the site and early-successional, native species have established dense stands along habitat

edges. It is the goal of the Northwest Field Office of Audubon Arkansas to not only restore this remnant prairie to functional habitat for local fauna, but also have it be useable to the surrounding community. It is a place to commune with nature and learn about the function of this important habitat, it is also a great place for birding.

Although Wilson Springs suffers several threats, there are important reasons to preserve and restore it. The rare Arkansas Darter (Etheostoma cragini) is a candidate

species for Endangered Species status for the U.S. Fish and Wildlife Service and has previously been identified in Wilson Springs. This small fish is about 2 inches long and almost always found in association with aquatic vegetation in areas of gravel, sand, or silt substrate. Their diet includes snails and insects that inhabit spring runs.

The site also has high biodiversity, containing species that are specialized to several different ecosystems. (Continued on Page 3)

sustained prairie ecosystem function.

from Beaver Water District, the largest

patch of land is scheduled to have a prescribed burn in March, 2011. In areas that

are located closest to development, man-

ual management may be the best option,

application, and/or debris removal. Rees-

tablishment of important tall grass prairie

which includes hand-cutting, herbicide

species, such as Big Bluestem Grass

(Andropogon gerardi), Little Bluestem

(Schizachyrium scoparium) and Indian

Grass (Sorghastrum nutans) is the ulti-

mate goal of this restoration effort, which

will form the core for subsequent habitat

restoration. To meet this end, the North-

west Arkansas Field Office is undergoing a

large volunteer recruiting effort to imple-

ment restoration activities. In Northwest

Arkansas, several other wetland and prai-

rie remnants (Woolsey Wet Prairie, World

Peace Wetland Prairie, Serles Prairie) have

been successfully restored and are now

actively managed by variety of local or-

ganizations and municipalities. It is our

hope to capture some of this awesome

Organizations such as Sam's Club, Teen

tion have previously volunteered to re-

move invasive species, cut early-

Action Support Center, Arkansas Legal Aid,

and Fayetteville Natural Heritage Associa-

successional green ash stands, and pick-up

trash. Following the burn this Spring, the

goal is to have a "team of organizations"

who rotate through the site. By holding

smaller areas of the property not eligible

for prescribed burning can meet the same

one volunteer event per month, the

Wilson Springs.

volunteer and citizen effort and apply it to

Through Arkansas Game and Fish Commission's State Wildlife Grant and support

Wilson Springs Restoration Project (Continued from Page 2)



Arkansas Darter, Etheostoma cragini, Photo Colo. DNR

Due in part to elevation gradients and habitat changes that occur, Wilson Springs includes riparian/perennial wetlands, mesic/ seasonal wetlands, and tall grass prairie/oak barren. Numerous, widespread mud chimneys of the endemic Ozark Burrowing Crayfish (Procambarus liberorum) can be found. Aquatic and semi-aquatic plants, prairie forbs and grasses, such as Prairie Cordgrass (Spartina pectinata), Swamp Dogwood (Cornus obliqua), and the Yellow Nut Grass (Cyperus esculentus) sedge have commonly been found. Although historically they were considered abundant, they are thought to be much reduced due to hydrology changes and conversion to non-native fescue grasses. Also, marshland birds are present during migration and are included among more than 125 bird species documented by volunteers. One of the most noted is the rare Henslow's Sparrow (Ammodramus henslowii), whose only known Arkansas nesting site is in these seasonally wet fields.

Wilson Springs also provides economically valuable ecological services by acting like a natural storm water detention and infiltration area. Being located within the urban matrix, the site serves to slow the return of storm water run-off from the adjoining impervious surfaces on and along I-540 and the surrounding commercial and residential development. There is increasing value placed on wetlands in urban areas due to their infiltration and purification ability.

Restoration of Wilson Springs will require several co-occurring steps. Fire disturbance regimes will be a necessary first step for



Wilson Springs, mesic/wetland habitat,



Wilson Springs, upland prairie area

A. Weeks

Volunteer Opportunity!

Adopt a Trail: Scull Creek Cleanup Tuesday, April 12th

Cleanup Area Wilson Park to Mud Creek

Event Schedule

4:00 p.m. to 7:00 p.m. Volunteer Check-In* & Cleanup

6:30 p.m. to 8:00 p.m Dinner and Door Prize Giveaways Wilson Park

*Check-In | ocations (Look for Signs)

(I)Wilson Park (West end)

(2) The parking lot at Appleby and Gregg Streets, near Washington Regional Hospital

(3)Sycamore Apartments

Please go to FNHA website (fayettevillenatural.org) for a copy of the flyer and a map for the locations.

Thanks once again to Mike Adelman for his dedication to our trails and his excellent organizational skills

Transitioning to E-Newsletter As part of its effort to live more lightly on the planet, the Fayetteville Natural Heritage Association plans to transition to an electronically-distributed newsletter with the next issue.

You can help us reduce our carbon footprint by opting to receive your copy by email rather than a paper issue sent via the USPS. Some of you have already made the transition, and we appreciate your help. are receiving your newsletter electronically, you do not have to respond (again!)

We realize not everyone has easy computer access. If this is the case, we will print a hard copy of the Newsletter and mail it to you, but you must request a mailed copy.

Let us know that you'd like to join our sustainability initiative now by sending an e-mail to FNHA Chair Bob Caulk at bobcaulk@cox.net for E-NEWS, or call 973-2968 for PAPER to continue receiving a paper newsletter in the US Mail.

FNHA and the planet will thank you!

FNHA Newsletter Change

FNHA Stands Out at Green Infrastructure Conference (Continued from page 1)

the category of Stakeholder Engagement, one of three awards given for National Green Infrastructure Implementation.

The Conference provided opportunities for a broad ranging discussion and information gathering from people across the country who use Green Infrastructure planning to improve their communities. Among speakers at the conference was Larry Selzer, President/CEO of the Conservation Fund, who made the case for the need to develop Green Infrastructure planning by saying:

"Natural areas are not simply areas waiting to be developed."

"We are investing in necessity."

"We are framing the connection between the economy and environment. This is a forward looking vision, and remains optimistic."

"We should be serious about remaining a great nation. We say we are supporting 'life, liberty, and the pursuit of happiness.' Why shouldn't access to nature be an inalienable right!"

"Our young people who will inherit our nation are alienated from the natural world. The average child spends less than 4 minutes a day outside. We have quarantined kids in 'house arrest'. Outdoor experiences mean exploration and improvisation as well as creativity and compassion."

FNHA hopes to expand our local project to

develop a broad regional Green Infrastructure map that can identify the most important natural areas for land planning. These green areas can be saved through conservation easement financing, private and public partnerships, farmland protection, and park/trail development.

For information on the Green Infrastructure planning process and our plan see: http://conservationfund.org/news/green-infrastructure-implementation-awards

http://conservationfund.org/green_infrastructure

www.GreenInfrastructureResources.com.

and the "What's Happening" section of FNHA's website, http://fayettevillenatural.org.

Annual Meeting and Board News

Annual Meeting May 8

Please join us for FNHA's annual meeting on Sunday afternoon, May 8, 2011, Sharpridge, 2-4 pm. FNHA Board member and avian ecologist **Doug James** will be the keynote speaker, telling us about "50 Years of Birding in Arkansas" just before he flies off to Bird in Belize!

Board News

Board member **Chris Wilson** is leaving Arkansas and The Nature Conservancy to return after 20 years' absence to his native Missouri to become Parks and Open Space Manager for the city of Liberty. Chris has done a great job leading the restoration of the prairie remnant at Lake Fayetteville.

Bob Caulk and **Barbara Taylor** have been elected to the Board of Directors of the new Beaver Watershed Alliance which will work on voluntary and educational programs and projects that contribute to maintaining a long-term, high-quality drinking water supply to meet current needs and continuing growth of our region.

Remove the Invaders!

Come to a workshop on **Thursday, April 7 at 5:30 pm** (rain date Monday, April 11) to learn how to identify locally invasive plants, remove them and plant native species instead.

Meet at the south end of Frisco Trail in Fayetteville to learn from UA Professor of Entomology Don Steinkraus and Washington County Cooperative Extension Head of Staff Berni Kurz.

Participants are invited to bring examples of invasive plants and to help dig them out along the trail (bring gloves and digging implements if you want to join in, but observers are welcome.) Park in the gravel lot on the north side of Prairie Street near the Greenhouse Grill. Sponsored by the Fayetteville Tree and Landscape Advisory Committee. For more information, contact Nancy Varvil at nvarvil@yahoo.com



Invasive plants like bush honeysuckle (I), privet and ailanthus trees have taken over wooded areas all over town. They leaf out early and have no local predators. Where they thrive they shade out the native plants that birds and insects need for food and homes.

Photo: Leslie J. Mehrhoff, UConn, Bugwood.org

Water Quality Assessed for the Past Decade in Three Major Tributaries to Beaver Lake

Under a cooperative agreement between Beaver Water District, the Arkansas Natural Resources Commission, the Arkansas Department of Environmental Quality and the United States Geological Survey (USGS), stream water is gauged and water quality measured in three major tributaries of Beaver Lake. The year 2008 marked the end of a decade of monitoring, creating a good opportunity to review those data.

This report is a summary of those 10 years of data. Data came from the USGS stream gages at Wyman Bridge on the White River (USGS station 07048600), Richland Creek at Goshen (station 07048800), and War Eagle Creek near Hindsville (station 070409000). The data were

collected by the USGS and analyzed by their National Water Quality Laboratory in Denver following the USGS's standard quality assurance/quality control protocol. These three stations account for roughly 69% of the total area tributary to Beaver Lake. These data do not include the contribution from the Paul Noland Wastewater Treatment Plant. The results presented in the report provide a good baseline for analyzing trends through the next several decades. The table on Page 4 provides the data for some key constituents.

From the standpoint of Beaver Lake, load is more important than concentration because the lake accumulates the load over time. To estimate the load of a particular constituent, or pollutant, it is necessary to measure both the flow rate and the concentration of that constituent in the stream. The load, or mass. of the constituent flowing in the stream is the product of the concentration and the flow rate. Flow rate can be measured continuously, but concentration can only be measured occasionally. Concentration also varies throughout the year, usually in some relationship to the flow rate. To determine the annual load of a constituent, that relationship has to be developed for the instances when concentration is measured, then the relationship is applied to the flow for the whole year. Yield is the load to a point in a stream divided by the area tributary to that point. Continued on Page 5

Water Quality Assessed for the Past Decade in Three Major Tributaries to Beaver Lake (Continued from page 4)

Flow-weighted concentration is the total load for a year divided by the total flow for the year. Flow-weighted concentration is a way of accounting for the variability of concentration. The report shows that for both suspended sediment and total phosphorus, two constituents that directly impact Beaver Lake, the annual load varies significantly and in response to the total annual flow rate. We

can also see that for these two constituents, the White River portion of the watershed has both the largest load and the highest yield of the three watersheds. Richland Creek, the least developed of the three watersheds, has both the least load and the smallest yield.

Additional data are available in the report which can be accessed at:
http://www.bwdh2o.org/files/46/
Beaver Lake Pollutant Load ReportUSGS BWD 2010.pdf

Constituent Concentrations, Loads, and Yields to Beaver Lake, Arkansas, Water Years 1999-2008. Susan E. Bolyard, Jeanne L. De Lanois, and Reed Green, summarized by Bob Morgan, P.E., Ph.D., Beaver Water District

		Mean Annual Stream Flow				Suspended Sediment		Mean		Total Phosphorous		Mean
		Min	Mean	Max	Min Load	Mean Load	Max Load	Yield,	Min Load	Mean	Max Load	Yield,
		m³/sec	m³/sec	m³/sec	Kg/yr	Kg/yr	Kg/yr	Kg/km ²	Kg/yr	Load Kg/yr	Kg/yr	Kg/km ²
White F	River	5.38	14.9	24.7	17,400,400	68,500,000	141,000,000	6,569,000	183,000	73,200	18,300	70
Richlan	nd Creek	1.64	4.98	14.6	2,850,000	9,770,000	32,900,000	27,400	2,710	9,290	31,300	26
War Ea	agle Creek	3.6	8.32	15.5	8,620,000	29,400,000	80,800,000	43,200	10,600	30,300	73,600	44

With cost of materials rising and supply of free staffing decreasing, FNHA annual memberships will now become due in January of each year. You will receive a renewal reminder in the Fall. Memberships at the Landmark level and above are Lifetime memberships. Since 2003, with support from so many levels, FNHA has been able to preserve natural areas, start an education endowment for children, influence land use and conservation policy, and in doing so we have gained national support and recognition, None of this would have been possible without you, our amazing members, and we hope you will continue to support FNHA as we continue to preserve our natural heritage.

Thank you!

Please help us to continue making exemplary natural areas accessible to everyone by supporting our conservation, stewardship, policy, and education efforts.

Have a question? Need more info? Want to Comment?

Fill out the contact form at www.fayettevillenatural.org or contact us directly

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Please join FNHA or renew your membership today								
Annual dues are: (☑ Please check one)	Membership is on an annual basis, due in January of each year							
☐ Landmark \$1000	☐ Steward \$500 ☐ Sustaining \$250							
☐ Supporting \$100	☐ Family \$40 ☐ Single \$20							
Use your PayPal account on the web at www.fayettevillenatural.org "Join Us"								
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 $FNHA is a \ 501(c) 3 \ nonprofit corporation comprised of a group of citizens dedicated to conserving the natural areas of Fayetteville and its environs for the benefit of present and future generations$

Green Infrastructure Implementation Award (Continued from page I)

"Receiving the National Green Infrastructure Implementation Award recognizes the commitment the Fayetteville Natural Heritage Association has for the conservation of our natural resources and the strong citizen support within our communities," said Patti Erwin, Urban Forestry Coordinator for the AFC. "The success of this Green Infrastructure Plan demonstrates the collaborative process that was implemented among key partners and local officials and the invaluable public input provided through volunteerism and professional recommendations." "The work of the Arkansas Forestry Commission's Urban and Community Forestry Program, with their partners Fayetteville Natural Heritage Association

and Beaver Water District, to create the Green Infrastructure Map is an outstanding example of regional cooperation," said John McLarty, Assistant Director of the NWA Regional Planning Commission. "The Green Infrastructure maps and data sets are already being utilized in planning decisions in the area. The NWA Regional Planning Commission would like to extend this valuable data set to the full two county area of Northwest Arkansas. Our region will continue to grow for decades to come, and it is an important goal to preserve our natural resources. Barbara Boland, representing FNHA, participated in a forum on engaging partners along with presenters from Chicago and Los Angeles during the National Green

Infrastructure Conference. The three-day conference, organized by The Conservation Fund, brought together expert policymakers and practitioners from across the country for the first time to explore the extensive growth of green infrastructure and chart its course for the next ten years.



FNHA Annual Meeting, Sunday May 8, 2011 - Sharpridge, 2-4 pm

Doug James will inform and entertain with his presentation Fifty Years of Birding in Arkansas

Officers will be elected, and the Golden Acorn Award will be bestowed.

Refreshments will be served.



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