

Newsletter

FNHA Turns 10!



Thanks to you, our supporters, the remarkable accomplishments of the past ten years have been possible

A passion for preserving a heavily wooded hillside in the middle of Fayetteville in early 2003 led a small group of Fayetteville citizens to give birth to a new organization that has since completed several impressive projects in its short history. The members of the Fayetteville Natural Heritage Association have contributed over \$500,000 to the City of Fayetteville toward conservation of more than 130 acres of natural areas. Contributors have grown to over 800.

Our group also developed an innovative method for identifying and ranking natural areas using a sophisticated GIS mapping system that has won regional and national awards. We recently completed development of a Green Infrastructure Plan for our area which won another national award and is an important part of Fayetteville's City Plan 2035. We are working with the City Parks Department to reclaim nearly 40 acres of an upland prairie on the Butterfield Trail and also working to improve access to the Brooks-Hummel Nature Reserve. FNHA established the Founders' Scholarship Endowment which helps deserving students from the area with tuition for attending summer naturalist programs at the Ozark Natural Science Center.

Let's Party then begin working the opportunities presented by the second decade

FNHA's mission to protect our natural areas is as critical today as it was in 2003. As our second decade begins we will continue our recent focus on integrating conservation into area land-use planning as well as raising citizen awareness regarding the importance of habitat quality. Additionally, FNHA will be returning to our conservation roots by focusing our efforts on a specific property in southwest Fayetteville ~ **the Mt. Kessler Reserve**. With your help and support we can continue to make a difference.

Fayetteville's 2012 Urban Tree Canopy Assessment



The City of Fayetteville received final results from the 2012 Urban Tree Canopy (UTC) Assessment in December 2012. The assessment is a city-wide study that evaluated current characteristics of Fayetteville's tree canopy, identified potential tree planting areas, and developed tools for incorporating urban forest benefits during policy and planning processes.

Funded in part by the Arkansas Forestry Commission through a grant from the USDA Forest Service, Fayetteville's study is one of five conducted by participating Arkansas cities.

Urban tree canopy assessments quantify the percentage of a given area's tree canopy coverage. In populated areas, tree canopy cover relates directly to air quality, storm water management, ecosystem balance, and

quality-of-life benefits.

"All these features add up to money for cities. If trees are helping with your storm water runoff, you don't have to build as many retention ponds or use as much energy to clean the water. Trees provide economic benefits for tourism as well. People want to live in and visit cities where they can enjoy the outdoors. Clean air and water and shaded parks and trails contribute to our quality of life," Patti Erwin, Arkansas Forestry Commission's Urban Forestry Coordinator said.

One-meter-resolution NAIP (National Agricultural Imagery Program) imagery from summer 2010 was used for the UTC assessment. Several Geographic Information System (GIS) data layers from the City, County, and the Fayetteville Natural Heritage Association were used in map-

ping and cover classes

Fayetteville's UTC assessment was completed in accordance with Chapter 167: Tree Preservation & Protection, which requires the City to conduct a UTC assessment every 10 years with the first to be completed by the end of 2012. Data gathered from the assessment may be used to inform UTC goals, prioritize locations for tree planting efforts, establish urban forestry master plans, understand patterns of environmental justice, inform sustainability plans, and justify budget increases for urban forestry.

Assessment results include a host of GIS data that is ready to be analyzed for current and future urban forestry research and problem solving. For example, one might utilize the GIS information to view the following re-

sults on a detailed savable and printable map:

- Highlight the census blocks that include commercial properties with less than 10% tree canopy cover.
- Identify potential planting areas (PPA) along riparian corridors characterized by less than 50% tree canopy cover.

Major findings from the assessment include:

- Fayetteville has 36% urban tree canopy cover based on 2010 imagery.
- Canopy trends indicate a loss of approximately 1.5% UTC since 2002. A note of interest to many FNHA Newsletter readers, the assessment's tree canopy loss maps recognized the canopy removal near Lake Fayetteville that was part of

Lake Fayetteville Prairie Remnant Named

Since 2009 FNHA and the Fayetteville Park staff have been working to restore a small, representative example of prairie along the Butterfield Trail. In October, the Fayetteville City Council passed a resolution naming the Lake Fayetteville Prairie Restoration Area "Callie's Prairie" in honor of Callie Henson, an early pioneer and landowner.

Sarah Caroline Gregg was born in 1839, in the community of Oxford Bend. Her father, Albert Gregg, was a farmer and the first postmaster of Shiloh (later Springdale) and of Lynch's Prairie Post Office. She married Thomas Andrew Henson in 1857.

The Henson family history in the April, 1960, issue of Flashback, the publication of the

Washington County Historical Society, relates that after the Civil War, in the spring of 1865, Andy and Callie were returning to Arkansas on Old Missouri Road. As they passed a farm at the northeast end of what is now Lake Fayetteville, Callie said, "I want this farm! I want to live here."



Sarah Caroline "Callie" Gregg Henson

The Hensons bought the farm, and over the years added land so that by the time Andy died in 1885, the farm was 1,700 acres in size. Andy was known as a good business man who traded livestock and land. Callie lived on the farm on Old Missouri Road with step-son Byrd and other children living near her until her death in 1927.

The prairie restoration area, purchased by the City of Fayetteville in 1949 as part of the Lake Fayetteville water supply project, had been used primarily for pasture and was in the ownership of the Henson/Sanders families for over 80 years.

Judith Woltjen did extensive research on the history of the Lake Fayetteville Prairie Restoration Area, and it was at her suggestion that the City of Fa-

yetteville chose to honor this early family and Callie in particular, who in the spring of 1865 fell in love with Clear Creek, its springs and the beautiful grasslands, by naming the area Callie's Prairie.

Judith, her husband Duane, and many other members of FNHA have spent countless hours cutting cedar trees and removing other non-prairie vegetation from the area now called Callie's Prairie.

As the preceding article notes, the Fayetteville Urban Tree Canopy study shows the Callie's Prairie restoration efforts as a tree canopy loss, a reminder that sometimes tree canopy loss is not only deliberate, but done in the interest of greater environmental diversity and of recapturing our area's history.



FNHA Board member Joe Woolbright, left, explains the method used for the eco assessment at Woolsey Wet Prairie in west Fayetteville before taking the group of U of A students for a closer look at the flora and fauna

This past fall FNHA Board members Joe Woolbright and Bob Caulk taught two Eco Assessment laboratory classes. Joe discussed prairie restoration and lead the class in a plant inventory/bio sampling exercise at Woolsey. Bob presented the Green Infrastructure Planning project and lead a short walk on Mt Kessler. Frank Sharp made it a memorable lab class by kindly providing dinner after the hike.

Community Wildlife Habitat Project
announces the first program of their
2013 SPEAKER SERIES

U of A Biological Sciences student
Mitchell Pruitt
presents
"Arkansas Birding & the Big Year"
and
Joe Neal
will discuss Northwest Arkansas bird
populations

Monday, February 4
6-7:30 PM
Giffels Auditorium
University of Arkansas Campus
Fayetteville
Free and Open to the Public

Assessment

Continued from page 1

the Callie's Prairie restoration.

- Residential lots cover 31% of Fayetteville with an average tree cover of 41% citywide. This represents 1/3 of the City's total tree canopy.
- The current urban forest removes nearly 1.3 million pounds of air pollutants from the air annually, which is valued at \$3.5 million per year.

by Derek Linn
City of Fayetteville
Urban Forestry Program

Resources:

[Fayetteville UTC Fact Sheet](#)
[2012 Urban Tree Canopy Assessment Report](#)
[UTC Assessment Workshop Video](#)
urbanforestry.accessfayetteville.org/

The City of Fayetteville encourages residents to read and become familiar with the results of the 2012 assessment, especially now while the information is the most up to date and accurate. A continued forward momentum between the City, the Arkansas Forestry Commission, FNHA, other partners, and community members is essential to maintaining and improving Fayetteville's beneficial urban forest.

Chairman's Corner

by Bob Caulk

In the previous edition of this Newsletter, I began sharing my thoughts on the essential common elements of the significant successes that FNHA has been part of as we approach our 10th birthday. We've documented many of these successes in this newsletter over the years, including land conservation projects, integrating conservation into land use planning and raising citizen awareness of habitat quality. The essential common elements are **Community Support** which includes residents, elected officials and city staff, **Partners** who provide the key ingredients when needed to ensure a successful outcome and **Champions** who have the passion to overcome obstacles, to move forward when others grow weary, and to complete the undertaken task. Community Support will be the topic for a later Chairman's Corner.

Partners share our vision, have superior skills (often technical like GIS) and access to resources (often money and labor.) The list of our partners during the past ten years is long and varied. It includes the Fayetteville City Council and Administration, The Nature Conservancy, citizen committees like the Environmental Action Committee and Tree and Landscape Advisory Committee, the University of Arkansas Landscape Architecture Department and Cooperative Extension Service, the Ozark Natural Science Center, Audubon Arkansas, the Beaver Water District, The League of Women Voters of Washington County, Fayetteville's Planning and GIS groups, the Northwest Arkansas Planning Commission, Two partners have made substantial and continuing contributions - the Arkansas Forestry Commission Urban Forestry Program (Patti Erwin) and the City of Fayetteville Parks and Recreation Staff (Connie Edmonston, Bryon Humphry and Alison Jumper) - leading to notable successes.

Our partnership with the Forestry Commission and Patti Erwin began with a small grant to build kiosks at the two entrances to Mt Sequoyah Woods. Patti pushed and pulled us to get involved in conservation planning, got us two grants to do the work and provided many opportunities to share our work with others. As it should be in a successful partnership, Patti is as proud of what has been accomplished as we at FNHA are and has repeated our projects in other Arkansas communities.

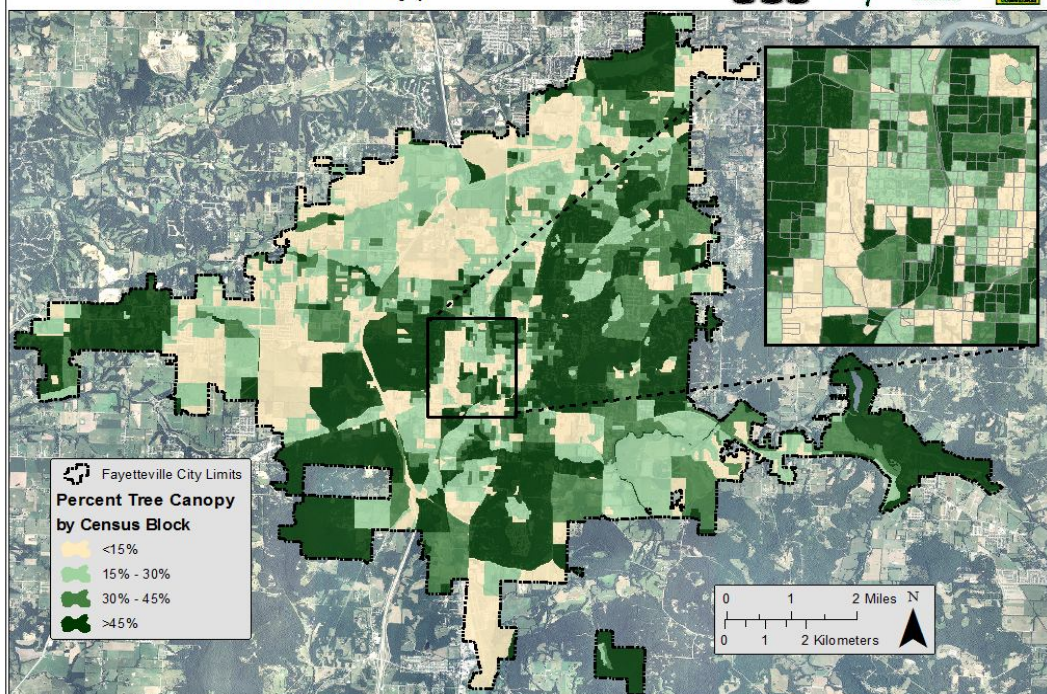
Working with Parks and Recreation started by aligning our visions - FNHA did not expect them to maintain natural area parks by trimming trees, clearing falls, mowing

ground cover, building trails, etc. as they would in traditional parks. Over the years, we worked together in Mt. Sequoyah Woods and Brooks-Hummel Nature Preserve, but the current project, restoring Callie's Prairie, is the one of which we will be most proud.

I have no doubt the Partners mentioned above and additional Partners will be there when we need their help in the next ten years. Northwest Arkansas appears to have an abundance of interested, talented and capable people. FNHA will continue to seek out these individuals to provide the help we need to contribute to our community.

Tree Canopy in Fayetteville, Arkansas

Based on 2010 NAIP Imagery



Support for the University of Arkansas' Purchase of Kessler Mountain Land

Editor's Note: This summer, Frank Sharp, FNHA member, Golden Acorn Award winner and long-time supporter of green space preservation and conservation trusts, urged members of FNHA and other interested community members to write to University of Arkansas Chancellor G. David Gearhart urging him to consider University purchase of 387 acres of land on Mt. Kessler, west of the campus. The land was to have been developed as part of South Pass, as mixed-use houses, apartments and condominiums, by a group of private investors, before the economic down-turn. It is now owned by a bank. Many of us wrote and e-mailed in support of Frank's idea that the property would not only provide an appropriate site for intramural recreation fields, which the University is seeking to move from their current Razorback Road location, but would also provide an ideal outdoor laboratory for a wide range of classes and perhaps even additional space for student housing.

One of the many who wrote letters was Dr. Steven J. Beaupre, Chair of the University's Department of Biological Sciences. His letter, and its supporting list of similar facilities at peer institutions impressed us, and with his permission, we are reprinting it here, unabridged. -BGT

9 October, 2012

RE: Potential purchase of acreage – South Pass

Dear Chancellor Gearhart:

I write to you as Chairman of Biological Sciences, regarding possible benefits of land acquisition on and near Kessler Mountain. I feel I would be remiss if I failed to comment on this potentially important decision. I understand that the UA is considering the purchase of acreage south-west of the University, near Kessler Mountain for the purpose of expansion of athletic fields. I have been informed by Mr. Frank Sharp (who I have known for several years, socially) that the UA has the opportunity to purchase additional acreage in the area, including parcels that are in a relatively undisturbed area. I strongly support the addition of this acreage to the purchase (if it indeed goes through). My primary motivation for this recommendation is the large potential benefit to teaching and research in ecology that would accrue to students and faculty in multiple programs across the UA (not just Biological Sciences).

Unlike many of the top schools in the country, the UA has no holdings that can be dedicated for use as outdoor laboratories. At other institutions, these outdoor laboratories become famous, and include icons such as The Duke Forest, Harvard Forest, University of Michigan E.S. George Reserve, The Michigan State Kellogg Biological Station, The University of Wisconsin Arboretum, Cornell's Arnot Forest, the Clemson Experimental Forest, and the University of Tennessee Arboretum, to name but a few (additional resources are listed on page 4). We (UA Biological Sciences) recently appointed a committee to name our Aspirant Peer institutions. All of these 6 institutions have land holdings that serve as outdoor teaching and research facilities (specifics appended on page 5, at the end of this letter). [Ed. Page 5]

As a specific example, I cite the University of Georgia, Odum School of Ecology, which is typically ranked as the number one ecology program in the country. The Odum School has several land holdings that serve as ecological field sites and laboratories. These include: The Coweeta Hydrologic Laboratory (in collaboration with the USDA Forest Service), The HorseShoe Bend Ecology Experimental Research Site, The Joseph W. Jones Ecological Research Center, McGarity Wetlands, Odum Broad River Property, San Luis, Costa Rica Research Station (yes, in Costa Rica), Satilla River Stephens-Hunt Refuge, and several others (<http://www.ecology.uga.edu/facilitiesList.php>). All told, the UGA Odum School has over 30,144 acres in GA alone, for support of students and faculty in research and teaching. These land resources and facilities are one reason the University of Georgia is at the top in ecology, likely among several other UGA programs that utilize the resources. Obviously, the UA is a long way from such an expansive program however we should be vigilant and carefully consider opportunities to create outdoor laboratories. The Kessler Mountain purchase is one such opportunity.

In Biological Sciences, there are many potential benefits of an outdoor laboratory in close proximity to the UA. Currently, we lack an outdoor classroom of any kind, where we can take ecologically oriented laboratories. These labs would include activities in Principles of Biology, our core course in General Ecology, and a host of advanced courses including Mycology, Protistology, Dendrology, Taxonomy Flowering Plants, Ornithology, Mammalogy, Herpetology, Community Ecology, Field Ecology, Population Ecology, Ecological Genetics/Genomics, Stream Ecology, and Wildlife Ecology, among others. The close proximity of the Kessler mountain site would facilitate rapid transit (less than 10 minutes from campus by van), and allow maximal use of the time allotted to laboratories. The property would also serve as an invaluable research resource for students and faculty. We currently lack outdoor facilities for setting up long- or even short-term ecological experiments. The natural diversity of the site, including old fields, forested hillsides and ponds, would facilitate the use of the site by researchers with diverse interests. When teaching and research activities are in close proximity, we become better able to integrate research into the classroom.

I think my point is made, but I will close with the following thoughts. These days, most of our students have grown up isolated from the natural world. Organized sports, clubs, television, the internet, and strict parental supervision have taken the place of hours of idle nature observation and hiking. In some cases, the first and only exposure of our students to nature occurs in ecologically-related laboratories. This is a dangerous precedent. Profound lack of understanding leads to a devaluation of the natural world, which in turn leads to the false premise that we exist independently of nature. Students need to understand our interrelation with nature, and specifically the fact that we cannot survive without the services provided by natural ecological systems. From a societal standpoint, the stakes are great. As college educators and researchers, we have a responsibility to connect students to nature, and to push the research frontiers of sustainability. An outdoor teaching and research laboratory at the UA would greatly facilitate the fulfillment of that responsibility.

I urge you to seriously consider the purchase of the full available acreage in the South Pass area of Kessler Mountain. I know that these are not the financial times that facilitate large purchases, especially those that must be justified on the basis of long-term financial gain. However, this is a great opportunity to make the UA a better place in so many ways. I believe it is worth the institution's time to carefully consider any options that might make possible this purchase and its attendant benefits.

Thank you for your time.

Sincerely,

Dr. Steven J. Beaupre
Chair, Department of Biological Sciences
602 Science-Engineering Building
University of Arkansas
Fayetteville, AR 72701

Important Outdoor Laboratories [from Beaupre letter, page 4]

Outdoor Laboratories at UA Biological Sciences Aspirant Peer Institutions:

1. Department of Biological Sciences, Clemson University (Clemson)
Clemson Experimental Forest
2. Department of Biological Sciences, University of Alabama (Tuscaloosa)
University of Alabama Arboretum
3. School of Biological Sciences, University of Nebraska (Lincoln)
Cedar Point Biological Station
4. Department of Biological Sciences, University of South Carolina (Columbia)
Gordon W. Belser Arboretum
5. Department of Biological Sciences, Louisiana State University (Baton Rouge)
Lee Memorial Forest
6. Departments of Zoology and Botany & Microbiology, University of Oklahoma (Norman)
University of Oklahoma Biological Station

Other examples of University-Based outdoor laboratories for teaching and research (websites available through Google Search):

H. J. Andrews Experimental Forest – Oregon State University
 Bonanza Creek Experimental Forest – University of Alaska, Fairbanks
 Lubrecht Experimental Forest – University of Montana
 Penobscot Experimental Forest – University of Maine
 University of Idaho Experimental Forest
 Pennsylvania State University Experimental Forest
 University Forest – University of Missouri
 Yale's School of Forestry has 7 forests in New England
 Robinson Forest, University of Kentucky
 Kiamichi Forestry Research Station – Oklahoma State University
 Ecology & Natural Resources Teaching Area – Texas A & M (180 ac near campus)
 Piney Woods Conservation Center – Stephen F. Austin State University
 Louisiana Tech University Arboretum – 74 acres near campus
 Sharp Forest – Mississippi State University
 Field Station – University of Mississippi (11 miles from campus)

Geese Everywhere!

- by Douglas A. James, originally printed in the Summer, 2012, edition of the Northwest Arkansas Audubon Society Newsletter.

Website: www.nwarkaudubon.org.

When pioneers reached the central USA they found extensive grasslands and prairie wetlands, the Great Plains. This area was home to big populations of large birds: Whooping Cranes, the largest crane, Trumpeter Swans, the largest swan, and the largest subspecies of the Canada Goose, the Giant Canada Goose. Subsequent conversion of the grasslands to agriculture had catastrophic adverse effects. Whooping Cranes were reduced to only 16 before rehabilitation began, Trumpeter Swans disappeared except in northwestern mountains, and nine authors writing from 1930s to 1960s declared the Giant Canada Goose extinct.

Then Harold Hanson, my classmate in graduate school at the University of Illinois, after being hired by Illinois Natural History Survey, discovered in 1962 Giant Canada Geese occupying a city park in Minnesota. Later he found residual populations in the Dakotas and adjacent Canada. This led to restoration efforts across the USA. The Arkansas Game and Fish Commission established a propagation site visible south of I-40 west of Russellville. The first geese in northwestern Arkansas wore neck bands from that facility. The operation was so successful the need was discontinued. Most forms of

Canada Geese migrate, but Giants stay year around. Also, they tolerate human disturbance more than the other subspecies. Cattle are grazers and so are geese, so pastures and parks are perfect. Golf courses provide a banquet set for geese.

This reestablishment is truly a marvelous success story, bringing a bird from the brink of extinction to its present abundance everywhere. We should really rejoice in this accomplishment and congratulate ourselves!



The Giant Canada Goose, pictured here, is a huge success story

FNHA annual memberships are due in January of each year. You will receive a renewal reminder sometime during the year. 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!

Have a question?
Need more info?
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Like to volunteer?

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

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

Please join FNHA or renew your membership today

Annual dues are:

Membership is for the calendar year,
and dues are payable January 1,

- ☐ 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"
or

Make your check payable to **Fayetteville Natural Heritage Association (FNHA)**
and mail to **PO Box 3635, Fayetteville, AR 72702-3635**

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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