Volunteer Cookout and Hike
- Dennis Bires

Saturday, May 15, came up sunny in the low 70s for the second Prairie Road Crew Day at the Tallgrass Prairie Preserve. After scooping up every last scrap of litter on the county roads, the 22 volunteers enjoyed a hamburger cookout at tables set up in the back yard of the ranch bunkhouse. Many thanks to Ann Whitehorn, Kevin Chouteau, and Harvey Payne for making the picnic happen.

After lunch, the group drove to the Western Wall Primitive Area on the Osage Wildlife Management Area, just east of the Preserve. High stream water precluded a visit to the Wall itself, a high bluff dropping to the South Fork of Pond Creek, so the hike proceeded on the high prairie overlooking the Tallgrass Prairie Preserve to the west.

The prairie views seemed limitless, the breeze was gentle and cool, and puffy white clouds passed below a sky one hiker described as deep “Osage blue”, a color found only in Osage County. Perhaps. The bright green spring grass was punctuated by purple Scurvy Pea blossoms, pale blue Carolina Larkspur, and pale Green Milkweed blooms.

Several hikers expressed gratitude for learning how to reach this little-appreciated 6,000 acres of public land. For those who missed it, the directions are simple. From the monument at the south entrance to the Tallgrass Prairie Preserve, drive east, and take the first left turn. Proceed a short distance past the Pappin Cemetery, where the road ends at a T, beside to an old schoolhouse now converted to a residence. Turn left at the T, right would lead to Highway 99, and travel four miles to the entrance to the Western Wall Primitive Area on the left. A high-ground-clearance SUV or pickup is desirable for the rough gravel roads in the Western Wall, four-wheel drive is even better. Avoid the weekends of the controlled deer hunts in November.

Two-headed Snake?
- Van Vives

On April 24 I was walking on the short trail with some people from Tulsa. When we got to the north side, just below the concrete bench, we heard an unsettling rattling noise. This was shortly after telling someone in the group that in six years I had only seen two snakes and they were harmless grass snakes. About three feet north of the trail path were some rocks. Uncoiling quickly were not one, but two, Western Massasauga rattlesnakes, (Sistrurus catenatus). We then realized that we were witnessing an unusual event because they were attached to each other in a mating position. I guess they were embarrassed to have such an audience watching their lovemaking and they scurried away, but still remained attached. One snake was going forward, dragging the other backward. I guess they were doubly dangerous, having a head on both ends.

So, yes, there are poisonous snakes on the walking trails!
Keystone Ancient Forest Preserve
Andrew Donovan- Shead

Saturday, May 1st, I attended the Keystone Ancient Forest Preserve Open House and Dedication with John Fisher and others. Our weather was damp and cool, but it didn't keep people away. We gathered at 9a.m. in the parking lot of the exotic dancing and drinking emporium next to Woody's Bait Shop at the 209th west exit from Hwy 412 to Prue. We were bussed into the preserve and gathered under the dripping leaves of a large oak tree.

Tim Grogan, Executive Director of the TNC Oklahoma Chapter, introduced Richard Andrews, the Special Projects Manager of the Oklahoma Department of Transportation; Mike Burge, Mayor for the City of Sand Springs; John Marnell, North Area Manager of the Tulsa District Army Corps of Engineers; and Dr. David Stahle (pronounced stay-lee), Director of the Tree Ring Laboratory at the University of Arkansas.

It took six years from David Stahle's first trespass and discovery of ancient woodland to this day. Six years of hard work with landowners, government agencies and the City of Sand Springs to purchase and organize the management of this preserve. To quote from the fact-sheet for the event: "The Nature Conservancy envisions a dynamic Crosstimbers landscape encompassing a diverse mosaic of forest, woodland, and savannas. Through the perpetuation of viable natural communities and the ecological processes that maintain them, we believe this landscape will sustain itself as a functional system. We envision a conservation area of 1,300 acres which is actively managed to abate ecological threats to natural diversity and enhance the native plant and animal communities living here."

At the conclusion of the opening remarks we began a field hike into the preserve. Though the Corps of Engineers had done some work to the access road, the recent rainfall had made it very muddy and somewhat treacherous, as one unfortunate lady discovered when she lost her footing. Luckily she was only startled and continued undeterred.

David Stahle explained that most of the ancient woodland is to be found here in the bottoms of the ravines rather than on the ridges. We stopped on a ridge that consisted of tallgrass prairies, grasses and stands of new-growth sumac. Dr. Stahle explained that the weather prevented us from going to site originally planned for that day, that he had not visited this particular area, and that he was fairly certain that we would find old-

(Continued on page 3)
growth trees in the bottom of
the small ravine below where
we stood.

We made our way down and
across the seasonal streams in
spate from recent rains and
found a good example of a
post oak, Quercus stellata,
growing on the side of the
hill. Dr. Stahle explained that
he was fairly sure that these
trees have been undisturbed
by humans because they grow
in an area that has no value
to man, either modern or
ancient.

We stood gathered around
the tree on the side of the
ravine with the water
gurgling to lower levels along
the stream-bed. Gusts of wind
moved the woodland canopy,
causing drops of water to
splatter upon our hats, the
rocks, and thick litter of
leaves covering the ground.
We heard the roar of traffic
on Hwy 412 faint in the
distance. Nearer we could
hear woodland birds calling.
Our eyes took in the green of
the new leaves on the trees,
the thick mosses and thinner
lichens on the rocks,
contrasted with the browns
and grays of the tree trunks,
the rocky outcrops, leaf litter,
and, overhead through the
leaves and branches of the
trees, gray overcastting
clouds.

Dr. Stahle pointed out the
characteristics of an ancient
tree, the loss of its main
upper trunk to some past
windstorm, the dead
branches, healed knots where
limbs had broken off, the
spiral growth of the trunk, its
lean away from vertical, and
the curb around the base of
the trunk at ground level.
David estimated the age of
this tree at 250 to 300 years.

Estimating the age of trees is
done by taking a radial core
of the trunk, from the bark to
the center of the tree. Dr.
Stahle handed around some
prepared core samples
mounted on blocks of wood,
then proceeded to take a
sample from the tree before
us. David looked for a solid
area by tapping the trunk
then, using a coring tool,
extracted a four-inch sample,
which was about two inches
short of the center of the tree.
He explained that the center
of the tree was rotten, which
he deduced from the feel of
the tool he used. After a
cursory examination of the
core, David revised his
estimate of the tree age to
400 years. He explained that
dating by tree rings isn't a
matter of just counting the
rings but correlating the
rings with other natural
events such as droughts and
with other samples from
other trees in the area. Even
so, the age of a tree is still an
estimate, albeit one informed
by careful investigation.

We were fortunate to have
present a number of experts
in botany, entomology, and
biology. Dr. Stahle suspects
that trees are eternal because
most of the small saplings
start life from the root
systems of older trees. He
discussed this assertion with
a colleague who is in genial
disagreement with him and
we learned that only about
one percent of trees actually
get started from acorns,
which was a surprise to us.
We wondered if some kind of
DNA testing could distinguish
between individual trees and
whether this would resolve
the question. Another expert
in this area thought that a
variety mitochondrial
analysis might reveal some
useful information. General
agreement was that the
science isn't far enough
advanced.

Our attention was drawn to
some ancient cypress trees.
Dr. Michael Palmer talked
about the species present in
this woodland and indicated
that the cypress trees may
actually be part of the
natural life-cycle of the
woods. Someone asked if
hawthorn is to found; Mike
said that indeed yes it is
supposed to be common yet he
has never seen any and
certainly none where there is
cypress growing. Presence of
cypress tree is generally
considered bad and the result
of human habitation, but the
scientific community is
revising its ideas on this
because there are some
obviously ancient cypress
trees that have been here
since pre-settlement days.

Our time expired and we had
to return to the
transportation, which we did
by hiking out onto the
opposite ridge, through
tallgrass prairie and stands of
(Continued on page 4)
(Continued from page 3) sumac to the access road, the vans, and the parking lot. We had a good walk in the woods made better by presence of the scientists who always make for interesting conversation.

One thing that intrigued me is the involvement of the Oklahoma Department of Transportation. I discovered that Lady Bird Johnson managed to get federal funds allocated for the beautification of the nation's highways. As you drive southeast across Lake Keystone along Hwy 412, all that you see to the east on your left-hand side is the Keystone Ancient Forest Preserve; then as you come off the bridge, the preserve butts against the northeast side of the road for about a mile and a half. Thus, it was possible for the consortium to get federal funding to help with the purchase of the preserve.

Any inaccuracies in this account you can blame on my memory, for I didn't take any notes.

Miles Up For Adoption

A few stretches of the county roads on the Tallgrass Prairie Preserve are still available in our Adopt-a-Mile program, in which docents volunteer to remove litter from a portion of the Preserve on days they serve in the Visitors Center.

Docs who serve at the Preserve at least once a month through the season may consider becoming an adoptive parent.

The Adopt-a-Mile map is on the wall in the office at the Visitors Center. Just write your name next to the segment you want. Adoptions last only through November, and are renewed at Docent Reorientation in March.

Updated Docent List Available

Prairie docents who haven't yet received one should take a copy of the docent address list. There is a stack of them in the office at the Visitors Center. The list is updated to include the eleven new docents from the 2004 New Docent Training class. Help us welcome our new volunteers when you see them.

Visitation Summary

George Meyers is busy tabulating the visitation reports for the year to date. Once they are ready we will share them with you in the newsletter!

Request for Group Visit Notification

- Kay Krebbs

If one of our docents is involved or in contact with a group planning a visit to the preserve, or just aware of the fact, please notify me at kkrebbs@tnc.org or (918) 2870-4803. You can either let me know yourself or ask the group’s contact person to let me know of their plans to visit the magnificent TGP Preserve.

Many groups have visited the TGP and more will do so in the future. When I get a notification call, I pencil a note on my calendar stating something like "school group - approx. 20-25 people". Then I tell Ann about them and once in awhile, if I think it's necessary, I also contact the docent scheduled to work on that day to advise them of the group coming.

A simple phone call or e-mail will be of benefit to both Ann and the docent(s) working, allowing them to be prepared to meet and greet the group.

Please remember to let groups know that we do not have trash service at the preserve. We ask that they pack out what they bring in!

Thanks for your help.
Upcoming Butterfly Counts at Oklahoma TNC Preserves
- John Fisher

Every summer since 1993 a small group of dedicated people have been counting the butterflies at the Tallgrass Prairie, Pontotoc Ridge, Nickel, and Keystone Ancient Forest Preserves. The number of different butterfly species found on these counts and other surveys aptly demonstrate the rich biodiversity and high quality habitat of the lands the Conservancy has protected. Pontotoc Ridge, nationally renowned for the richness of its butterfly populations, leads Oklahoma preserves with 91 different species recorded. Closely following are the Nickel Preserve at 88 and the Tallgrass Prairie and Keystone Preserves each with 87 species. In addition, each of the preserves has several holes in their lists, species that are either in the area or should be there but haven’t been found yet. The Nickel Preserve filled one of those holes this May when the Olive Juniper Hairstreak was spotted near Bathtub Rocks and in Dog Hollow.

Since butterflies are like the wildflowers and bloom at different times of the year, we won’t see all these species but past counts have approached the 50 species mark. Everyone from novice to expert is welcome. What we need most of all are lots of good eyes. Close focusing binoculars are a help but not absolutely necessary though bug spray is. With your help, we might be able to fill in some of those holes this summer. Maybe this will be the year we add the Olive to the Pontotoc Ridge list.

**June 12th – Pontotoc Ridge Preserve**
- Time: 10:00 AM
- Where: Preserve Headquarters
- Contact: Walter Gerard
  - Tel: 918-747-4771

**June 15th – Keystone Ancient Forest Preserve**
- Time: 9:00 AM
- Where: call for directions
- Contact: John Fisher
  - Tel: 918-245-8662

**June 19th – Tallgrass Prairie Preserve**
- Time: 9:30 AM
- Where: Preserve Visitor Center
- Contact: Walter Gerard
  - Tel: 918-747-4771

- Time: 9:30 AM
- Where: Preserve Headquarters in Sawmill Hollow
- Contact: Walter Gerard
  - Tel: 918-747-4771

Tulsa Audubon Society’s Oklahoma new butterfly resource page is found at [http://www.tulsaaudubon.org/butterflies](http://www.tulsaaudubon.org/butterflies).

Volunteer Fair
- Van Vives

The Nature Conservancy participated in the Volunteer Fair in Bartlesville on April 22nd. John Fisher, Marilyn Keefer, and Van Vives manned the booth from 8–5. The fair was sponsored by ConocoPhillips and held in the Phillips Auditorium. The purpose was to introduce employees, especially new employees, to volunteering opportunities. About 46 organizations participated. It was also open to employees of other Bartlesville companies.

Over 100 interested people stopped at our booth to get information and to ask questions about the TNC and the Tallgrass Prairie. I estimated that at least half the people, Bartlesville residents, had no knowledge about the Tallgrass Prairie or had never been there. Many expressed a sincere interest in visiting it this summer. Many were not familiar with the TNC and its purpose. Hopefully we have at least 100 more people who are knowledgeable about the need for conservation and the volunteer opportunities the docent program offers.
**What's Blooming?**

- Van Vives

The prairie is starting to burst with color. Some of the wildflowers that were in bloom last month are still blooming, such as Daisy Fleabane, Prairie Parsley, Prairie Verbena, Violet Wood Sorrel, and Gray-green Wood Sorrel. The new blooms are as follows:

1. **Bindweed, Convolvulus arvensis**

2. **Large-Flowered Coreopsis, Coreopsis grandiflora**

3. **Green Milkweed, Asclepias viridis**

4. **Tuber False Dandelion, Pyrrhopappus grandiflorus**

5. **Common Spiderwort, Tradescantia ohiensis**

6. **Blue Wild Indigo, Baptisa australis**

7. **Toothed Evening Primrose, Calylophus serrulatus**

8. **Buckley's Penstemon, Penstemon buckleyi**

9. **Indigo Bush, Amorpha fruticosa**

10. **Nuttall’s Death Camas, Zigadenus nuttallii**

*Photos courtesy of Van Vives*

Other flowers are blooming that I did not have pictures for: Scurfy pea, yarrow, showy evening primrose, and yellow sweet clover.

More information can be found at [www.okprairie.com](http://www.okprairie.com).

**Editor's Note:** Van did an excellent job creating this web site and it is well worth the visit!
Update from Jerry Wagener
Editor's Note: Jerry and his wife Jean moved to the East Coast this spring. While his absence will be felt at the TGP, you can keep abreast of the building progress on their house by visiting his blog site at http://jerry.wagener.com/northfield

We're having great fun in this new adventure, though the arrival of the Docent News today twanged my heartstrings more than just a bit. Now that I'm no longer on the scene, I can attest that The Docent News is a fabulous way to keep up-to-date on the doin's at the Tallgrass Prairie. Looks like sales are up at the Visitor Center, most days are covered, the calves are arriving on time, and the calendar of future events looks more exciting than ever.

Perhaps you could inform folks of our temporary address, until our house is finished: 75B Wells St, #430, Greenfield, MA 01301; phone 413.774.3928.

Thanks again for the Docent News; I'm enjoying it more than ever. And I wish I could walk the trail and see those spring flowers, though Van's photos are a good substitute given that I can't be on the spot.

Gift Shop Sales Summary

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>$5,236.16</td>
</tr>
<tr>
<td>April 2003</td>
<td>$4,708.99</td>
</tr>
<tr>
<td>April 2004</td>
<td>$5,236.16</td>
</tr>
<tr>
<td>Year-to-date 2003</td>
<td>$7,832.57</td>
</tr>
<tr>
<td>Year-to-date 2004</td>
<td>$8,924.34</td>
</tr>
<tr>
<td>Year-to-date increase in sales</td>
<td>$1,091.77</td>
</tr>
</tbody>
</table>

On-Line Library

George Pierson has taken over management of the TGP Docent web site now that Jerry Wagener has moved. Past issues of The Docent News can be found in the library section of the TGP docent web site at oklahomanature.org/OK/tallgrass_volunteers.html.

Other articles found in the library are:

"Ecosystem Management Based on Evolutionary Grazing Patterns" by Sam Fuhlendorf

"Osage County History" by Jenk Jones

"Plants of the Tallgrass Prairie Preserve" by Michael Palmer

"Butterflies Observed on Oklahoma Preserves" compiled by John Fisher

"Birds Observed on Oklahoma Preserves" compiled by John Fisher

“Bison Chart – 2003” By Bill Rinehart
Nickel Preserve  
- Chris Wilson

Spring has been busy at the Nickel Preserve. Prescribed burning and savanna restoration work have progressed quite nicely. Flooding from heavy rains caused major damage to roads, parking areas, landscaping, and virtually obliterated the pond behind the headquarters building. As we move into summer, our work will expand to include invasive species eradication and monitoring activities.

Prescribed burns covered nearly 3,000 acres, including some acreage with a neighboring landowner. The majority of the area burned had not seen fire in more than 30 years. Initial assessments indicate the burns accomplished their objectives of reducing stem densities of small trees and shrubs while stimulating herbaceous growth in the understory.

80 acres of former fescue-bermuda grass pasture were planted in native grass and wildflower seed. Pine seedlings have been planted in restoration areas to begin to restore the structural component of savanna communities. Turkey, quail, and other grassland birds are already using these areas for nesting and foraging habitat. Thousands of Coreopsis have turned these fields into a sea of vibrant yellow.

More than a foot of rain fell over a three day period in late April, generally wreaking havoc on all roads and bottomlands. Roads became streambeds, the Headquarters area looked like a shallow lake, and the pond became little more than a wide place in a river. Without the use of John Nickel’s dozer, most of the preserve would basically be inaccessible. Hopefully, these 100-year floods won’t happen more than once every few years.

Self-guided trail brochures are now in place at the trailhead signs. Visitors are welcome anytime, and trails are open 7 days a week.
Oklahoma Freshwater Initiative

The Oklahoma Freshwater Initiative (OFI) is designed to address threats to freshwater biodiversity across Oklahoma. The OFI will increase our capacity to work strategically with state water management, wildlife management and conservation agencies as well as community stakeholders.

For freshwater streams and rivers threatened by the two greatest threats to biodiversity, hydrologic alteration and pollution—mainly from agriculture, we aim to advance the Conservancy's Ecologically Sustainable Water Management, ESWM, and agricultural practices to protect aquatic conservation priorities across the state. This ESWM model seeks to balance the pressing social, economic, and recreational demands being placed on Oklahoma rivers with their ecological needs to remain healthy.

In the streams of southeast Oklahoma, the Oklahoma Freshwater Initiative has already engaged water management agencies including the U.S. Army Corps of Engineers, the Oklahoma Water Resources Board and the Oklahoma Department of Wildlife Conservation on issues surrounding the Kiamichi and Little River’s need for natural river flows.

Serving as a neural facilitator of the ESWM process, our first OFI workshop was held in the spring of 2003, and found more than 60 individuals representing two dozen stakeholders sharing their interests in protecting these precious Oklahoma freshwater resources.

We have actively engaged a diverse coalition of Oklahoma's best aquatic scientists who began to study the flow needs of the Kiamichi and Little River in 2003, and their initial data and findings should be announced in 2004.

For the Nature Conservancy, no issue in Oklahoma has more urgency or impact for our state than water management. Through the Oklahoma Freshwater Initiative, we seek to play a key role in contributing towards a plan to meet societal needs for clean, plentiful water from healthy, renewable sources.

Calendar of Events

<table>
<thead>
<tr>
<th>Saturday June 12th, 2004 9:00 a.m.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Jim Thayer 918-494-3784</td>
</tr>
</tbody>
</table>

Tallgrass Prairie How to find and Identify Butterflies

Jim Thayer will lead a workshop on "How to find and Identify Butterflies" on Saturday June 12th. We will begin at the visitor center at 9:00 AM. The program will start with a short discussion and handouts for future reference. Most of the time will be spent in the field taking part in the process of finding and identifying butterflies. The formal part of the program will run from 9:00 AM until 12:00 noon. Jim will be available after lunch for anyone that would like to continue.

Please bring lunch for yourself and plenty of water, also binoculars is you have them.
Butterfly Counts at Oklahoma TNC Preserves

Every summer since 1993 a small group of dedicated people have been counting the butterflies at the Tallgrass Prairie, Pontotoc Ridge, Nickel, and Keystone Ancient Forest Preserves. The number of different butterfly species found on these counts and other surveys aptly demonstrate the rich biodiversity and high quality habitat of the lands the Conservancy has protected.

Everyone from novice to expert is welcome. What we need most of all are lots of good eyes. Close focusing binoculars are a help but not absolutely necessary though bug spray is.

June 12th - Pontotoc Ridge Preserve
Time: 10:00 AM
Where: Preserve Headquarters
Contact: Walter Gerard 918-747-4771

June 15th - Keystone Ancient Forest Preserve
Time: 9:00 AM
Where: call for directions
Contact: John Fisher 918-245-8662

June 19th - Tallgrass Prairie Preserve
Time: 9:30 AM
Where: Preserve Visitors’ Center
Contact: Walter Gerard 918-747-4771

June 26th - Nickel Preserve
Time: 9:30 AM
Where: Preserve Headquarters in Sawmill Hollow
Contact: Walter Gerard 918-747-4771

Saturday August 14th, 2004

For further information call TNC Tulsa Office 918.585.1117

Wild Brew 2004 Tulsa

A casual event offering the opportunity to sample domestic and international beers, ales and wine from outstanding microbreweries, as well as signature dishes from Oklahoma's finest restaurants.
Docent Schedule

May

<table>
<thead>
<tr>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
<td>27</td>
<td>28</td>
</tr>
<tr>
<td>Leslie Brucks</td>
<td>Neil Garrison</td>
<td>Hugh Selman Peggy Selman</td>
<td>Marilyn Keefer</td>
<td>Bill Rinehart</td>
<td>Barbara Bates</td>
</tr>
</tbody>
</table>

June

<table>
<thead>
<tr>
<th>Sun</th>
<th>Mon</th>
<th>Tue</th>
<th>Wed</th>
<th>Thu</th>
<th>Fri</th>
<th>Sat</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kim Hagan</td>
<td>Dave Dolcater</td>
<td>Mary Ann Davis Cela James</td>
<td>Jan Reynolds Jane Thomas</td>
<td>Beverly Atteberry Van Vives TG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>Nicholas Delgrosso</td>
<td>Hugh Selman Peggy Selman</td>
<td>Deana Brewster Dennis Brewster</td>
<td>Phyllis Connally Jim Thayer</td>
<td>Leslie Brucks Don Bruner TG</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>14</td>
<td>15</td>
<td>16</td>
<td>17</td>
<td>18</td>
<td>19</td>
</tr>
<tr>
<td>Marilyn Keefer</td>
<td>George Brenner</td>
<td>George Brenner Pat Jaynes</td>
<td>Mary Ann Davis Cela James</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>21</td>
<td>22</td>
<td>23</td>
<td>24</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>27</td>
<td>28</td>
<td>29</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dave Dolcater</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To schedule a shift, use the real-time on-line scheduler on the web site at www.oklahomanature.org/OK/tallgrass_volunteers.html or contact Karen Harris at (918) 663-8306 or kharris@hollandhll.org.com