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**WHAT IS TCWP?**

TCWP (Tennessee Citizens for Wilderness Planning) is dedicated to achieving and perpetuating protection of natural lands and waters by means of public ownership, legislation, or cooperation of the private sector. While our first focus is on the Cumberland and Appalachian regions of Tennessee, our efforts may extend to the rest of the state and the nation. TCWP's strength lies in researching information pertinent to an issue, informing and educating our membership and the public, interacting with groups having similar objectives, and working through the legislative, administrative, and judicial branches of government on the federal, state, and local levels.

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1. TENNESSEE NEWS

1A. The legislature has convened

[Contributed by Sandra Goss, with information from LCV]

The Tennessee Legislature started this session on January 14. This is the second year of the two-year 108th Assembly, and no general elections have occurred except to fill two vacancies. At press time, a variety of bills had already been filed. Among those are measures that:
-- would lengthen the life of school buses, which would result in unhealthy emissions;
-- would allow anyone with a valid carry permit to carry a firearm into any state or county park, and would delete provisions allowing local governments to opt out of this legislation. This bill, SB.1496/HB.1407, has been referred to the Senate Judiciary Committee.

It is widely believed that this will be a very short legislative session, ending by April 15. Since 2014 is an election year, and incumbents are forbidden to raise funds during the legislative session, lawmakers will be highly motivated to get back to their home districts and start campaigning and fundraising.

TCWP will be sending timely e-mails during the session, alerting subscribers about urgent communication needs with legislators. Also, we will be developing a caravan for the Wednesday, February 19, Conservation Day on the Hill. This is a day on which conservationists and environmentalists from across the state gather at the Legislative Plaza, wearing green labels, letting our elected officials know that many Tennesseans care about pure water to drink, clean air to breathe, and conserving our wild lands and waters.

WHAT YOU CAN DO:
Please contact Sandra Goss (865-583-3967 or sandra@sandrakgoss.com) to be added to the e-list or to the caravan list, so you can make your voice heard by elected officials.

1B. In and around Frozen Head (#1): historic site to be added to State Park

[Contributed by Cindy Kendrick]

A house built in 1814 by Ezra B. Stonecipher, one of the first permanent white settlers in Morgan County, is being added to Frozen Head State Park, along with its surrounding 30 acres. According to Knox Heritage, the Stoneciphers settled Revolutionary War land-grant tracts in the Emory River Valley and its tributaries. The house is a two-story log structure with a third-story loft, built in a saddlebag style, with a central chimney and two front doors. Under its siding, it reportedly retains most of the original architectural features. The house and 30 acres on which it sits are adjacent to the Park, near Beech Fork Creek.

Knox Heritage will help restore the house. Barbara Stagg, long-time Morgan County resident and board member of the East Tennessee Preservation Alliance, was instrumental in organizing preservation buyers when the estate put the property up for auction.

1C. In and around Frozen Head (#2): Brushy Mountain Prison conversion

Situated immediately adjacent to the Frozen Head Natural Area is the Brushy Mountain State Penitentiary at Petros. In November, Morgan County residents overwhelmingly (67.4%) voted in favor of turning the old prison into a moonshine distillery. Associated with the distillery will be a gift shop, museum, and horse trails. There are also plans for a garden and orchard. All of the development will be phased in over a period of time, if things work out.

Operating a distillery allows the "manufacture of intoxicating liquors and drinks in Morgan County." This has now been legalized by a referendum, despite the objection of many religious groups in the county, which has been dry. Arguments for the distillery were that it would bring more than 100 jobs to Morgan County and preserve a historic landmark.

1D. Cumberland Trail Conference

General Manager Resigns

[Contributed by Jimmy Groton]

On November 20, 2013 Tony Hook resigned as General Manager of the Cumberland Trail Conference. CTC Board Chairman Ray Garrett recognized Tony for the extreme dedication he had shown and the tremendous effort he made during his tenure as CTC General Manager. The amount and quality of trail built, the number of bridges and parking lots constructed, trail maintenance overseen, and publicity efforts executed have all been exemplary.

Tony did an amazing job and we deeply regret the present outcome. We wish Tony well in his travels and we are glad to have been able to work with him. In the meantime, CTC is determined to move forward in our mission to complete construction of the Cumberland Trail. CTC will have to look hard to replace Tony and complete ongoing projects like the Big Soddy Bridge and the upcoming Spring BreakAway. Four work sessions are planned between March 2 and 29 (see ¶1E, below).

1E. Cumberland Trail Conference

trail-building event

[Contributed by Sandra Goss]

Despite the resignation of its General Manager (¶1D, above), CTC is proceeding with its trail-building activities. The Spring BreakAway event, an “alternative spring break” for many college students, is coming up soon: Week 1, March 2–8; Week 2, March 9–15; Week 3, March 16-22; Week 4, March 23-29. Everyone is welcome.

Base camp will be at the Dogwood Lodge (in the Soddy Daisy area). Breakfast, lunch, and dinner are pro-
vided, with the exception of Wednesday, which is a day off for students and staff. One can volunteer for one day or any number of days.

**WHAT YOU CAN DO:** Pre-register by e-mailing marleyapendleton@frontiernet.net with the dates of your arrival and departure (for logistical purposes). A signed liability form is required. Tax-deductible donations to help offset the cost of this program would be very much appreciated as well.

**1F. Tennessee land protection by conservancies**

Significant areas of lands and waters in our state have been protected by various land conservancies. Here are a few summaries from recent communications; the land-protection information is undoubtedly incomplete and other activities of these organizations are not here reported.

**The Nature Conservancy in Tennessee**

TNC has protected 280,000 acres in our state. This includes helping to create, or significantly expand,
- 29 State Natural areas
- 10 State Wildlife Management Areas
- 2 National Wildlife Refuges
- ‘Connecting the Cumberlands’ (128,000 acres)
- ‘Bridging the Smokies’ (6,000+4,000 acres, see ¶4A this NL)

**Tennessee Parks & Greenways Foundation**

With partners, TPGF is working to link together more than 55,000 acres at Fall Creek Falls State Park, Scott’s Gulf, Virgin Falls, and Bledsoe State Forest. In addition, more than a dozen Tennessee Treasures have been conserved, including Black Mountain, Cummins Falls, Devilstep Hollow Cave (Head of the Sequatchie), the Mississippi River’s Randolph Bluff, etc. Altogether, 51 land-conservation projects (1998-2012) are shown scattered over a map of Tennessee. TPGF fundraises to buy strategically important tracts of land and accepts conservation easements from private landowners.

**The Foothills Land Conservancy**

FLC works through conservation easements. In 2013, it protected 11,000 acres in Tennessee and western North Carolina. In 2012, FLC conserved 6,000 acres.

**2. OBED NEWS**

**Want to be a Friend of the Obed Wild and Scenic River?**

[Contributed by Sandra Goss]

Quite a few units of the National Parks System have “Friends” groups that are active on various fronts, such as mustering volunteer resources to care for infrastructure, or generating funding to support stewardship.

There’s an effort afoot to establish a Friends of the Obed WSR group. Such a group would be a concrete demonstration of support for the park.

**WHAT YOU CAN DO:** If you are interested in partnering on this effort, call or write Dave Carney at 423-569-9778 or dave_carney@nps.gov

**3. FORESTS**

(including the CHEROKEE NF)

**3A. Don’t forget Cherokee National Forest Wilderness!**

[Includes information from Tennessee Wild]

We are partway there and, though it’s taken several years now, we must continue our efforts to go the rest of the way (NL312 ¶3A). The Tennessee Wilderness Act didn’t make it in the 112th Congress, but it was reintroduced in July 2013 as S.1294 by Senators Lamar Alexander and Bob Corker (NL310 ¶4; NL311 ¶4A). It now needs action in the House (see ¶6A for Congressional attitudes on wilderness).

What’s involved is adding acreage to each of five existing Wilderness areas and designating one new one – a total of about 20,000 acres. It should be a no-brainer: the U. S. Forest Service’s most recent Management Plan recommended that these areas be changed from wilderness-study designation to wilderness-area status. Such change in designation does not require additional land, funds, or changes in management agency.

But we must get support of the Tennessee delegation in the House, and especially the support of Congressmen Chuck Fleischmann (R-TN3) and Phil Roe (R-TN1), in whose districts the areas in question are located. Constituents are needed to visit these congressmen to let them know that the proposed Wilderness Bill is important to them. We will schedule such visits at your convenience and will provide training. See action box.

The TN Wild effort has added a Business Development Director to its staff, as of December, 2013. Laura Hodge is responsible for securing additional wilderness legislation endorsements from businesses in the 1st and 3rd Congressional Districts. The endorsements will merit positive attitudes from Congressmen Roe and Fleischmann, who have concerns about their districts’ economies.

Hodge is seeking referrals to 1st and 3rd congressional district business people who might be interested in endorsing the wilderness designation (see action box). She is preparing handouts and a presentation on the topic.

**WHAT YOU CAN DO**

(1) If you are a residents of Congressional Districts 1 or 3, please contact Sandra Goss (865-583-3967 or sandra@sandrakgoss.com) and tell her of your willingness to visit Reps. Roe or Fleischmann, respectively.
3B. Forests being lost
to energy generation

[Based on information from NRDC and SELC]

Until recently, burning biomass was considered a renewable form of energy, with sawdust and wood waste being the fuel. Now, biomass energy production has come to consume whole trees, and entire forests on a large scale. Giant energy companies, e.g., Virginia-based Dominion Power, are clear-cutting southern forests (particularly, sensitive wetland hardwood forests, a remarkably rich wildlife habitat) and are boasting that they produce “clean and renewable” energy (while spewing carbon pollution). Wood shipments from the American South have also been skyrocketing to feed European power plants, where burning trees is a widespread practice.

The volume of whole trees harvested for export doubled from 2012 to 2013 and is projected to continue to escalate. Britain's Drax Group, for example, plans to consume 7 million tons of wood annually — equivalent to burning a forest four times the size of Rhode Island. SELC is working with European Union partners to dispel the belief that biomass sourced in the U.S. is carbon neutral and meets sustainability principles — incorrect assumptions that are driving industry demands in Europe.

A recent careful study commissioned by SELC and NWF (Nat'l Wildlife Federation) shows that, in the next 35-50 years, use of wood would produce higher levels of atmospheric carbon per megawatt than use of fossil fuels. America's forests serve as carbon "sinks" that absorb and hold some 10% of the heat-trapping carbon dioxide emissions our country pumps out each year. Burning trees to generate electricity releases this CO₂ (NL311 ¶6D).

3C. Urban forests

[Information from woodworkingnetwork.com]

According to a recent U.S. Forest Service study, America’s urban forests store an estimated 708 million tons of carbon, an environmental service with an estimated value of $50 billion. The USFS is active in more than 7,000 communities across the U.S., helping them to better plan and manage their urban forests.

3D. Chestnuts may come back

[Information extracted from an article in The Atlantic, 5/31/13, which was submitted by Dave Reichle]

In the 20th century, a fungal blight (introduced by a blight-resistant Japanese chestnut) killed off four billion towering American chestnuts that grew in the eastern US, including most of Tennessee. Since the blight’s discovery, cross-breeding a few surviving American chestnuts with the blight-resistant Asian chestnut has conferred some, but not full resistance.

The newer technique of genetic engineering (i.e. introduction of a gene from another species) was more difficult for chestnuts than for other trees because of the way in which chestnuts can be propagated. When this technical difficulty was finally resolved, researchers at SUNY-ESF were able to introduce a gene, taken from wheat, that provides resistance to oxalic acid, the toxin produced by the chestnut blight.

This has now resulted in a transgenic line of chestnuts that appears to be even more resistant to the blight than the Asian trees are. For now, the results are preliminary, being based on "leaf assay tests" which take place in the lab and are performed on small plants. Saplings will need to grow for about two to three years before resistance can be confirmed.

4. SMOKIES and ADJACENT LANDS

4A. “Bridging the Smokies”

[Based on information from NPCA and TNC]

A 15-year process to preserve a valuable 10,000-acre area adjacent to the Gt. Smoky Mountains National Park (GSMNP) was completed in 2013. Back in the late 1990s, when dams along the Little Tennessee River next to the Smokies came up for re-licensing, NPCA (National Parks Conservation Association) organized several agencies and groups to enter into an alternative licensing process with the owner of the dams (ALCOA, at the time) that required compensatory environmental protection measures. The plan finally negotiated, and federally approved, was to turn 10,000 acres into public land by implementing a long-term set of easements and transfer options.

The final piece of the plan was competed in October of 2013, when The Nature Conservancy (TNC) took possession of 4,000 acres along the Little T (the majority of it upstream from Calderwood Dam). Nine years earlier, TNC had purchased nearly 6,000 acres and transferred them to the GSMNP, the Cherokee NF, and state Wildlife Management Area lands. At that time, the 4,000 acres that have now been acquired by TNC were temporarily protected via a conservation easement.

The final acquisition connects the GSMNP with the Cherokee NF and encompasses habitat for more than 20 rare species. The area will ultimately be transferred into public ownership.

4B. Acting Park Superintendent replaces retired Dale Ditmanson

After 36 years, Dale Ditmanson retired from the National Park Service (NPS). He had served as superintendent of the Great Smoky Mountains National Park since May 2004. As of January 12, Pedro Ramos is the acting
superintendent for 90 days, while NPS conducts a search for a permanent superintendent.

Ramos has been the superintendent at Big Cypress National Preserve since 2009. Born in San Juan, Puerto Rico, he attended the University of Massachusetts in Amherst, where he graduated with a Bachelor of Science in 1990. He began his federal career with the U.S. Department of Agriculture, Farmers Home Administration, in Vermont, and in 2001 transferred to the National Park Service as Administrative Officer at Big Cypress National Preserve. He has had acting superintendent assignments in a number of parks.

The GSMNP’s new deputy superintendent, since mid-September 2013, is Patricia M. Wissinger, a North Carolinian (NL 312 ¶4B).

5. TVA NEWS

5A. TVA is retiring coal capacity

[Based on information from SACE]

In November, TVA announced that it would retire 3,308 MW of coal capacity. From one to all units will be retired at three coal-fired power plants (Colbert and Widows Creek, both in Alabama, and Paradise in Kentucky). These retirements will decrease TVA’s fleet-wide CO₂ emissions by more than 15.6 million tons per year.

This decision is partly the outcome of a 2011 Consent Decree with EPA. Additionally, TVA’s new CEO, Bill Johnson, has announced a new goal to reduce total coal reliance to only 20% of total generation capacity. Historically, TVA relied on coal-fired generation to produce upwards of 60% of its total electricity generation. Johnson is dedicated to moving TVA to a more balanced generation portfolio, including an increase in renewable energy use to 20% of total generation capacity.

Changes in the economics of coal plants are making them an increasingly bad investment for many utilities nationwide. The costs of significant investments in pollution controls needed to comply with future environmental regulations, more competitive renewable-generation and energy-efficiency options, as well as a significant decrease in the cost of natural gas are some of the reasons driving these financial viability changes.

5B. Upcoming vacancies on the TVA Board

[Partly contributed by Sandra Goss]

TVA Board member and TCWP member Neil McBride’s term ended at the end of 2013. He was not re-nominated to the post, nor has anyone else been nominated for that seat. Board Chairman Bill Sansom’s and Board member Barbara Haskew’s terms expire in May of this year. Together, these three vacancies will represent one-third of the Board, so it is to be hoped that they will be filled quickly.

Neil has spent a lifetime effectively developing the practice of public-interest law in Tennessee. From 1978 until his retirement in December 2013, he managed the Oak Ridge office of the Legal Aid Society of Middle Tennessee and the Cumberlands, Tennessee’s largest nonprofit law firm. Over the years, he has also served several Tennessee organizations concerned with social, economic, and environmental issues. One of these was TCWP, on whose Board he served from 1990 to 1994.

6. NATIONAL NEWS

6A. This Congress is disinclined to preserve any wilderness

[From Huffington Post 1/3/14]

This year marks the 50th anniversary of the Wilderness Act. Yet the only thing Congress has preserved in the past four years is its record dry spell, having designated no new areas of the country for protection under that law since 2009. The 112th Congress (2011/2012) was the first since the law’s passage (in 1964) to fail to designate any new wilderness, and it looks like the present, 113th, Congress may follow suit.

In the first year of the 113th Congress (2013), 27 different areas (including those in the Cherokee NF), totaling more than 13.5 million acres, were proposed in the House or Senate for wilderness status. (Of these 27, 12 were proposed in both chambers, including 5 that have sponsors from both parties.) An additional 10 areas, representing nearly 2 million acres, were proposed for non-wilderness protections.

But whether any of those 37 areas will actually be approved in 2014 is uncertain. The main roadblock is the leadership of the Natural Resources Committee (Rep. Doc Hastings, R-WA), whose philosophy is: “we have enough public lands, let’s not add any more.” Instead of preserving wilderness areas most of the efforts by the committee chairman have been directed toward making it easier to drill for oil and gas on public lands.

6B. Sec. Jewell protects wilderness in Alaska

[From Alaska Wilderness League 1/8/14]

Interior Secretary Sally Jewell recently upheld a U.S. Fish and Wildlife Service decision forbidding a road through federally designated Wilderness in Izembek National Wildlife Refuge in Alaska. Congress designated Izembek as Wilderness more than three decades ago to conserve globally important waterfowl habitat. The proposed road would have fragmented the refuge, destroying wetlands of global ecological significance.
Most of us will never visit Izembek, but the decision is of importance to all who value wilderness. Had Secretary Jewell allowed the road to be built, it would have set a dangerous precedent for stripping protections from other designated Wilderness areas in Alaska and across the country. This is Secretary Jewell’s first major action regarding Alaska’s public lands, and she needs to know that she has our support for making a sound, science-based decision.

WHAT YOU CAN DO. Contact Interior Secretary Sally Jewell (sallyjewell@ios.doi.gov, or see Political Guide) to applaud her protection of a designated wilderness area.

6C. “Extinction Act” introduced in House and Senate

[From EarthJustice 12/13/13]

At a time when we should be celebrating four decades of success with the Endangered Species Act (ESA), a bill (HR.3533/S.1731) has been introduced in both House and Senate that would gut the Act.

The “Extinction Act” would harm imperiled species by:

• Automatically removing them from the lists of endangered and threatened species after five years, whether or not they’ve recovered.
• Letting politics win over science by requiring that state governors give their consent before species in their states can be listed under the ESA, and requiring a joint resolution of Congress to approve the listing of species as threatened or endangered.
• Undermining citizens’ ability to enforce the ESA in court and to help protect imperiled species by filing citizen listing petitions.

WHAT YOU CAN DO. Urge your senators and representative (see p.2) to oppose this dangerous bill

6D. Evolution and climate change make it into textbooks after all

Four years ago, the Texas Board of Education passed controversial curriculum standards that some members hoped would force textbooks to water down instruction on evolution and climate change. But in November, the majority of the board voted to include all of the proposed instructional materials up for adoption for high school biology and environmental science. Throughout the adoption process, publishers had refused to make concessions that would have compromised science instruction on these subjects in their textbooks.

The Texas Freedom Network called it “a huge win for science education,” attributed to publishers refusing to lie to students, and to parents demanding “that their children get a 21st-century education based on established, mainstream science.” Because Texas represents such a large percentage of the market, the decision will have beneficial effects on textbooks used nationwide.

7. CLIMATE CHANGE; ENERGY

7A. EPA needs to finalize rules for limiting carbon emissions from new power plants.

In September, EPA published proposed rules for limiting carbon emissions from new power plants (please read NL312 ¶7A), but the proposal has yet to be finalized. Power plants are the largest contributor of carbon emissions, making them the chief cause of climate change.

EPA needs to be told that we agree with the evidence showing that carbon dioxide and other global warming pollution endanger public health and welfare, and that we applaud EPA for using its authority under the Clean Air Act to take action to protect us from this pollution. There should be no further delay in finalizing a strong rule designed to control carbon pollution from new coal-fired and natural-gas-fired power plants. (Standards for existing power plants are to be issued by June 2014.)

WHAT YOU CAN DO: Contact EPA by the end of February.

Ways to comment:

(a) Visit the EPA website, http://www2.epa.gov/carbon-pollution-standards/2013-proposed-carbon-pollution-standard-new-power-plants, to read the information on the proposed new standards, and find the link for commenting (top right corner).

(b) Email to: a-and-r-Docket@epa.gov, Subject: Docket ID No. EPA-HQ-OAR-2013-0495.

7B. Sec. Kerry’s focus on global warming is changing international expectations

[Includes some information from NY Times, January 2014]

For decades, other nations have been skeptical of American efforts to reduce carbon emissions, and this skepticism has been a major factor in the failure to achieve a global climate-change treaty. At the 2009 Copenhagen summit, Pres. Obama had promised that the Senate would soon pass an ambitious climate-change bill, but this bipartisan bill (sponsored by Kerry, Lieberman, Lindsey Graham) failed in 2010. Since then, prospects for Congressional action have deteriorated even more.

More recently, Pres. Obama’s administrative initiatives and the appointment of John Kerry as Secretary of State have served to diminish the skepticism of other nations. The president has directed EPA to issue regulations
forcing cuts in carbon pollution from coal-fired power plants. These rules, which Republicans (and coal-state Democrats) criticize as a “war on coal,” are viewed as a sign that the United States is now serious about acting on global warming.

John Kerry has a long history of interest in climate change. As a senator in the 1980s and 1990s, he worked closely with then-Senator Al Gore on climate-change policy. In 1992, Sen. Kerry attended the first U.N. climate change summit in Rio de Janeiro. Since he became Secretary of State last February, Kerry has created an agency-wide focus on global warming and has put top climate-policy specialists on his personal staff.

He has issued a directive that all meetings between senior American diplomats and top foreign officials include a discussion of climate change. One recent significant success was that the United States and China agreed in September to jointly phase down production of hydrofluorocarbons, greenhouse gases used in refrigerators and air-conditioners.

Secretary Kerry’s goal is to become lead broker of a global climate treaty in 2015 (a treaty that would commit the United States and other nations to historic reductions in fossil fuel pollution) and he has set midlevel talks to pave the way, particularly with China, the world’s largest emitter of greenhouse gases. Will the Senate ratify such a treaty? That’s where we, the voters, have a major role to play.

7C. Large companies prepared to pay price on carbon

[Information from New York Times, 12/5/13]

Mainstream economists have long agreed that putting a price on carbon pollution is the most effective way to fight global warming. The resulting higher prices for gasoline and electricity would drive the market away from fossil fuels and toward renewable sources of energy.

Seeing this trend as inevitable, many large companies have incorporated carbon pricing into their long-term financial plans as a practical business decision. A new report by the environmental-data company CDP lists at least 29 such companies, some with close ties to Republicans (including ExxonMobil, Walmart, and American Electric Power). ExxonMobil (which, incidentally, is currently the nation’s biggest natural-gas producer) now plans its financial future with the expectation that eventually carbon pollution will be priced at $60 a ton. The company would support a carbon tax if it was paired with an equal cut elsewhere in the tax code.

On the other side, Koch industries, a conglomerate, is ramping up an already aggressive campaign against climate policies – specifically against any tax or price on carbon. These contrasting positions may become part of a larger rift between business-friendly establishment Republicans and the Tea Party.

7D. Natural-gas- vs. coal-fired power plants: what saving in greenhouse gas emissions?

[Based on information from UCS]

Heat-trapping CO₂ emissions from an efficient new gas-fired power plant are about 50-60% lower than those from a typical new coal-fired power plant. However, the drilling of wells and the extraction of natural gas from those wells, along with the distribution of natural gas, result in the leakage of methane, which can trap 25 times more heat than CO₂ over a 100-year period. Preliminary studies indicate that these so-called fugitive methane emissions amount to 1-9% of total natural gas production.

Methane leakage significantly reduces — or, at higher percentages, even negates — the potential climate advantage natural gas has over coal. One recent study found that methane losses must be kept below 3.2% for natural-gas power plants to have lower life-cycle emissions than coal plants. Cost-effective technologies exist for reducing methane leakage, but stronger policies and regulations are needed to require their deployment. An upcoming Supreme Court decision (NL312 ¶7B) will have a bearing on this issue.

7E. The top GHG producers in history

[Based on report in The Guardian, 11/20/13]

An analysis of fossil fuel and cement production from 1854 to 2010 has found that the climate crisis of the 21st century has been caused largely by just 90 companies (Climatic Change 122:220-241, 2014). Between them, these companies produced 63% of industrial CO₂ and methane emitted worldwide from 1751 to 2010. About half of these gases were emitted since 1986, well past the date when governments and corporations became aware that rising greenhouse-gas emissions from the burning of coal or oil were causing dangerous climate changes.

Of the total, roughly 1/3 each was traced to investor-owned entities, state-owned enterprises, and nation-states. Government-run oil and coal companies in the former Soviet Union produced more greenhouse gas emissions than any other entity – just under 8.9% of the total produced over time. China came a close second with its government-run entities accounting for 8.6% of total global emissions. Nearly 30% of emissions were produced by just the top 20 investor-owned companies, with Chevron Texaco (3.5%), Exxon (3.2%), BP (2.5%), being the top three. Many of the companies are also sitting on substantial reserves of fossil fuel, which – if they are burned – puts the world at even greater risk of dangerous climate change. Several of the top companies on the list have funded the climate-change denial movement.
7F. Only one significant achievement of the Warsaw Convention
[From bloomberg.com/news/2013-11-23]

The annual U.N. Framework Convention on Climate Change, held in Warsaw in November, was short on substantive achievements, but made progress in the area of deforestation and tropical forest degradation. Deforestation and land-use changes account for 17% of global greenhouse-gas emissions. Concluding eight years of negotiation, the Warsaw Convention adopted a rulebook setting out how aid funds can go to protect woodlands. The measures known as Reducing Emissions from Deforestation and Forest Degradation, or REDD-plus, will help nations such as Brazil and Congo to protect forests. Needed next are implementation, and funds for it.

7G. Climate change poses risk to food supplies
[From New York Times, 11/1/13]

A leaked draft of a report under development by the Intergovernmental Panel on Climate Change (IPCC) reflects a large body of recent research that has shown how sensitive crops are to heat waves. The report finds that while benefits may occur in some areas, like northern lands that are now marginal for food production, overall, global warming could reduce agricultural production by as much as 2% each decade for the rest of this century. The effect of this reduction becomes all the more significant because, during that period, demand is expected to rise as much as 14% each decade as the world population grows from the present 7.2 billion to 9.6 billion in 2050. Additionally, many of those people in developing countries will acquire the money to eat richer diets. Food shortfall would lead to rising food prices that would hit the world’s poor hardest.

Any attempt to meet increased global food demand by putting more land into production is likely to entail chopping down large areas of forest. Such action would only accelerate climate change by reducing the availability of carbon sinks and by emission of CO₂ from the destruction of trees.

7H. Possible relation of oil & gas extraction to earthquakes
[From New York Times, 12/12/13]

Oklahoma, never known as earthquake country, has experienced a swarm of recent seismic events. Oklahoma has also had an increase in oil & gas activity. The coincidence is interesting to contemplate, although it’s not possible to show a definitive link.

Historically, the state has experienced about 50 tremors per year, most of them too slight to be perceived. But in the past three years, there have been thousands of quakes, many of them felt by residents. There were 2,600 in 2013 alone. The biggest quake ever recorded in the state (magnitude 5.6) occurred in 2013.

Also over the past several years, Oklahoma has constructed 4,000 disposal wells for wastewater from oil and gas operations (disposal wells are commonly located near producing wells). Billions of gallons of wastewater that is produced along with oil and gas are injected under pressure into wells that reach permeable rock formations. Pressure changes underground can “unclamp” old stressed faults so the rocks can slip past each other and cause the ground to shake.

8. OAK RIDGE/KNOXVILLE AREA

8A. Eagle Scout Project at Oak Ridge’s Worthington Cemetery
[Contributed by Jimmy Grotton]

More than a dozen years ago, TCWP adopted a TVA tract at the East end of Oak Ridge with the object of ridding it of exotic invasive plants and restoring cedar-barren habitat. It has since become the focus of our annual activities to celebrate National Public Lands Day with TVA. This Worthington Ecological Study Area surrounds a historic family cemetery, and this has now become the beneficiary of a scout project.

Eagle Scout Arshene Baigvand has cleaned up and restored much of the historic cemetery. The project consisted of removing trees and shrubs that had enveloped the cemetery and of cleaning the gravestones. In essence, the intent was to restore the cemetery without further damaging the gravestones. Arshene organized three workdays in November and December to carry out his project. He recruited a host of fellow students, friends, and parents to help cut back encroaching vegetation and clean the gravestones. The group accomplished a phenomenal amount of work. Arshene coordinated his project with the Worthington family, TVA, and the City of Oak Ridge.

8B. Manhattan Project Park has to start over again

Running out of time to pass the National Defense Authorization Act for FY 2014 (H.R. 3304), the House and Senate Armed Services Committees used an expedited process to negotiate a compromise version of the bill, which passed each chamber without amendment. This bill did not include authorization for a Manhattan Project National Historic Park. Because the park proposal has built bipartisan support within Congress, it will probably be considered again in the coming year.
8C. Knoxville Urban Wilderness rescued from threat

[Based on article in Tennes-Sierran]

The Urban Wilderness, a combination of city-owned properties and conservation easements on private tracts -- all within Knoxville city limits -- contains the 12.5-mile South Urban Loop trail system. Until recently, the Loop and the Wilderness were threatened by TDoT’s planned James White Parkway Extension project, which would have bisected the Loop in two places and wiped out several connecting trails. Fortunately, a 100-acre tract located directly in the path of the proposed highway was recently donated to the Wilderness by the Wood family. Following a request by Knoxville’s Mayor Madeline Rogero, TDoT has announced that work on the James White Parkway Extension project would cease.

The properties traversed by the Loop vary greatly in condition, illustrating the needs for wildland preservation. At one end of the spectrum are ecological gems and, at the other end, lands in early stages of recovery from decades of abuse.

9. TCWP NEWS

9A. Upcoming activities

[Compiled by Carol Grametbauer]

[NOTE: Times listed for all events are Eastern Time.]

“Frogs and Salamanders of Anderson County” – Thursday, February 6
John Byrd’s program on “Frogs and Salamanders of Anderson County” will begin at 7 p.m. in the Social Room of the Oak Ridge Civic Center.

John has been involved with education and research on amphibians for many years: he taught biology and science at Anderson County High School, and has headed the Clinch River Environmental Studies Organization (CRESO), which introduced high school students to advanced field research techniques. John and Steve Forbes, an engineer with Arcadis, have overseen construction of more than ten wetlands at local schools (NL312 ¶8C).

Alley Ford Cumberland Trail workday – Saturday, February 22
A day of trail work and hiking will take place on the 2.5-mile section of the Cumberland Trail between Nemo Picnic Area and Alley Ford at the Obed Wild and Scenic River. This section was adopted by TCWP in 1998. Participants should wear sturdy shoes or boots and bring work gloves, loppers, small bow saws or folding saws, shovels and grubbing tools, as well as a lunch and plenty of water. Some tools will be available at the event.

Participants can meet for carpooling in Oak Ridge at the Rush/Books-A-Million parking lot (meet at the end close to S. Illinois Avenue, near the Waffle House) in time to leave Oak Ridge at 9 a.m. Eastern, or can join the crew at Nemo Picnic Area or Rock Creek Campground at 10 a.m. We expect to return to the trailhead by around 3 p.m. (NOTE: If the weather is uncooperative -- excessive rain or snow and ice -- we will reschedule for March 8.)

For additional information, contact Jimmy Groton at 865-805-9908 or at groton87@comcast.net.

Oak Ridge Cedar Barren cleanup – Saturday, March 1
We will conduct our spring exotic invasive plant removal at the Oak Ridge Cedar Barren on March 1. Located next to Jefferson Middle School in Oak Ridge, this Barren is a joint project of the City of Oak Ridge, State Natural Areas Division, and TCWP. One of only a few cedar barrens in East Tennessee, the area is subject to invasion by Chinese lapsededa, Japanese privet, autumn olive, mimosa, Nepal grass, multilora rose, and woody plants that threaten the system’s prairie grasses. Our continuing efforts help to eliminate these invasives and other shade-producing plants that prevent the prairie grasses from getting needed sun.

Volunteers should meet in the Jefferson Middle School Parking lot at 9 a.m., with sturdy shoes, loppers, gloves, and water. The work session will conclude at noon with a pizza lunch.

For additional information, contact Tim Bigelow at 865-607-6781 or at bigelowt2@mindspring.com.

Additional information on all TCWP activities may be obtained from TCWP Executive Director Sandra K. Goss at Sandra@sandrakgoss.com or at 865-583-3967.

9B. Recent events

TCWP Holiday Party – Thursday, December 12
About 35 TCWP members and guests attended our holiday party, held at the Oak Ridge home of Jenny Freeman and Bill Allen. This get-together annually provides us with the opportunity to relax and catch up with each other in the welcoming setting of Jenny and Bill’s beautifully decorated home, while enjoying delicious hors d’oeuvres and desserts. As always, our sincere thanks to them for hosting this popular event each year!

Whites Creek SWA Trail Work -- January 18, 2014
Nine volunteers braved the cold weather to help with TCWP’s annual trail maintenance work on the Whites Creek Trail at TVA’s Small Wild Area and adjacent TCWP property. Volunteers included 4 Oak Ridge High School students (from Deni Sobek’s and Beth Adler’s classes), two ORHS parents, and three TCWP members. The volunteers walked the entire 3-mile loop clearing brush from the trail, installed handrails on a foot bridge constructed by TCWP several years ago, and enjoyed a beautiful winter day in the
woods. Special thanks to TCWP board member Tim Bigelow for providing lumber and other bridge materials and coming up with a sturdy design for the handrails, and to the students for helping out with the bridge.

**9C. Bob Luxmoore, 1940-2014**

It is with deepest sorrow that we report the death of Bob Luxmoore on January 4. Bob, a renowned soil scientist and plant physiologist, freely contributed his knowledge and energy to organizations that address social, environmental, and economic justice. Chief among these were SOCM and TCWP (on whose Board he served 1988-91). With his wife, Annetta Watson, he created heaven-on-earth in Solomon Hollow near Coalfield by protecting nature not only on the large farm they owned but by several conservation easements.

A Celebration of Life and picnic reception are planned for later in the Spring. If you wish to attend, notify sharpfuneralhome@aol.com and provide your contact information.

**9D. Members in the news**

[In alphabetical order]

In late November, Chuck Coutant received the Vocational Service Award of the Rotary Club. While serving on the TCWP Board from 1982-1993, Chuck was active in protecting Oak Ridge’s greenbelts and maintaining the North Ridge Trail. He developed a canoe trail around Haw Ridge.

Jenny Freeman (one-time TCWP executive director and past Board member) was on the front page on January 3, presenting Gov. Haslam with seals made by ORNL’s Manufacturing Demonstration Facility. Jenny is the recipient of last year’s East Tennessee’s Economic Council’s ‘Muddy Boot’ award.

Carol Gramethauer (TCWP Board member, Secretary, and head of the Program Committee) is the author of the forthcoming poetry book, *Now & Then*. The book can be ordered online at [www.finishinglinepress.com](http://www.finishinglinepress.com), or from Finishing Line Press, P.O. Box 1626, Georgetown, KY 40324.

Tim Myrick was awarded the annual Starfish Award by the Anderson County Interagency Coalition in December. This award recognizes his efforts to make a difference in the lives of others.

Oak Ridge National Laboratory has established the Liane B. Russell Distinguished Early Career Fellowship. In awarding these fellowships (named in honor of Lee), emphasis will be given to attracting women and minority candidates.


**9E. An easy and automatic way to benefit TCWP**

Repeated from NL312 ¶9, for anyone who wants to benefit TCWP and needs to be reminded of the easy way in which this can be done.

The new Kroger Community Rewards Program* in which TCWP is now enrolled provides a way for you to benefit TCWP with no effort, except for registering. Visit krogercommunityrewards.com and establish a password through the Sign Up Today New Customer box. With your password, click on Edit Kroger Community Rewards information and input your Kroger Plus card number. Then enter TCWP’s number, which is 26906.

Once this process is completed, every time your Kroger Plus card is used on check-out, TCWP will automatically receive a credit. Kroger will send TCWP a check each quarter that reflects a percentage of all purchases made by TCWP shoppers.

For help navigating the registration process, please call Sandra at 865-583-3967. Thanks to everyone for supporting TCWP when you shop at Kroger.

**9F. A Note from the Executive Director**

[By Sandra Goss]

This first month of 2014 is filled with year-end reports, activity planning and implementation, and catching up with projects and colleagues after the holiday break. The normal routine, albeit under frigid weather conditions, is a welcome change from the holiday festivities.

The year-end report reminds me that good things happened last year including: continuation of the real-estate transfer fee in the State budget, which funds land purchases that conserve natural areas and state parks; University of Tennessee’s withdrawal of the proposal to frack on its Morgan and Scott Counties forest lands; and the Tennessee Valley Authority’s decision to generate a revised Integrated Resource Plan that will take into consideration recent changes in electricity production and consumption.

There were also our numerous workdays throughout the year. We currently take responsibility for the Whites Creek Trail in Rhea County; the Alley Ford segment of the Cumberland Trail; the Oak Ridge Cedar Barren; Oak Ridge’s North Ridge Trail; the Wildflower Greenway; and the Worthington-Cemetery Ecological Study Area. We’ve been doing an annual cleanup from rafts on the Obed River, and starting this year, will also do one on the Big South Fork of the Cumberland River.

Thank you, thank you, thank you to our leadership and volunteers. Many people, working together, make these accomplishments possible. We must press on in
2014, on the ground and on the phone or computer, to protect and enhance Tennessee’s wondrous natural resources.

There are numerous opportunities for you to get involved in the next several weeks (see the calendar in ¶10). Please mark your calendar and join us!

Plans for other events are in progress, including a grand celebration of the 50th Anniversary of the Wilderness Act. To be held September 3 at the East Tennessee Historic Center in Knoxville, this celebration will feature descendants of Harvey Broom, co-founder of The Wilderness Society. Look for more details later.

For more information about any TCWP activities, call or write me. I welcome our conversations!

Sandra

9G. Thanks, and a tip of the hat to …

[From Sandra Goss]

-- Jean Bangham, Frank Hensley, Charlie Klabunde, and Dick Raridon for preparing the TCWP Newsletter for mailing.

-- Jenny Freeman and Bill Allen for once again hosting the enjoyable TCWP Holiday Party.

-- Eagle Scout Arshene Baigvand for his work on the Worthington Cemetery as part of his Scout project.

-- Francis Perey for maintaining our website.

-- Ed Clebsch, Joe Feeman, and Wes James for joining the TCWP Program Committee.

-- Jan Lyons for serving on the Community Shares Board of Directors on behalf of TCWP. Her participation helps A LOT on TCWP’s required “sweat equity” in CS.

-- Lee Russell for herculean efforts on the long-running, widely acclaimed TCWP Newsletter.

-- Officers (David Keyes, Mike Sale, Jimmy Groton, Jim Whaley) and Directors of the Emory River Watershed Association for their good work on a kiosk recently erected at the Morgan County Visitors’ Center.

-- Tim Bigelow, Carol Grametbauer, Jimmy Groton, and Charlie Klabunde for their work on TCWP’s Employee/Board Goals and Evaluation Committee.

9H. Erratum

On p.1 of NL 312, we failed to list ¶8C, Wetlands constructed at local schools.

10. CALENDAR; RESOURCES

• CALENDAR (events and deadlines)

(For details, check the referenced NL item; or contact Sandra Goss, 865-583-3967, or Sandra@sandrakgoss.com)

- Jan. 25 – Feb. 1, Wilderness Wildlife Week, Pigeon Forge (TCWP will have a display)
- February 6, TCWP information program (amphibians) by John Byrd (¶9A, this NL).
- February 19, Conservation Day on the Hill (¶1A, this NL).
- February 22, Cumberland Trail workday, Alley Ford (¶9A, this NL).
- By Feb 28, send comments to EPA, supporting carbon-emission limits for new power plants (¶7A, this NL).
- March 1, Spring Cedar Barren cleanup (¶9A, this NL).
- March 2-29, Volunteer opportunities for Cumberland Trail (¶1E, this NL).
- March 29, Obed River cleanup on rafts (details in next NL).
- March 29-30, TVA Riverbluff Trail hikes
- April 5-6, TVA Riverbluff Trail hikes
- April 10, Dodd Galbreath presentation (details in next NL).
- April 12, Big South Fork raft trip/river cleanup (details in next NL).
- April 12 – Community Shares Circle-of-Change Banquet
- April 26 - Oak Ridge Earth Day
- May 10 - Obed River cleanup organized by NPS

• RESOURCES

- The League of Women Voters’ national website (www.lwv.org) is a rich source of accurate information on current and past events and issues. Among topics that may be searched is “Defending the Environment.”

- The Smoky Mountains Regional Project at the UT Libraries preserves early photographs of the Smoky Mountains (NL312 ¶4A). It can be browsed at www.library.utk.edu/smokies and supported financially by calling Erin Horeni-Ogle at 865-974-0055.
14 Reasons to be a member of TCWP for 2014

Tennessee Citizens for Wilderness Planning:

* Issues the most informative environmental newsletter in the state
* Secures special lands in Obed River Gorge
* Maintains Whites Creek Trail (Rhea Co.)
* Provides TCWP E-lerts on timely environmental issues
* The TCWP Newsletter and E-lerts can help you make a difference
* Conducts regular invasive plants cleanup at Oak Ridge Cedar Barren
* Sponsors informative presentations
* Is long-time adopter of Alley Ford segment of Cumberland Trail
* Takes active role in oil and gas rules
* Sponsors a caravan to Conservation Day on the Hill
* Works to stop Mountain Top Removal Coal Mining
* Advocates for pure drinking water
* Built and maintains the North Ridge Trail (Oak Ridge)
* Fights for healthy state and national forests

Our "dues" year is the calendar year, Jan 1 to Dec 31. Contributions to TCWP are tax-deductible.
To join after August 1, you may pay half the listed annual rates.
Please visit www.tcwp.org for secure contribution or send form, and check (payable to TCWP), to:
Charles Klabunde, Treasurer, TCWP; 219 E. Vanderbilt Dr.; Oak Ridge, TN 37830

NAME(S)______________________________________________________________

ADDRESS__________________________________________________________

City__________________________

State_______Zip__________E-mail:_____________________________________

PHONES: Home__________________________________________Work________________________

MEMBERSHIP CATEGORIES
1. Student, Correspond, Senior (low budget)...$15.00  3. REGULAR (individual) .................. $25.00
4. Family (husband, wife) ......................... $35.00  You may always contribute as much more as you want.
[ ] I prefer delivery of Newsletters as a PDF attached to an e-mail instead of paper copy via USPS.
Now 144 are doing this:
—Instead of a heap of Snail Mail paper—
their Newsletters are delivered as PDF’s
attached to an e-mail. This is only
after they told us to make this change.
An e-mail to klabundece@aol.com does it.

Membership Renewal for 2014.
NOW is the time to renew. Please do it.
You may even add a year-end gift.

Coming Events
Feb 6, Thur – Presentation – John Byrd on "Frogs and Salamanders of
Anderson County"

Feb 19, Wed – Conservation Day on the Hill – Nashville (pre-registration
encouraged)

Feb 22, Sat – Alley Ford Cumberland Trail workday

Mar 1, Sat – Spring Cedar Barren cleanup

Mar 29, Sat – Obed River Clean up on rafts trip (pre-registration
encouraged)