Taking the Tops off Mountains at the Flip of a Switch

By Jea Yoon Lee

Everyone knows that electricity comes from power plants. Some know that 40 percent of the electricity in the U.S. comes from coal-fired plants. Fewer know that an estimated 7-10 percent of the country’s total coal production comes from mountain-top removal (MTR) mines in Appalachia. Unfortunately, many Tennessee consumers are linked to MTR through their utility companies which use MTR coal.

First developed around the 1970’s with the innovation of massive dragline equipment, MTR is a method of coal mining which entails razing the tops of mountains with dynamite to reach the thin seams of coal buried underneath, and then dumping the crushed remains of the land into valleys.

MTR is the cheapest method for coal companies because it is speedy and requires fewer employees than underground mining. The exponential growth of Americans’ energy consumption and the rising demand for low-sulfur bituminous coal found in central Appalachia has led to increased MTR mining in the past decade.

So far, MTR has destroyed over 800 square miles of mountains and 1,200 miles of streams across Appalachia, according to the EPA’s 2005 Environmental Impact Statement.

The tragedy of MTR is not just the abstract notion of “losing” mountains, forests, and streams, however. For Virginians, West Virginians, Kentuckians and Tennesseans living near the mines, it means undrinkable, rash-inducing water full of arsenic and mercury, flying boulders and earthquakes caused by the blasting, and dramatic depreciation of property value.

They also live in the shadow of impoundments—dams which hold back the wastewater created by washing the debris off coal. Eight years ago in Kentucky, one broke and released a torrent of over 300 million gallons of thick, toxic sludge which destroyed homes, farmlands and 100 miles of waterways.

More MTR leads to burning more coal, which diverts resources away from alternative energy sources, and greater reliance on coal-powered plants, which leads to even more MTR. That means dirtier air, more acid rain and more global warming emissions.

According to some estimates, as much as 37 percent of the coal used in Tennessee power plants may come from MTR mines. Five plants in Anderson, Hawkins, Humphreys, Roane and Sumner Counties purchase coal directly from MTR mines and provide electricity to the Tennessee Valley Authority (TVA) grid.

Most other plants purchase coal from companies that operate MTR mining. Appalachian Electric, Duck River Electric, Upper Cumberland EMC and Tri-County Electric are just a few of the utilities on the TVA grid. (For more information on your community’s connection to MTR, visit http://www.ilovemountains.org/myconnection).

Rising gas prices opens the prospect of a coal-to-liquid industry which would lead to an even greater reliance on coal. The coal industry is peddling the false solution of converting coal into liquid fuel, but the reality is worse than being topless in Appalachia. Not only does it take one ton of coal to produce just two barrels of fuel, but burning liquid coal also releases double the global warming emissions per gallon as regular gasoline. Replacing 10 percent of our nation’s transportation fuels with liquid coal would require increasing coal mining by over 40 percent.

Coal is not the solution! Currently there are plans for constructing 87 new coal power plants, each with an expected lifespan of 50 years. Is an additional 50 years of reliance on coal even a viable option for our planet? Let us oppose the irreversible, irremediable practice of MTR and instead invest in solar, wind and geothermal power.

MTR requires filling valleys with vast quantities of mining waste. Filling streams with waste was illegal under the Clean Water Act, and advocacy groups used the law to protect the mountains and streams. Rising to the defense of coal companies, the Bush Administration changed the rules, effectively legalizing the filling of streams with waste.

Sierra Club and other groups are urging Congress to enact the Clean Water Protection Act, which would reverse the rule change, once again prohibiting the filling of streams with MTR waste.

Please join our efforts by asking your utility company not to use MTR coal and urging your representative to co-sponsor the bill. For more information on how you can help, visit http://www.sierraclub.org/cleanwater/mtr/.

Jea Yoon Lee is an apprentice with the Sierra Club’s national coal campaign in Washington, DC.
ARTICLE SUBMISSION GUIDELINES:
Submission DEADLINE is the 10th of the month preceding the new month's issue.
1. Email and email attached files are preferred. Send to lbaker@usw.org either with embedded text messages, or attached files in PC-based formats. Attached files are preferred. Mac users should embed text in body of an email message only.
2. Photographs should be scanned in a .jpg or .tif file format then either attached to email or mailed via US Postal Service (USPS) on a 3 ½ diskette or CD Rom. Please include a stamped, self-addressed envelope if you would like your diskette or photo prints returned.
3. Hard-copy handwritten or typewritten articles may be accepted; however, pre-approval from the Editor is required.
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How Would You Spend $14 BILLION? Contest

For a Sustainable Tennessee Valley

Energy Efficiency
Renewable Energy

By Louise Gorenflo


Go to the Solar Valley website (www.solarvalleycoalition.net) for the contest announcement and rules. We want to get people talking about how much energy we can save in the Tennessee Valley.

The estimated construction cost for the two proposed AP 1,000 nuclear units at Bellefonte, near Scottsboro, Ala., is $14 billion. TVA has submitted a combined construction and operating license application for the Bellefonte plant to the Nuclear Regulatory Commission.

If TVA spent $14 billion on energy efficiency and renewable energy between now and 2020, not only could we avoid having to build the Bellefonte nuclear plant but we could start shutting down coal plants. Truly, everyone would then be a winner!

Contestants must describe in detail how $14 billion-worth of energy efficiency, demand response and renewable energy within the TVA service area can meet and exceed what the two Bellefonte nuclear plants would produce in both MW and GWh, using the design parameters of the nuclear plants. Contestants also must estimate reductions in greenhouse gas emissions and creation of green jobs.

The deadline for the contest is Earth Day 2009. It is open to individuals and collaborating groups—civic clubs, student associations and organizations, and other non-professional organizations—or an entire class from a high school, college, university or technology center may enter. Members of the board, staff or their immediate relatives of the sponsoring organizations are not eligible to participate.

The winning individual or group for the contest will receive $2,000. The second prize winner will receive $1,000 while four third-place winners will each receive $500. Winners will be announced on summer solstice June 21, 2009.

Others states and utilities are way ahead of our region in energy efficiency and renewables, and contestants are encouraged to learn from them as long as they address the Tennessee Valley conditions.

No published study like this for our region has been done, so the results of this contest will be invaluable in educating ourselves, communities and leadership about the power of energy efficiency and renewable energy. Contestants are given links to state-of-the-art examples of integrated resource planning.

Energy efficiency and renewable energy are our future. This is a tremendous opportunity to engage the best and brightest on the college campuses across the Valley.

You can help by sending the contest announcement to those who might want to participate. Please send me the names and contact information of campus student leaders and faculty members who might be interested in this contest.

Let the game begin!

Louis Gorenflo, contest coordinator, is with the Solar Valley Coalition, lgorenflo@gmail.com

Correction

On the front page of the July Tennes-Sierran, the contact information for Metropolitan Planning Commissioner André LeQuire was listed incorrectly. Here is the corrected information: André LeQuire, LeQuire Gallery, 4304 Charlotte Avenue, Nashville, TN, 37209; (615) 298-4611; andree@lequiregallery.com.

We apologize for any inconvenience.

---The Editor

Corner

Dear Tennessee Chapter Members,

Thank you to Watauga Group and everyone else who made the summer chapter meeting at Laurel Fork Lodge a success! The food was outstanding! The activities were fun! It was great to reconnect with old friends and begin new friendships.

If you missed this chapter meeting, mark your calendar now and make plans to attend the fall chapter meeting at Pickett State Park October 24-26. Our chapter meetings provide more than business meetings—we have an opportunity to assemble members from all across our state and establish working relationships and friendships that bind us together in our fight to protect our planet.

Before we know it we will be going to the polls in November to elect a new president and other political leaders. The Tennessee Chapter needs your help with a vital key element in promoting candidates who support the work of the Sierra Club.

The Tennessee Chapter Political Action Committee (PAC) fund has limited resources at this time. Please consider donating $25 or more to the PAC fund. Write your check to the Tennessee Chapter PAC and mail it to Rachel Floyd (Tennessee Chapter treasurer), 3223 Caldwell Road, Ashland City, TN 37015. Without your help we won’t be able to make much of a difference in the election this year.

The Cherokee Group continues to make strides in its re-organization effort. Dr. Ross McCluney gave a powerful presentation about global warming at the June meeting. There are several issues the group is interested in pursuing including Corridor K and Montlake. For additional information regarding these issues, please contact me.

The August 24 meeting will be a potluck dinner and hike hosted by Emma Ford at her home near the Cherokee National Forest. Contact Emma for directions at emazon2000@yahoo.com. I look forward to seeing you there!

The Tennessee Chapter Super Energy co-chairs Diane Perschbacher and Steven Sondheim are proposing a new strategic plan promoting green business, green jobs, green building and infrastructure, and sustainability. Please contact Steve at stevensondheim@yahoo.com or Diane at Diane@propson.com for additional information on how to become involved in these initiatives.

Don’t forget to make plans now to attend the Wilderness First Aid course October 17-19 at Laurel Fork Lodge near Hampton, Tenn. Contact me for more information and to register at Katibug1959@aol.com.

Enjoy the dog days of summer and stay safe!

Explore, enjoy and protect the planet.

Katherine Pendleton
Tennessee Chapter Chair
The HBG will furnish burgers, veggie burgers, drinks, GreenWare plates, cups and plastic ware. Bring a side dish or dessert to share and some great stories about your summer vacation. We will light the grills at 5:30 p.m. (volunteers are needed). Everyone is welcome. For information, call John Finger at (865) 573-5908.

Directions: (via I-40 E and the I-640 E detour): Take exit #394; turn right onto Asheville highway; go to red light and turn left onto Chilhowee Drive; go through 4-way stop; turn road dead-ends; turn right onto Holston Hills Drive; go ca. 2 miles; at stop sign, cross Boysd Bridge Pike, passing the Holston Health Care Center; continue on Holston Hills Drive ca. ½ mile to park on left. Shelter is by the big parking lot. Via Riverside Drive: Go eastward on Riverside Drive from South Knoxville Bridge to Holston Hills Drive; turn left.

SEPTEMBER PROGRAM MEETING
Tuesday, September 9, 7:30 p.m., Tennessee Valley Unitarian-Universalist Church, 2931 Kingston Pike.

Dawn Copcock, Knoxville attorney and legislative director of LEAF (Lindquist Environmental Appalachian Environmental Fellowship), will discuss her work as a lobbyist against mountain-top coal mining during the last legislative session in Nashville. LEAF is a Christian creation care group started in Knoxville in 2005. Dawn will discuss how LEAF has collaborated with environmental groups, including the Sierra Club, on the Tennessee Scenic Vistas Protection Act. She will suggest suitable public responses to the continuous degradation of our mountains. See www.leaf.org for general information on LEAF and the legislation. Everyone is welcome. For information, call John Finger at (865) 573-5908.

MIDDLE TENNESSEE GROUP (Nashville)

PROGRAM MEETING: Thursday, August 14, 7:00 p.m. at Radnor Lake Visitor Center, 1160 Otter Creek Road, Nashville.

The land Trust for Tennessee’s mission is to preserve the unique character of Tennessee’s natural and historic landscapes and sites for future generations, and MTG is proud to be able to bring you an update on the land trust’s recent successes in fulfilling that mission. The Land Trust works with landowners to find ways to preserve the scenic and natural values of their land forever while they continue to retain ownership of their land.

Bob Brandt, board member for The Land Trust and one of the founders of the Tennessee Chapter of the Sierra Club, will present. Brandt has served as a judge of the Chancery Court in Nashville and as a senior judge. He has been active in a number of civic and religious organizations, and received the Conservationist of the Year Award from the Tennessee Scenic Rivers Association in 1974. He is the author of numerous articles and books on hiking, the outdoors and travel, including Compass American Guide: Tennessee (1970), Middle Tennessee on Foot: Hikes in the Woods and Walks on Country Roads (1999), Touring the Middle Tennessee Backroads (1995) and Tennessee Hiking Guide (1992).

In Davidson County The Land Trust is working with local homeowners interested in protecting the Beeoman Park to Bells Bend corridor. Recent successes include negotiation of permanent conservation agreements of 256 acres of woodlands and farmland in Williamson County and purchase, with permanent protection, of Lost and Champion Coves on the Cumberland Plateau. Other achievements, such as protection of the original Mayfield Dairy farm and a 230-acre farm near Lepers’ Fork, as well as many others, attest to the energy and effectiveness of The Land Trust for Tennessee.

We hope you will join us in welcoming Brandt, who will tell us of the plans of The Land Trust to help conserve the natural legacy of Tennessee. This program is free, and the public is invited.

STRATEGY MEETING: Tuesday, August 26 at 6:30 p.m. in the old St. Bernard’s Academy Building, 2011 21st Avenue South, 4th floor.

Conservation issues are free on the agenda. All members are invited to attend this conservation and administrative meeting to get the news on what’s happening in our Middle Tennessee Group. We welcome you to be with us to learn about the group’s conservation initiatives and community activities. For more information regarding the meetings, send a message to Rachel Floyd at rlfloyd57@bellsouth.net or call 792-2590.

STATE OF FRANKLIN GROUP (Tri-Cities)

STRATEGY/PROGRAM MONTHLY MEETING: Every 4th Thursday at 7 p.m. in the downstairs meeting room of the Putnam County Library. Alternating program meeting with planning meetings every other month. For more information, contact Mary Mastin at marymastin@twlakes.net or (931-268-2938).

CHEROKEE GROUP—UNDER RE-ORGANIZATION (Chattanooga)

MEETING: The August 24 meeting will be a potluck dinner and waterfall hike from 4 PM* host- ed by Emma Ford near the Cherokee National Forest entrance. Contact Emma for directions at emazom2000@yahoo.com.

The September 30 meeting will be held from 6-7 PM in Side B at the West Tennessee YMCA, 7430 Shallowford Road in Chattanooga.

This meeting will feature a program starting at 7 PM on mountain top removal speaker TBA. A business meeting will be held from 6-7 PM. The program will be hosted by the 2009-2011 group executive committee members will be finalized at this meeting. Contact Barbara Kelly for additional information. Tennessee Executive Chair Katherine Pendleton will be attending these meetings.

CHICKASAW GROUP (Memphis)

Monthly First Thursday Members Gathering: August 7 & September 4, 5:30-7:00 pm -- Othersland, 641 South Cooper, Memphis, Tennessee -- Join the Chickasaw Group’s “First Thursday” monthly gathering where Sierra Club members, activists and friends can meet in a casual setting to talk about issues and interests. Anyone interested in learning about the Sierra Club is invited. For more information, contact Judith Rutschman at (901) 374-0582 or jrutschman@rhodes.edu.

The monthly meeting of the Memphis Chickasaw Group will be held at Prescott Memorial Baptist Church, 961 Getwell, Memphis, Tennessee -- This meeting of the Executive Committee is open also to all members of the Sierra Club. Contact Nancy Ream by August 8 (August meeting) or September 5 (September meeting) to place items on the agenda: (901) 759-9416 or nream5@aol.com.

Chickasaw Group Sierra Club Film Night, “A Passion for Sustainability” Wednesday, August 20, 7:30pm - Power House, 45 E. P. Patterson (between Main and Front) – Envision a society where economic opportunity, social justice and sus- tainable culture all result from environmental steward- ship. Ten years ago, 14 businesses in Portland, Oregon did just that. Using a sustainability tool called “The Natural Step,” these businesses began charting the operation of their businesses through the lens of environmental sustainability, and began a journey to build businesses that would be responsible for Earth’s natural systems while maintaining healthy economic growth. Admission is free (with donations accepted), and refreshments will be available. For more information, contact Tom Lawrence at (901) 237-4819 or bus@the cave.com.

Program Meeting – “Shelby County Household Hazardous Waste Facility” Thursday, August 28, 7:00pm, Benjamin Hooks Central Library, 3030 Poplar Avenue. Attend this presentation to find out how you can safely and legally dispose of used oil, old computers and leftover paint. Thanks to a coop- erative agreement involving the State of Tennessee, Shelby County and several municipalities, residents of Shelby county now have a Household Hazardous Waste (HHW) facility (6305 Haley Road in Shelby Farms, 379-4430) to safely dispose of many poten- tially hazardous materials. Most of the items are recycled, making less waste. Lisa Williams, who runs the facility for Shelby County, will talk about how to get the most out of your visit to the HHW facility, including which items can be brought to the facility and which must be disposed of another way. For more information, contact Tom Lawrence at (901) 237-4819 or bus@the cave.com. Come to the meeting at 6:30pm for social time!

TELEVISION PROGRAM:
WPYF - Channel 18, Memphis, Tennessee – Mondays at 1:30pm, Tuesdays at 4:00pm, Wednesdays at 11:30am & 11:00pm, Thursdays at 7:00pm, Fridays at 7:00pm, Saturdays at 10:00am, and Sundays at 2:00am. “The Nature of Conservation” is the Sierra Club’s Chickasaw Group TV Program on cable channel 18. For complete schedule listings on cable channel 18, please see the website: www.memphislibrary.org/tc18/schedule. For more information about “The Nature of Conservation,” or if any groups or individuals in the community have a special concern and would like to see a program on it, please contact Judy Rutschman at (901) 767-5916 or rutschman@rhodes.edu

A Yahoo Group for the Sierra Club Chickasaw Group and Friends is a Yahoo group for members and friends of the Chickasaw Group of the Sierra Club (Memphis/West Tennessee). It is an announcement-only email list to send notices of upcoming events and other “green” information of local interest. All notices are accessible to the public, so you can look up the latest posts anytime! To view and/or join the Yahoo group, go to http://groups.yahoo.com/group/sierraclub-chickasaw-

WATAUGA GROUP (North Eastern TN)

PROGRAM MEETINGS: Every second Tuesday at 7 p.m. Please contact Gloria Griffin at gla7979@earthlink.net or 423-727-4797 for more information.
Riding the Mississippi

Three tired, somewhat sunburned and poison ivy afflicted kayakers made a welcome stop at the Memphis Yacht Club after paddling eight days from St. Louis, Missouri. A small welcoming committee consisting of Anne Vanderford, the marketing and development director for the Mississippi River Corridor; John Gary, vice president of the Friends For Our Riverfront; and James Baker, project director of Tennessee Water Sentinels, were there to say hello.

The paddlers explained the reason behind the expedition as they rested and completed testing a few river samples. Sarah and Aaron are educators in the Chicago school system, and their trip was funded by a grant by Fund for Teachers. Their friend Patrick is an environmental inspector for the City of Minneapolis, Minnesota. Their project was to measure nutrient pollution and micro habitats on the lower Mississippi. With the information and experience that Aaron gathered and with the help of Sarah and Patrick, Aaron will develop a river ecology unit for his high school sophomore class.

The paddlers’ adventures came straight from the pages of the Mark Twain novel, Adventures of Huckleberry Finn. Aaron, Sarah and Patrick left St. Louis riding the crest of the terrible flooding that has plagued Iowa, Missouri and other Midwest states. Aaron said the river was full of floating trees, logs, as well as tires and other debris that one finds when the river rises into full flood. One advantage of riding the crest was increased speed. Early in the trip, the paddlers made 61 miles one day, and averaged about 45 miles per day. The disadvantage of rising water was finding a campsite that would still be dry by morning. Patrick remarked that the campsites became easier to find once they passed the confluence with the Ohio River near Cairo, Ill. There, the river widens out considerably and it was easier to find an obliging sand bar.

Aaron, Sarah and Patrick stayed with Susan, James’ friend from the Memphis contra dance group who offered her home for their Memphis stay. It turns out that Susan’s son, Robert, served with Aaron, Sarah and Patrick in the Peace Corps in the Republic of Vanuatu in the Pacific. Before they left with Susan, Amie presented each paddler with a water bottle from Joe Royer, a Chickasaw Group/Sierra Club member, co-owner of Outdoors, Inc., and a local advocate for recreation-al activities on the Mississippi River, which he calls Memphis’ front door. James presented each paddler a Water Sentinels t-shirt. A few days of rest at Susan’s home, complete with showers, sleeping on real beds under air conditioning and a medication for poison ivy restored the paddlers and they left Memphis ready for further down-stream adventure that was completed on July 14th.

To learn more on the Soggy Science Expedition, and see their photos, please go to: http://soggy-science.blogspot.com/

MATA Offers Discounts on High-Pollution Days

The Memphis Area Transit Authority (MATA) recently announced that on Code Red Ozone Action Days all bus or trolley rides are 25 cents. Taking advantage of the discount can reduce the harmful amounts of ground-level ozone in Memphis air because one full bus can take as many as 40 cars off the road. A full-size bus with as few as seven riders is more fuel-efficient than the average single-occupant vehicle.

Ozone is formed when emissions combine with other pollutants and bake in hot temperatures, clear skies and high pressure. Ozone can reduce lung function, aggravate asthma and cause permanent lung disease.

Seniors 65 and older and persons with disabilities with a valid MATA photo ID may ride free from 9:00am to 3:00pm. To plan your trip, call the MATA hotline at (901) 274-MATA (6282) or visit www.matatransit.com.
All participants in Sierra Club outings are required to sign a standard liability waiver. If you would like to read a copy of the waiver before you participate, please refer to: http://www.sierraneutral.org/outings/chapter/formal/SignWaiver.PDF, or call 415-977-5630 for a printed version. Transportation to the outing, including carpooling, is the responsibility of the individual and is strictly a private arrangement among the participants. Participants assume the risks associated with this travel.

HARVEY BROOME GROUP (Knoxville)
August 2-3, Backpack, North Harpers Creek (North Carolina).
In 2003 we did a weekend backpack in the lower portion of the North Harpers Creek Roadless area. This year we’ll see the upper portion, which is a wonderland of waterfalls in a high mountain valley. It is located among the numerous watersheds south of Blowing Rock and east of Grandfather Mountain that are a scenic wonderland.

Harp Creek WSA is described in a guidebook, “Hiking North Carolina,” as having “among the best waterfall hikes in Western North Carolina.” We’ll probably follow the Persimmon Ridge Trail from FS 58 down to North Harpers Creek Trail and then continue up Harpers Creek Trail along the creek upstream to FS 58 trailhead, south Harper Creek Falls, Bald Falls, Chestnut Cove Branch Falls and North Harper Creek Falls on the way. Distance is about 7.5 miles and it is rated Moderate.
Preregister with Will Skelton: H 523-2272; Cell 742-7327; whs0meh@bellsouth.net.

STATE OF FRANKLIN GROUP (Tri-Cities)
Contact Tom Mozen, SOF Group chair, at (423) 232-0827.

MIDDLE TENNESSEE GROUP (Nashville)
August 16, 2008 - Tour Fort Negley and the new Visitor Center
Listed in the National Register of Historic Places, Fort Negley was the largest and most important of the fortifications built by Union forces after Nashville fell in 1862. Located in the heart of Nashville, Fort Negley is open to the public daily from 9 am to 5 pm, with the Visitor’s Center opening in December of 2004, where you can learn about the history of its construction.

Visit the site, enjoy a tour, and meet Tom Mozen at 10 am at the Visitors Center.

August 17, Membership Ice Cream Social
The Tennessee Chapter Sierran will be sponsoring Outings Leader 101/201 training brought to us by the National Sierra Club Local Outings training staff during the weekend of Friday, September 26 through Sunday, September 28 at Laurel Fork Lodge near Hampton, Tennessee. OLT 101 is required for certification to become a level 1 outings leader (front country trips). OLT 201 is required for certification to become a level 2 (backcountry trips) or higher outings leader.
Cost of the course is $45/person and includes lodging and meals for the weekend.
To sign up for the course go to: http://www.sierraclub.org/outings/training/brochures/2008_Tennessee.
For additional information contact Webb Griffith, Tennessee Chapter co-outing chair at 423-727-4797 or email gla4797@earthlink.net.

October 4-5, Jack & Back Bike Ride
The Tennessee Chapter has a bike team to ride the Multiple Sclerosis “Jack & Back” from Franklin to Mothlow College.
There are two routes available. One is 75 miles each way and the other is 60 miles each way. This is a fully supported ride. If you can’t ride the entire route, transportation is available to take you to the finish line!
It is a fun event with refreshment stations and lunch. Transportation is provided to a participant is required to collect $300 donations. Last year, the Tennessee Chapter bike team raised $3,300 for this worthy cause.
For additional information contact Katherine Pendleton at 615-360-3481 or Katibug599@aol.com.

October 17-19, Wilderness First Aid
The Tennessee Chapter will host a WFA course taught by NOLS Wilderness Medicine at Laurel Fork Lodge near Hampton, TN. The course will be taught on Saturday and Sunday from 8 AM-5 PM each day.
Cost of the course is $45/person and includes lodging, all meals from supper on February 28 thru lunch on Sunday) are included in the cost of $225/person.
For additional information and to register contact Katherine Pendleton at 615-943-6877 or email katibug599@aol.com.
February 28-March 7, 2009: 3rd annual Claire Tappan Lodge Ski Trip
http://www.noroast.com
Make your reservation now to go with the Tennessee Chapter’s Claire Tappan Lodge for a week that you will never forget! This is the third year for the Tennessee Chapter to host a ski trip and our rate is $425 for its 4 day/3 night trip.
Clark Tappan Lodge is located 7,000 feet in California’s Sierra Nevada, 45 minutes West of Reno, Nevada. Activities planned for our week at Clark Tappan Lodge include cross-country skiing and exploring the Lake Tahoe area. Skiing classes are available at the lodge.
Accommodations are in bunk beds equipped with mattresses. Bring your own bedding and towel. Restroom and shower facilities are shared with two men’s and two women’s bathrooms.
Price for the trip is $600 per person and includes lodging, all meals from supper on February 28 thru breakfast on March 7 and transportation from airport to lodge and back to airport. Trip price does not include airfare, ski rental, ski lessons, ski fees, incidentals, breakfast and lunch on February 28 and supper on March 7.
Reservations are limited to six participants. Non-refundable $100 deposit due by January 1, 2009 made to TN Chapter Sierra Club Outings, P.O. Box 290306, Nashville, TN 37229. Remainder of fees due January 26, 2009.
Complete information regarding equipment and clothing, cross-country skiing activities planned, accommodations and any other inquiries may be directed to Katherine Pendleton at 615-943-6877 or Katherine.pendleton@sierraneutral.org. Payment by credit card is available. (Educational, Conservation)

CHEROKEE GROUP (CHATTANOOGA)
August 24, Waterfall Hike and Potluck—Cherokee National Forest
Sierra Club outings offer a variety of hiking and near-wilderness experiences. It is important to realize that while all trips are guided by a leader, it is ultimately the responsibility of the individual to operate in a safe manner. To this end, the following is a list of essential items that you should bring! These are:
1. Adequate map
2. First aid kit
3. Compass
4. Rain gear
5. Extra clothing (it is good to always have a wool hat)
6. Matches
7. Knife
8. Flashlight
9. Extra food, water
10. Ten Essentials for Hiking—You decide what is the most important thing to bring!

October 1-4, Jack & Back Bike Ride
The Tennessee Chapter has a bike team to ride the Multiple Sclerosis “Jack & Back” from Franklin to Mothlow College.
There are two routes available. One is 75 miles each way and the other is 60 miles each way. This is a fully supported ride. If you can’t ride the entire route, transportation is available to take you to the finish line!
It is a fun event with refreshment stations and lunch. Transportation is provided to a participant is required to collect $300 donations. Last year, the Tennessee Chapter bike team raised $3,300 for this worthy cause.
For additional information contact Katherine Pendleton at 615-360-3481 or Katibug599@aol.com.

September 26-28, Outings Leader 101/201 Training
The Tennessee Chapter Sierran will be sponsoring Outings Leaders 101/201 training brought to us by the National Sierra Club Local Outings training staff during the weekend of Friday, September 26 through Sunday, September 28 at Laurel Fork Lodge near Hampton, Tennessee.
OLT 101 is required for certification to become a level 1 outings leader (front country trips). OLT 201 is required for certification to become a level 2 (backcountry trips) or higher outings leader.
Cost of the course is $45/person and includes lodging and meals for the weekend.
To sign up for the course go to: http://www.sierraclub.org/outings/training/brochures/2008_Tennessee.
For additional information contact Webb Griffith, Tennessee Chapter co-outing chair, at 423-727-4797 or email gla4797@earthlink.net.

CHICKASAW GROUP (Memphis)
Saturday, September 6, 9:00 a.m. – 5:00 p.m., Hummingbird Migration Celebration, Strawberry Plains Audubon Center, Holly Springs, MS.
The annual Hummingbird Migration Celebration features the spectacular fall migration of the Ruby-throated hummingbird. Thousands of the tiny birds are drawn to the center’s forests, gardens and feeders. Experts from the Hummer/Bird Study Group band Ruby-throats during the event. Guests watch and learn during training/brochures/2008_Tennessee.
For additional information contact Webb Griffith, Tennessee Chapter co-outing chair, at 423-727-4797 or email gla4797@earthlink.net.

Ten Essentials for Hiking
1. First aid kit
2. Compass
3. Rain gear
4. Extra clothing (it is good to always have a wool hat)
5. Matches
6. Knife
7. Flashlight
8. Extra food, water
9. Ten Essentials for Hiking—You decide what is the most important thing to bring!

For additional information contact Katherine Pendleton at 615-360-3481 or Katibug599@aol.com.

Carl Tappaan includes cross-country skiing and snowshoeing. Other outdoor activities at the lodge near Hampton, Tennessee include birding, hiking, nature walks, geocaching, flying kites, and exploring the Lake Tahoe area. Skiing classes are available at the lodge.
Accommodations are in bunk beds equipped with mattresses. Bring your own bedding and towel. Restroom and shower facilities are shared with two men’s and two women’s bathrooms.
Price for the trip is $600 per person and includes lodging, all meals from supper on February 28 thru breakfast on March 7 and transportation from airport to lodge and back to airport. Trip price does not include airfare, ski rental, ski lessons, ski fees, incidentals, breakfast and lunch on February 28 and supper on March 7.
Reservations are limited to six participants. Non-refundable $100 deposit due by January 1, 2009 made to TN Chapter Sierra Club Outings, P.O. Box 290306, Nashville, TN 37229. Remainder of fees due January 26, 2009.
Complete information regarding equipment and clothing, cross-country skiing activities planned, accommodations and any other inquiries may be directed to Katherine Pendleton at 615-943-6877 or Katherine.pendleton@sierraneutral.org. Payment by credit card is available. (Educational, Conservation)

CHEROKEE GROUP (CHATTANOOGA)
August 24, Waterfall Hike and Potluck—Cherokee National Forest
Sierra Club outings offer a variety of hiking and near-wilderness experiences. It is important to realize that while all trips are guided by a leader, it is ultimately the responsibility of the individual to operate in a safe manner. To this end, the following is a list of essential items that you should bring! These are:
1. Adequate map
2. First aid kit
3. Compass
4. Rain gear
5. Extra clothing (it is good to always have a wool hat)
6. Matches
7. Knife
8. Flashlight
9. Extra food, water
10. Ten Essentials for Hiking—You decide what is the most important thing to bring!
Why I’m Against Nuclear Power (Part I)

By Ross McCluney, Ph.D., rmcluney@comcast.net

Periodically I’m asked why I oppose a new nuclear power plant planned by the Tennessee Valley Authority to be built 42 miles from my home, near Scottsboro, Ala. I have B.A., M.S., and Ph.D. degrees in physics, the first two from Rhodes College in Memphis and University of Tennessee in Knoxville, so I have had some exposure to nuclear physics in my training. I also studied the subject during the first wave of nuclear power plant applications. So I guess I shouldn’t be surprised that some people expect me to be in favor of nuclear power.

I am surprised by the question, however, because orders for new nuclear power plants in the U.S. have been suspended for many years, for safety and economic reasons. I thought everyone understood the multiple dangers and threats inherent in nuclear power.

Nuclear Ignorance

I guess I didn’t count on all the youngsters who have come along during the hiatus period and who haven’t learned much about the history of nuclear. These and other newcomers to the nuclear controversy, plus a variety of long-standing proponents, seem to think of nuclear as clean, safe and a great antidote to global warming. This is reinforced by a pro-nuclear animated commercial by Areva, with its catchy tune, that has been airing on TV for a while. It’s also strengthened by the pro-nuclear politicians we hear and see on TV. So let me state the primary reasons I am against this resurgence of nuclear power.

The waste products from nuclear power, including those from manufacturing the fuel, the wastes spewed into the air and water by every nuclear power plant (admittedly modest in quantity under normal operating conditions, but dangerous nevertheless), and the “spent” fuel left over from operating the reactor, have half-lives ranging from short to tens of thousands of years. (The half-life is the time it takes for half of any quantity of a radioactive material to decay to another substance -- in some cases this may be a stable element, in others it may be one or more other radioactive elements.)

The types of radioactive materials and emissions produced are also varied in type, including alpha, beta, gamma and neutron radiation. For more on these you can go to Wikipedia on the web, visit your local library, or otherwise search for information on “ionizing radiation.”

Radioactive Waste

Radioactive waste, either routinely emitted or accidentally released in high quantities or concentration, is very damaging to living things. Ionizing radiation from radioactive substances receives this label because the radiation is so energetic on the microscopic scale that it can strip electrons from atoms, ionizing them, leaving them positively charged and therefore very chemically reactive, meaning that the charged atoms and the molecules to which they are attached easily undergo chemical reactions with other atoms and molecules in their vicinity, producing new chemical species in the process. It doesn’t take a lot of this inside biological cells to cause a lot of disruption, leading to failure of the cells to operate properly, usually making the organism ill.

High-energy radioactive radiation can also produce genetic mutations, disrupting genes in the human body. This occurs naturally in our bodies on a regular basis, due to the presence of cosmic rays and solar storms from outer space, and from background radiation from the soil, rocks and other sources. Plus there is still some residual radiation from atmospheric weapons tests in times past and a little from nuclear accidents at power plants, weapons labs and industrial plants. All of this is dangerous and is thought to cause at least some of the cancers from which humans increasingly suffer.

Problem with Nuclear Power

The problem with nuclear power is that it causes an increase in this background radiation, increasing our risks of disease from the radiation directly and from the genetic mutations. Radiation also contributes problems with human reproduction (infertility and sterility) and is thought to be a contributor to some miscarriages. Though it is a controversial subject, I believe that there is no “safe” level of radioactivity on or in the human body. The National Academy of Science, in its 7th report from the panel on Biological Effects of Ionizing Radiation, 2005, seems to agree.

Many of us allow very short-lived radioactive tracers to enter our bodies for medical diagnostic tests. These are generally considered safe because they are very low level and leave the body quickly. However, every exposure is potentially risky but is tolerated for the greater benefit such exposure hopefully provides. Unreported involuntary routine exposure, day in and day out, is another issue entirely. The risk for cellular mutations, resulting in cancers, are increased in the vicinity of nuclear reactors. Children are more susceptible to radiation-induced cancers than adults.

In the event of an accidental release, or a terrorist intentional release, substantially higher levels of radioactivity can be experienced by the populace. Radioactivity is particularly dangerous because it cannot be seen, heard, smelled or felt. You can be exposed to unsafe levels and not find out about it for years (unless the exposure is very high or acute), making it very difficult to identify the cause of the illness that results or even when or where you were exposed. This gives some people a false sense of safety. We are used to knowing immediately when we are burned or hurt by something outside our bodies. Without the acute and immediate effects, it is difficult to say that any one malady is or is not caused by nuclear radiation exposure.

Hard to Tie to Specific Event

A particularly unfortunate factor is that cancer can never be “proven” to be the result of a specific event months or years before; however, we know that every radiation exposure increases the risk that the affected individual will suffer from it. Some radiation impacts are heritable -- can be passed on to the next generation -- so the nuclear industry is gambling with the genetic treasury of life. Human-caused radioactive pollution impacts all species exposed, so all are vulnerable.

The concluding Part II of this article will appear in next month’s issue.

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McCluney recently retired from his position as Principal Research Scientist at the Florida Solar Energy Center in Cocoa, Fla., a research institute of the University of Central Florida. He now resides in Chattanooga, Tenn., working as a technical consultant to the National Fenestration Rating Council and other clients in the energy efficiency and renewable energy fields.

Recycling Coordinator Needed

Volunteer Coordinator needed for the recycle Drop-off Site in Nashville that is sponsored by the Sierra Club.

The Volunteer Coordinator will schedule volunteers to staff the Drop-off Site from 9:00 to 12:00 on Saturday mornings from a list of people who have expressed an interest in being there.

Interested people may contact Betty Garber at garberb@hotmail.com
“Barefoot Farmer” Brings Organic Farming to Life

By Joy Mayfield

On a hot day in June, 44 Sierra Club members and Sumner County master gardeners met for a lecture and tour of Jeff Poppen’s Long Hungry Creek Farm. Jeff’s farm is the longest running CSA (Community Supported Agriculture) program in Tennessee. Seasonal organically grown produce is delivered to Nashville weekly. From May to December a hundred members pick up a half bushel basket or a full bushel basket of fresh vegetables and other goodies from Jeff’s farm. This program is so popular that over a hundred people are on a waiting list to join this CSA.

In his talk Jeff shared his passion for farming with us. He is an eloquent speaker on a mission to teach us to nurture and enhance the land upon which we grow our food. When Jeff opened up his lecture to questions, his accumulated knowledge from 25 years’ experience as an organic and biodynamically farmed farmer was truly astonishing. Even when answering practical gardening questions, he never veered from his fundamental belief that the land sustains us if we care for it and that as inhabitants of our fecund earth, we have a responsibility to do just that. His reverence for the land and our own place in the web of life was a common thread in his responses to our many questions.

When our tour was finished Jeff and his staff fed us a delicious, wholesome lunch from the farm’s bounty. We enjoyed chili beans with brown rice, butternut squash casserole, tender, just-picked salad greens with spring onions, blue corn bread, cherries, rhubarb cobbler with fresh cream and his own cool, refreshing nonchlorinated spring water.

Watauga Group Organic Garden Brings Homegrown Taste to Public

By Gloria Griffith

Standing in the shade of an evergreen hemlock wind break one afternoon in March, Webb Griffith pointed to the future site of Watauga Group Sierra Club organic garden and said, “If this garden spot is good enough for the birds and earth worms that live here, it should be plenty good for vegetables.” Griffith favors organic growing methods—“attract birds to eat the bugs,” he says—and no petroleum-based fertilizer or pesticides are necessary.

The potential garden site sure didn’t look like much in February when the idea first blossomed. In the middle of prime Doe Valley farmland, this overgrown garden had not been worked for many years. Grabbing up and looking at a handful of soil told of the garden’s real potential. After passing USDA soil sample tests with flying colors and milder temperatures arrived, the garden “ground breaking” began the week after Easter.

With grants, members’ labor and generous donations, the organic garden dream came alive in May. Using hand tools after a tractor plowing in April, volunteers kicked off their gardening project so that people, used to supermarket-imported vegetables, could reap what they sow. Using hand tools after a tractor plowing in April, volunteers kicked off their gardening project so that people, used to supermarket-imported vegetables, could reap what they sow.

The study, funded by the European Union (EU), reached similar conclusions with fruits, vegetables and milk. The organically produced crops and milk usually contain more vitamins and antioxidants believed to help combat disease and promote health.

The University of California study compared antioxidants (flavenoids) in organic and non-organic tomatoes. The results revealed that the levels of flavonoids, quercetin and kaempferol were, on the average, 79 and 97 percent higher respectively in organic tomatoes.

It’s Official: Organic Food is More Nutritious

By Teresa Campbell

Two scientific studies published last year show that organic food has more beneficial nutrients than conventionally grown food.

Ethics rather than data have formed the basis for deciding to purchase organic food. Sustainable agriculture, natural fertilizers, no pesticides and herbicides all indicated the superiority of organic food. Now, however, a ten-year study out of the University of California and a four-year study produced in Europe vide scientific evidence to support the ethics.

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