

Tennessee Sierran

SIERRA
CLUB
TENNESSEE CHAPTER

The bi-monthly state newsletter of the Tennessee Chapter of the Sierra Club

Volume 54, Number 2 - March / April 2021

Advocates for the Oak Ridge Reservation (AFORR) Defend a Uniquely Threatened Habitat

Page 4

Tyson Foods, Inc. brings factory farms to Tennessee

Page 6

Masthead photo by Todd Waterman.

Cover photo: An osprey and some Canada geese on Melton Hill Lake near Oak Ridge National Laboratory's reactor dome that was never fueled or operated.
Photo by Doug Colclasure.

Explore, Enjoy, and Protect

From Mac Post, State Chair



Welcoming the Winds of Change

For four years, a commitment to protect the environment has felt like walking head on into a gale force wind. After the chronic despair of getting up every morning to fearfully check the news to find out “what now?,” I am starting to breathe again as President Biden aggressively emphasizes environmental improvement. In fact, it is hard to keep up with the blizzard of executive orders that largely reverse the former President’s anti-environmental executive actions. The last week in January, for example, was huge for climate-related executive orders. Included are: an order to set a national goal of protecting 30% of the country’s lands and waters by 2030; another to consider the climate crisis in U.S. foreign policy and national security, including a re-commitment to the Paris Climate Agreement; another to pause new oil and gas leasing on public lands and waters, review existing leases and permits, and increase offshore wind

renewable energy development; and yet another to create a Civilian Climate Corps to work on protecting and restoring public lands, waters, and forests, increasing carbon sequestration, protecting biodiversity, improving outdoor access, and addressing climate change. And there are more.

Even more encouraging is that these executive orders include sweeping actions to address environmental justice, specifically:

- Creation of a White House environmental justice inter-agency council to develop clear performance metrics to promote accountability
- Installation of environmental justice officers at all federal agencies
- Creation of an external environmental justice council to identify reforms to achieve equity and inclusion in federal policy making
- An order to the Environmental Protection Agency to recommit to enforcing the nation’s pollution laws, especially those that impact communities of color
- A commitment that forty percent of the benefits from relevant federal investments will be targeted toward communities impacted by environmental injustice.

We need to applaud these initiatives. So, while it is a relief that environmental concerns are a priority with the new federal administration, it is not time to sit back and only celebrate. These executive orders are a start. For them to be more than aspirational goals all of us need to continue to advocate for these actions and to work on them - especially at the local level. With encouraging news from the highest level, this is an opportunity to advance the environmental concerns of minority communities that bear the greatest burden from lax emission enforcement, legacies of illegal waste disposal, extractive industry impacts, and more, resulting in exposure to toxic chemicals, and low air and water quality. Protecting 30% of land and water requires us to incentivize not only local and state officials, but also private citizens, to prioritize preserving the ecosystem services these protected lands and waters provide at landscape scales for the sustainability of our communities. Now is the time to enthusiastically get to work while the wind is – at least for now – at our backs.

Executive Committee Election Results



Dr. Cris Corley



Dr. Virginia Dale



Don Barger

Congratulations to the winners of the 2020 Executive Committee (ExCom) election. Elected to the Chapter ExCom were Dr. Cris Corley, Dr. Virginia Dale, and Don Barger. Those elected to Group ExComs are listed below.

Cherokee Group ExCom

David Hoot - Sandy Kurtz - Barbara Kelly - David Riall - Elizabeth Tallman

Chickasaw Group ExCom

Mondell Williams - Charlie Belenky - Marquita Bradshaw - Dennis Lynch - Shahin Samiei

Harvey Broome Group ExCom

Will Skelton - Joan Tomlinson - John Todd Waterman - Kent Minault - Don Barger - Gerald (Jerry) Thornton

Middle Tennessee Group ExCom

Antoinette Olesen - Paula Lennon - Dan Joranko - Robert Wingfield - Gary Bowers

These members began their terms January. A complete directory of all ExCom members will be published in February.

Tennes-Sierran

The bi-monthly newsletter of the
Tennessee Chapter of the Sierra Club
Volume 54, Number 2 March / April 2021
Digital Edition

Change of Address

Email: Address.Changes@SierraClub.org

Online: MyAccount.SierraClub.org

Snail Mail: Mail new address AND the mailing label on page 1 to:
Sierra Club, P.O. Box 421041, Palm Coast, FL 32142-1041

Request no paper copy here: http://bit.ly/Stop_My_Paper_Copy

Submissions

April Issue of the Chapter E-Newsletter by March 26

May Issue of the Chapter E-Newsletter by April 23

May / June Issue of The Tennes-Sierran by March 31

Request Submission Guidelines at sierratnnews@gmail.com

Chapter News Team

Communications Coordinator: Gary Bowers, sierra@totheforest.net

Tennes-Sierran Editor: Emily Ellis, tnsierran.editor@gmail.com

E-Newsletter Editor: Allie Stafford, enews.sierratn@gmail.com

Managing Editor: Sinclair Sparkman, sierratnnews@gmail.com

Photo and Copy Editor: Todd Waterman, jtoddw@gmail.com

Poetry Editor: Alan May, <http://alan-may.com/>

TENNESSEE CHAPTER

<https://www.sierraclub.org/tennessee>

Officers

Chair: Mac Post 865-938-3116
chapter.chair@tennessee.sierraclub.org

Vice Chair: Cris Corley 615-477-9090
drcriscorley@gmail.com

Secretary: kate anthony 513-365-7989
rainbowgardener2@gmail.com

Treasurer: vacant

Conservation Chair: Bill Moll 404-401-7899
whmoll@aol.com

Outings Chair: Ron Shrieves 865-924-8973
ronshrieves@gmail.com

Conservation Program Coordinator

Scott Banbury 901-619-8567 smbanbury@gmail.com

GROUPS AND REGIONAL CONSERVATION COMMITTEES

Cherokee Group – Chattanooga

<https://www.sierraclub.org/tennessee/cherokee>

Chair: kate anthony 513-365-7989

rainbowgardener2@gmail.com

Harvey Broome Group – Knoxville

<https://www.sierraclub.org/tennessee/harvey-broome>

Chair: Jerry Thornton 865-719-9742

gatwildcat@aol.com

Chickasaw Group – Memphis

<https://www.sierraclub.org/tennessee/chickasaw>

Chair: Charlie Belenky 310-756-3294

cbelenky@gmail.com

Middle Tennessee Group – Nashville

<https://www.sierraclub.org/tennessee/middle-tennessee>

Chair: Antoinette Olesen 615-498-2778

time4nashville@gmail.com

Clarksville-Montgomery County Regional Conservation Committee

Chair: JoAnn McIntosh 931-338-2530

mcijoann@gmail.com

Care NET Regional Conservation Committee

Chair: Bill Kornrich 423-300-8764

bkornrich@gmail.com

Tri-Cities Regional Conservation Committee

Chair: Greg Kramer 423-429-3443

grg.kramer@gmail.com

Watauga Regional Conservation Committee (Johnson/Carter Counties)

Chair: Gloria Griffith 423-727-4798

gla4797@embarqmail.com

2021 State Legislative Update

by Scott Banbury, Tennessee Chapter Conservation Program Coordinator



The Tennessee General Assembly got a real late start this year. After convening for a special session on education in January, legislators took a break until February 8.

Most legislators are expecting this to be a short session, possibly ending as early as April.

As of this writing, most legislation has yet to be filed, but we do know of a few important bills. Developers are making moves to further deregulate the impacts of housing developments by attacking septic system rules and communities' ability to charge fees for stormwater infrastructure. We also anticipate an attempt to weaken the Tennessee Water Quality Act by making it no stricter than the rules passed by the Trump administration regarding Waters of the United States.

The coal industry is coming back to try to fix the bad bill passed in 2018 that forced the Tennessee Department of Environment and Conservation to assume primary permitting responsibility for surface coal mining. The US Office of Surface Mining found several problems with the state's application and it turns out that the program will cost the state nearly a million dollars a year to run. The industry had claimed that fees would cover all costs, but since little-to-no coal has been produced in the last few years, fees are coming up short. This claim of self sufficiency was the only reason the law passed in 2018, and we hope to get it repealed.

On the positive side of things, legislation has been introduced by Senator Richard Briggs and Representative Jeremy Faison that would create a committee to develop state policy that would achieve a minimum of 85% recovery of beverage containers and also address single use plastic bags. This will most likely go to the Tennessee Advisory Commission on Intergovernmental Relations to develop strategies this summer and be implemented within the next two years.

Visiting the legislature this year is by appointment only and there will be no lobby days. Instead, the Sierra Club will host an online lobby training webinar on Wednesday, March 3, and members will set up Zoom meetings with their legislators throughout the month of March. For more information on legislation as the session develops, visit sierraclub.org/tennessee/state-lobby-team. To receive weekly email updates, email scott.banbury@sierraclub.org.

Sierra Club Hails United Nations Treaty on Prohibition of Nuclear Weapons

Sierra Club and a coalition of national environmental, peace, and public health groups celebrate the entry into force of the United Nation's Treaty on the Prohibition of Nuclear Weapons (TPNW). We congratulate the United Nations, our affiliate the International Campaign to Abolish Nuclear Weapons (ICAN), and the 51 countries who have ratified the historic TPNW. The Sierra Club has long called for the total elimination of nuclear weapons. Sierra Club, Physicians for Social Responsibility, and International Physicians for the Prevention of Nuclear War also call on the Biden Administration and the 117th Congress to deny further funding for the development of a new generation of nuclear weapons or upgrades of existing warheads.

Endorsed by more than 120 nations, and ratified by 51 so far, the TPNW prohibits parties from participating in, or assisting in any way, the engineering, manufacture, testing, deployment or transfer of nuclear weapons within their jurisdictions.

The legacy cost and environmental damage caused by the development of nuclear weapons from 1943 to the present is incalculable. The Congressional Government Accounting Office (GAO) estimates the remediation of sites across the United States associated with nuclear weapons production at \$505 billion. This cost could easily double to one trillion dollars, as the GAO's Office of Legacy Management adds more nuclear weapons production sites to its list. Some sites like Rocky Flats, Colorado, or Hanford Site, Washington, will never be reclaimed.

In response, Sierra Club Nuclear Policy Director John Coequet released the following statement:

"The Sierra Club looks forward to this landmark international treaty coming into full effect, and continues to urge all nations to work towards the goal of eliminating nuclear weapons worldwide.

"The manufacturing and storage of nuclear weapons and the nuclear arms race are inherently dangerous. All aspects of nuclear weapons, from their manufacture and storage, to their testing and usage, pose an unacceptable risk to every community and our environment."

Care NET Conservation Committee Active in Spite of Covid-19

by Lisa Luck, Volunteer Writer, and Bill Kornrich, Chair, Care NET Conservation Committee

Care NET Conservation Committee members have been working on several activities for its four-county region of east Tennessee. Care NET is reprinting a recycling brochure with information about what, how and where to recycle in the east Tennessee region. Members of Care NET and community members have created a 30-piece quilt entitled "Say Their Names - Never Forget: A Black Lives Matter Memorial Quilt". The quilt will be on display in several locations, beginning in February at The Price Center, a formerly African-American school in Rogersville. Several members are working with Rocky Mount State Historical Park reintroducing native grasses to the park. One member writes a regular column for the bi-weekly Hancock County newspaper about energy, the environment, and electric cooperatives. Members are exploring how to remove hundreds of discarded

Group Scoop

Cherokee Group

Recent programs include Scott Banbury, Sierra Club Tennessee State lobbyist, presenting an agenda and goals for the 112th TN Legislation session, and representatives from Waterways presenting about the abandoned coal mines of Signal Mountain and their impact on water quality. Waterways is a nonprofit organization working to improve watershed and community health in the Tennessee Valley and the Caribbean Islands.

Bill Moll has been the heart and soul of Cherokee Group, through his work with the Chapter political and conservation committees and his work planning programs for the group. Kate Anthony will continue as Chair of Cherokee Group and Secretary to the Chapter and will maintain the Facebook page. Alyssa Matas will continue as communications coordinator, managing the website and e-newsletter, and add duties as Secretary to the Chapter. The Chapter Representative will be David Riall, with Alyssa as backup.

We are starting to brainstorm now on goals for 2021 with an eye towards increasing our energy and activity. An exciting new development is a connection we have made with Sunrise Hub Chattanooga, a movement of young people uniting to stop the climate crisis with over 400 hubs across the country, including the recently formed Chattanooga hub. We will cross-post announcements and send representatives to each others' leadership meetings.

Chickasaw Group

Chickasaw Group, in alliance with other organizations, continues to work in opposition to a crude oil pipeline proposed to run from the refinery on the river through South Memphis and DeSoto County. We are continuing our work for clean energy and the ongoing issue of whether Memphis should leave TVA.

The Chickasaw ExCom met in January. Charles Belenky was selected as Chickasaw's chair. Dennis Lynch remains chair of the conservation committee as well as taking over communications. Quite a few members pitch in with conservation on specific issues.

Rita Harris (a local member who just happens to be on the national Board of Directors) and Dennis Lynch are preparing a one-hour Zoom orientation for new members so that they can hit the ground running.

Our January program meeting was about Electric Vehicles (EVs) and their impact on our community. The President of the Memphis Area Transit Authority (MATA) and the City's Engineering Department reviewed electric bus plans, while the Sustainability Office talked about plans to increase EVs in order to reduce climate and pollution impacts.

Harvey Broome Group

The Harvey Broome Group has sponsored several online programs over the past few months. Blue Jay (aka Joan Tomlinson) told us about her hike on the Wonderland Trail/Mt. Rainier and we heard a presentation about a proposed Motorsports Park in Oak Ridge along with proposed actions in opposition. We shared slides from recent and past adventures during our December program, although refreshments were sorely missed. Many of our members were busy helping out with local, state, and national elections organized by Sierra Club's national office - sending texts, writing letters, and making calls - to mobilize voters in swing states, including in the Georgia run-off. We weighed in on several proposed projects in the Great Smoky Mountains National Park. In January, we had our annual planning meeting, electing a new Chair, Jerry Thornton, Vice Chair, Kent Minault, and Alternate Delegate, Dan Terpstra. In addition to our normal goals toward fighting for the environment, our plans for 2021 include our commitment to social and environmental justice. In 2020, we donated \$1200 to local groups and causes, and endorsed a unanimously approved motion for Knoxville City Council that apologizes for past urban renewal projects that demolished Black neighborhoods and businesses and provides a road for reparations.

Possible plans to celebrate Earth Day include a tree-planting event and presentations about electric cars in low-income communities and solar energy in the community.

Middle Tennessee Group

Sierra Club Middle TN Group is diving into 2021 with exciting plans for the coming year. Stay tuned for the new local environmental issues we will be focusing on. Please welcome the newly elected Executive Committee slate of officers: Chairperson- Antoinette Olesen, Vice Chairperson- Grace Stranch, Treasurer- Charlie High, Secretary- Mary High, Group Delegate- Gary Bowers, Alternate Group Delegate- Paula Lennon. Our monthly programs take place on the second Thursday of each month on Zoom and are a great place to gather and interact. All are welcome. The January Program on the Nashville Food Co-op opened our minds to new ways of supporting our community as we shop. Speaking of our programs, we'd like to send a big welcome to Stephanie Perry as a new Program Committee member and a big thank you to Chairperson Alex Searce and her team for providing such popular programs and bringing our community together.

tires from the Holston River east of Rogersville and have also engaged with TVA concerning the coal ash dump left behind along the Holston River by the former John Sevier Fossil Fuel Plant (now John Sevier Combined Cycle Plant).

Members of Care NET have been working with Sierra Club members in the Tri-Cities Area to organize a group serving the Kingsport-Johnson City-Bristol area. Although Tri-Cities meetings were interrupted by COVID-19, they continue to plan activities for 2021.

• Contact Lisa at lisaluck.work@gmail.com and Bill at bkornrich@gmail.com

AFORR Strives for Strategic Stewardship

by Virginia Dale, AFORR Board Member and Ellen Smith, AFORR Vice President



A fledging great horned owl in the Black Oak Ridge Conservation Easement (2011). Photo by Virginia Dale.

Advocates for the Oak Ridge Reservation (AFORR) was established in 1999 by concerned citizens to encourage the appropriate stewardship of the Oak Ridge Reservation (ORR). In the 1940s the federal government used eminent domain to acquire 58,575 acres of land for Manhattan Project activities. Much of this land is occupied by Department of Energy (DOE) facilities and the Oak Ridge community, but about 20,000 acres are in a natural state, having been largely protected from fragmentation and disturbance over the ensuing decades. There is continual pressure to convert ORR land to private development. AFORR seeks to maintain this public land, which is mostly forested, as a resource of value to the region, the nation, and the world.

AFORR seeks to foster appropriate stewardship of the ORR by encouraging DOE to follow environmentally sound management practices, disseminating information about the ORR, and increasing awareness of its value; promoting increased access and use for research, education, and recreation; and encouraging public participation in decisions about the ORR's future.

AFORR is organized as a consortium that includes organizational members as well as individual members. As such, it works with the Harvey Broome Group of the Sierra Club, Tennessee Citizens for Wilderness Planning (TCWP), the Tennessee Chapter of The Nature Conservancy, and several other local and state organizations to promote good stewardship of the ORR.

Three topics of current concern are:

- A developer wants to build a motorsports complex in an industrial park that was created when DOE transferred land for industrial use to help the region recover from job losses after the Cold War ended. The developer wants DOE to eliminate land-use restrictions in the deed and to turn over land that DOE had excluded from development and transfer in order to avoid potentially significant environmental impacts disclosed in a NEPA environmental assessment. The proposed development also would adversely affect the adjacent Black Oak Ridge Conservation Easement (BORCE), which is protected as a natural area and has popular high-quality greenway trails. AFORR has expressed opposition to the actions requested of DOE, submitted extensive comments on DOE's draft environmental assessment document about the proposal, and is urging Oak Ridge City Council to deny the rezoning request for the site.
- DOE wants to build a new landfill on the ORR for radioactive and hazardous waste from ongoing clean-up. Because the landfill would be classified as a remedial action under CERCLA (the Superfund law), it would be built and operated without the public involvement and regulatory oversight that apply to ordinary landfills. AFORR would prefer that wastes go to licensed facilities in an arid and less populated part of the country, instead of being kept in wet, populous Tennessee. The proposed landfill site is largely forested, in an area of the ORR that DOE agreed would be kept uncontaminated, and it is a wet site with hydrology unsuitable for waste disposal. AFORR has asked questions about waste acceptance criteria for the landfill, comparative costs and jobs for onsite versus offsite disposal, the environmental regulations that DOE wants to have waived, and plans for putting mercury waste in the landfill.
- AFORR is promoting establishment of an "Oak Ridge Blueway" in Melton Hill Lake, from Melton Lake Park to Melton Hill Dam, with Clark Center Park as a key access point. This 26+ mile stretch of the Clinch River allows aquatic recreationists to experience the scenery and wildlife of the vast tracts of forested ORR land bordering the river.

A new website is being developed for AFORR that should be fully functional by the time you are reading this. The site is www.aforr.info.

Contact Virginia at virginia.dale4@gmail.com and Ellen at ellen@ellensmith.org



A beaver dam under stress from a heavy rain in the Black Oak Ridge Reserve. Oak Ridge, TN. Photo by Doug Colclasure.



Boaters on Melton Hill Lake checking out the Oak Ridge National Laboratory reactor dome. Photo by Virginia Dale.

ORR Values

- **Conservation:** The ORR supports remarkable biodiversity, including species and ecological communities absent or uncommon in surrounding areas. The ORR is home to 26 state-listed threatened and endangered plants, 20 federally and state-listed animal species, with appropriate habitat for additional listed wildlife species. It contains seven registered State Natural Areas and has been recognized as an International Biosphere Reserve.
- **Historical Significance:** The ORR includes prehistoric sites, pre-World War II homes, churches, cemeteries, and wartime facilities that link the past and future. Sites and structures that supported the war effort are now a highlight of the Manhattan Project National Historic Park: <https://www.nps.gov/mapr/oakridge.htm>.
- **Science and Technology:** The ORR provides exceptional opportunities for research because of its established large-scale facilities, a security buffer that protects research, long-term records of environmental conditions, and partnerships with universities and industry (Dale, V.H. and P.D. Parr. 1997. Preserving DOE's research parks. *Issues in Science and Technology*. XIV(2): 73-77 available at: <https://bit.ly/PreservingDOEResearchParks>). These attributes have helped establish Oak Ridge National Laboratory as a world leader in research on global climate change, contaminant behavior in the environment, and clean energy production and use.
- **Local Economy:** The local area and region benefit from environmental research activity on the ORR and from the availability of land to site new DOE facilities.
- **Public Health and Safety:** ORR land serves as a buffer providing security for federal activities and helping to assure the safety of the public.
- **Education:** The Oak Ridge Research Park is a training ground for future researchers and students from kindergarten to graduate school, as well as teachers and interested citizens.
- **Recreation:** Public access to the ORR is limited, but recreational opportunities exist through state-managed deer and wild turkey hunts, periodic guided nature walks, and greenways open to the public for hiking, bicycling, and viewing nature. ORR lands on the shore of Melton Hill Lake enhance its value as a setting for boating, swimming, fishing, photography, and wildlife viewing.

Getting Involved with Citizen Science and the City Nature Challenge

by Cade Campbell, Guest Writer

As spring filters over the mountains of East Tennessee, lemon-yellow trilliums burst open in the rolling forests, black bears emerge and begin roaming across the awakening mountains, accompanied by tiger swallowtails soaring overhead, the echoing dirges of wood thrushes, and the low thrumming of queen bumblebees searching for nest sites in the leaf litter. With every degree, the night temperature of the ground rises and young showy orchids and morel mushrooms begin to push through the gray leaf litter. A pure kind of marvel is frequently captured, even if only in a memory of the early spring woods. Few human explorers in this habitat realize that almost every encounter with nature can be immortalized through citizen science on a short stroll.

The 2021 City Nature Challenge, an annual, global, community science event to document urban biodiversity, is scheduled for April 30 through May 3. Participants document plants, animals, and other organisms living in urban areas. The process is easy: find wildlife, take a picture, and upload it using the free iNaturalist app.

An iPhone picture of a red salamander waddling across a post-rain trail, the strange-looking caterpillar of an unknown oak-slug moth, or a backyard photograph of an ancient cucumber-tree magnolia can be citizen science. Even a photo of mysterious, webbed tracks meandering along the riverbank, an old orchard oriole nest dangling from the limbs of a wild cherry tree, or an MP3 recording of tree crickets at dusk can all become remarkably valuable contributions to peer-reviewed, scientific research. How can an ordinary observer share these wonders with

researchers, especially those at distant universities? In recent years, a free app called iNaturalist has valiantly stolen the stage as “the” citizen science initiative.

iNaturalist is more than a direct receptacle for any quality of nature observations. It also serves as a living, social nature journal by compiling detailed records of each observation. Focusing on picture-based identification, any observation uploaded will be reviewed by other naturalists and nature enthusiasts. These are other

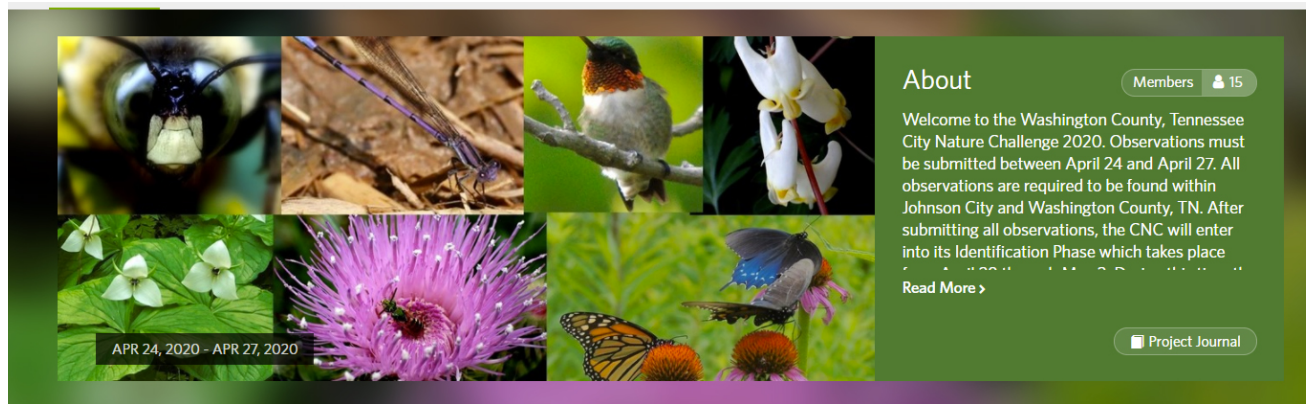
“iNaturalists” who either identify, agree, or disagree with your initial observation. After a conclusion is reached by a two-thirds majority, the observations become “Research Grade” and visible to scientists browsing the massive bank of wildlife photos. Everyone, from families on a casual afternoon hike with nothing but a phone, avid birders photographing distant snow geese in a cornfield, to intrigued

naturalists carefully capturing the characteristic features of a painted lichen moth with a macro lens, can contribute. The iNaturalist website lays out detailed but easily understandable advice for using the app, and after experimenting for a while, the process can become habitual (and arguably addictive).

Year after year, more is learned and updated about each species, but the individual iNaturalist records from long ago persist and change along with scientific advancements. Biologists, environmental scientists, ecologists, and a wide variety of professionals browse through this data. Since they cannot possibly see every one of these picture-worthy moments personally, iNaturalist provides unique snapshots of scientific evidence from

an enormous, interactive database. However, this is only one of many citizen science outlets that directly engage with Tennessee’s beautiful habitats and wildlife. Platforms such as BugGuide, eBird, FrogWatch USA, and HerpMapper are easy ways for anyone to become involved with collecting scientific data. While some are easier to use than others, all are worth investigating and have steadily vital roles in modern-day conservation. Frequently, there is a certain specific project for almost every taxonomic group (e.g., plants, salamanders) in a region, sometimes even every species,

Yet the highlight of this naturalist research is the BioBlitz, an invigorating event where citizen scientists (sometimes alongside professional scientists) can congregate and scout the fields, forests, and waterways of a specific area to capture a detailed snapshot of the region’s respective biodiversity. (continued on page 7)



Overview 1,195 OBSERVATIONS 461 SPECIES 232 IDENTIFIERS 37 OBSERVERS Stats



One project on iNaturalist, “Tracking Red-Eared Sliders” maps the distribution of introduced Red-eared Sliders (*Trachemys scripta elegans*) observed across the world. Other projects have been designed to monitor spiderweb designs, natural bioluminescence, the effects of climate change on a region’s birds, and even a study involving color variation in the wings of Blue Dasher (*Pachydiplax longipennis*) dragonflies, which was published two years ago by a graduate student.

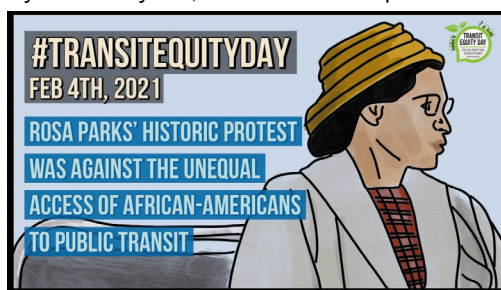
Even a photo of mysterious, webbed tracks meandering along the riverbank, an old orchard oriole nest dangling from the limbs of a wild cherry tree, or an MP3 recording of tree crickets at dusk can all become remarkably valuable contributions to peer-reviewed, scientific research. How can an ordinary observer share these wonders with

If you live in northeast Tennessee and want to participate, visit this website:
<https://bit.ly/CityNatureChallengeNETN>

To find other places that are participating in the City Nature Challenge, go here:
<https://citynaturechallenge.org/participate/>

Transit Equity Day 2021 in Memphis Honors Rosa Parks

by Dennis Lynch, Chickasaw Group



February 4 was “Transit Equity Day”, with many local events around the country, including one in Memphis. February 4 was Rosa Parks’ birthday, and we commemorate her huge role in the history of transit and civil rights. Beyond honoring Rosa Parks, important focus is being applied to public transit as a civil right, and to urging politicians to substantially

over, and continued to describe their own personal experiences of relying on transit to get to work or school, and to discuss their views and support for the increased funding.

As the discussion continued beyond the hearing’s scheduled time window, Dennis Lynch, the Sierra Club’s coordinator for the conference, asked the overtime attendees, “Who thinks we should do another online hearing to discuss this subject further?” Every visible attendee raised their hand. Lynch also points out what a fantastic ally and partner MICAHA was in working together to make the hearing such a



The Transit Equity Day press conference in Memphis, TN, February 4, 2020. Standing left to right) are Britney Thornton (Memphis Interfaith Coalition for Action and Hope), County Mayor Lee Harris, Justin Davis (Bus Riders Union), Marquita Bradshaw (The Sierra Club); seated is Alison Donald from the Memphis Center for Independent Living.

increase funding for transit.

The Sierra Club was one of many national sponsors, with the Labor Network for Sustainability (LNS) being a major driving force. 2021 is the fourth year that local and national events have been organized. Unfortunately, the pandemic changed public focus only a month after the 2020 Press Conference, and keeping bus riders and drivers safe dominated efforts. This year, the Chickasaw Group teamed up with MICAHA, the Memphis Interfaith Coalition for Action and Hope, and arranged an “Online Public Hearing” to re-energize efforts to increase funding and support for the Memphis 3.0 Transit Vision Plan. We asked elected officials to increase funding for transit by \$30-35 million per year.

The online hearing was a great success, with over 120 attendees, including a mix of bus riders, business leaders, elected officials and professional staff strongly expressing their support for transit in Memphis. The meeting was so successful and important to the attendees, that almost 50 remained even 15-20 minutes after the official event was

Websites for Further Reading

- Here is an article from the *Tri State Defender* that came out after the hearing: <https://bit.ly/transit-equity-day-2021>
- LNS has provided great resources for groups to organize local events at: <https://www.labor4sustainability.org/transit-equity-day/>
- The US Library of Congress also has a great teaching site about Rosa Parks: <https://blogs.loc.gov/teachers/2015/02/happy-birthday-to-rosa-parks/>
- In 2020, the Chickasaw Group organized a small press conference where seven local ally organizations spoke to recognize Rosa Parks, and the importance of public transit as a civil right: <https://www.sierraclub.org/articles/2020/02/honoring-rosa-parks-transit-equity-day>

success. Now the harder work continues. We will work to maintain and build the momentum, undoubtedly with another online event within the next few months. We must get commitments to increased funding, and especially, a dedicated funding source.

Contact Dennis at dmlynch1@gmail.com

Tyson Plant Opening in Middle Tennessee



by Aaron Butler, Volunteer Writer

“Chicken is the perfect food!” declares my father-in-law Frank as he picks a piece of tender meat from the bone and plucks it into his mouth. Frank isn’t the only person who feels this way, which is why the United States meat and poultry industry processes over nine billion chickens each year. Chicken is tender, pairs well with so many different foods and is inexpensive in comparison to other protein options. But while chicken may seem like the perfect food, the process by which it arrives to our stores, restaurants and ultimately to our tables is far from perfect. A chicken must be hatched, housed, fed, grown, transported, slaughtered, processed, packaged and transported again to ultimately find itself next to a side of green beans on a disposable plate at a local BBQ. There are challenges all along the way – from environmental impacts to competing community and business interests; a perfect example of which is playing out right now in Tennessee.

In 2018, attracted perhaps by Tennessee’s exceptionally lax CAFO regulations, Tyson Foods broke ground on a new plant in Humboldt, Tennessee, a town which lies in Gibson and Madison Counties, estimated to begin processing poultry in mid-2021. The footprint of the new Tyson plant will extend far past Gibson and Madison Counties. Plants like this one rely upon hundreds of CAFOs (Concentrated Animal Feeding Operations) to breed and grow chickens that will then be transported to the plant for processing – moving forward we will call these CAFOs “chicken barns.” It is estimated the plant in Humboldt will require over 330 chicken barns spread across seven counties to supply them with the volume of poultry needed to keep production in full swing. Generally, chicken barns operate within a 50-to-60-mile radius of a processing plant to cut down on both the time and cost of transportation between facilities; we can anticipate chicken barns in Gibson, McNairy, Weakley, Chester, Carroll, Madison and Henderson Counties.

Without digging deeper, this all sounds like a huge economic win for Middle Tennessee; but, like most things, it is just not that simple. All living things produce waste and, with over 1000 chickens in each chicken barn at any given time, there will be a whole lot of waste to contend with. If not properly managed, these wastes can have an extremely negative impact on the levels of nutrients leaching into nearby soil and water. Additionally, there are concerns regarding local air quality impacted by odors and fumes, fluctuations in property values, impacts upon the aesthetic value that prompted people to move to the country in the first place, quality of jobs, and even damage to infrastructure from increased traffic.

Concerned citizens of multiple surrounding counties have begun mobilizing against the plant and these efforts have culminated in everything from the “NO TYSON IN HENDERSON COUNTY” Facebook page to an effort to prevent the approval of a gas-line that will provide the energy for a 150-acre property housing 26 chicken barns. How effective have these efforts been? Citizen awareness and education have definitely been bolstered, however there is little indication that any of this will change the outcome. Environmental laws in Tennessee prevent preemptive action based upon the belief that environmental damage “will” result. Only “after” environmental damage has been caused will citizens in these counties be able to take their cases to the courts. Also, Tennessee zoning laws consider chicken barns as agricultural endeavors and therefore make no distinction between them and crop farming. What does that mean? It means if your neighbor decides to build and operate a 600-foot chicken barn right outside your door but on their property then there is absolutely nothing you can do about it; your only recourse is to sue for any damage caused after it is done. “There’s a large community against the expansion of these chicken houses but their options are limited because the state has taken away the counties’ ability to regulate,” says Adam Friedman, a journalist for the *Jackson Sun* who has researched and reported on this topic extensively.

A Facebook post from Henderson County Commissioner Andy Anderson, dated September 17, 2020, attempts to address local concerns. Although Commissioner Anderson cites the before-mentioned issues of odor and fumes, potential environmental and water contamination, etc., he says, “However the actual extent of these issues will not be realized until the operations are up and running. So it may be hard to assess those for some time.” Anderson continues by ascertaining that, “Environmental and water quality issues also seem to be sort of speculative at this point.”

Anderson’s assessment is either woefully uninformed or deliberately misleading, admitting a lack of knowledge of the extent of potential problems while telling us to just open the plant and worry about the impacts later. Even more concerning is that he calls environmental and water quality issues stemming from chicken barns “speculative.”

Axel Ringe, the Tennessee Chapter’s Water Quality Chair, responds to Commissioner Anderson, “It is unfortunate that politicians like Commissioner Anderson, who are responsible for the health and safety of their constituents, are so woefully ignorant of the facts surrounding CAFOs and won’t even educate themselves before spouting nonsense. The environmental impacts of factory farms have been widely and conclusively documented across the country.”

Let Your Legislators Know You Care!

by Sherry Loller

The Tennessee General Assembly is in session now, and your legislators need to know where you stand on environmental issues. We have a lobbyist at the state legislature, Scott Banbury, who keeps us informed through emails about pending legislation. These Action Alerts give us timely notice when bills that impact the environment will be brought up in committee. They also give us pertinent information about the bills, including the rationale for our stance, who to contact, and suggestions about what to say.

If you do not feel comfortable calling your legislators, be assured that most people feel that way at first, but they get over it very quickly. Usually when you call, you will get a staffer who will be friendly and gracious. They will ask you for your name, address, and the number of the bill you are calling about. The Sierra Club gives you information to help you formulate the message you leave regarding the proposed bill. The process is quick, easy, and effective.

Some people prefer to email or write their legislators, but regardless of what mode of contact you choose, the important thing is to let your representatives know where you stand on environmental issues. If you don’t tell them, they won’t know that you care.

In order to get good bills passed and bad ones stopped, we need you – yes, YOU! – to get in touch with your representatives. There is strength in numbers. People are powerful when they band together, and together we will make a difference!

If you have not signed up to receive Action Alerts regarding pending legislation, please email or call me, and I will put you on the list. Additionally, if you would like to make a donation to help fund the position of our lobbyist, please contact me and I will send you a form.

Sherry Loller
615-889-2968 sherryoller@hotmail.com
Chair, Sierra Club TN Chapter Defenders Fund

Instead, questions that remain are ones like how much financial responsibility will Tyson Foods bear for the resulting environmental damage, what efforts will be taken to mitigate toxins leaching into the environment, and in what ways will Tyson Foods do more than just the bare minimum to provide chicken barn operators with expertise so their barns have minimal impact.

As of now a few things are certain. The Tyson Foods plant in Humboldt will open, chicken barns will operate in multiple surrounding counties and there will be environmental damage as a result. If no action can be taken until they pollute, then the best thing these counties (and even individual property owners) can do is test their soil, air and water extensively before the plant and barns are in operation. Data must be gathered now to measure levels of nitrogen, ammonia and other potential contaminants. Accurate data collection will enable us to assess the variance between present state vs. future state. This data will be indispensable in ensuring all parties in the poultry supply chain process are assessed a level of responsibility equal to their impact. It will also function as a point of reference before elected officials think to call environmental and water quality issues resulting from chicken barns “sort of speculative.”

Contact Aaron at thegoodfightnow@gmail.com



Reprinted with permission of the American Society for the Prevention of Cruelty to Animals

Dear Eartha : Advice from An Eco-Guru

Dear Eartha,

I've heard that the Arctic National Wildlife Refuge (ANWR) is now sold to major petroleum and oil companies so they can drill for oil on pristine land in Alaska's most northern region. But I also heard the sale was a joke! What's happening now that Trump's out and Biden's in? Is the refuge still protected?

—Tennessee Caribou Protector

Dear Caribou Protector,

You are so right – things are definitely in flux as the executive and legislative branches of the United States government have changed. Here's what I know:

The area that was offered for sale to oil companies consists of nine parcels or tracts called "the coastal plain." Out of the 400,000 acres of the entire Refuge, this plain makes up 30%. It is homeland to native peoples, and many of the Gwich'in and Inupiaq people have for decades fought the sale and invasion of their tundra by outsiders. Why? Not only is it the peoples' homeland, it is also the calving grounds for Porcupine caribou, and home to polar bears, birds, and other wildlife. With the process of oil drilling comes large trucks across their frozen tundra, noisy machinery, businesses, pollution, and, inevitably, oil spills.

Native tribes and others, including the Canadian Parks & Wilderness Society, well-known climate and wilderness advocates Greta Thunberg and Leonardo DiCaprio, and the usual climate protectors – Sierra Club and National Resources Defense Council, for example – have been campaigning to protect the 1,000 square kilometers to keep the Refuge the "largest untapped land-based oil reserves in North America" (Canadian Broadcasting Company, January 6, 2021). Emphasis on "untapped"!

The joke is that only three companies bid on all that oil and the largest bidder was Alaska's Bureau of Land Management. National Public Radio (NPR) reported on January 6 that the Biden administration opposes the sale, which was rushed on the last full day of the Trump administration. But reversing the course of the leases means buying them back or suspension of "any work on the land. Several court cases...to cancel leases are ongoing."

This is a fight long held and widely supported by a multi-national core of environmentalists who know that the ANWR is a pristine place, one of few remaining on planet Earth, and have been working fervently to protect it. Court cases continue.

Finally, translating from the mother tongue of her people, the name for the Arctic coastal plain means "the sacred place where life begins." As always, power never concedes its hold without a fight. At least now the Biden administration seeks to preserve this refuge and not exploit it.

Stay tuned and stay safe,

Eartha

*Dear Eartha is written by Rita Bullinger.
Submit your question for Eartha to SierraTNNews@gmail.com*

Who Has Seen the Wind?

by Christina Rossetti

Who has seen the wind?
Neither I nor you
But when the leaves hang trembling,
The wind is passing through.
Who has seen the wind?
Neither you nor I
But when the trees bow down their heads,
The wind is passing by.

This poem is in the public domain

Lines Written in Early Spring

by William Wordsworth

I heard a thousand blended notes,
While in a grove I sate reclined,
In that sweet mood when pleasant thoughts
Bring sad thoughts to the mind.

To her fair works did nature link
The human soul that through me ran;
And much it grieved my heart to think
What man has made of man.

Through primrose tufts, in that sweet bower,
The periwinkle trailed its wreaths;
And 'tis my faith that every flower
Enjoys the air it breathes.

The birds around me hopped and played:
Their thoughts I cannot measure,
But the least motion which they made,
It seemed a thrill of pleasure.

The budding twigs spread out their fan,
To catch the breezy air;
And I must think, do all I can,
That there was pleasure there.

If this belief from heaven be sent,
If such be Nature's holy plan,
Have I not reason to lament
What man has made of man?

This poem is in the public domain.

City Nature Challenge — continued from page 5

In Johnson City, the first regional City Nature Challenge was created by ardent environmental warrior Melanie Kelley last April. Due to Covid-19, there were no big gatherings or events. However, a handful of naturalists sprinkled across the city and surrounding countryside of the county collectively amassed over one thousand observations (authentic, photographic records), many of which have since been reviewed and utilized by researchers, authors, artists, and other lovers of our natural ecosystems.

This set of observations contributed to the worldwide City Nature Challenge project, composed of over 800,000 observations, here in Johnson City. Knox County, Western North Carolina, and Blacksburg, Virginia, have developed similar City Nature Challenge initiatives and contributed these same overall finds, alongside bustling metropolitan areas in California and citizen scientists in the African savanna. With the combined effort of naturalists from all corners of the globe, the City Nature Challenge is continually growing, creating a snapshot of the biodiversity of Johnson City, Tennessee, the United States, and the entire world. But BioBlitzes aren't limited to this annual event. In 2019, the United States Forest Service and Tennessee Wildlife Resources Agency used iNaturalist's platform to engage the public with one of their annual BioBlitz activities, which have been conducted in the Cherokee National Forest long before iNaturalist gained popularity among local naturalists. Many other groups, including the Friends of Roan Mountain, Dr. Rebecca Fletcher's "Environment in Appalachia" class at East Tennessee State University, the Blue Ridge Discovery Center, and the North Carolina Museum of Natural History all have organized projects like our City Nature Challenge (CNC), and frequently incorporate observations from the area.

If you are interested in this kind of citizen science, the CNC is coming soon to East Tennessee. This year, the area has expanded to include nine new counties, incorporating habitats from the crest of the Blue Ridge on Roan High Knob, to the lowland bald-cypress swamps around Rankin Bottoms. All ten of Tennessee's northeastern-most counties will be in the range of the regional CNC. For those in the area, be sure to have your phone camera handy as spring wildlife returns! For those who are not, you can likely search for and find local iNaturalist projects in your area, or even start your own. With spring right around the corner, I encourage all fellow naturalists to engage in citizen science to leave a legacy for biodiversity, and provide the data needed for positive environmental change.

Join the Northeast Tennessee City Nature Challenge: <https://bit.ly/CityNatureChallengeNETN>.



The first iNaturalist record of a "Roadside Rambler" or Common Sootywing (*Pholisora catullus*) butterfly in Washington County, TN, found during the 2020 City Nature Challenge. Normally, this species is found in much warmer habitat in Midwestern prairies and the coastal plain. This one was found sunbathing along the frigid Watauga River.

Another opportunity to be a citizen scientist is the family-friendly BioBlitz on May 22, 8:00-12:00 in Springville, TN, co-sponsored by DLiA and the Tennessee Valley Authority. Register here: <https://dliia.org/event/bioblitz-tnwr/>

Contact Cade at cittercade@gmail.com



Be a champion for the environment. Join today.

From delisting endangered species like the Gray Wolf to drilling for dirty tar sands, the threats to our environment have never been greater. Your support is absolutely essential to preserving our most precious natural resources - join the nation's largest and most effective grassroots movement today.

We'll thank you with this free insulated cooler tote (limited time!) as well as these exciting Members-only benefits:

- One-year subscription to *Sierra* magazine
- Worldwide Members-only outdoor trips
- Automatic membership in your local Chapter and Group
- Discounts on Sierra Club calendars, books, and other merchandi



Name _____
 Address _____
 City _____ State _____
 Zip _____ Phone (_____) _____
 Email _____

Check enclosed. Please make payable to Sierra Club.
 Please charge my: Visa Mastercard AMEX

Cardholder Name _____
 Card Number _____
 Exp. Date ____/____/____
 Signature _____

Membership Categories	Individual	Joint
Special Offer	<input type="checkbox"/> \$15	
Standard	<input type="checkbox"/> \$39	<input type="checkbox"/> \$49
Supporting	<input type="checkbox"/> \$75	<input type="checkbox"/> \$100
Contributing	<input type="checkbox"/> \$150	<input type="checkbox"/> \$175
Life	<input type="checkbox"/> \$1000	<input type="checkbox"/> \$1250
Senior	<input type="checkbox"/> \$25	<input type="checkbox"/> \$35
Student/Limited Income	<input type="checkbox"/> \$25	<input type="checkbox"/> \$35

Contributions, gifts and dues to Sierra Club are not tax deductible; they support our effective, citizen-based advocacy and lobbying efforts. Your dues include \$7.50 for a subscription to *Sierra* magazine and \$1 for your Chapter newsletters.

Enclose a check and mail with this full ad to:
 Sierra Club
 P.O. Box 7059
 Murrifield
 Virginia 2216-7059 **Or click JOIN on our website:**
<https://www.sierraclub.org>

Defenders Fund Contributors

Many thanks to those who have contributed to the Defenders Fund to help fund the position of our lobbyist at the state legislature. Recent contributors include:

- | | |
|------------------------|------------------------|
| Vince and Tina O'Brien | Walter Cox |
| Marge and Paul Davis | Amy Smart |
| Bill and Dorothy DeVan | Mary Buckner |
| John Noel | Marita Vornehm |
| Peg Duthie | Cathy Conley |
| Jack Jeffers | Gene and Ruth Van Horn |

WANT TO GO PAPERLESS?

To opt out of getting a paper copy of this newspaper and receive it attached to an email instead, type this link into your internet browser or scan the QR Code to open the form to make your paperless request.



http://bit.ly/Stop_My_Paper_Copy

Seeking Passionate Writers

The *Tennes-Sierran* is looking for passionate news and feature writers to cover important Tennessee news about conservation. We're especially interested in writers with background in environmental issues. If you are an experienced writer and would like to be a part of the Sierra Club movement to protect Tennessee's environment, please contact:
 Emily Ellis, TS Editor, tnsierran.editor@gmail.com

VOTE FOR PLANET EARTH!

**April Chapter Retreat Canceled
 Virtual Business Meetings March 13 and May 8**

The Sierra Club's Safety Management Team is requiring that we not hold in-person meetings through July 4, 2021. The Spring Chapter Retreat is canceled. The fall retreat is still on at Pickett State Park, October 29-31 (Happy Halloween!). The **Chapter Executive Committee** will meet via Zoom on **March 13, and May 8, both at 9 A.M. Central, 10 A.M. Eastern.** RSVP here: <https://bit.ly/SCTNcalendar>

RETREAT SCHEDULE

	LOCATION	DATES
Spring 2021	Cancelled due to COVID-19	---
Fall 2021	Pickett State Park	October 29-31
Winter 2022	Cedars of Lebanon SP	January 14-16
Spring 2022	Fall Creek Falls State Park	April 29-May 1

MEETINGS

The Sierra Club continues to pause all in-person meetings. Most groups and conservation committees are meeting online. Check a meeting status: <https://www.sierraclub.org/tennessee/sierra-club-tennessee-calendar> or scan the QR code ➡
 If you would like to attend, please contact the group or committee chair. Contact information is on page 2.



Group Program Meetings

Group	Date	Location	Time
Cherokee (Chattanooga)	Mon 3/22, 4/26, 5/24	Check for Virtual/On Line	TBA
Chickasaw (Memphis)	Tue 3/18, 4/15, 5/20	Check for Virtual/On Line	6:30 PM
Harvey Broome (Knoxville)	Tue 3/9, 4/13, 5/11	Check for Virtual/On Line	7:00 PM
Middle TN (Nashville)	Thu 3/11, 4/8, 5/13	Check for Virtual/On Line	7:00 PM

Group Business Meetings

Group	Date	Location	Time
Cherokee (Chattanooga)	Mon 3/1, 4/5, 5/3	Check for Virtual/On Line	TBA
Chickasaw (Memphis)	Wed 3/3, 4/7, 5/5	Check for Virtual/On Line	6:30 PM
Harvey Broome (Knoxville)	Tue 3/23, 4/27, 5/25	Check for Virtual/On Line	7:00 PM
Middle TN (Nashville)	Mon 3/15, 4/19, 5/17	Check for Virtual/On Line	6:30 PM

Regional Conservation Committee Business Meetings

Committee	Date	Location	Time
Clarksville	Tue 3/16, 4/20, 5/18	Check for Virtual/On Line	6:00 PM
CareNET (Rogersville)	Tue 3/4, 4/1, 5/6	Check for Virtual/On Line	6:00 PM
Watauga (Mountain City)	Tue 3/16, 4/13, 5/11	Check for Virtual/On Line	5:00 PM
Tri-Cities	Tue 3/9, 4/13, 5/11	Check for Virtual/On Line	7:00 PM