



likenknowledge.org

2021 NEWSLETTER

We are a network connecting communities to each other and to helpful resources. LiKEN's work is coordinated through five different, but interlinked programs



WATER COLLABORATORY



Mountain Drinking Water Project Team on planning retreat at Jenny Wiley State Park, July 2021. L to R: Mickey McCoy (MCCC), Walter Robles (Headwaters), Mary Cromer (ACLC), Jason Unrine (UK), Hilary Miles (Headwaters), Anna Hoover (UK), Simona Perry (LiKEN), Ahmad Hakoum (UK), Nina McCoy (MCCC), Debi Sexton (Headwaters), Carson Benn (LiKEN), Betsy Taylor (LiKEN), Madison Mooney (MCCC/LiKEN), Bev May (UK), Kallista Bley (LiKEN)

Mountain Drinking Water Project

Having safe, reliable, and affordable tap water is a must for all households. One of the main challenges in supplying healthy water is to make sure it is free of germs such as bacteria in the source water. For this purpose, water is chlorinated to kill germs. However, under certain conditions, chlorine can bind to compounds in the water and form what are called Disinfection By-Products (DBP's) such as Trihalomethanes (THM's) or Haloacetic Acids (HAA's). DBPs are among the most frequent drinking water quality violations in the United States. Exposure to high levels of DBPs have been associated with adverse health effects,

such as cardiovascular birth defects, and in the case of long-term exposure, bladder cancer.

In 2019, LiKEN became a partner in a university / community

collaboration to reduce exposure to disinfection byproducts (DBP) in rural communities. Community partners in this study -- Martin County Concerned Citizens (MCCC), Headwaters (in Letcher County), and Appalachian Citizens' Law Center (ACLC) -- bring a wealth of experience. Dr. Jason Unrine from the University of Kentucky College of Agriculture, Food, and the Environment (UK CAFE) and Dr. Anna Goodman Hoover from the University of Kentucky College of Public Health (UK CPH) are academic leads. The project will work with several hundred citizen scientists in Letcher and Martin Counties in eastern Kentucky who gather water samples in their households and help to analyze the causes of, and solutions for, problems related to DBPs.

LiKEN is contracted to help coordinate the "Stakeholder Consultation Core" (SCC) group made up of community-based organizations as well as members from the health sector, water utility sector, and local and state governing agencies. The SCC will be essential to shaping how the DBP study is conducted and evaluated through input from local community groups and water and health-related sectors and agencies. The SCC is designed to strengthen communications on key issues and build lasting partnerships on water quality, access, and affordability built on trust among all stakeholders. LiKEN's role will be to help with face-to-face and virtual meetings, to conduct qualitative interviews, to facilitate dialogue and deliberation, and help to develop educational, outreach, and communication materials for various audiences.



Community team leaders, Debi Sexton (Headwaters) and Nina McCoy (MCCC) gather water samples from the reservoir that supplies public drinking water for Martin County, Kentucky. Photo by Madison Mooney

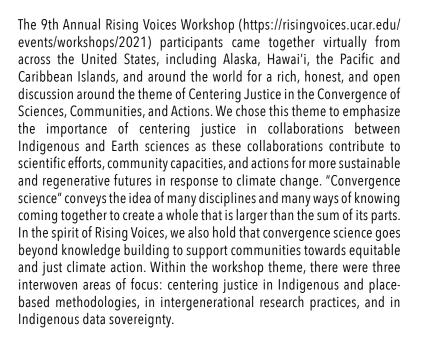
This 5-year project is funded by the National Institute of Environmental Health Sciences.

East Kentucky Water Network

Since 2019, LiKEN has been collaborating with communities across eastern Kentucky through the Eastern Kentucky Water Network (EKWN), a network of organizations and stakeholders working together to secure clean and affordable drinking water and improved watershed quality across eastern Kentucky. EKWN currently includes concerned citizens from five counties and organizations such as, Headwaters in Letcher County, Martin County Concerned Citizens, Kentucky Conservation Committee, Kentuckians for the Commonwealth, Kentucky Riverkeeper, and Appalachian Citizens' Law Center. Stay tuned for upcoming reports on EKWN's work!

CLIMATE RESILIENCE PROGRAM











Centering Community-led Solutions

To motivate action to advance community-led solutions to climate-forced displacement in the US, the Rising Voices Community Relocation/Site Expansion Working Group and the Legal Justice Coalition (facilitated by the Unitarian Universalist Service Committee and the Lowlander Center) issued policy guidelines earlier this year (https://www.uusc.org/addressing-climate-forced-displacement-inthe-united-states-a-just-and-equitable-response/). At the heart of these policy guidelines is the need to center the agency, leadership, and self-determination of frontline communities in addressing climate-forced displacement.

From Land to Sea: Learning from Indigenous and Local Knowledges to Co-create Climate Adaptation Metrics

Communities are increasingly facing adaptation decisions to reduce their exposure to climate change impacts. Proactive planning requires reliable and relevant data on which to base decisions. Datadriven tools and information that meet communities' priorities and needs and engage local input and knowledge can effectively inform local community adaptation decisions to increasing climate and weather threats. LiKEN's Climate Resilience program is working with seven community hubs in the Gulf Coast, Pacific Coast, Caribbean, and Hawaiian Islands to create a collaborative knowledge sharing to: (1) develop and share climate data metrics that communities use, and (2) bring together NOAA climate data metrics and the communities' metrics to enhance the usefulness of climate data for informing community adaptation responses. With a participatory process of co-learning, we ask: What kinds of data and knowledge are needed to address the effects of climate change on complex land-coast-sea ecosystems?; What are effective ways to gather such information?; and How can a diversity of data and knowledges be brought together to successfully solve climate-driven problems.

<u>Project Team:</u> LiKEN, Asian Pacific Environmental Network, Comunidad Tribu Yuke de Jayuya, Boriké (Tribe of the Whiteland Community, from Jayuya, Borike), First People's Conservation Council of Louisiana, Kīpuka Kuleana, Kumeyaay Dieguñeo Land Conservancy, Lowlander Center, The Sierra Fund, and Sogorea Te' Land Trust, in collaboration with trusted partners at the South Central Climate Adaptation Science Center, Southeast Climate Adaptation Science Center, University of California-Davis, University of California-San Diego, Stanford University, University of California-Berkeley, and Lawrence Berkeley Lab.

This project is supported with funding from the National Oceanic and Atmospheric Administration's Climate Program Office, award number NA210AR4310280.

Knowledge Sharing Network: Climate Education Centering Indigenous Knowledge Systems

During the first half of 2021, the Livelihoods Knowledge Exchange Network (LiKEN) convened a Council of Indigenous scientists and educators to inform a knowledge sharing network design, focused on climate education centering Indigenous Knowledge systems. The process included catalyzing support for Indigenous community and grassroots-initiated and -led educational projects. In the second half of 2021, after much discussion, input, and recommendations from the council, the work was transformed into three key deliverables, with the hope that future Indigenous-serving climate education organizations may be better informed in the development of educational work through these publicly available open-access tools.

The key deliverables in process include:

- 1. A curated Indigenous Climate Education Literature project, including an annotated open-access bibliography for educators, students, and organizers.
- 2. An Indigenous Peoples (AI/AN & Native Hawaiian) population density map overlain with FEMA National Risk Indicator zones by county, as well as ecoregions for student/educator use; this will include both a printed version to share with collaborators, as well as an open-access online map.



3. A "Building a Fire" process to grow projects centered around core concepts of Relationality, Sovereignty, and Responsibility, in the establishment of ethical Indigenous partnership(s) and knowledge sharing, with a Turtle as the guiding metaphor.

The deliverables will soon be available through open-source and Creative Commons licensing.

This project was supported with funding from the Bay and Paul Foundations.

COLLABORATIONS IN CLIMATE RESILIENCE

While this newsletter highlights LiKEN programs and projects, we would like to acknowledge the many climate resilience projects in which we are honored to be collaborators. Some examples include:

Restoring Louisiana's Marshes: Protecting Sacred Sites, Increasing Tribal Resilience, and Reducing Flood Risk

This project involves filling in the canals dredged in Louisiana's wetlands in order to restore marsh ecosystems, reduce land loss and flood risk, and protect sacred sites. The Grand Bayou, Grand Caillou/ Dulac, and Pointe-au-Chien Tribes initiated this project, which integrates coastal resilience activities and cultural heritage, in partnership with the Lowlander Center. This project is funded by the National Estuary Program and National Fish and Wildlife Foundation. For more information about the project, https:// www.lowlandercenter.org/projects



The project team discussing maps of canal cuts near the Tribes' sacred sites for project preparation. Credit: J Maldonado, Oct 2018.

The Disaster Justice Network (DJN) is a volunteer network lending support to share critical information that is not easily accessed for the 2020 and 2021 hurricane recovery processes in Louisiana. The network includes community leaders, faith leaders, advocates, A family lives outdoors in Lake Charles, Louisiana, after the 2020 hurricane season. ©Kelli Stawecki, 2020

Disaster Justice Network

activists, practitioners, researchers, and students weaving together environmental justice and disaster expertise to develop strategies that address the inequitable access to disaster response and recovery efforts and to advocate for a justice-driven recovery process. For more information about the network, http://disasterjusticenetwork.org/, and to read about DJN's development, https://hazards.colorado. edu/quick-response-report/justice-driven-disaster-recovery.

Volunteers offload a van of supplies for hurricane victims. The network organized and arranged for the equipment necessary to deliver resources to communities in their distribution channels within 12 hours of receiving them. ©Disaster Justice Network, 2020.

STORIES OF PLACE PROGRAM

Stories of Place is an intergenerational storytelling program, directed by LiKENeer Mary Hufford, that focuses on the special places that shape community life in Central Appalachia.





Women, Ginseng, and Ecologies of Care

Photos of Janet Hodge by Mary Hufford

Over the course of 2021, LiKENeer Mary Hufford gathered stories of women who are skilled stewards of ginseng in West Virginia, Virginia, and Tennessee--under a grant from the Smithsonian Institution's "American Ginseng: Local Knowledge, Global Roots" program. With support from the Smithsonian's American Women and History Initiative, and in cooperation with LiKEN, the Smithsonian's Center for Folklife and Cultural Heritage has begun addressing the silence on women in public histories of ginseng. Mary Hufford has just finished the fieldwork and some profiles of these women will soon be up on LiKEN's website and linked to "American Ginseng: Local Knowledge, Global Roots," an interactive website, curated by Betty Belanus and Arlene Reineger of the Smithsonian Center for Folklife and Cultural Heritage.



Ruby Daniels. Photo by Mary Hufford

Ruby Daniels

Consultant herbalist and Forest Farmer - Lanark, WV

Herbalist Ruby Daniels is an Afrilachian forest farmer, living on her family homeplace in the former African American coal town of Stanaford, WV. As an Afrilachian Forest Farmer, Ruby Daniels is foregrounding African American history in a region where it has long been invisible.

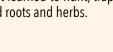


Janet Hodge, proprietor of Hawk Mountain Trading. Photo by Mary Hufford.

Janet Hamric Hodge

Ginseng Buyer, Proprietor of Hawk Mountain Trading and WV Wildlife Resources Commissioner - Smithville, WV

Janet Hodge's family has lived in Central West Virginia since the late 1700s. Growing up in the farming communities of Gilmer and Braxton Counties, Janet learned to hunt, trap, fish, and forage for wild roots and herbs.



Victoria Ferguson

Member of the Monacan Indian Nation Historic Resource Committee and Program Coordinator, Historic Fraction Family House at Solitude, Virginia Tech

As an enrolled member of the Monacan Indian Nation, Victoria Persinger Ferguson, of Roanoke, Virginia, has spent nearly three decades researching and developing programs around the Eastern Siouan of the central portion of what is now Virginia.



Amy Cimarolli and Barbara Breshock, stopping to verify goldenseal along the bank of an intermittent stream. Photo by Mary Hufford

Amy Cimarolli and Barbara Breshock WV Foresters, Co-leaders of WV Women Owning Woodlands

As co-founders of the West Virginia chapter of Women Owning Woodlands (WOW) in 2018, Barbara Breshock and Amy Cimarolli are career foresters blazing a trail for women in the traditionally male-dominated world of forest management.

Carol Judy (1949-2017)

Herbalist, Root Digger, Rural Development Leadership Networker, and Forest Granny Jellico, Tennessee

Carol Judy (1949-2017) wove ginseng into a dense and vibrant meshwork connecting human and more-than-human, deep past with deep future, and local with global (some would say intergalactic). She raised her children in Tennessee, co-founding, with Marie Cirillo and others in the community, the Clearfork Community Institute, and there she learned from fellow woods walkers to identify and harvest roots and herbs of the forest.



Carol Judy in ginseng patch with Michelle Mockbee, a co-founder of Fair Trade Appalachia, in 2011. Photo by Audrey Lankford Barnes



Since 2018, in collaboration with Martin County high school and community partners, Karen Rignall, Associate Professor



Snapping beans, Martin County KY. Photo by Mary Hufford

at the University of Kentucky (UK), has been coordinating a process of story-catching by high school students in Martin County, KY. But, where should these stories go? In Summer 2021, Karen Rignall brought together various participants in Stories of Place / Martin County to begin developing a website as a platform for sharing these wonderful stories.

This dedicated team of Martin County citizens and LiKENeers has been working all fall on the new website, Martin County Stories,

to be launched soon The group work collaboratively to develop a mission and vision:

<u>OUR MISSION</u> is to open a civic space where Martin County citizens across generations can present the beauty of their home, in their voice, through their eyes, in a beautiful mosaic display of the realness of Appalachia;

<u>OUR VISION</u> is to be a place for an online community filled with love and pride for our homes and each other and a source for resources about the land, culture, and people in Martin County.

Key leaders in this effort are high school students, UK undergrads, and UK graduates from Martin County: Alyssa Dyer, Chloe Hale, Madison Mooney, Liz Stayton. Ashley Watkins, took the lead in website design during her joint UK / LIKEN internship,bringing gifts from her UK Writing, Rhetoric, and Digital Studies major and her Appalachian coal mining family roots.

LAND & REVENUES PROGRAM

Inaugural Kentucky Black Farmers Meet Up. A gathering coordinated by Tiffany Bluefield (Community Farm Alliance) and Ashley Smith (Black Soil) with Support of the Farm to Table team at Community Farm Alliance



Farm Credit

LiKEN started work this Fall on a Land and Revenue project related to farmers and the government financial agencies tasked with serving them, again with the gracious support of Alcorn State University. The Farm Service Agency and the Farm Credit Service, two wings of the USDA, describe themselves as "lenders of first opportunity:" expressly committed to offering startup loans and lines of credit to early-career and other socially disadvantaged farmers. These agencies have, however, acknowledged a great deal of discriminatory practice on their part in the past, and also that significant steps need to be taken to reach groups of farmers that have historically been excluded. LiKEN is exploring those barriers-both through interviews with USDA financial officers, and participatory action research with farmers. We will compare three regional populations: African American farmers in central Kentucky and coastal Georgia, as well as lower income farmers and agroforesters in eastern Kentucky. Key partners in this work are: Jim Embry (Sustainable Communities Network), Tiffany Bellfield and Martin Richards (Community Farm Alliance), and Grow Appalachia.

This project is funded by a grant from the Socially Disadvantaged Farmers and Ranchers Policy Research Center, Alcorn State University, Mississippi

Jim Embry in the flower fields at Green House 17 for a Herald Leader article about the therapeutic horticulture program that he created in 2008. Photo by Charles Bertram.



Tiffany Bluefield, Food Justice Coordinator with the Community Farm Alliance

Jim Embry standing next to his 8 foot tall tomato plants. Photo by Jim Embry's camera on time delay.

Our Collaborations

LiKEN is proud to share this work with our colleagues in the Appalachian Land Study Collective, a region-wide network of researchers and activists dedicated to continuing the legacy of the original Appalachian Land Ownership Task Force. Mass absentee ownership of real estate, along with these other issues with land and public revenue in the region, continue to inhibit the growth of equitable livelihoods and communities in the region. Through research and advocacy, LiKEN is committed to reforming these unjust systems. We are also in knowledge-sharing networks with the Southern Rural Development Center / Mississippi State, Center for Heirs' Property Preservation / South Carolina, and the Federation of Southern Cooperatives. Cassandra Johnson Gaither (US Forest Service), a leading scholar on heirs' property, is a principal investigator in all of our work on this topic.







Heirs' Property



Heirs' property is created when land passes without a will to two or more descendants who become "tenants in common". This kind of "tangled title" can make families vulnerable to predatory land grabs. Heirs' property correlates with low wealth and land loss in African American communities in the U.S. and is common in other regions with entrenched poverty (Central Appalachia, the colonias in southern Texas, and Native American communities).

This summer, LiKEN completed a study with the support of Alcorn State University that evaluates the efficacy of a major law that seeks to protect families who own heirs' property, the Uniform Partition of Heirs' Property Act (UPHPA). Drafted in 2010, this law is designed to help preserve family wealth and reduce the likelihood of forced sales and land grabs. LiKEN sought to understand how well this law has worked in Georgia and Alabama (where the law has been passed), and what its benefits might be if it were to pass in Kentucky.

We are also gearing up for another heirs' property-related study in eastern Kentucky. As part of a major grant from the USDA's Agriculture and Food Research Institute, we are partnering with the Center for Heirs' Property Preservation (CHPP), a legal aid and education center in Charleston, SC, to interview heirs' property owners in Appalachia about their land, their community's wealth, and their sense of place. CHPP has championed the rights and resources of heirs' property owners in the Carolina and Georgia lowcountry, and we are proud to have their guidance as we begin this work in central Appalachia.

FOREST FARMING PROGRAM

Appalachian Mother Forest Fellowship & Book Series

An anonymous donor has given a very generous gift of \$55,000 to LiKEN to institute the first in a series of fellowships to fund work on books about the waters and forests of Appalachia. These books will focus on the rivers and forests as ecosystems and as sources of human sustenance and meaning. This series will be open to texts that blend genres and are designed to reach wide and diverse audiences. To capture the complexity of this ancient mountain range, these books may weave together science, stories, and art. The goal of this series is to listen to the deep histories of human and non-human life in this landscape and to prepare for futures emerging in our century of climate emergency. The first fellowship began June 2021.

In association with series, we will encourage LiKENeers and LiKENaffiliated collaborators who are working on Appalachian Mother Forest writing or multimedia projects to self-organize into 'creativity pods' to support each other with substantive and editorial input, and progress marking as members' work unfolds.



Left: Forest Farming Apprenticeship Right: YMC Will Lewis and bee yard

Photos by Mary Hufford





Sarah Chayes, LiKEN Senior Fellow & first recipient of the Appalachian Mother Forest Fellowship

Sarah Chayes joins LiKEN in the capacity of Senior Fellow in order to work on a book to be published by Alfred A. Knopf, with the working title The Potomac: An Invitation to Change Course. This book will focus on the river itself and its ecosystem, weaving such scientific disciplines as archeology, botany, geology, and zoology together with mythic associations and understandings the natural phenomena in question. Chayes's subject(s) and approach interconnect with ongoing LiKEN projects and focus areas in multiple ways, so her fellowship is expected to help weave internal, cross-project connections. Sarah is the prize-winning author of Thieves of State: Why Corruption Threatens Global Security and On Corruption In America -- And What Is at Stake. For more about her distinguished career as a journalist and public scholar, see www.sarahchayes.org. She lives in Paris, France and Paw Paw, West Virginia.

KENTUCKY ENVIRONMENTAL FOUNDATION

The Kentucky Environmental Foundation (KEF), in partnership with LiKEN, continues to engage in multiple issues addressing disarmament, economic development and social justice, with a constant focus on the environment.

- KEF continues watchdogging the U.S. Chemical Weapons Disposal Program at the Blue Grass Army Depot (BGAD) in Richmond, KY. Of the 535 tons of chemical warfare agent originally stored at the Depot, over 180 tons have been safely destroyed.
- The disposal program employs close to 1,500 people and is scheduled for completion in late 2023.
- KEF is working with the Pentagon and regional economic development organizations to prevent a severe economic downturn upon completion of the mission, which has so far expended over a billion dollars in payroll since its initiation. We work to integrate that skilled workforce into the existing economy as well as attracting new, environmentally sound, businesses to the region.

KEF is also a founding member of the "Cease Fire" campaign, a national effort to curtail the military approach of Open Burning and Open Detonation of conventional weapons as a means of disposal. The public health and environmental impacts of this practice are obvious.

We are also working to protect Indigenous Environmental Defenders in South and Central America whose land rights and cultural traditions are being disrupted by big corporations and corrupt governments.



Craig Williams, Director of KEF's Chemical Weapons Working Group, inspects a weapons disposal facility.

Finally, KEF continues its advocacy for veterans health care through its affiliation with veterans and peace groups throughout the United States.

HELP SUPPORT
THE EFFORTS OF LIKEN
MAKE A DONATION

LiKEN is a link-tank for communities - to build capacity to grow good livelihoods based on local assets, to monitor community health and wealth to avoid boom and bust, and to take evidence-based action for future well-being based on deep understanding of the past. Please help sustain out work with a donation today!



DONATE ONLINE

www.likenknowledge.org/donate



MAIL A DONATION

LiKEN 109 Rosemont Garden, Lexington, KY 40503

NEW LIKENEERS!



CARSON BENN is the new program director for LiKEN's work in land and revenue. He recently completed his PhD in history at the University of Kentucky.

L to R: Mary Hufford, Betsy Taylor, Carson Benn, Rachel Eppley, Simona Perry, Julie Maldonado - enjoy a LiKENeer gathering at our Mothership office in Lexington, Kentucky in July. Photo by Betsy's smart camera on time delay.



SIMONA PERRY

One of the joys of 2021, was having Simona Perry return to LiKEN. In LiKEN's first two years, LiKEN was one of our 'founding mothers'. She now brings a remarkable diversity of gifts and experience to her role as a core advisor on communications. Simona Perry is an applied scientist with a passion for community dialogues, appreciative inquiry, local foods and lifeways, wild places and creatures, writing and teaching, and working alongside others to imagine and create beloved community. Trained as an ecologist and ethnographer, Dr. Perry has worked in rural and urban places across the US to document and raise awareness

of the interconnections between ecology, psychology, politics, and culture.



PATRICK AUSTIN FREELAND, Hvtvltvlke Mvskoke (Wind Clan, Muscogee Creek Nation of Oklahoma) is a graduate of Haskell Indian Nations University and Purdue University. Patrick centers his work through intergenerational knowledge-sharing and the utilization of interdisciplinary sciences, arts, and engineering -- to improve human and environmental health, social advancement, and intercultural understanding through reconciliation, collaboration, healing, and peace-making.

MADISON MOONEY is the new community engagement coordinator for collaborative work with Martin County Concerned Citizens in Kentucky. With Madison's Master's degree in Social Work, she brings a wealth of gifts. In the Mountain Drinking Water Project, her role is to work with the community, teach residents how to collect water samples, and inform them about how they can get involved. Madison is also working on the Land Study, Stories of Place, and an emerging solar project. Madison is thankful to have the opportunity to work within her home community at a career that will positively impact the future of residents of her hometown.





BETHANI TURLEY recently joined LiKEN to work as a Social Science Researcher in our Water Collaboratory. She is from West Virginia and her research is shaped by an interest in the ecologies and politics of chemical and fossil fuel industries in Appalachia. Bethani spent nearly a decade working in urban farming and local foods distribution in Ohio, where she cultivated a market garden and raised dairy goats. She is finishing a geography PhD at Portland State University, building on her earlier work in folklore, anthropology, and environmental sciences.

CAMERAN BAHNSEN is an undergraduate student at the University of California, Santa Barbara, and assisting in LiKEN's Climate Resilience work. She is part Assiniboine (Fort Peck Reservation, present-day Montana) and is working to implement more sustainable Indigenous foods/medicines, Indigenous gardening practices, traditional ecological knowledge, and cultural representation on campus.





ASHLEY WATKINS As an intern with the UK Appalachian Center, and then with UK Dept of Community and Leadership Development, Ashley did splendid work as the web designer for LiKEN's Stories of Place / Martin County. She is a senior in the University of Kentucky majoring in Writing, Rhetoric, and Digital Studies with a minor in Business Analytics. Her family history in Appalachia has driven her to learn more about the region. She is a sister of Theta Nu Xi Multicultural Sorority, whose goal is to promote leadership, multiculturalism, and self-improvement.