OBFS as Community

BY RHONDA STRUMINGER, PRESIDENT

What a fall it has been! Most of our member stations are thriving, but some were greatly impacted by hurricanes or face other unexpected situations. Please contact OBFS leadership or the listserv for help in solving a challenge – the community is here for each of you!

Our 2024 annual in-person meeting will be 11-15 November at the Baruch Institutes of Hobcaw Barony, South Carolina. Special thanks to OBFS Vice President and co-host Skip Van Bloem (Clemson), co-host Bill Strosnider (USC) and Meeting Chair, Tom Bansak (Flathead Lake Biological Station), who wisely scheduled it after hurricane season. Thanks to the entire planning committee:

- Scott Thomas, Hancock Biological Station, TN
- Teresa Schueller, UW-Milwaukee at Waukesha, WI
- Jason Wallace, Center for Desert Studies, CA
- Brett Biebuyck, Rocky Mountain Biological Laboratory, CO
- Sonia Nobrega, Queens University Biological Station, ON
- Sofía Rodríguez, La Selva Biological Station, OTS, CR
- Lara Roketenetz, University of Akron Field Station, OH
- Megan Napoli, Mohonk Preserve, NY.

This group has done an amazing job lining up plenary speakers and making sure the experience will be great. I encourage you to register for the virtual meeting experience, much of which will be available in simultaneous Spanish translation.

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ANNUAL MEETING 2024: OBFS IS "WINGING IT!" P. 11

Banner photo:

Bog plants at Shingle Shanty Preserve and Research Station, NY.

PROFILE: SHINGLE SHANTY PRESERVE AND RESEARCH STATION
—BY STEPHEN LANGDON

Shingle Shanty Preserve and Research Station is located on a privately-owned,15,000-acre (6,000 ha) property in a remote part of the Adirondack Mountains of northern New York. This region is situated in the North American Boreal Temperate Ecotone and the property features uplands dominated by temperate northern hardwoods, and a large (> 500 ha) boreal peatland complex.

This site has a long history of scientific research. In the late 19th century Gifford Pinchot—a leading figure in American forestry and later governor of Pennsylvania— wrote a harvest plan for the property that aimed to improve the sustainability of *Picea mariana* (black spruce). Two decades later, in 1917, a professor of forestry from the New York State College of Forestry (now the State University of New York College of Environmental Science and Forestry) evaluated the success of these harvest prescriptions.

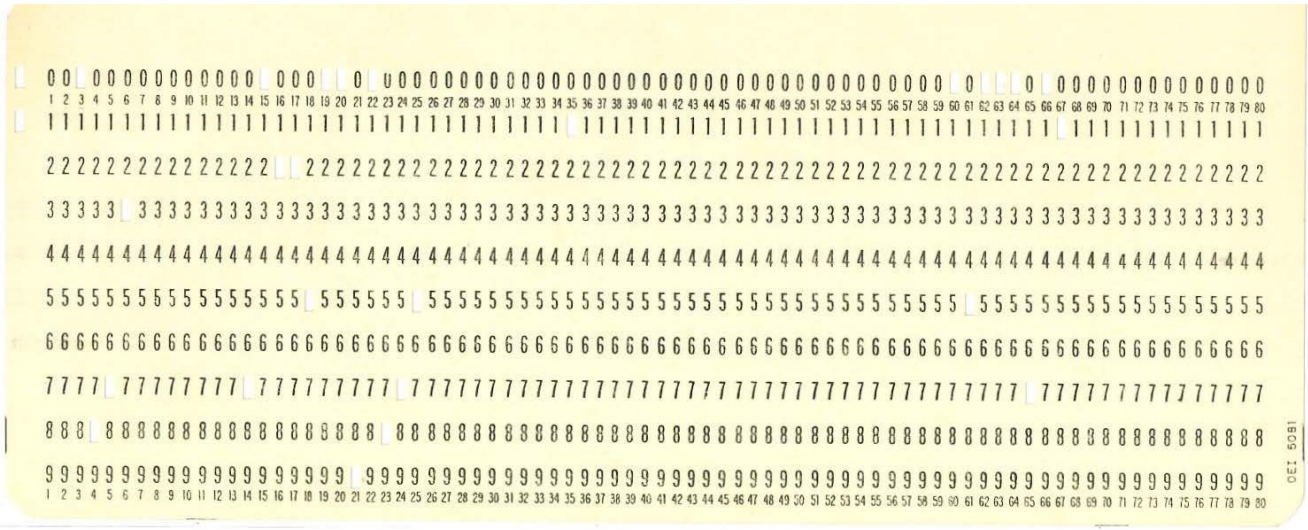
Wetlands abound on Shingle Shanty Preserve and Research Station; students explore the rich plant community.

In the 1970s Dr. Donald Potter, a geologist at Hamilton College, often brought students to the site. In 1979, one of those students, Jonathan Overpeck, published a paper that reconstructed the paleoecological history of the site from a 10 m peat core. Years later, after shifts in landownership structure Shingle Shanty Preserve and Research Station was established as a 501(c)3 organization with the broad mission of facilitating scientific research in the Adirondacks.

Since that time, SSPRS has hosted undergraduate classes and researchers from wide-ranging disciplines from universities, agencies and conservation organizations. Long-term monitoring of microclimates and boreal bird populations at their southern range extent have been the main focal areas of the organization.

We welcome inquiries for research opportunities directed through our website (www.shingleshanty.org) or via direct email director@shingleshanty.org.

Steve Langdon is Director of SSPRS.



An IBM punch card of founding members of OBFS from circa 1963 (above).

OBFS HISTORY INTERN—BY LOUIE PRETE

My name is Louie Prete, and I'm a senior at Clemson University. This summer I was the OBFS Historical Archivist Intern. I spent my summer in Georgetown, SC working at the Baruch Institute of Coastal Ecology and Forest Science with Skip van Bloem and the OBFS history committee. My goal was to digitize and organize historical documents.

Philippe Cohen and Mary Hufty shared many physical documents from their time as board members. I sorted, organized, and scanned these documents so they could be preserved and viewed more easily by OBFS members. I also started a comprehensive organizational system in the official OBFS cloud storage so newly digitized files, as well as preexisting files could be more easily found by members.

As I went through the documents, there were a number of interesting finds from the early days of OBFS. Perhaps the most unique was what is likely the first OBFS directory. It is an IBM punch card distributed by Dr. Arch Tryon of Pymatuning Lab of Ecology, PA (above). Dr. Tryon was the second president of OBFS. It appears to be from an early 1963 meeting of the future founding members (OBFS was officially founded in 1966). Along with this exciting find, I collected digital copies of all but one newsletters published between 1966 and 2002.

When I started as the Historical Archivist Intern, I was told that by the end of the summer I would be one of the most knowledgeable people about the history of OBFS. I was sure this was hyperbole, but throughout the summer I learned a ton about this wonderful organization. I am looking forward to sharing more of what I learned about the people and programs that shaped OBFS in its early years at this year's Annual Meeting in November.

Louie Prete is the OBFS History Intern.

Above: Louie Prete, OBFS' first Historical Archivist Intern. Below: Hobcaw Barony, site of the 2024 OBFS Annual meeting.

NOMINATE FOR VP, MAL1, TREASURER ON THE OBFS BOARD

IDEA+ COMMITTEE SPOTLIGHT: CLIMATE CHANGE & JUSTICE

In the wake of recent global climate disasters (e.g., hurricanes in the US, Amazonian wildfires, monsoons in India; EPA, 2021; Nuccitelli, 2024), this column considers the role Field Stations and Marine Laboratories (FSMLs) may play in supporting the resiliency of local communities in which FSMLs are situated. Notably, research demonstrates that climate change disproportionately affects historically marginalized communities (Berberian et al., 2022; Davis et al., 2021; EPA, 2021). For example, the United Nations Development Programme (2023) reports that climate change magnifies structural inequities based on race, ethnicity, gender, and socioeconomic status as climate-induced crises may exacerbate pre-existing conditions (e.g., safe housing, food security, access to water and sanitation.

What role can FSMLs play?

As argued by Berberian et al. (2022) "climate change is an environmental injustice that is likely to exacerbate existing racial disparities across a broad range of health outcomes" (p. 459). As such, what can FSMLs do to support historically marginalized communities negatively affected by climate change?

Integration and emphasis of Indigenous and local community Knowledge. Integrating and emphasizing Indigenous and local community Knowledge and voices in research can enhance our collective understanding of the natural world. The White House Council on Environmental Quality (CEQ) in 2022 released guidance on recognizing and including Indigenous Knowledge in research, policy, and decision making. Indigenous Knowledge can be defined as a body of observations, oral and written knowledge, innovations, practices, and beliefs developed by Tribes and Indigenous Peoples through interaction and experience with the environment and are some of many important bodies of knowledge that contribute to scientific, technical, social, and economic advancements.

Climate change is a justice issue.

Community oriented climate action plans. Davis et al. (2021) found that one of the biggest barriers to community resilience was a lack of historically marginalized community members in local public mitigation and recovery policy decision making. When developing FSML specific climate action plans, including members from historically marginalized communities in the planning and decision-making process could help to build community resilience and response in the event of a crisis and foster relationship building/trust between local communities and FSMLs.

Building relationships with local communities through PAR. Davis et al. (2021) also argues for the continued relationship building between organizations and local communities. One recommendation is to apply Participatory Action Research (PAR) for community-building capacity. PAR is a scholar–activist research approach "that prioritizes the value of experiential knowledge for tackling problems caused by unequal and harmful social systems, and for envisioning and implementing alternatives" (Cornish et al., 2023). Relationships and relationship building are central to the success of PAR

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Kendall-Frost FS ribbon cutting: Edie Munk, wetlands advocate; Vice Chancellor for Research and Innovation Corinne Peek-Asa; San Diego City Council President Pro Tem Joe LaCava; and Dean Kit Pogliano of the School of Biological Sciences. Credit: Erik Jepsen.

KENDALL-FROST MARSH RESERVE FIELD STATION —BY KELLIE UYEDA

UC San Diego's Kendall-Frost Marsh Reserve Field Station and Community Learning Center in Mission Bay, San Diego opened in May. The new facility provides overnight accommodations for visiting researchers as well as event space for student groups or community events. It also includes a large deck to serve as an outdoor classroom or birdwatching space.

This building replaced a 50-year-old trailer previously located on the same site. A colorful mural was carefully repurposed by UC San Diego art students into a bench and several decorative canoes that are located on the grounds of the new field station. Kendall-Frost Marsh Reserve protects half of the last 40 acres of wetland habitat remaining in Mission Bay, which historically contained 2,000 acres of emergent wetland.

It is part of the University of California Natural Reserve System and one of four reserves managed by UC San Diego; this library of natural areas supports research, teaching, and community service.

Kelly Uyeda, Executive Director, kuyeda@ucsd.edu

Below: A mural by Celeste Byers made into a bench and canoes by Sakman Mario Borja and UCSD students.

LACAWAC PLEON RECEIVES GOVERNOR'S AWARD —BY BETH NORMAN

Lacawac Sanctuary Field Station and Environmental Education Center sits in the heart of Pennsylvania's Pocono Mountains, a region known for its tourism and recreation. The more than 150 lakes in the Poconos are a critical part of the region's appeal. Pocono lakes are facing many environmental challenges, including warming temperatures, altered precipitation regimens, invasive species, increased runoff, and nutrient loading, all of which can degrade water quality and decrease aesthetic value.

Many Pocono lakes are managed by private property owners or other civic associations. While these groups range in size and resources, all have the challenge of protecting and managing lakes in the face of the many stressors affecting the region. Data that describe changes in water quality variables over time are crucial to meeting this challenge effectively. However, developing and interpreting these datasets can be difficult, particularly for groups without scientific expertise. Lakes are complex ecosystems and deciding which variables to monitor and how often to monitor them can be significant barriers to action.

Above, right: participants discuss and sample lake health in the PLEON program.

Recognizing the need to facilitate evidenced-based lake stewardship in the Poconos, Lacawac started the Pocono Lake Ecological Observatory Network, or PLEON, with the goals to ***empower the public*** to better understand and manage their freshwaters, ***create a community*** of scientists and landowners working to preserve Pennsylvania's lakes, and ***collect and communicate ecological data*** that help inform effective lake stewardship and management.

Since its inception in 2017, PLEON has worked with 18 lake associations to collect water quality data on 31 lakes across three counties, many of which had little to no previous data. We also developed the PLEON Lake School, a two-day field intensive course where members of lake associations gain hands-on experience collecting and interpreting water quality data and learn stewardship best practices.

In 2024, PLEON was honored with a Pennsylvania Governor's Award for Environmental Excellence as well as the Partners Award from the Pennsylvania Environmental Council.

To learn more about Lacawac or PLEON, visit www.lacawac.org or contact beth.norman@lacawac.org.

Beth Norman is Director of Science and Research.

OBFS STATION EXCHANGE IN PERU—BY FRÉDÉRIQUE TRUCHON

In September, representatives from three OBFS member stations—Finca Las Piedras Research Station (Alliance for a Sustainable Amazon, Peru), the Field Research Centre (Hasselt University, Belgium), and the Gault Nature Reserve (McGill University, Canada)—gathered at Finca Las Piedras in the Peruvian Amazon for a week-long workshop. Made possible by the OBFS Matching Program, this meeting allowed station managers, researchers, and educators to share experiences, exchange knowledge, and explore collaborative approaches to advancing conservation and education initiatives.

We are deeply grateful to the OBFS Matching Program for the funding that made this gathering possible, reinforcing the importance of international collaboration in addressing shared environmental challenges.

To learn more about our stations: gault.mcgill.ca/en/news/detail/new-international-partnership-with-peruvian-and-belgian-field-stations/.

Above: the team in Peru with canine friends. Below: Johana Reyes co-founder of Finca las Piedras Research Station, showcases the station's Brazil nut tree phenology project. All photos credit Alex Tran.

Above, from left to right, Natalie Beenaerts (Field Research Centre), Martin Duval (Gault Nature Reserve), Johana Reyes (Finca las Piedras Research Station) and Frédérique Truchon (Gault).

Frédérique Truchon is the Communications Associate at Gault Nature Reserve.

OBFS STATION EXCHANGE: UMBS/UMN —BY CHRISSY BILLAU

The University of Michigan Biological Station (UMBS) and the University of Minnesota Itasca Biological Station and Laboratories (IBSL) took time this summer to learn from each other. Teams from each field station visited their counterpart's campus in June and August as part of an exchange program funded by OBFS.

Above: The UMBS team visits Itasca Biological Station and Laboratories.

"It was a huge success," said Dr. Aimée Classen, director of UMBS. "We could see our field station and operations through their eyes...We learned a lot — from ideas on research and academic programming to thinking about how to reduce paper waste in our dining hall." Classen led visitors from IBSL on a campus tour along Douglas Lake in Pellston, Michigan.

During their stay in northern Michigan, Dr. Jonathan Schilling, director of IBSL, and team explored laboratories and research sites at UMBS and met with Pellston staff to discuss administrative processes, facilities, and research and education programs. "This exchange has been a very good dollar-to-outcome investment by OBFS," Schilling said. "We all made connections that will be lasting. It is very reaffirming and efficient networking. That is a unique opportunity for those in operations roles who may not attend conferences. A rural field station job is very different from a job on an urban main campus."

In August a subset of the UMBS team traveled to the Itasca field station, which is nestled near the headwaters of the Mississippi River. "What a rewarding experience," said UMBS Associate Director Karie Slavik. "We have very similar challenges, and we learned from each other new ways to navigate them. Our field stations have different programming and land management styles, but the fundamentals are the same — our dedication to research and teaching."

Above: The Itasca team visits UMBS on the shore of Douglas Lake, MI.

"Even though we come from different institutional 'home teams,' it's like convergent evolution: we've both ended up with strikingly similar approaches to our work," said Dr. Emily Schilling, IBSL associate director. "This exchange was a fantastic opportunity for our IBSL staff to create new connections with UMBS colleagues who share our passion for field biology and perspectives on how to run a biological field station." Read the full SXP story here.

Chrissy Billau is Communications Specialist at UMBS.

CAREER PANEL AT ESA —BY CONNER PHILSON

At the Ecological Society of America (ESA) meeting in Long Beach, CA this past August, three OBFS members participated in a panel focused on careers for early career scientists at Field Stations and Marine Labs.

Given the variety and complexity of FSMLs across the globe, and the well-rounded skillset required to operate FSMLs, Megan Napoli (Mohonk Preserve, NY), Jessica Malisch (UC Merced Natural Reserve System, CA), and Marty Meyer (Pomona College's Robert J. Bernard Field Station, CA) provided their expertise and perspective.

Jessica's message was that FSML leaders "need both research experience and administration experience, and it is not straightforward how to acquire both of those skills." She outlined how picking up opportunities for administration work though graduate school may be an excellent way to start developing these skills.

For those curious about careers at FSMLs, consider connecting with your local FSML leaders (or an OBFS Board Member) to get their story and career path and getting involved with OBFS (e.g., though our email listserv, by attending our Annual Meeting, and/or engaging with a Committee).

Conner Philson is the OBFS Outreach & Communications Chair.

(Continued from page 4)

(and FSMLs), as the research approach brings together community members, activists, and scholars to co-create knowledge and foster positive change.

As climate change-related disasters are expected to increase, integrating Indigenous and local community Knowledge in research, including members of marginalized communities in climate action planning, and building relationships with local communities through PAR will help our communities' abilities to adapt and recover from climate-change-related disruptions. Interested in continuing the conversation? Attend the wide range of IDEA+ centered sessions at the upcoming OBFS annual meeting to continue these important conversations!

If you are interested in additional resources, have content that you would like to submit for the IDEA+ Spotlight, or are interested in joining the IDEA+ committee please reach out to Tori McDermott (vmmcdermott@alaska.edu), Phoebe Jekielek (phoebe@hurricaneisland.net) or email diversity@obfs.org

INTERNATIONAL COMMITTEE NEWS

Is there a subject you wish you could discuss with other field stations but haven't made the time?

Is there a speaker you have wanted to hear from but haven't had the opportunity?

Do you want other field stations to learn more about what is happening in your corner of the world?

Are you looking for help with a particular challenge?

Let the International Committee know and together we can organize a one-hour Virtual Café on the topic of your choice!

Send an email to david.maneli@mcgill.ca with your ideas or suggestions.

Events Calendar

Stay in the know: scroll to the bottom of the OBFS Events webpage https://obfs.org/events/ and click "Subscribe to Calendar." It's easy!

ADAPTING TO CLIMATE CHANGE IMPACTS —BY ELLEN HOLSTE

In 2021, a local business owner approached Pierce Cedar Creek Institute interested in reducing their carbon footprint. The Institute saw an opportunity to bring together land management, field station research, and community outreach by highlighting the local effects of climate change while addressing ecosystem health and resilience. The Climate Resilient Land Management (CLRM) program was born.

Much climate change research focuses on the rate and scale of climate change or species shifts across space and time. The Institute wanted to address the more localized challenges facing land managers. Through this lens, we focused our efforts on 1) encouraging carbon sequestration, 2) maintaining and enhancing biodiversity, and 3) promoting climate-adaptive species management. Educating the community to implement similar measures on their property was equally important.

The Institute aimed to document, monitor, and evaluate effectiveness to inform property-wide management. We collected floral and fauna baseline data on a 65-acre parcel and tested several protocols to evaluate which biodiversity metrics would be good indicators of ecological health. Bird and lepidoptera species are widespread and sensitive to climate change, but birds were easier for volunteers to record and identify. We also offered community stewardship experiences, such as removing invasive species, prescribed fire, collecting seeds, and planting native species.

As of 2024, we have funded 6 CRLM-related projects, 14 student researchers, and 4 fellows. Projects focused on enhancing biodiversity, including rare herpetofauna (e.g., eastern massasauga rattlesnakes, eastern box turtles, western lesser sirens) and marsh birds; carbon storage by plant community types; and harmful algal blooms. Staff will monitor the impacts of the CRLM management practices and shape future activities.

The Institute is committed to CRLM to help ensure our property grows resilient and healthy for future generations. For more information about the project visit CedarCreekInstitute.org/stewardship.

Above: Testing monitoring of fauna and carbon.

Ellen Holste is Research and Community Engagement Manager (eholste@cedarcreekinstitute.org) .

HOW TO FIND US

www.obfs.org/

@joinobfs

@OBFS-FieldBio

YouTube

The Virtual Field

@obfs_org

Organization of Biological Field Stations

STACY MCNULTY, EDITOR
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2024 AUCTION THEME: WINGING IT !

Baruch Institutes of Hobcaw Barony, South Carolina, November 11th – 15th

Alligators, awards and an auction, oh my!

The theme of the Annual Meeting is "Rising Tides and Winds of Change: A New Generation for Field Stations". This theme embraces the role of OBFS in lifting each other up in the midst of challenges such as the underappreciated role of field stations, academia and science in society; a divided political landscape; and the impacts of climate change and natural disasters on our built and natural environments.

The 2024 OBFS Meeting Theme is "Rising Tides and Winds of Change: A New Generation for Field Stations"

Virtual attendance registration is still open:

https://obfs.org/annnual-meeting-registration-page/

We hope to see you all in South Carolina!

RECENT PUBLICATIONS

Click the link to access

The first article is part of a series of papers on plant blindness, teaching Indigenous foodways, rural intetnet access impacts and more in Integrating Diversity, Equity, Inclusion, and Accessibility into Natural Sciences Education.

- Spence, P. L., & Leggett, Z. H. (2024). A pilot program to expand career opportunities in conservation for students of color. Natural Sciences Education, 53, e20136. https://doi.org/10.1002/nse2.20136
- Traylor-Knowles, N., A. Bedi de Silva, A. D. Boyd, K. A. Callwood, A. C. D. Davis, G. Hall, V. Moreno and C. P. Scott. 2023. Experiences of and support for black women in ecology, evolution, and marine science. Frontiers in Marine Science. DOI 10.3389/fmars.2023.1295931
- Ruskin, K., J., Z. T. Wood, H. C. White, S. O'Brien, and D. M. Allen. 2024. Short, Early Field Research Courses as a Model to Increase Equity in Ecology. *Ecosphere* 15(6): e4912. https://doi.org/10.1002/ecs2.4912