CMU. BIOLOGICAL STATION

OBFS as Inspiration

BY LARA ROKETENETZ, PRESIDENT

Like some of you on an academic schedule, I am taking advantage of the summer months to get away for a short respite. I feel lucky to be able to do so! Many others of you are in the middle of hosting students, deep into your research, or running camps for younger scientists - and vacations and relaxing are far from your minds.

I'm mentioning it because this year my family time took me to the Apostle Islands in Lake Superior, across the Upper Peninsula in Michigan, and to my parents' cabin on Torch Lake, where I am looking out over the water as I write this now. It struck me (as it often does) how my personal love of nature is reflected back to me in OBFS and our important work at field stations.

I get reinvigorated and motivated by my own experiences in nature and by the many others I meet who are making their own emotional and physical trails to connect people in their communities to nature. I went to a ribbon cutting for a nature preserve here in a small town, made successful by the hard work of volunteers and helping hands from community foundations and land conservancies, and there was a child there with a shirt that said "Nature is for Everyone." OBFS and member field stations are working to make this sentiment a reality through our individual and shared goals. I hope that helps you feel inspired and rejuvenated too.

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ANNUAL MEETING: "YOU'RE IN FOR A TREAT AT CMUBS!"

Banner photo: Sheena Parsons, KUFS, visits CMU's John Gordon at Beaver Island, MI

OBFS Newsletter-August 2022



Photos: YLPSI intern Mar teaches art class at the Yosemite Conservancy Nature and Art Center (top); Caitlyn helps with bighorn sheep surveys (middle) Joey conducts land surveys (bottom).

For more information about YLPSI: https://ylp.ucmerced.edu/ or contact Breeanne Jackson at bjackson10@ucmerced.edu.



A TALE OF TWO FIELD STATIONS—BY SHEENA PARSONS

Like so many others, 2020 had me longing to travel. So naturally, when the OBFS meetings went virtual, it was hard to resist bidding on station trips at the auction. I managed to win two trips to stations very different from my own and in keeping with that "go big or go home" attitude, I planned one epic road trip with my family to visit both in a little under two weeks in June.

My first stop was to visit John Gordon at CMUBS on Beaver Island, MI. CMUBS has great facilities and access to explore so many amazing spots. I recommend the trip to Miller's Marsh if you can make it to the island early.

Next we headed east and eventually made it over to see Phoebe Jekielek at Hurricane Island, Maine. Our stay on that island happened to overlap with a student group that was at camp that week, (continued p. 4)

"Yosemite Leadership Program Summer Internship continues to promote a mutual fellowship between the park and UC Merced"

YOSEMITE FS/NATIONAL PARK SERVICE INTERNSHIP - BY CAITLYN KLEMM, INTERN

The Yosemite Field Station is celebrating our 6th year hosting The Yosemite Leadership Program Summer Internship (YLPSI). This program offers a competitive and life-changing opportunity for undergraduate students from University of California, Merced to develop adept leadership qualities and explore a tailored pathway toward a career in land management.

Each intern is offered a position in a National Park Service or park partner work group. This summer, YLPSI hosts five interns: art and nature center intern Mar Lopez, engineering intern Joey Rivera, Indian cultural demonstrator Paul Sugimoto, Merced River restoration intern Karla Destephen, and Yosemite Field Station outreach intern Caitlyn Klemm. All five interns share a cabin at the Yosemite Field Station in Wawona and commute to their workplaces across the park from Curry Village to Tuolumne. Their experiences include astronomy teaching, land surveying, bead making, photo monitoring, and pollinator inventorying. Six weeks into their respective seasons, each intern is prompted with initiating a capstone project which encapsulates their learned skills and knowledge from over the summer. These projects extend from the digital compilation of research in the parks via a story map to designing a new campsite amphitheater.

Upon completion of their internship, interns receive a monetary education award as well as a Direct Hiring Authority with the National Park Service which allows them to be non-competitively hired into a permanent position. Yosemite Leadership Program Summer Internship continues to promote a mutual fellowship between the park and UC Merced by educating curious and driven students about National Park Service work and seeing them matriculate to the work force after graduation.



Dr. Beth Norman samples nitrogen in water at Lacawac Sanctuary, PA (above, right).

A CAREER IN FIELD STATIONS—BY BETH NORMAN

I visited my first field station as an undergraduate student at Bridgewater College when my ecology course took a field trip to the Mountain Lake Biological Station in Virginia. I completed my B.S. in Biology from Bridgewater in 2002, received a M.S. in Biology from James Madison University in 2006 and a PhD. from Virginia Tech in 2012. I am an aquatic ecosystem ecologist whose research focuses on understanding nitrogen dynamics in freshwaters.

Field stations have played a large part in my career. I conducted much of my doctoral research at the Coweeta Hydrological Laboratory, studying how nitrogen is transformed and transported within forested headwater streams. At that time, Coweeta was part of the Long-Term Ecological Research (LTER) network and the opportunity to interact with the researchers involved in LTER research was an invaluable part of my development as a scientist. My fellow graduate students and I often discussed how amazing it would be to come to work every day at a place like Coweeta. Following school, I spent two summers at the Experimental Lakes Area as a postdoctoral fellow researching effects of silver nanoparticles on lake ecosystem structure and function.

I am now the Director of Science and Research at <u>Lacawac Sanctuary Biological Field Station and Environmental Education Center</u>. Every day I work in 550 acres of Pocono Mountain forest with a pristine glacial lake, which makes my graduate student self smile. I conduct my own research, facilitate visiting scientists' work, help maintain the aquatic sensor network, and engage with the community. One of my favorite parts of my job is mentoring undergraduate interns. Lacawac is a small, independent field station where researchers investigate topics including the response of lakes to climate change, browning, and acid recovery as well as the impact of deer herbivory on forest structure and function. Students from many regional colleges and universities conduct research at Lacawac or come to Lacawac on field trips. I love to see these students because even short visits to field stations can be formative.

DEVELOPMENT HAPPENINGS

The Development Committee develops awareness and resources for OBFS as well as assists OBFS members to improve FS operations.

The committee will host a special learning opportunity during the annual meeting. This will be an immersive learning experience where a small number of OBFS members will attend a fund and friend-raising event after the annual meeting on Saturday, September 17th in Traverse City, MI.

Members will learn how to host their own 'small' events at their home stations. The event will include a threehour boat ride aboard a research and teaching vessel from the Inland Seas Education Association's Captain Thomas M. Kelly Biological Station and dinner after the tour. Members will visit with local community members, hear about ISEA programs, and learn to communicate the importance of field stations to the broader public.

Participation is limited; email Sarah Oktay at <u>sdok-</u> tay@gmail.com for details.

Development Activities

The committee, co-chaired by Brian Kloeppel and Sarah Oktay, meets monthly to discuss the needs of the OBFS community fundraising and building a donor base. At the annual meeting, FS directors present ideas and best practices in a concurrent session.



STATION EXCHANGE PROGRAM (SXP)

As part of the Strategic Plan implementation, OBFS has launched a station exchange program to facilitate professional development opportunities between member field stations.

The intent of this program is to provide mini travel awards to facilitate field station staff travel to other field stations in the OBFS network for shadowing, cross-training and mentoring opportunities.

Applications are due August 15 for travel awards of up to **\$1,000**.

For more details contact: Andy Rappe, adrappe@ufl.edu.

Photos for Web Site Wanted

OBFS is revamping its web site! Share some of your best photos of people, highlights, activities and scenes from all types of stations. Send pictures via this form:

https://forms.gle/ KdiNKAEAUG4TM8iLA

- by Paul Wetzel, Treasurer

A TALE OF TWO FIELD STATIONS—FROM P. 2

so we were lucky to catch student research presentations but also found time to hike every trail. If there is a trip to Hurricane Island in the auction this year, bid on it! And make sure you experience a spat bag. You will not be disappointed.

Visiting these stations offered the obvious opportunity to check out facilities and new sights, but for me it also strengthened a sense of community with other OBFSers connecting me to these other places through this

experience. John and Phoebe were incredible hosts and it was great to get a glimpse of their stations through their eyes. The auction theme for this year's annual meeting is "Invasive Species." I spend a lot of time as a land manager trying to find ways to minimize populations of introduced species, but as I reflect on my summer road trip, I may have a slightly softer spot for these invasives. This no-coaster is ready to pack up and become a transplant on either of these islands!

COLLABORATIONS CORNER - BY PAUL FOSTER

OBFS Member Survey-coming soon

OBFS has contracted Amanda Lindell to conduct a survey of the OBFS and broader field station community.

We expect to launch the survey in September. If you have suggestions for what data you would like see collected please contact me at pfoster@bijagual.org.

Liaisons

We are seeking liaisons to organizations with important connections with OBFS to facilitate the flow of information. Organizations include: NSF, LTER, ESA-SEEDS, NAML, UFERN, The Virtual Field, US Federal Land management agencies and NGOS and tribes. If you have an interest in serving as a liaison to an organization, please let Paul F. know.

NSF Partnership

The US National Science Foundation has published the solicitation announcement for the **Partnership to Advance Conservation Science and Practice (PACSP)**.

"The Program's focus is on conservation goal-related research that will directly translate to on-the-ground biodiversity conservation efforts. Proposals that adopt a convergent approach between climate change, conservation, and the health of ecosystems and the organisms therein are especially encouraged. Proposals are also expected to incorporate project outcomes within the context of broader societal impacts and, as appropriate for the research proposed, engage non-academic partners in collaboration." Proposals are due October 11, 2022.



The LEED Gold research and education facility at Rice Creek Field Station, Oswego, NY.

RICE CREEK FIELD STATION — BY KRISTEN HAYNES & KAMAL MOHAMED

In 1957, Professor John A. Weeks arrived at SUNY Oswego and asked, "Where's the field station?" As a field biologist, John knew the value of offering students and faculty a dedicated site for hands-on learning and research. Almost ten years later, John's vision became a reality. In 1966, the college acquired roughly 350 acres of agricultural land located a mile south of main campus and began to build a facility and transition the landscape from farmland to forests under different successional stages, fields, and wetlands. John designed the earthen dam and fish ladder in Rice Creek, which created Rice Pond and its surrounding wetlands. The field station officially opened in 1966 and began serving SUNY Oswego and the surrounding community as a hub for college instruction, research, and public education in the natural sciences-a threefold mission that persists to this day.

In 1986, a group of community members and college faculty formed Rice Creek Associates (RCA), the support group for the field station, which raises funds to support programs like the Rice Creek Reflections speaker series, the Small Grants Program for research and scholarly projects (over 100 to date), the Ruth Sachidanandan Herb Garden, trail improvement, and scholarships for Rice Creek's Exploring Nature children's camp. RCFS established the Canal Forest Restoration Project to restore three species of white oak and white pine trees in New York State's Canal Regions. The project hires interns, educates about native trees, and distributes hundreds of trees annually.

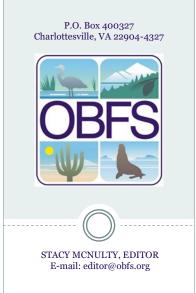
In 2013, the original facility was replaced with a new LEED Gold main building, an astronomical observatory and wired pavilion. With classroom and laboratory space and updated equipment, Rice Creek hosts over fourteen SUNY Oswego classes each year, primarily in biology and zoology. RCFS also serves as a retreat center for campus, offers nature-based wellness events, and creates a peaceful place for reflection.

From a biological sciences perspective, the field station's location is important to millions of birds migrating annually near Lake Ontario. Visit: https://www.oswego.edu/rice-creek/home.





Organization of Biological Field Stations



2022 AUCTION THEME: INVASIVE SPECIES!

Central Michigan University Biological Station, Beaver Island, Michigan, September 14th – 17th

GRINNELL AWARD RECIPIENT— DEEDRA MCCLEARN

The American Society of Mammalogists awarded the 2021 Grinnell Award for teaching to Dr. Deedra McClearn who gave a plenary address at the ASM 2022 meeting in Tucson, Arizona.

ASM reported that Deedra is known for her "impact on graduate and undergraduate students from the US and internationally" including work in Costa Rica, South Africa and China. Deedra is well-known as a fierce "champion of efforts to support and include local students, educators and researchers into the study abroad program."

She said "ASM is a great society...it reminds me a lot of OBFS in its size, attitude, and friendliness. They even have a crazy auction! Right now, the society is pushing for more inclusion of international students and the Latin American student group is particularly strong."



Dr. Deedra McClearn in Costa Rica

Deedra retired but remains involved in education, developing modules for tropical biology courses to be freely available online. **Congratulations Deedra!**

RECENT PUBLICATIONS

Click the link to access

<u>An Informal STEM Outcomes Framework to Drive Creative and Cul-</u> <u>turally Inclusive Planning, Design, and Evaluation</u>—Wasserman et al.

Early users have reported that the Framework:

- Promotes important dialogue at each program phase
- Aids in strategic planning
- Helps to aticurlate an overview of institutional educational intentions
- Parses learning outcomes to realistically reflect contact time and experience
- Focuses program planning
- Builds practitioner capacity
- Builds evaluation capacity
- Aids in communication to and collaboration with value holders (aka stakeholders)
- Creates a full context for learning
- Provides language and data for communicating impact