In early August, the DDCSP Collaborative teamed up with the Ecological Society of America’s SEEDS (Strategies for Ecology, Education, Diversity, and Sustainability) Program for the ESA’s 100th Annual Meeting in Baltimore. Even with attendance estimated at over 5,000 participants, our DDCSP Collaborative Scholars stood out for their enthusiasm, professionalism, and drive to succeed. Through their participation in the SEEDS program, each student was able to choose an individual mentor to get to know and learn from during the meeting. Students met with their mentors daily and attended various meals, talks, and poster sessions together. Our DDCSP Collaborative Scholars also had the opportunity to get to know the 30 additional students taking part in the SEEDS program and to expand their professional networks. In addition to networking, our students attended workshops and talks of their choosing and presented posters about the summer research projects they completed during their first summer in the program. We would like to thank Teresa Mourad and Fred Abbott at ESA for making this such a memorable experience!

“SEEDS program provided an integral community for students to interact in a safe, welcoming, and professional environment while developing ecological skill sets. I felt at ease in an intimidating environment with the support and encouragement of other SEEDS students and mentors. If it weren’t for the DDCSP Collaborative and the SEEDS program, I would not have had the opportunity to take part in the ESA centennial convention and to create so many lasting connections.” —Sandy Marin (UA 14)
Students Win Programming Awards at ESA

Houston Harris (UA 14) and Elyce Gosselin (UI 14) both took part in the “Simple App Creation for Ecologists” Workshop and Eco-Hackathon, sponsored by the ESA Committee on Diversity and Education. The workshop provided an in-depth introduction to Android app development using the MIT App Inventor platform. They then worked in groups to develop original apps for use in ecology education, outreach, and research.

Houston’s team won first place in the Beginning Developers category with their “Quadrat” app and Elyce’s team came in third with their “EcoPic” app. The Quadrat app allows users to take a picture of a given area and use their finger or a stylus to shade in up to 5 different areas of the picture to get a percent cover estimate of each area. The user can also save their GPS location and record the plot ID number and users name to their phone’s SIM card. Great work Houston and Elyce!

“I think that going through the workshop will help me in the future by allowing me to make more apps that are tailored to my needs whether it’s for more data collection or educational purposes.” – Houston Harris (UA 14)

Summer Research Projects at UF

The 2015 UF students spent a week at UF’s Seahorse Key Marine Lab learning field techniques before beginning their summer projects. For their projects, Jeanelle Brisbane and Charmaine Pedrozo worked with graduate student mentor (GSM) Brian Smith, assisting with his research on movements of invasive Burmese pythons in the Everglades. Jeanelle’s independent project was on occupancy of different frog species in Everglades National Park and Charmaine led a project looking at the occurrence of native snakes on the Main Park Road. Sharmin Siddiqui, Monica Quintiliani, and Megan Ely worked with GSM Nichole Bishop at UF’s Whitney Marine Lab. Shar studied nutrient cycling in sea turtle nests, Monica studied the effectiveness of man-made oyster bars as living shorelines, and Megan Ely used camera traps to study mammal diversity at Washington Oaks Gardens State Park.

Summer Research Projects at UA

The 2015 UA students assisted graduate students with projects on bighorn sheep in the Catalina Mountains and gray hawk nesting ecology in the San Pedro Riparian National Conservation Area near Sierra Vista, Arizona. Analysis is ongoing, with Kalyn Miller studying bighorn sheep diet in relation to water intake, Kali Richardson studying the effect of human trail usage on habitat use by local wildlife, Briana Booker measuring diet variability in bighorn sheep, Andres Piedra using trail camera data to catalogue biodiversity in the Santa Catalina mountains, and Heatherlee Leary studying whether the frequency of alarm calls by nesting gray hawks was related to proximity to human disturbance and whether alarm call frequency was related to nesting success.
Summer Research Projects at NCSU

For their summer research experience, the 2015 NCSU students spent a week in the Outer Banks helping Shilo Felton with her research on the nesting success of American Oyster-catchers correlating with human disturbances such as the use of 4WD vehicles on the beaches. They then traveled to the western part of the state to help Kara Dziwulski track small mammals and determine their habitat usage on Christmas tree farms. After that, the students spent a week in Raleigh where they learned about aquaculture/aquaponics, toxicology, fisheries, and wastewater treatment from an aquaculture facility. They wrapped up their summer with two weeks in Puerto Rico where they assisted Gus Engman and Dr. Jesse Fischer with their research on amphidromous fish species like the Sirajo Goby. The students collected stomach contents of predators to determine the changes in diet composition associated with large runs of Ceti back to freshwater as well as surveying the Ceti fishery.

- Supplied by Adriane Gill, Graduate Student Mentor

Summer Research Projects at UI

UI students learn about fisheries projects with faculty mentor Christine Moffitt

After CLW, UI students spent a week with Idaho Fish and Game learning about fisheries projects. Then Anna Miera, Michael Briggs, and Viviana Nuñez went to work on projects in Craters of the Moon National Monument with graduate student Jamie Jarolimek. Anna gathered data on Lewis’s woodpecker nest success as it varied with land use. Michael examined how tree cavity microclimates might be influenced by tree health, and Viviana compared measures of avian diversity in aspen stands that had various levels of grazing. Aron Oliveras and Keala Bush worked with graduate student Amanda Goldberg on research for the federally endangered Northern Idaho Ground Squirrel. Aron evaluated the effectiveness of 3 different methods to capture this species, and Keala collected data on the relationship between soil types and Northern Idaho Ground Squirrel colonies. The UI group also spent a week gaining additional experience in fisheries management and small mammal trapping in collaboration with the Nez Perce National Historic Park.

The 2015 Cornell students split into two groups. Eliza Bonner, Kelly Ventura, and Catherine Louie spent their summer at the Cornell Biological Field Station at Shackelton Point, and Nana Britwum and Elizabeth Chi spent their summer at Cornell’s Arnot Teaching and Research Forest. Eliza studied phosphorus dynamics in Oneida Lake, Kelly studied the impact of lighting on barn swallow physiology, Catherine studied zooplankton grazing patterns in Lake Michigan, Nana studied the effect of woody litter and canopy cover on ecosystem processes, and Elizabeth studied forest stand recruitment in relation to environmental factors.

Kelly Ventura and Catherine Louie on an open-water sampling trip

"It was an extraordinary experience. I got to travel across the country and across my state, exploring places I had never been and learning the entire way. I got to conduct research in an area I’d never spent a lot of time in, and I developed a deep appreciation for that region and the animals and plants we were working with that I will always carry with me. The opportunity I had to work with a wonderful team of people made the entire experience even more inspiring.” – Anna Miera (UI 15)
DDCSP Collaborative is Springboard for Further Success

Last spring I was fortunate enough to win the Udall Scholarship, which is an award that honors the legacy of Stewart and Morris Udall by giving to college students interested in environmental science, tribal public policy or tribal health care. The scholarship included a four-day orientation in Tucson, Arizona at the beginning of August, during which the 50 scholarship winners got to meet each other and network with professionals in different fields. The days were packed with workshops and lectures and we also participated in a mock case study where we acted as different stakeholders working to solve a water scarcity problem. I got to meet great people like Mark Udall and Diane Humetewa, who were very inspiring and who helped solidify my interest in a career in conservation. The combination of this experience, my internship with the Florida Fish and Wildlife Conservation Commission and the ESA National Conference made this summer a great learning experience that I can build off of going into my senior year. I don’t think I would’ve had the opportunity to win the scholarship without the help of the Doris Duke Conservation Scholars Program. The research and internship experience I got from my first summer of the Doris Duke program was very important in making me competitive for the scholarship.—Steven Ingram (CU 14)

Graphic Arts for Youth Engagement at the FWC

I was given the opportunity to intern with the Florida Youth Conservation Centers Network (FYCCN), which is through the Florida Fish and Wildlife Conservation Commission (FWC). I was able to assist in the graphic design efforts. This includes development and maintenance of digital projects, including animated graphics, logo design, website, infographics, brochures, and signs. During breaks from the office I was able to visit some of the camps that I made designs for. At the camps I was able to interact with the youth as well as experience the great outdoors of Florida. I’m used to making designs behind a computer screen so it was very exciting and therapeutic to get away and visit the camps. At the camps I shot my first rifle and I also caught a few fish, it was awesome.

Overall my journey at FYCCN was great. This wouldn’t have happened without the team that welcomed me and allowed me to come in, learn, and design: Sara, Rae, Kelly, Kaitlyn, Josh, Robin, and, Lexi. Especially Sara, who was adamant about me using my time at FYCCN to grow as a designer and also took the time to help me learn vital skills that designers need. I’m very grateful for the opportunity and friends I gained. - Adreenah Wynn (UF 14)

To learn more about our Scholars’ internship experiences, check out the blog: ddcspcollaborative.wordpress.com

DORIS DUKE CONSERVATION
The Ideal Internship: Protecting the Land I Love

I had an amazing summer working at the Finger Lakes Land Trust (FLLT) in Ithaca, NY. The FLLT mission is to protect land in the Finger Lakes region of New York. The FLLT put me to work doing public outreach, helping administer the deer management program, conducting visitor surveys, writing a newsletter article, building new hiking trails, researching how climate change may affect land protection strategies, and going on conservation easement and nature preserve monitoring visits. A few weeks into my internship I arranged with the Director of Stewardship to write management plans for two of the newest nature preserves. Then, while doing research for a newsletter article I was writing, I discovered the New York Phenology Project (NYPP) and their network of phenology trails in New York state. I proposed creating something similar for the FLLT and with staff approval, I started planning the Phenology Trail with guidance from the NYPP. When complete, participants of the Phenology Trail will record the current phenophase of each study tree at observation stations along the path. These observations will then be submitted to the National Phenology Network’s database for tracking the impacts of climate change. There’s a lot more to do, including designing educational materials and installing the stations, so I’ll keep volunteering until next summer to ensure the project gets off the ground. Working with FLLT staff and volunteers to create the Phenology Trail, finish two management plans, and complete other projects was an incredible experience. Many times I was unsure whether the Phenology Trail would actually come to fruition, but I worked hard and didn’t give up. The support of the DDCSP not only provided me with an amazing summer internship and great connections to professionals in the conservation field, but also encouraged me to be a leader in the workplace.—Hannah George (CU 14)

http://www.fllt.org/phenology/
During the 2014-2015 academic year, DDCSP scholars worked on group projects to create a communication platform that would help a local organization within their community publicize their work. As always, the DDCSP scholars exceeded program expectations, and created webpages and public communication brochures that were of real value to their community. These included the Nature Rx Blog at Cornell; an updated website for the Walnut Creek Wetland Center in Raleigh, NC; educational materials for Seahorse Key Marine Lab at UF; a social media campaign for the Tucson Audubon Society; and educational materials for the Nez Perce National Historic Park Visitor Center, which are currently on display. As proud as we are of the scholars accomplishments, this year we will not have group projects. Instead, students will concentrate on their classes and on analyzing, writing up, and presenting the results of their summer research. In keeping with our spirit of service, however, our students plan to come together as united teams (2014 and 2015 scholars) to give back to the community via volunteer activities. At NCSU, students began volunteering at the Boy’s and Girl’s Club in Raleigh last spring. We look forward to updating everyone on DDCSP Collaborative volunteer efforts in the Spring Newsletter.

Sakshi Handa (NCSU 14) helps make recycled paper at the Raleigh Boys’ Club

"The desert is harsh, but it rewards you through the small details."
- Quote and photo by Kali Richardson (UA 15)

Demetrius Tillery (NCSU 14) has discovered a passion for environmental education while working with the Raleigh Boy’s Club

We would like to express our appreciation to the families of our students and to all of you who lend your time, expertise, kindness, and support in order to make this program possible. The DDCSP Collaborative is housed and administered at the University of Florida/IFAS and is funded by the Doris Duke Charitable Foundation. We are also grateful to our collaborating universities, the USGS Cooperative Research Units, the USFWS National Conservation Training Center, and to all of our graduate student mentors and research and internship hosts and supervisors for their support of our program.

We hope that all of our scholars have a great Fall, and wish the same to all of the DDCSP Collaborative’s friends and supporters! We look forward to sharing students’ Fall experiences with you in our Spring newsletter. If you would like to sign up to receive future newsletters, please click here to provide your email address. For more information about our program, please visit http://programs.ifas.ufl.edu/ddcsp

Best wishes,

Rena Borkhataria
Dr. Rena Borkhataria and the DDCSP Collaborative Team

Rena R. Borkhataria, Ph.D
UF/IFAS Everglades Research and Education Center, Wildlife Ecology and Conservation
Executive Director & Program Coordinator - DDCSP Collaborative
3200 E. Palm Beach Rd, Belle Glade, FL 33430
Phone: 561-993-1599; Fax: 561-993-1582