



1. Conservation Foundation of the Gulf Coast

Organization's Mission: To protect the land and water in Southwest Florida for the benefit of people and nature.

Project Description:

Conservation Foundation is a regional not-for-profit working in Southwest Florida to protect land for the benefit of people and nature. Ensuring the well-being of natural resources and managing public access are the primary responsibilities of land managers working for State (e.g. FL State Parks), local (e.g. County Parks), and private conservation entities (e.g. Conservation Foundation). Conservation Foundation stewards twenty-five conservation areas in four counties. Land stewardship is coordinated by Land Stewardship Manager Lee Amos and Land Steward Esmeralda Figueras, who will involve interns in the monitoring and management of Foundation properties.

Specific opportunities include, but are not limited to: 1) Participating in land management & restoration 2) Monitoring conservation areas.

Through this program, student interns will gain a better understanding of conservation lands management – threats, opportunities and solutions related to natural resource protection. *2024 Program Emphasis – Wildland Restoration and Management. During 2024, Conservation Foundation is especially seeking help with restoring natural areas, planting trees and managing invasive exotic plants though both herbicide application and volunteer events.

Learning Outcomes:

- 1) Understanding of conservation fundamentals, including resource identification and management planning and action
- 2) Understanding of land conservancies, common land protection methods, and the preservation of community spaces
- 3) Understanding of invasive plant control, including identification, triage assessment, and control methods.
- 4) Understanding of conservation easements, their monitoring and enforcement, and the role that easements play in a healthy community (e.g. preserving public spaces and working farmlands)

Qualifications:

- 1) Interest in natural history and conservation.
- 2) Excellent interpersonal and written communication skills.
- 3) Ability to work both independently and as a member of a team.
- 4) Ability to organize and manage volunteers.
- 5) Ability to develop and maintain positive working relationships with a diversity of people, including in conflict situations.
- 6) Competent with Microsoft office suite – namely, Excel, Word, PowerPoint
- 7) Valid Florida driver's license and proof of insurance
- 8) Personal transportation

Hours/Dates/Location:

30 hours per week; starting mid May through August, 10 weeks maximum. Travel is required. Interns will be reimbursed for mileage, but a personal vehicle is required of interns. The primary locations of work will be 400 Palmetto Ave, Osprey and 9600 Wauchula Rd, Myakka City. All necessary equipment will be provided, including computer, internet access, tools, and PPE.



2. Manatee County Natural Resources Department, Environmental Protection Division

Organization's Mission: Health for the community and environment

Project Description: Tailwater runoff from deep groundwater irrigation appears to have impacted surface water quality in eastern Manatee Co. streams. Trends appear to be visible in old water quality data. Data-mine ambient water quality data from a pre-mining environmental impact study for the Duette Mine, a proposed phosphate mine in eastern Manatee County, that was collected in the early 1980's. Compare ambient water quality during this period with current observations from Manatee County monitoring data. Estimate magnitude of any long-term water quality changes in eastern Manatee County since the 1980's. Report findings in a written report and place work in a recognized repository for future review.

Learning Outcomes:

Interns will:

- 1) Demonstrate understanding and application of the practices and protocols of US EPA Participatory Science model and the tenets of Open Science model (esp. "Tidy Data" and "Repositories") to ensure quality, reproducible results.
- 2) Apply knowledge to design, document and implement an investigative assessment of long-term water quality trends in eastern Manatee Co.
- 3) Communicate findings in a professional manner and post project details in a recognized repository for the benefit of future investigators.

Qualifications:

This internship is perfect for a current undergraduate in natural or physical sciences that's interested in pursuing a career in environmental science. Computer and data management skills are required. An interest in data science desired.

Hours/Dates/Location:

27 hours per week for 10 weeks; beginning June 3rd to August 8th.

Physical location will be: NRD, Environmental Protection Division, 1501 Dam Rd., Bradenton 34212. This office is between the Water Treatment Plant and Lake Manatee State Park.



3. Assessing Seagrass Relationships

Organization's Mission: New College of Florida prepares intellectually curious students for lives of great achievement.

Project Description:

The goal of this project is to study ecology, morphology, and reproduction in Sarasota Bay syngnathids (seahorses and pipefish) and assess the health and composition of seagrass beds. The official running title for this project is "Assessing Syngnathidae-Seagrass Relationships". The goal of this internship is to collect and process samples from year-round sampling efforts in Sarasota Bay led by a New College of Florida professor. Interns will be involved in the project to develop sampling methods and protocols for processing the samples. While we do have a sampling protocol already, involving interns in the design of the project engages you in its design and allows you to think about its execution and important components. These training activities will show interns how to conduct marine ecological surveys, and interns will be able to execute their designs throughout the internship. There will be assignments associated with learning about the necessary background information for this project. Based on this and group discussions, interns will be able to develop an independent project in an area of their choosing related to seagrass and syngnathids. Students may choose to focus on the seagrass and study their abundance, parasitic epiphyte communities, or even the plankton surrounding them. On the syngnathid side, students can choose to investigate anything from abundance to morphology or behavior. While you work on your independent study projects, you will also engage in monthly surveys of seagrass beds in Sarasota Bay. In conjunction with the surveys, interns will work on processing the samples we collect during this internship, as well as those collected throughout the year. The end goal of the student projects will be to develop a final product that could range from a research poster to a paper report. Students would be welcome to any data collected for the project to accomplish this goal. Ideally, the interns would present their work at a local conference.

Learning Outcomes:

1. Experimental design, including the design of field surveys and the development of sampling regimes.
2. Collect and process data in the field and lab.
3. Analyze data related to ecology and morphology.

Qualifications

Students can be trained on any aspect of the internship. With that said, a passion for field and/or lab work is necessary for the successful completion of this internship. Having an introductory biology class is preferred.

Hours/Dates/Location:

Interns will work for 20-25 hours per week for 10 weeks. June 3rd – August 12th. Due to the primarily field-based nature of the internship, some weeks may require fewer hours.



4. STEM Project – Intensive Summer Program

Organization's Mission:

New College of Florida prepares intellectually curious students for lives of great achievement.

Project Description:

Students will be working with middle and high school students on an intensive summer program focused on hands on learning. These students will learn about the scientific process by conducting experiments and making observations related to the coastal and marine environments including saltmarsh function, eDNA techniques, sampling strategies, and data analysis. They will also participate in a VR simulation concerning impacts of ocean pollution on wildlife. Some simple programming will be taught. Interns will help with implementing experiments, assist students with lab and field notebooks, and learn how to do eDNA. They will learn, along with students, about how health of the bay impacts health of people.

Learning Outcomes:

Interns will:

- 1) understand best practices for science education for field and lab work
- 2) understand how eDNA is an important tool for ecology
- 3) learn how gaming and VR can impact learning

Qualifications:

- 1) understand best practices for science education for field and lab work
- 2) understand how eDNA is an important tool for ecology
- 3) learn how gaming and VR can impact learning

Hours/Dates/Location:

Internship begins in June through 3rd week of June

New College Campus - Heiser building and bayfront; one trip to Mote Marine

4 weeks total: 1 week with 5 hours for orientation / 2-3 week 30 hours each for interaction with students and 4 week for 5 hours for debrief and clean-up



5. Visual Documentation of 2024 EDAP Internships

Organization's Mission:

The Cross College Alliance is an education collaborative comprising five institutions dedicated to higher education and community building along the West Coast of Florida. We are colleges, universities and campuses with our own, distinct identities and offerings that share a common vision: to build a network among the region's educational organizations that amplifies and expands learning opportunities for our students and the communities that surround us. The members of the Cross College Alliance are: New College of Florida, Ringling College of Art and Design, The Ringling/FSU, State College of Florida, Manatee-Sarasota, and University of South Florida Sarasota-Manatee.

Project Description:

The purpose of the CCA-Visual Documentation internship is the creation of video documentation and appropriate copy communicating the experiences of students engaged in the 2024 Environmental Discovery Awards Program (EDAP).

A public presentation of the Visual Documentation will be presented at a CCA EDAP sponsored community event August 2024. CCA will archive the Visual Documentation and will have and hold rights to publish and distribute the Visual Documentation with credit being shared by CCA and the intern, i.e. photo credit: CCA/intern's name.

Qualifications:

The intern will need appropriate video and editing skills and writing ability as well as basic scientific and/or environmental literacy and course work. Intern(s) should have an interest in environmental communication and outreach.

The intern must have access to the equipment needed for the CCA Visual Documentation project and will need to provide their own transportation to the various EDAP internship sites.

Hours/Dates/Locations:

One (1) student will be selected to work an average of 20 hours per week for approximately 6 weeks to complete the deliverables for the internship. The locations will be the various organizations that are selected for this summer program.



6. AI + STEM Summer Program

Organization's Mission:

New College of Florida prepares intellectually curious students for lives of great achievement.

Project Description:

New College of Florida will be hosting a 2 week STEM summer program for middle/high school students from Sarasota/Manatee counties. During the STEM summer program these students will be introduced to Artificial intelligence and it's applications. Related activities will be centered around environmental awareness and education. Looking for 2 interns who will work as peer-leaders to

- a) co-develop a comprehensive 3 day program to teach computational thinking with AI applications.
- b) co-develop hands-on activities students can participate in to engage them further
- c) create sample code templates for the attendees to work on and ease into learning
- d) interact with attendees to help them through the lessons and build the game
- e) document the overall pedagogical experience, lesson plans and outcomes in a reflection report

Learning Outcomes:

- 1) Read and synthesize pedagogy research related to the use of artificial intelligence in the field of environmental science /conservation
- 2) Review software/programming languages to teach computational thinking through AI applications
- 3) Develop lesson plans and activities
- 4) Implement lesson plans and activities with the Internship supervisor

Qualifications:

Interns will:

- 1) have expertise in programming in (Python/C++ /Java)
- 2) familiarity with artificial intelligence tools such as ChatGPT and machine learning packages such as scikit-learn
- 3) has keen interest in environmental issues
- 4) willing to work one on one with middle/high school students

Hours/Dates/Locations:

20 hours per week for 3 weeks

Location: Heiser Natural Sciences Building 157E, New College of Florida

- 1 day between May 22nd - June 2nd - completing HR paperwork and background check at NCF to get ready to work (working with minors require background check and approval)
- June 2nd - June 24th (note this will include 5 hours on a Sunday prior to start of the summer camp for brief student orientation)



7. Virtual Reality Game Development

Organization's Mission:

New College of Florida prepares intellectually curious students for lives of great achievement.

Project Description:

Seeking 2-3 interns to join an exciting project to develop Virtual Reality (VR) games. The purpose of these games is to increase awareness about everyday actions such as disposing of non-biodegradable trash into the ocean or high-speed boats and its harmful impact on marine life and the ecosystem. The primary focus will be on developing VR games for Oculus Headset (headset VR) platforms to raise awareness by gamifying scenarios of impact. We then intend to conduct a pilot remote study to receive feedback regarding player immersion and engagement. There are a total of three spots available (hybrid).

Each intern will focus on 3 distinct roles to develop the simulation

- a) conduct background research on manatee movements, habitats and impact of everyday pollutants on manatee food sources and develop gamified scenarios.
- b) develop an Oculus Quest VR game related to the impact of everyday pollutants on manatee habitats/ food sources and creating 3D environments to support a VR games
- c) develop a framework to collect data and conduct user studies.

Learning Outcomes:

- 1) Learn about working in a collaborative environment with interdisciplinary colleagues and develop scenarios that can increase awareness about everyday actions on marine life.
- 2) Design and develop components of a Virtual Reality game for different platforms (Mobile and Oculus)
- 3) Learn how to use a game development engine (Unity 3D), a scripting language (C#), and 3D modeling software (Blender)
- 4) Learn how to develop data-storage frameworks to collect player-related game-play analytics to improve the overall usability of the product

Qualifications:

2 positions to work on development of VR simulation (hybrid) :

- a) have prior experience working with C#Unity3D game engine and deploying projects to an Oculus Quest headset.
- b) 3D modeling and experience with AWS is preferred but not required.
- c) analytics and data storage related to AWS and Oculus Quest

1 position for a student in any discipline (marine science/environmental science etc.)

- a) Has taken classes in introductory statistics and can do quantitative data analysis using R or Python or any other tool
- b) Is familiar with some elements of qualitative data analysis such as thematic analysis (exposed to the concept, but not necessarily an expert)
- c) has taken 1 or more classes in Introductory environmental science/biology / marine science etc.
- d) Interested in Manatees

Hours/Dates/Location:

15-20 hrs per week for 7 weeks / Begin June 1st – July 15th

Location: Heiser Natural Sciences Building - 157 E, New College of Florida



8. Sarasota Bay Estuary Program

Organization's Mission: The Sarasota Bay Estuary Program is dedicated to restoring our area's greatest and most important natural asset – Sarasota Bay. We strive to improve water quality, increase wildlife habitat, and enhance the natural resources of the area for use and enjoyment by the public. SBEP's mission is carried out through a partnership among local, state, and federal governments and agencies, scientists, and local communities.

Project Description:

Background

The Sarasota Bay Estuary Program was established in 1989. Over the past 35 years, the program and its partners have been actively working to restore habitats and waterways for the benefit of our local community and the more than 1,400 species of plants and animals that rely on the bay for survival. Habitat restoration projects can range from in-water reef installations to invasive removal and ecosystem management, to native plantings and wetland creation. A large part of the success of any restoration project involves outreach and education. As the estuary program looks back on its existing restoration projects and towards new ideas, the program aims to archive its restoration history and create an interactive, online tool for the public to explore and learn about existing and upcoming projects. This tool would help people understand the history of the land and local ecosystems and encourage visitation to perhaps some lesser-known places. Furthermore, SBEP is currently in the process of refreshing several older restoration sites, enhancing new habitats and recreational areas, and will be updating its five-year habitat restoration plan. The Restoration Outreach Intern would also receive exposure to the multi-step process of restoration planning and implementation.

Intern Responsibilities

The intern should be available for a portion of time during regular office hours (Monday – Friday from 9am – 5pm). Weekend or evening availability may be needed on occasion in addition to normal business hours. Access to reliable personal transportation is highly encouraged.

Work Activities

- Compile quantitative data (provided) for past SBEP restoration projects into an archive for internal use and as a foundation for an online tool for the public (15% of time).
- Conduct interviews with key partners and stakeholders that participated in past restoration initiatives (contact information will be provided) to capture the full story around key projects (15% of time).
- Capture high quality photographs of restoration sites as needed. XX camera will be provided (10% of time).
- From the data archive, interviews, and photography, create an online tool and/or publication (i.e. website plug in, GIS storymap, infographic) to showcase the restoration stories around key projects. (45% of time)
- Present the new tool to the SBEP Citizens Advisory Committee (5% of time)
- Accompany SBEP on restoration management activities in Sarasota and Manatee counties (5% of time).

This activity can include participation in our annual citizen science macroalgae program called Eyes on Seagrass and/or visits to various parks.

Learning Outcomes:

The intern will gain interdisciplinary knowledge in outreach, communication, and the process of large-scale habitat restoration. Working as part of a real life, collaborative project, the intern will learn the analytical and



8. Sarasota Bay Estuary Program (continued)

storytelling skills needed for effective communication and scientific interpretation. This experience offers opportunities to learn about local environmental management issues, large scale restoration processes, and network with researchers and managers to further professional growth.

Specific learning outcomes include:

- Enhanced understanding of the process of restoration and associated targeted outreach strategies.
- Advanced knowledge of online storytelling and data visualization tools like ArcGIS, Wordpress plug-ins, Canva, or others as needed
- Experience conducting interviews, compiling quantitative data, and presenting to a professional stakeholder committee, the Sarasota Bay Estuary Program Citizens' Advisory Committee

Qualifications:

- Applicants should have a strong interest in Biology, Marine Biology, Environmental Studies, Communication, Outreach, Geography, Botany, or other related natural science or communication field
- Some experience with digital communication tools/programs is desired
- Passion for environmental stewardship and conservation and strong interest in working in an environmental field
- Strong interpersonal and public speaking skills
- Strong computer and organizational skills
- Reliability, responsiveness, and a positive attitude
- Availability and willingness to work weekends and evenings (this would be very seldom if any) in addition to some scheduled time in the office during normal business hours (Mon-Fri)
- Reliable transportation encouraged (restoration sites range up to 30 miles from SBEP office)

Hours/Dates/Location:

The intern will work 15 - 30 hours per week, depending on preference, scheduled activities, and workload. SBEP staff and interns operate on a hybrid schedule, alternating between in-office and remote work. The exact start date from mid-May to mid-August is negotiable. We estimate this project will take about 150 – 200 hours total. This position will be hybrid. The SBEP office is located at: 111 South Orange Ave. Suite 200W Sarasota, FL 34236. Travel may be required to restoration sites and events around Sarasota and Manatee counties.



9. Sarasota Dolphin Research Program (Chicago Zoological Society)

Organization's Mission: To inspire conservation leadership by engaging people with wildlife and nature.

Project Description:

The Sarasota Dolphin Research Program (a program of the Chicago Zoological Society based at Mote Marine Laboratory) is the world's longest running dolphin conservation research program. We are seeking 1 intern to participate in monthly boat-based fieldwork focused on monitoring dolphins and their prey in Sarasota Bay using photographic identification and purse seine fishing techniques, giving them exposure to key field and lab methods in marine mammal science. Selected intern will spend 5-8 days engaged in field activities each month, with approximately equal time focused on learning data processing and photo-analysis skills in the lab. The intern will also be given exposure to acoustic monitoring methods via participation in activities related to the Sarasota PALS Network, which uses passive acoustic listening stations (PALS) of two types to study both sound-producing and acoustically tagged animals. Interns may participate in other research, education, or outreach projects, depending on timing and interests.

Learning Outcomes:

- Develop understanding of core field methods for long-term monitoring of dolphins and their prey (e.g., photographic identification, purse-seine fish sampling, acoustics)
- Learn how to use data processing software such as ArcGIS, RavenPro
- Develop good data management and verification practices.

Qualifications:

- Students need to provide their own transportation to Mote Marine Laboratory for field work and will be responsible for any personal items needed for their own comfort while in the field or office (e.g., sunscreen, polarized sunglasses, food, appropriate footwear).
- Minimum of 18 years of age, and engaged in or recently completed undergraduate studies, with an interest in environmental studies, marine biology, ecology, zoology, wildlife, or fisheries
- Basic computer proficiency in Microsoft Office programs (especially Excel and Access)
- Must be physically fit, able to withstand long days on a boat, and able to swim
- Good verbal communication skills, fluent in English
- Must be able to work effectively as part of a team
- Enthusiasm and desire to learn a variety of field and lab-based research methods

Hours/Dates/Location:

30 hours per week

June 3rd to August 9th (10 weeks)

Sarasota Dolphin Research Program offices at Mote Marine Laboratory, 1600 Ken Thompson Pkwy, Sarasota, FL 34236. Additional travel not required.



10. Southface Sarasota

Organization's Mission: Southface promotes sustainable homes, workplaces and communities through education, research, advocacy, and technical assistance.

Project Description:

- Coordinate with GoodUse Sarasota and Partners for Green Places organizations to maintain their Energy Star Portfolio Manager accounts
- Communicate with organizations to help track the usage and report the savings from the GoodUse grantees
- Assist and analyze educational training research for the organizations, help plan and implement Accordingly
- Help continue to build our audience showcase success stories to highlight completed projects in the Sarasota area through social posts/interactions, in-person and network building, video and photo creations
- Assist the Marketing & Communications team create GoodUse Sarasota signage and fact sheets to be displayed at the organizations' locations

Learning Outcomes:

- Build a record of work experience in their field of interest (nonprofit work, building sciences, communications)
- Develop critical real-world skill competencies, notably in nonprofit strategy, network building, technical services, and communications
- Develop personal skills in leadership, self-reliance and self confidence

Qualifications:

- Able to use computer, social media, and mobile phone proficiently
- Proficient in Microsoft Office Suite of products, including but not limited to Office Teams, Microsoft Word, Excel
- Past history or interest in nonprofit organizations
- Proficient in photography, videography, and graphic applications or willing to learn

Hours/Dates/Location:

20-30 hours a week for ten weeks

Mid-May to early August

New College of Florida – Caples Carriage House - 351 Caples Drive, Sarasota, FL 34234 & Virtual



11. Sunshine Community Compost

Organization's Mission: The mission of Sunshine Community Compost is to strengthen community connections and give back to the planet through education and action program that increase local composting, resource recovery and zero waste efforts.

Project Description:

Intern Responsibilities:

- Attend 1-2 individual meetings with E.D. per week
- Be willing and able to work remotely (and in-person if they are living locally)
- Be willing to track your tasks and project development in a shared document
- Dedicate up to 20 hours of focused attention per week to the internship and designated activities
- Be able to focus on weekly learning goals and deliverables and inform the supervisor of areas of need, challenge, opportunity throughout the internship so that intern gleans optimal learning benefits.
- Attend and present at one Board of Directors meeting (with ample support from supervisor and as appropriate for optimal intern learning)
- Attend online/zoom professional development presentations, classes, events, collaborative meetings as appropriate/available during internship to develop professional skills and gain a wider understanding of non-profit organizational management and development
- If intern(s) is in town/ not remote, we prefer they join us at a minimum 1x per month during community workdays to gain hands-on exposure to our community programs and actual composting processes - as is possible and/or appropriate if no personal, health, location or other unseen challenges are present

Learning Outcomes:

Learning Outcome 1:

Student will gain experience understanding non-profit model, operations and program development in relation to their role as Content Development Associate.

Learning Outcome 2:

Student will learn to refine their tools of collaboration, client relationship management and client satisfaction through the guided process of developing content and materials with our E.D. that meet outreach, media, communication and messaging needs of Sunshine Community Compost.

Learning Outcome 3:

Student will learn the interconnected benefits of composting (related to climate, food, soil, community building, human health, watershed health, waste equity, pollution, etc.) and how to develop content to uplift

the composting movement and SCC while aiming to draw in a wide and diverse range of audiences.

Qualifications:

- Consistent access to email and the web including familiarity with zoom, social media platforms, content development tools or willingness to learn these
- Consistent access to a portable computer and phone
- Experience and interest in graphic or visual design, design features, website design, creative expression for public education (please note our staff are not designers or developers and can assist in describing what we are looking for, but not offer guidance on special/expert skill development in content development.
- Able to collaborate, generate ideas and generate materials and useable content as described in the position description, and be willing and able to receive feedback and modify content as needed.
- Desirable but not required is the ability to create short, sharable, instructional videos using phone or other video content tool

Hours/Dates/Location:



20 hours per week for 8 weeks from June 3 - July 26

12. Sarasota Bay Watch

Organization's Mission: SBW is an action oriented grassroots, non-profit organization dedicated to restoring coastal ecosystems through citizen participation.

Project Description:

Sarasota Bay Watch has acquired 2 multi probe water quality instruments that records environmental parameters, such as dissolved oxygen, temperature, salinities, etc. This device will be installed in SBW underwater clam lease to obtain environmental information for our clam cultures and other experimental tests in our lease. These instruments require calibration, maintenance, data download, and deployments. This is the perfect task for a marine technician to support our scientific efforts for clam restoration in Sarasota Bay. We expect a monthly activity requiring 3 days (8 hours per day) for calibration of the instruments, underwater deployment of instruments, downloading the data from the instrument, and data compilation and analysis.

Learning Outcomes:

Learning Outcomes:

- The student will learn how to calibrate and give maintenance to scientific instruments that are commonly used in marine studies.
- The intern will collect the information, organize, and analyze the data collected.
- The intern will have the opportunity to interact with other professionals about the information collected during professional gatherings regarding clam restoration. There is a possibility for a scientific paper associated with the environmental conditions in the Sarasota Bay Watch clam lease.

Qualifications:

The student selected must have a marine study seeking degree. Should be a SCUBA certified diver with familiarity of underwater experience in scientific projects. Willing to be trained in the calibration, data download, and maintenance of instruments.

Hours/Dates/Location:

This internship will require preliminary activity of instrument preparation (calibration and maintenance) - 3hrs the day before the deployment. The day of deployment should take 8 hours, which includes transportation to the deployment site, deployment of the instrument via SCUBA diving, and return to the site of departure. The day after recovering the instrument, maintenance, and data download will take place. In addition, data analysis and posting of the data on google drive data storage and maybe the WaterAtlas. (4 hours). A total of 15 hours per month.

Start Date mid-May 2024 / End Date mid-August 2024.

The physical location of this internship is Sarasota Bay. Transportation to and from the deployment site will be provided by Sarasota Bay Watch volunteers with navigation capabilities.