**Camryn Middlebrooks**

| Phone: +1 (941) 447-9250Email: C.middlebrooks@tcu.edu |  2901 Sandage AveFort Worth, TX 76109 USA |
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# **Education**

**PhD** Texas Christian University, Biology 2024-Current

 GPA of 3.86

**BS** University of North Florida, Biology May 2022

 GPA of 3.25

# **Honors and Awards**

**American Scandinavian Foundation Fellow**  2025-26

$5,000 award for field work contributing to my PhD in Greenland

**TCU SERC Grant** 2025

$1,998 award earned for Arctic contaminant research at TCU

**Jacksonville Environmental Achievement Award** 2022

Awarded as a member of NAVFAC Mayport for environmental efforts related to sea turtle conservation

**AmeriCorps Education Award** 2022

$3,200 award earned for service performed through the Student Conservation Association in Jacksonville, FL

**Stay Strong Scholarship** 2019-2022

Scholarship earned for completing 30 credit hours with a high GPA

**Florida Medallion Scholarship** 2018-2022

Florida Bright Futures Scholarship awarded for high GPA, SAT scores, and volunteer hours

**Research Experience**

 **PhD Dissertation**, Texas Christian University, Greenland 2024-Current

* Multifaceted study to uncover drivers of mercury bioaccumulation in Greenlandic freshwater food webs including insects, arachnids, passerines, and canids
* Capturing, handling, banding, and bleeding a variety of birds including seabirds, passerines, and falcons
* Crafting novel hair snare tools for sampling Arctic foxes
* Collaborating with the High Arctic Institute, the University of Calgary, and Greenland Home Rule Government

**Contaminant Ecology Lab**, Texas Christian University, Greenland 2024-Current

* Compiling data and writing manuscripts investigating mercury toxicology in Northern Greenland
* Analyzing avian, reptilian, and invertebrate samples for mercury concentrations using both THg and MeHg techniques
* Acting as lab manager and mentoring undergraduate students in crafting original research projects

**LCTW Bear Behavioral Study**, Lao Conservation Trust for Wildlife, Laos 2024

* Study to determine sociality among Asiatic black bears and sun bears in response to introductions to new individuals and movement to a new enclosure
* Sedation via dart gun and transfer of bears to a new enclosure within a national park in Laos
* Development of an identification key to use for individual bears based on chest markings and distinct facial features
* Crafting an original research project, collecting and analyzing data, and compiling research into a manuscript

**LCTW Siamese Crocodile Genetics**, Lao Conservation Trust for Wildlife, Laos 2024

* Capturing and restraining crocodiles at LCTW for tissue and blood sampling
* Assisting with full genome sequencing of Siamese crocodiles
* Developing a breeding program among pure Siamese individuals
* Releasing crocodiles into designated areas to improve the quality of the existing population for this critically endangered species

**USGS Mariana Swiftlet Population Analysis Project**, USGS, Guam USA 2023

* Analysis and organization of historical data and field methods for literature development
* Assisting with field work such as camera set up, mist netting, and collecting samples from a critically endangered avian species

**USGS BTS CFES Suppression Project**, USGS, Guam USA 2023

* Co-leading a project that results in the capture, transport, and surgical implantation of tracking devices into brown treesnakes, with their release into a designated study area
* Use of telemetry to track snakes for a better understanding of habitat use and behavioral patterns in response to intervals of aerial toxicant drops
* Document organization and multi-agency cooperation with USDA and DAWR.

**Sea Turtle Stranding Research Project**, NAVFAC Mayport, Jacksonville, FL USA 2022

* Compiling a database of turtle stranding events on NAVFAC Mayport (1990s-2022)
* Completing stranding forms for FWC and transportation of turtles to rehab facilities
* Determining trends associated with fibropapillomatosis tumors and anthropogenic disturbance
* Creating/editing documents that provide a guide for stranding causes

**FWC Marine Mammal Stranding Necropsies**, FWC, Jacksonville, FL USA 2022

* Transportation of cetacean and sirenian carcasses to an outdoor laboratory
* Full necropsy and determination of gut contents
* Collecting tissue samples for NOAA analysis
* Collecting data on cause of death, state of decomposition, and organ state

**Relevant Work Experience**

**High Arctic Institute**, Pituffik Peninsula, GL 2024

**Graduate Researcher**

* Developing novel research project to investigate the ecotoxicology of mercury in the region
* Performing various field activities in inclement and challenging conditions including, boating, rafting, rappelling, hiking, and camping.
* Capturing birds using a variety of methods including potter traps, mist nets, and dip nets for banding and bleeding.
* Processing avian blood samples for DNA and isotopic analysis

**Texas Christian University**, Fort Worth TX 2024 - Current

**Graduate Teaching Assistant**

* Acting as an instructor for introductory biology courses.
* Developing and implementing lesson plans for college students
* Grading and giving feedback on assignments

**Lao Conservation Trust for Wildlife**, Laos Jan 2024 to Apr 2024

**Animal Management Intern**

* Assisting with the rescue, rehabilitation, and release of native Lao wildlife from the illegal wildlife trade, including primates, large carnivores, reptiles, and birds
* Developing and crafting new tools and methods for animal enrichment and overall welfare
* Engaging with local Lao, Hmong, Khmou, and international communities through environmental education and outreach events
* Assisting with veterinary procedures, including body quality observations, euthanasia, necropsies, and surgical procedures

**University of Guam**, Guam USA Jan 2023 to Jan 2024

**Research Associate I**

* Acting as a biologist on the USGS brown treesnake project and conducting high-quality research on the ecology, control, and containment of the brown treesnake
* Conducting surveys on the brown treesnake and various vertebrate species on Guam and other Pacific Islands
* Using methods such as telemetry, trapping, tagging, and necropsy
* Error-free data collection
* Collaborating with diverse stakeholders for the reintroduction of native species

**Student Conservation Association**, NAVFAC Mayport FL Sep 2022 to Dec 2022

**Species Protection and Habitat Development Intern**

* Conducting sea turtle nesting surveys, inventories, egg shell genetic sampling, GIS mapping, and writing technical reports
* Responding to wildlife stranding events and coordinating transportation to rehab
* Leading gopher tortoise, raptor, shorebird, and marine mammal surveys
* Conducting education and outreach workshops
* Revising management plans based on MBTA, ESA, MMPA, and other protective laws

**Student Conservation Association**, Huguenot Memorial Park Mar 2022 to Sep 2022

**Natural Resource Management Intern**

* Performing weekly shorebird direct count surveys
* Transportation of injured or sick animals to rehab facilities
* Developing and implementing strategies to increase the reproductive success of nesting shorebirds and sea turtles
* Conducting sea turtle nesting surveys and inventories
* Data entry/analysis
* Developing outreach materials to educate the public on coastal conservation

**UNF Eco Adventure**, University of North Florida Feb 2020 to Mar 2022

**Coordinator of Environmental Education**

* Creating lesson plans that align with state educational standards, catering to students ranging from kindergarten through college
* Developing and delivering educational programs in an outdoor classroom on the UNF nature trails
* Recruiting and managing staff members
* Maintaining the nature trails and collecting data on protected species
* Acting as program coordinator and supervisor

**Publications**

## ***Scientific Communication Publications***

Middlebrooks, C. H. (2022). “An Overview of Sickle Cell Anemia,” Genomics: Insights on Genome: Unlocking Life’s Code website.

<https://www.unlockinglifescode.org/genomics-insights/overview-sickle-cell-anemia>

**Equipment, techniques, vaccines, and certifications**

**Equipment** 2018 to current

* 4WD utility vehicles
* Mist nets
* Trimble Geo7X
* Dart Gun

 **Techniques** 2018 to current

* PCR
* GIS and GPS
* Telemetry
* Necropsy
* Use of game cameras

**Certifications** 2018 to Current

* SCUBA Advanced Open Water
* Boat License
* USGS Chainsaw
* USGS Firearms
* USGS Pesticide Use
* USGS Wilderness First Aid

**Professional Affiliations, Conferences, and Presentations**

**NPS Dragonfly Mercury Project, 2024**

Sampling freshwater ponds for dragonfly nymphs to undergo mercury testing while engaging and educating local high school students

**LCTW Wildlife Rescue and Response Team, 2024**

Assisting with the safe capture and transport of wildlife from various areas across Laos.

**Brown Treesnake Technical Working Group Conference, 2023**

Attending conference and presenting research on BTS work to show any novel developments in the field and where funding is allocated.

**USGS Brown Treesnake Rapid Response Team, 2023**

Training members from USGS and other affiliated organizations to respond to invasive snake sightings on Pacific islands in an efficient manner. Participating in multi-agency rapid response efforts on Saipan, including trapping, creating transects, training, and performing visual surveys.

**Marianas Terrestrial Conservation Conference, 2023**

Assisting with data collection for the presentation of projects that focus on conserving the habitat of the Mariana Islands.

**Timucuan Shorebird Alliance, 2022-Present**

Providing nesting data on imperiled shorebirds at Huguenot Memorial Park and NAVFAC Mayport for regional conferences.

**FWC Marine Mammal Mortality Response Team, March 2022- December 2022**

Assisting with the transportation and necropsy of Florida dolphins and manatees to determine cause of death and dietary links to mortality.

**Community Service**

**Ecologists Without Borders**

Volunteer, Remote, 2022 - Current

**Wildlife Rescue Coalition of Northeast Florida**

Volunteer, Jacksonville, FL, 2019-2020 & 2022

**HAWKE Rehab Center**

Raptor Rehabilitation Volunteer, Jacksonville, FL, 2021-2022

**Languages**

**English**: Native language

**Spanish**: Intermediate speaker, advanced reading and writing

**Lao:** Novice speaker

**Danish:** Novice speaker, intermediate reading and writing

**Computer Skills**

* Rstudio, MEGA, VORTEX, Image-J, MS Office, LoggerPro, SPSS, Zims, Procreate, and HOBOware