J Ted Hillert (Carter) Email: jtedcarter@gmail.com

Cullowhee, NC Phone: (828) 828-1729

**Education**

*Western Carolina University – Cullowhee, NC In studies until,*

Master of Science in Biology August 2023

*University of North Carolina Asheville – Asheville, NC Graduated*

Bachelor of Science in Biology May 2020

*Wilson Community College – Wilson, NC Graduated*

Certificate in Surgical Technology July 2016

**Research Experience**

*Western Carolina University – Cullowhee, NC Summer 2022 – Current*

Graduate Thesis – Management implications of low-intensity ground fire on Round Bald of Carver’s Gap

* Sampled the plant community along previous transects in burned and unburned parts of the bald
* Took seed bank samples of the soil and litter in burned and unburned parts of the bald
* Examined the difference in composition following fire as possible addition to the current mowing management practice (So far grazing and mowing are the preferred practices for grass balds)

*University of North Carolina Asheville – Asheville, NC* Spring 2020

Undergraduate Seminar – Fire-adapted ecosystem of the Southeastern United States

* Researched historical disturbance regime and land use change within the Longleaf pine forests of the Southeastern US
* Communicated the importance of prescribed fire and of the ecosystem functions of fire-adapted communities
* Presentation of research data detailing management plan to restore range of fire-adapted communities

*University of North Carolina Asheville – Asheville, NC* Spring 2019

Forest Ecology Seminar – Forest Management Plan Proposal

* Removal of invasive species, *Celastrus* *orbiculatus* and *Hedera* *helix*, through herbicide application and mechanical removal
* Prescribed fire to produce early successional habitat for the native *Pipilo erythrophthalmus* and the migratory *Vermivora chrysoptera*
* Timber harvests in 13-year intervals to maintain a multi-aged stand capable of accommodating differing successional species

**Research Experience – cont.**

*University of North Carolina Asheville – Asheville, NC to Key West, FL* Summer 2019

Marine Biology Seminar

* Studied the ecosystem functions of dunes, mangrove forests, seagrass meadows, marshes, reefs, and various other marine systems
* Advocacy and education of the specific functions and services of seagrass meadows and the challenges they face from fisheries to climate change
* Examined the importance of marine ecosystems and their roles as carbon sinks, erosion barriers, biodiversity sites, and buffers against hurricanes

**Lab Experience**

*Western Carolina University – Cullowhee, NC*

Human Biology Teaching Assistant for Dr. Adkinson Fall 2022

* Help prepare lab sections prior to lab meetings and prepared teaching slides for mini lecture
* Run lab sections for undergraduate students teaching principles and language of experimentation
* Proctor lab exams

*Western Carolina University – Cullowhee, NC*

Advanced Methods lab & Conservation Biology lab Fall 2022

* Developed Fish & Plant Community sampling methods, presence and absence models, and ArcGIS maps
* Compiled reports on Plant Community in relation to advanced regeneration and on litter decomposition along a slope and within a floodplain
* Surveyed a plot of land (McBride tract) as demonstration of Conservation Easements
* Produced a mock Easement contract based on McBride tract survey

*University of North Carolina Asheville – Asheville, NC*

Biology Department Lab Assistant for Dr. Greene and Dr. Grosser Spring 2020

* Perform DNA extractions and PCR assay on GMO and non-GMO food products
* Preparation of agar growth plates and feeding of Tetrahymena cultures
* Usage, cleaning, and general maintenance of autoclave, micropipettes, lab glassware, scales, centrifuges, etc.
* Housekeeping, organization, and cleaning of labs
* Handling, sterilization, and disposal of biohazardous material

*University of North Carolina Asheville – Asheville, NC*

Cell Biology and Biochemistry labs Fall 2018 – Fall 2019

* Perform protein, DNA, and cellular measurements on samples using appropriate chemical reagents and lab equipment
* Proficient use of micropipettes, lab glassware, centrifuges, thermocyclers, and gel boxes
* Analysis and visualization of data in R and excel
* Interpretation, documentation, and presentation of findings

**Work Experience**

*Highland-Cashiers Land Trust – Highlands, NC*

Summer Stewardship Intern Summer 2022

* Survey conservation easement properties for compliance and possible infractions
* Maintain aesthetic value of public access properties
* Compile floral diversity booklet for McKinney Meadow and Dixon Woods
* Compile invasive species information booklet for Coalition for Non-native Invasive Plant Management

*Harris Regional Hospital – Sylva, NC*

PRN Surgical Technician January 2022 – present

* Cover night shift call so day shift could rest for the next day’s cases
* Set-up and maintenance of the sterile field; including sterility throughout perioperative setting, ensuring all equipment is readily available and in working order
* Ensuring that proper cleaning and sterilization of surgical equipment has occurred
* Handling and disposal of biohazardous material
* Providing a safe and comfortable environment for patients of all ages entering the operating theater; including safe moving of patients to and from stretchers, and induction of anesthesia

*Stanford Healthcare – Stanford, CA*

Traveling OR Surgical Technician through LRS Healthcare February 2021 – December 2021

* Neurosurgical team: including handling and implantation of tissue and hardware associated with procedures
* Set-up and maintenance of the sterile field; including sterility throughout perioperative setting, ensuring all equipment is readily available and in working order
* Ensuring that proper cleaning and sterilization of surgical equipment has occurred
* Handling and disposal of biohazardous material
* Providing a safe and comfortable environment for patients of all ages entering the operating theater; including safe moving of patients to and from stretchers, and induction of anesthesia

*Mission Hospital – Asheville, NC*

Staff OR Surgical Technician September 2016 – January 2021

* Neurosurgical, Orthopedic Spine and Joint, and Podiatry teams; including handling and implantation of tissue and hardware associated with procedures
* Set-up and maintenance of the sterile field; including sterility throughout perioperative setting, ensuring all equipment is readily available and in working order
* Ensuring that proper cleaning and sterilization of surgical equipment has occurred
* Handling and disposal of biohazardous material
* Providing a safe and comfortable environment for patients of all ages entering the operating theater; including safe moving of patients to and from stretchers, and induction of anesthesia