William T Mann Jr

|MS Student | University of North Carolina at Greensboro |wtmann@uncg.edu|

**EDUCATION**

***Bachelor of Arts, Biology December 2021***

*University of North Carolina at Greensboro*

***Masters of Science, Biology December 2023***

*University of North Carolina at Greensboro*

**RESEARCH EXPERIENCE**

**University of North Carolina at Greensboro**

***Processing Legume Gas Exchange Samples:***December 2021

*Research Mentors:* Alyssa Young, Sally Koerner

* Conducted gas chromatography to analyze manipulated legume root nodule gas samples
* Tracked results of gas chromatography using Microsoft Excel and graphs

***LongLeaf Pine Savanna Maintenance:***May 2021, July 2021

*Research Mentors:* Alyssa Young, Sally Koerner

* Built several 10x10 drought shelters with drainage systems
* Identified LongLeaf savanna plant species using species composition (percent cover)
* Analyzed LongLeaf savanna plant species traits in the field
* Scribed for LongLeaf savanna team on multiple occasions
* Collected arthropods in LongLeaf savanna using various insect collection techniques

***Montana Research Trip****:* May 2021 – June 2021

*Research Mentors:* Kathryn Bloodworth, Morgan Frost, Sally Koerner

* Collected arthropods in tall-grass prairie using SweepNet and D-Vac insect collection techniques
* Identified tall-grass prairie plant species using species composition (percent cover)
* Sampled nutrient composition of tall-grass prairie using 10 mm and 20mm soil coring method
* Prepared for the research trip by creating insect collection bags, labeling soil coring, and insect bags
* Scribed for Montana research team on multiple occasions

***Undergraduate Independent Research Project:*** January 2021 - April 2021

*Research Mentors:* Kathryn Bloodworth, Sally Koerner

* Conducted research on differing methodological Arthropod collection and the difference in data that these methods produce
* Analyzed and interpreted tall-grass prairie arthropod data using RStudio

***Undergraduate Research****:* January 2020 - April 2021 *Research Mentors:* Kathryn Bloodworth, Sally Koerner

* Contributed significantly to graduate student research
* Identified tall-grass prairie Orthoptera samples to the species level
* Identified tall-grass prairie Arthropods samples to the family level

**PRESENTATIONS**

***Mann. WM****,* Bloodworth. KJ, Koerner. SE. *Thomas Undergraduate Research and Creativity Expo* (poster, 2021). ***Comparing arthropod diversity differences in two arthropod sampling methods.***

**FUNDING AND AWARDS**

***Instructional Assistantship:*** Spring 2022

University of North Carolina at Greensboro***.***

Award Amount: $18,000 living stipend.

***Undergraduate Research and Creativity Award:*** Summer 2021

University of North Carolina at Greensboro.

Award Amount: $3,000 living stipend.

***Undergraduate Student Research Support Fund:*** Spring 2021

University of North Carolina at Greensboro.

Award Amount: $250.00.

**TEACHING EXPERIENCE**

***University of North Carolina at Greensboro***

***Instructional Assistant***

(1) *Ecology and Evolution Lab Instructor* Spring 2022 – Present

* + 1. Guided undergraduate students through data collection using data tables and hand measurements
		2. Guided undergraduate students through data analysis using graphs, Microsoft Excel, and phylogenetic software
		3. Presented a number of lessons to a class of 20 students
		4. Managed and graded relevant coursework

(2) *Ecology and Evolution Lab Assistant* Spring 2022 – Present

1. Assisted in teaching undergraduate students data collection and analysis using tables, graphs, Microsoft Excel

**MENTORSHIP EXPERIENCE**

***University of North Carolina Greensboro***

***Graduate Advisor for BIO 660, Symbiosis*** Spring 2022 - Present

* Aided undergraduates in curating relevant research papers to create scientific presentations
* Presented to a class of undergraduate students about multiple topics, demonstrating how to find and present relevant research in the correct format

**SKILLS & ABILITIES**

***Research:*** Experienced in scientific writing and poster and oral presentations.

***Laboratory & Field Skills:*** Root nodule gas chromatography, arthropod identification, arthropod collection techniques, plant species composition measurements (percent cover), soil coring, drought shelter construction and maintenance.

***Languages:*** Intermediate understanding of the Spanish language.

***Computer Efficiency:*** Proficient in Microsoft Office. Experience using RStudio.

***Organization:*** Experience organizing and maintaining a laboratory–keep track of inventory.

**LEADERSHIP**

***Undergraduate Overseer (UNCG, Koerner Lab)***  Fall 2021

* Oversaw undergraduate students who were conducting data analysis on Arthropods from tall-grass prairies
* Provided answers to any relevant questions about Arthropods found in tall-grass prairies