# An Evaluation of Key Components of Undergraduate Persistence and Success in Natural Resources

Brandy Bishop

Dr. Matthew McBroom, Dr, Pat Stephens-Williams, Dr. Ray Darville, Dr. Scott Drury, and Mr. John Kidd

Arthur Temple College of Forestry and Agriculture
STEPHEN F. AUSTIN STATE UNIVERSITY

Public perception and knowledge about natural resource careers are influenced by various circumstances, and it is common for people to assume that there are limited career opportunities within the natural resource fields. Increased urbanization, coupled with greater immersion in technology to the detriment of experiences with nature, have exacerbated this perception. Furthermore, with the recent COVID-19 pandemic, opportunities to experience natural resource education have been limited due to even less in-person instruction and travel opportunities. Students' career choices are primarily chosen based on variety of experiences, preconceived ideas, peers and sense of self identity. When the opportunity for these experiences are limited, the reduced exposure correlates to decreased enrollment in these programs. Therefore, it is essential that students engage with natural resources and develop a sense of identity and personal connection with nature and develop their understanding of their intended career. Future research will focus on the key components of undergraduate persistence and success in natural resources by evaluating prior experience in the outdoors, personality, test scores, GPA, student engagement, demographics and barriers they may face in a longitudinal study spanning four years.

## Methods

In-person camp experiences can be an effective way to engage students in hands-on learning that will help bridge the knowledge gap for natural resource careers in addition to allowing students to see themselves working in conservation careers. Beginning in summer 2021, the Arthur Temple College of Forestry and Agriculture at Stephen F. Austin State University started the Conservation Careers Camp (CCC) to provide students with an interest in natural resources the opportunity to better connect with nature and to consider future careers in natural resources and STEM fields. During this camp, three surveys were administered through Qualtrics to collect demographics, personality, natural resource knowledge and familiarity, and interest in college and natural resource careers. All campers will be evaluated in a final survey to see how exposure to natural resource experiences and employment information translated to higher education and careers for these participants. The program was not only successful because of the staff, but because participants were genuinely engaged in environmental issues; thus, it will be expanded in future summers and utilized to show how camps leave lasting impressions on future conservationist in addition to gaining valuable data. Research will also be expanded to other entities' programs and camps to help eliminate bias and to show correlations with natural resource education and success in natural resources. The information collected from this will be compared to like information collected from current natural resource and non-natural resource students to help identify bias that come into play for many students, including lack of support from family, perceptions of the career field, lack of interest, difficult content, financial issues, stereotypes, hierarch levels, fear of discrimination, age progression and being outdoors, danger, or lack of interest due to buzzwords such as "conservation".
The goal is to evaluate key components of student engagement and success in natural resources and how this impacts career choice and success.

Brandy Bishop is pursuing a PhD in Forestry at Stephen F. Austin State University. She received her Bachelor of Science in Agriculture Development Production and Masters of Education from Stephen F. Austin State University.