

Enhancing Climate Resiliency and Climate Communication in Southeastern United States through Co-production

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Introduction

This poster will walk through and provide general information on three different studies that are being conducted throughout my dissertation work. This work involves co-production which is when science users and science researchers collaborate in order to develop a successful product. Each heading describes details about one research study.

1: Eye-Tracking

The goal of this project is to fill the assessment gap in co-produced research by designing a web-based tool for species managers and evaluating its usefulness when applied to the construction of Species Status Assessments (SSAs). This research involves the development and evaluation of a tool called **Climate Analysis and Visualization for the Assessment of Species Status** (CANVAS) which is being developed using a co-production approach. This study will be conducted through **eye-tracking** of stakeholders within the United States Fish and Wildlife Service (USFWS). This eye-tracking study will require for participants to go through the navigational CANVAS website and answer multiple choice questions about the website. **Interviews** will also be conducted after the eye-tracking to ask more open-ended questions surrounding CANVAS. Results from this research will include heat maps, gaze plots, total fixation duration, etc. that will be retrieved from eye-tracking data. Results will be used in order to help **refine the website** so that USFWS biologists can use the website in the future when writing SSAs.

The overall goal is to evaluate...

- **Usability** of an online endangered species tool
- **Undergraduate** interaction with online endangered species tool
- **Understanding** of communities' knowledge about climate change



1: Eye-Tracking

- How can the **usability** of CANVAS be improved?



2: Classroom

- How do **undergraduates** interact with the CANVAS website?

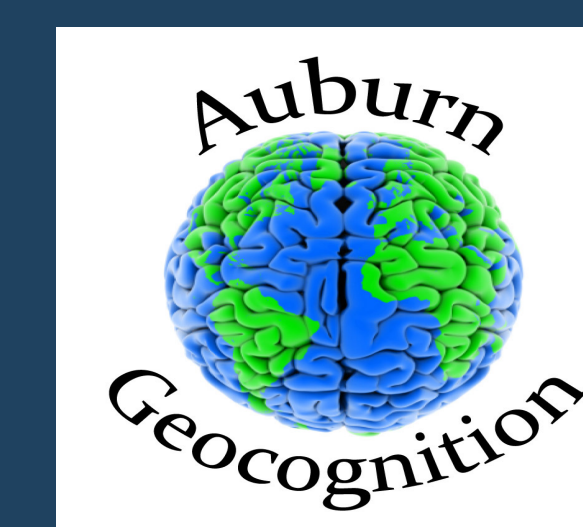


3: Community

- How do community members **understand** climate change and adaptation?



If you are an USFWS stakeholder and would like to participate in the eye-tracking research during this conference, scan the QR code to the left.



2: Classroom Implementation

This study involves **classroom implementation** of the CANVAS website in an undergraduate Weather and Climate course. This study requires participants to **walk through the navigational website** with step-by-step instructions and answer questions related to the steps that they completed. Also, **exit tickets** are given to participants to allow for open ended questions of how participants felt about the website to provide improvements in the future. Another aspect of this study involves a **pre and post assessment** of the topics covered in the lab created for this course to measure learning gains of undergraduate participants throughout the semester of learning.

3: Community Research

This study involves working with **underserved communities in North Carolina** in order to enhance their climate resilience. The two communities are Cherokee, North Carolina and Elizabeth City, North Carolina. Research in these communities will involve conducting **interviews, focus groups, and surveys** with community members and leaders in order to properly understand how these communities **understand climate change and climate change adaptation**. From that information gathered, **expressed mental models** will be developed in order to show the communities how exactly they think about climate change and provide resources of how they can improve their climate resiliency in the future.

Questions?



If you have any questions or comments, feel free to send me an email at hjc0023@auburn.edu OR you can scan visit the Auburn Geocognition Lab Website at <https://mcnealgeocog.wixsite.com/website>.

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