GRADUATE RESEARCH POSTER GUIDE:
Design, Style, and Formatting

A guide for designing and formatting your poster for presentation

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Goal of Poster Presentations

- The content on your poster will vary based on what sort of project you are presenting. Any discipline can create a poster!
- Posters tell the story of your project visually and concisely, and should complement your oral presentation
  - However, the content should also be able to stand on it's own
- The content of your poster will determine which judging category you will be placed in
- See gradschool.cofc.edu for more information

Poster Size & Formatting

- Posters should be created in PowerPoint in LANDSCAPE format set at 54" wide x 40" high.
- Poster display boards measure 72" wide x 48" high
- Titles, authors, and headings should be legible from 5 feet away

70pt for title - bolded

48pt for authors - bolded

36pt for headings - bolded

28pt for text body

22pt for captions

Do not use a font size smaller than 18pt

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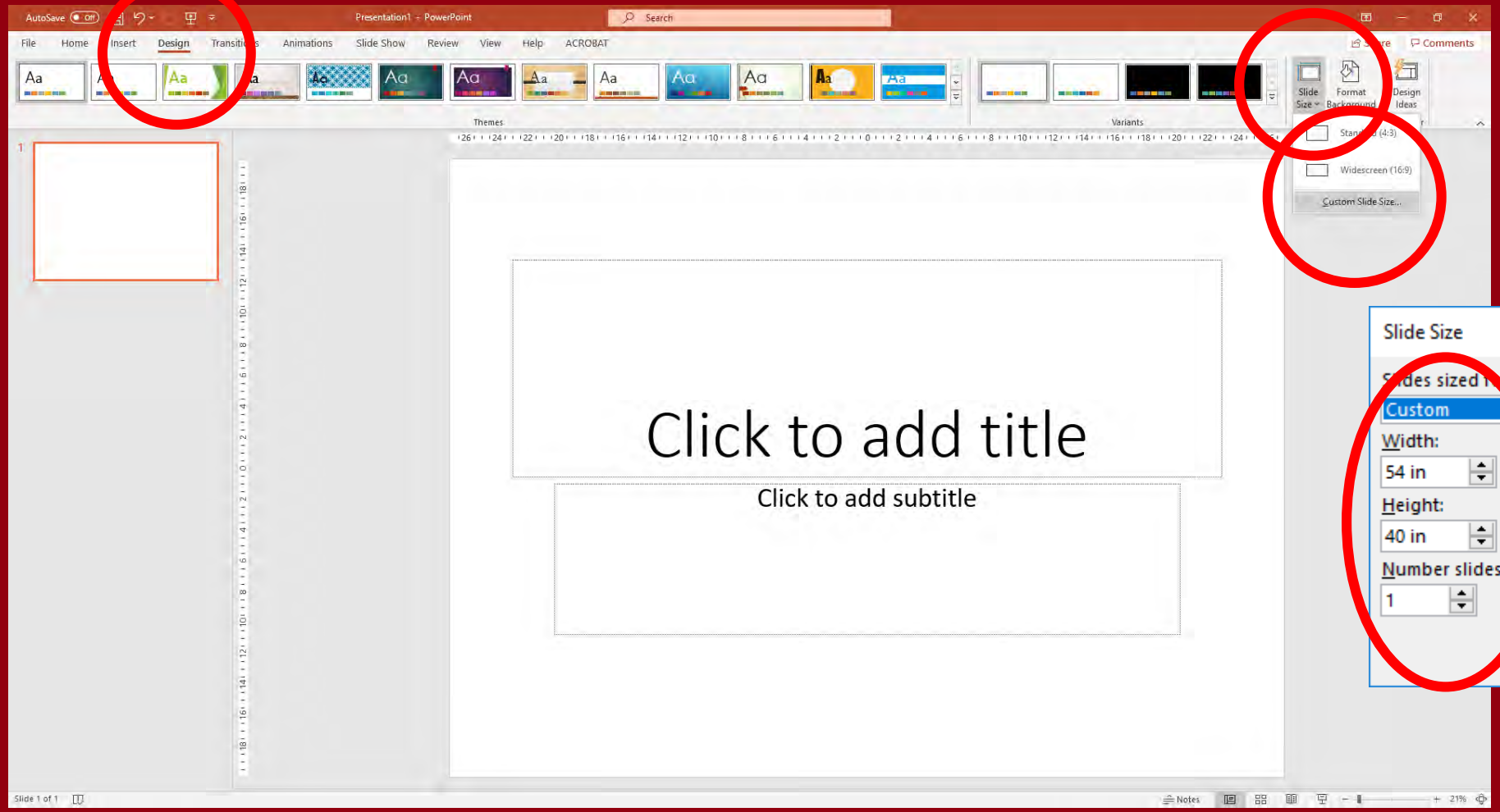
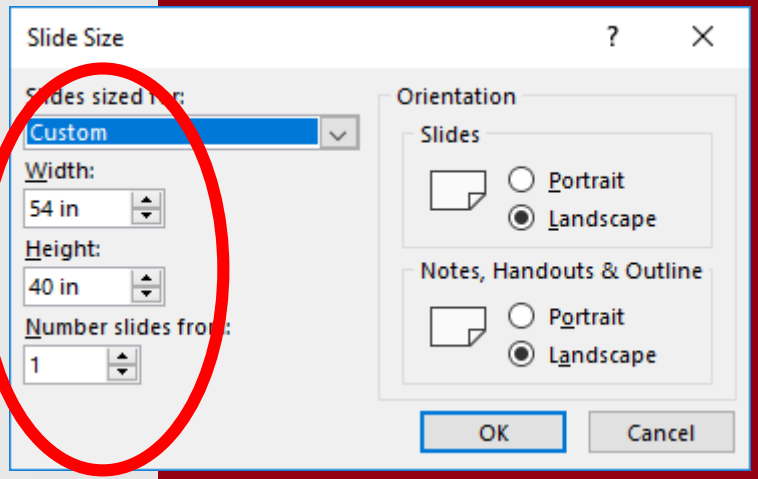
How to Set up Your Poster Slide





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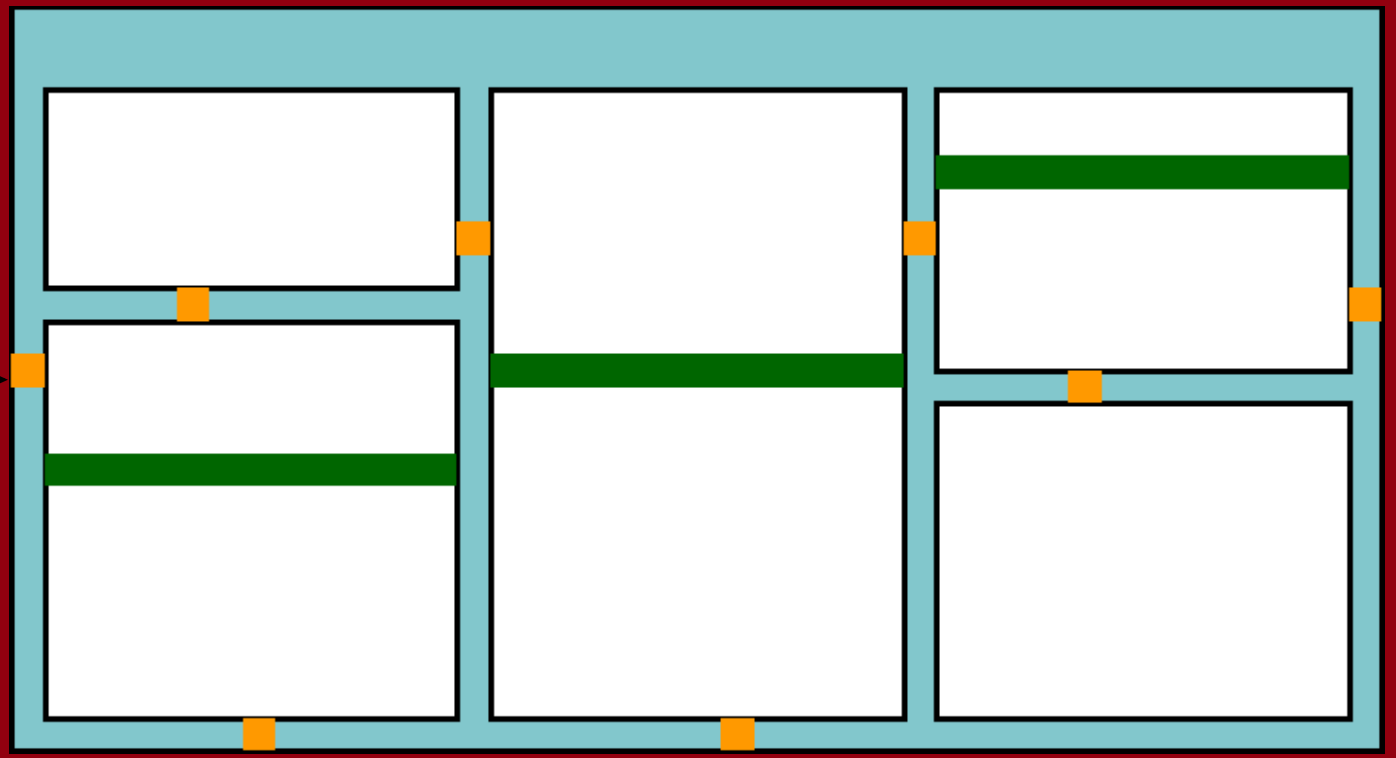
Layout

- What figures do you want to include:
  - Pick out appropriate pictures, diagrams, graphs, tables FIRST
  - Size them appropriately
  - Decide whether these figures can stand on their own or should be included in a section
- Arrange sections so the reader can easily follow the story of your poster
  - Make the significance of what you have on the poster very clear

Organization & Alignment

- Make sure sections are equally spaced from each other
- Make sure everything is aligned and centered

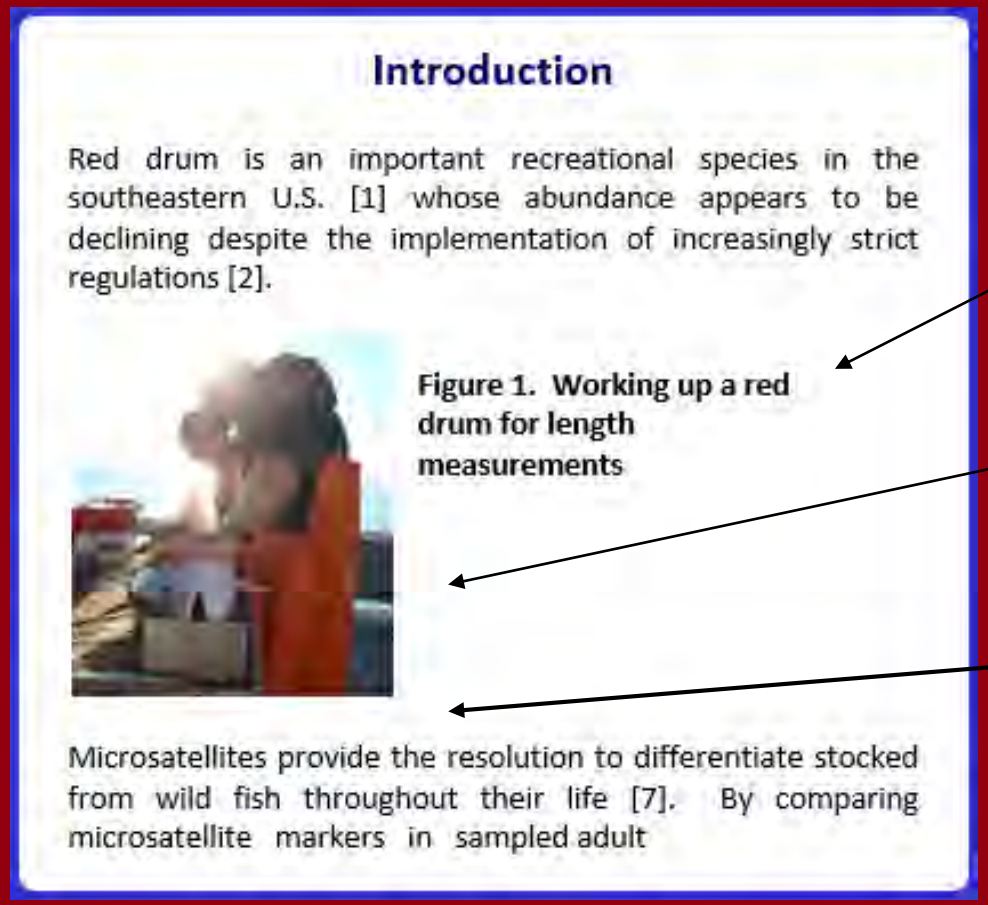
Sample of the alignment and flow of information



Pictures & Graphics

- Include what is necessary to tell your narrative
- Avoid putting text over pictures or using pictures as the background of your entire poster
- Crop pictures to show the most important elements while not sacrificing space
- Include white space between figures and body of text
- Ensure any pictures are high enough resolution to handle being blown up to poster size

Pictures (continued)



Introduction

Red drum is an important recreational species in the southeastern U.S. [1] whose abundance appears to be declining despite the implementation of increasingly strict regulations [2].

Figure 1. Working up a red drum for length measurements

Microsatellites provide the resolution to differentiate stocked from wild fish throughout their life [7]. By comparing microsatellite markers in sampled adult

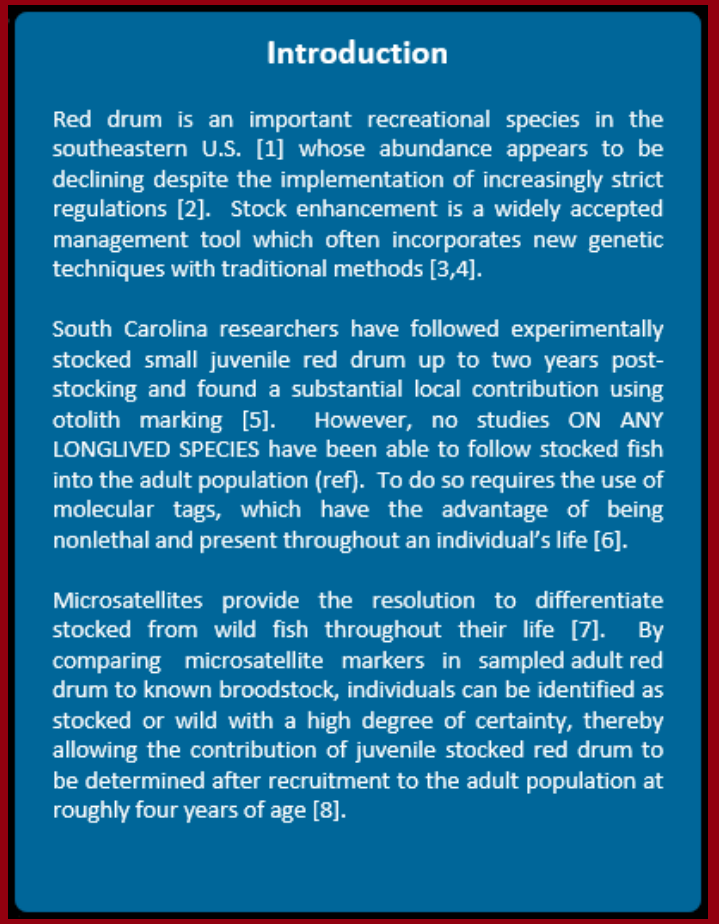
Captions for all pictures, figures, graphs, etc.

Pictures cropped for optimal use of space

White space between pictures and text for readability

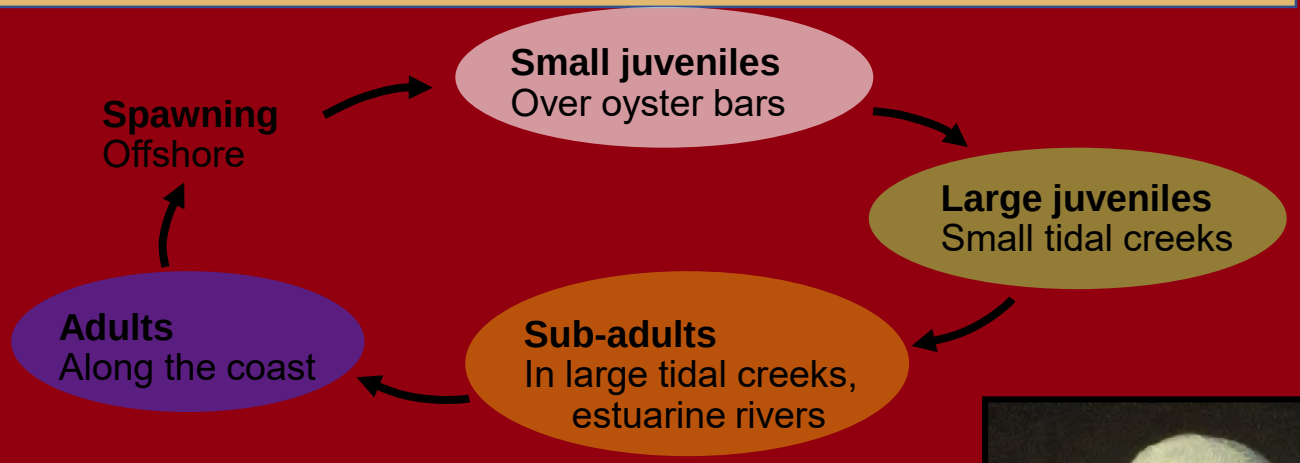
Lines and Fills

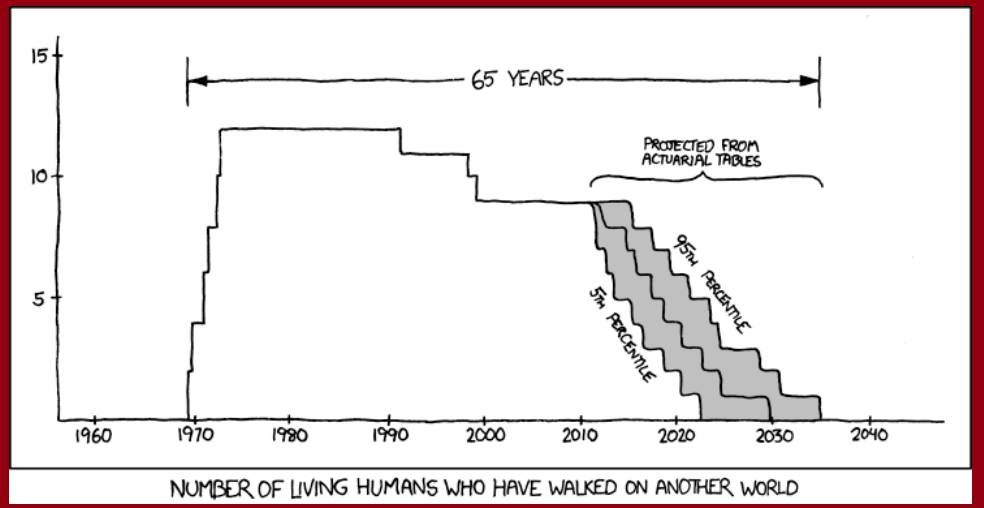
- Put borders around sections to delineate between sections
- Can use fill colors to delineate between sections and make text pop
  - Be careful to maintain a high level of contrast between font and text



Presenting Data

- Graphs are better than tables
- Diagrams can be more useful than sentences
- Pictures and figures give audience something to focus on while reading/listening





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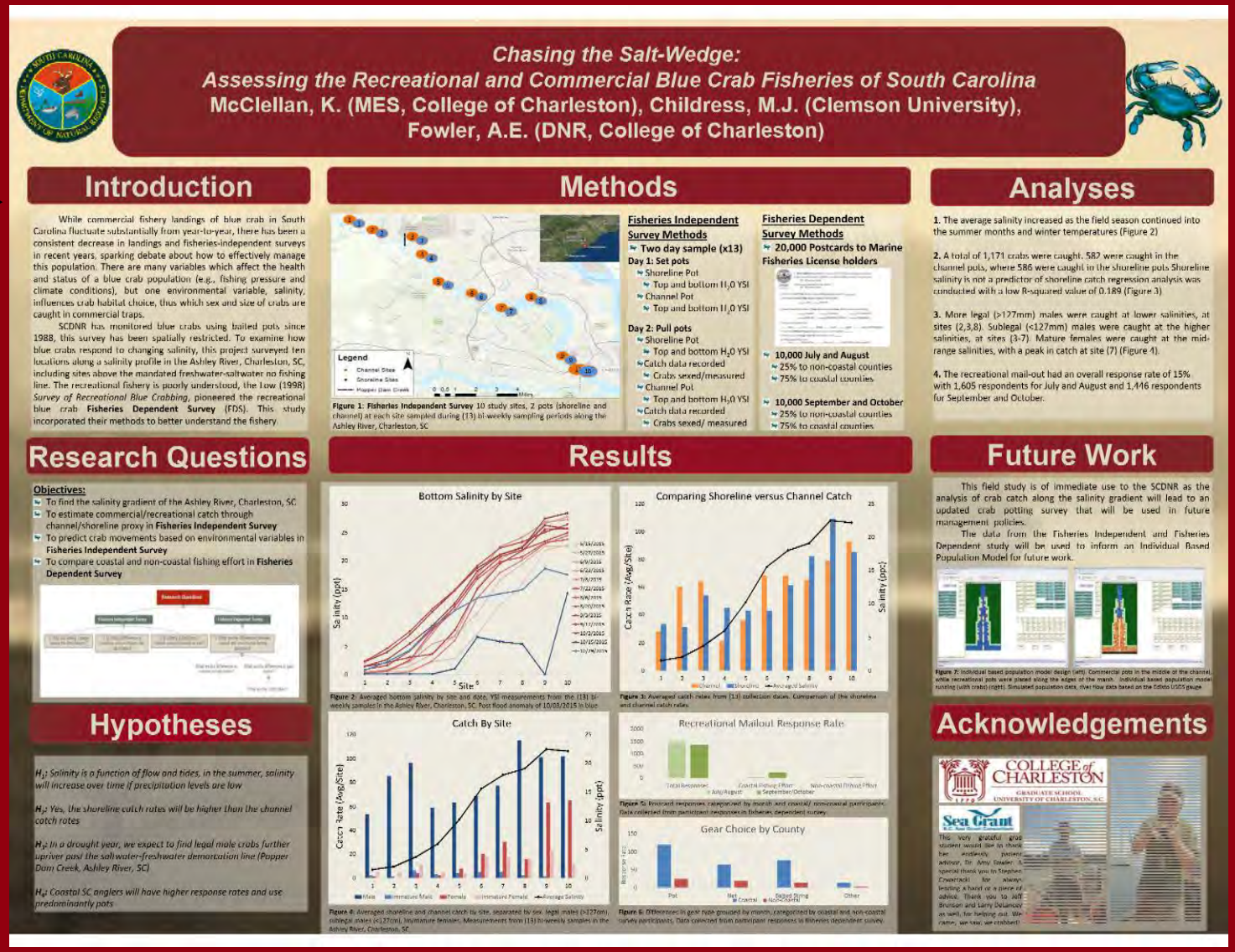
Examples from Past Entries

2016 Winner: Sciences, Mathematics, & Business



Chasing the Salt-Wedge:
Assessing the Recreational and Commercial Blue Crab Fisheries of South Carolina
McClellan, K. (MES, College of Charleston), Childress, M.J. (Clemson University),
Fowler, A.E. (DNR, College of Charleston)

Introduction

While commercial fishery landings of blue crab in South Carolina fluctuate substantially from year-to-year, there has been a consistent decrease in landings and fisheries-independent surveys in recent years, sparking debate about how to effectively manage this population. There are many variables which affect the health and status of a blue crab population (e.g., fishing pressure and climate conditions), but one environmental variable, salinity, influences crab habitat choice, thus which sex and size of crabs are caught in commercial traps.

SCDNR has monitored blue crabs using baited pots since 1988, this survey has been spatially restricted. To examine how blue crabs respond to changing salinity, this project surveyed ten locations along a salinity profile in the Ashley River, Charleston, SC, including sites above the mandated freshwater-saltwater no fishing line. The recreational fishery is poorly understood, the Low (1998) *Survey of Recreational Blue Crabbing*, pioneered the recreational blue crab **Fisheries Dependent Survey** (FDS). This study incorporated their methods to better understand the fishery.

Methods

Figure 1: Fisheries Independent Survey 10 study sites, 2 pots (shoreline and channel) at each site sampled during (13) bi-weekly sampling periods along the Ashley River, Charleston, SC

Fisheries Independent Survey Methods

- Two day sample (x13)

Day 1: Set pots

- Shoreline Pot
  - Top and bottom H_2O YSI
- Channel Pot
  - Top and bottom H_2O YSI

Day 2: Pull pots

- Shoreline Pot
  - Top and bottom H_2O YSI
  - Catch data recorded
  - Crabs sexed/measured
- Channel Pot
  - Top and bottom H_2O YSI
  - Catch data recorded
  - Crabs sexed/ measured

Fisheries Dependent Survey Methods

- 20,000 Postcards to Marine Fisheries License holders
- 10,000 July and August
  - 25% to non-coastal counties
  - 75% to coastal counties
- 10,000 September and October
  - 25% to non-coastal counties
  - 75% to coastal counties

Analyses

1. The average salinity increased as the field season continued into the summer months and winter temperatures (Figure 2)

2. A total of 1,171 crabs were caught. 582 were caught in the channel pots, where 586 were caught in the shoreline pots Shoreline salinity is not a predictor of shoreline catch regression analysis was conducted with a low R-squared value of 0.189 (Figure 3)

3. More legal (>127mm) males were caught at lower salinities, at sites (2,3,8). Sublegal (<127mm) males were caught at the higher salinities, at sites (3-7). Mature females were caught at the mid-range salinities, with a peak in catch at site (7) (Figure 4).

4. The recreational mail-out had an overall response rate of 15% with 1,605 respondents for July and August and 1,446 respondents for September and October.

Research Questions

Objectives:

- To find the salinity gradient of the Ashley River, Charleston, SC
- To estimate commercial/recreational catch through channel/shoreline proxy in **Fisheries Independent Survey**
- To predict crab movements based on environmental variables in **Fisheries Independent Survey**
- To compare coastal and non-coastal fishing effort in **Fisheries Dependent Survey**

Hypotheses

H_1: Salinity is a function of flow and tides, in the summer, salinity will increase over time if precipitation levels are low

H_2: Yes, the shoreline catch rates will be higher than the channel catch rates

H_3: In a drought year, we expect to find legal male crabs further upriver past the salt water-freshwater demarcation line (Popper Dam Creek, Ashley River, SC)

H_4: Coastal SC anglers will have higher response rates and use predominantly pots

Results

Figure 2: Averaged bottom salinity by site and date. YSI measurements from the (13) bi-weekly samples in the Ashley River, Charleston, SC. Post flood anomaly of 10/03/2015 in blue

Figure 3: Averaged catch rates from (13) collection dates. Comparison of the shoreline and channel catch rates.

Figure 4: Averaged shoreline and channel catch by site, separated by sex, legal males (>127cm), sublegal males (<127cm), immature females. Measurements from (13) bi-weekly samples in the Ashley River, Charleston, SC

Figure 5: Postcard responses categorized by month and coastal/ non-coastal participants. Data collected from participant responses in fisheries dependent survey.

Figure 6: Differences in gear type grouped by month, categorized by coastal and non-coastal survey participants. Data collected from participant responses to fisheries dependent survey.

Future Work

This field study is of immediate use to the SCDNR as the analysis of crab catch along the salinity gradient will lead to an updated crab potting survey that will be used in future management policies.

The data from the Fisheries Independent and Fisheries Dependent study will be used to inform an Individual Based Population Model for future work.

Figure 7: Individual based population model design (left). Commercial pots in the middle of the channel, while recreational pots were placed along the edges of the marsh. Individual based population model running (with crab) (right). Simulated population data, river flow data based on the Edisto USGS gauge.

Acknowledgements

This very grateful grad student would like to thank her tirelessly patient advisor, Dr. Amy Fowler. A special thank you to Stephen Crowcroft for always lending a hand or a piece of advice. Thank you to Jeff Brunson and Larry DeLancey as well, for helping out. We came, we saw, we crabbed!

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1770

Examples from Previous Entries

2016 Winner: Humanities, Social Sciences, Arts, & Education

Shedding Light on History's Shadows with Digitization: Lowcountry Digital History Initiative

Jamie Mansbridge, Monica Bowman, Leah Worthington, College of Charleston, MA Program in History

Lowcountry Digital History Initiative

Introduction

The **Lowcountry Digital History Initiative (LDHI)** is a digital public history project at the College of Charleston hosted by the Lowcountry Digital Library. Launched in 2014, LDHI serves as an online platform hosting historical exhibits that focus on underrepresented histories of the Lowcountry. LDHI is a digital museum providing wider access to information and stories that are often left out of history books.

LDHI Objectives

- Keep the College of Charleston up to speed with how people digitally engage with historic and cultural information in the digital world.
- Encourage projects that highlight underrepresented race, class, gender, and labor histories within the Lowcountry region.
- Help articulate diverse histories within the Lowcountry's numerous historic landscapes and structures.
- Provide its partners with guidance and support for conceptualizing and implementing digital interpretation strategies.
- Share the dynamic, cost-effective, and widely accessible outreach and educational capabilities of digital public history.

Featured Exhibits

"Somebody had to Do It": First Children in School Desegregation

- Examines the history of school desegregation in South Carolina and the U.S. South.
- Features oral histories with Black Americans who were the "first children" to integrate public schools in the mid-twentieth century.

Voyage of the Echo: The Trials of an Illegal Trans-Atlantic Slave Ship

- Examines the world of the illegal trans-Atlantic slave trade by reconstructing the voyage of the slave ship Echo in 1858.
- Utilizes documents from a major public trail to tell the story of a part of part of history with few sources.
- Highlights disparate historical narratives including popular opinion's power, sea merchants, slave rebellions, and the U.S. Civil War.

Keeper of the Gate: Philip Simmons Iron Work in Charleston, South Carolina

- Outlines the history and work of Charleston's award-winning and famous iron worker, Philip Simmons.

- Features the cultural arts and artists of the Lowcountry.

Featured Upcoming Exhibit

Mother Emanuel Tribute

- An image-heavy tribute highlighting the memorabilia left at Mother Emanuel in the weeks and months following the June 17, 2015 shooting.

Graduate Students' Roles

LDHI projects are developed through collaborative teams: academic scholars, librarians, archivists, public historians, and graduate students.

LDHI graduate student assistants play a crucial role in developing, editing, and laying out each project. In the process, we acquire skills in digital technology, editing, and archival research. In addition to offering a widely accessible digital exhibitions platform, LDHI provides a distinctive educational opportunity for us to work in the dynamic and growing scholarly fields of digital humanities and public history.

As graduate students, we also attend local events discussing LDHI as a whole or specific projects we have worked on. In this way, we are building public speaking and community outreach skills.

Broader Implications

Increasing public access to academic information is an ongoing goal across academic fields. LDHI is an important College of Charleston tool to provide the general public as well as local and global educators with better access to the region's history.

LDHI is one of the College of Charleston's tools to provide a wider audience with access to interesting and often untold stories of Lowcountry history and culture, promoting knowledge and understanding of people here and throughout the world.

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