

# Educating Students by Experience and Adventure

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**ECU Scholar--Teacher  
Awards and Symposium  
Thursday, April 7, 2011  
Mendenhall Student Center**



# How Did I Get Here?

- I came to East Carolina University in August of 1983. I was an Assistant Scientist in the Institute for Coastal and Marine Resources – now the Institute for Coastal Science and Policy.



## My Research Interests:

- Evolution and Ecology of Diadromy –
  - ❖ Anadromy – striped bass, shads and river herrings, sturgeon
  - ❖ Catadromy – American eel
  - ❖ Critical habitat assessment
  - ❖ Fish passage
  - ❖ Life history aspects
- Long Distance Migration –
  - Striped bass, shads and river herrings, spiny dogfish shark
- Trace Element Signals in Coastal Watersheds –
  - “watershed fingerprinting”

# Teaching

- Teaching – I love to teach both graduate students and underclassmen and to involve them at all levels of the college experience.
- Today's methods and techniques present many challenges to instructors – distance education, white boards, projected lectures from computers, and yes – even adequate cell phone coverage.
- Whatever happened to slide projectors and good ole chalk boards?

# **Courses Taught in Last Five Years**

- **Intro to. Fisheries Management (BIOL 3550, 4550)**
- **Fisheries Techniques (BIOL 5600/5601)**
- **Current Topics in Coastal Biology (BIOL 5680)**
- **Advanced Fisheries Techniques (BIOL/CRM 7011)**
- **Graduate Marine Biology (BIOL 7020/7021)**
- **Fisheries Literature (BIOL 7350)**

# The 21<sup>st</sup> Century Student

- Students hate/love to see themselves in action. “Don’t take my picture... Oh hey, look at me!”
- Students crave to have a closeness to a mentor, someone more than a teacher on MWF (i.e., do the students actually KNOW your name?)
- Students can’t relate textbook information to real life experiences – “I’ll never use this.”
- Students have lost the necessity to take notes (posting notes, Blackboard, PowerPoints, etc.)
- Students do not know how to roll up sleeves and “Git ‘er done!”
- Students want to meet people that can help them in the job market, but don’t know how to make this happen.



# Actor/Mentor/Teacher

"It was hard to sit and listen to somebody talk. I wanted to be out, educated by experience and adventure, and I didn't know how to express that."

-- Robert Redford, AARP Magazine, Mar/Apr 2011, p. 41.



# How I Incorporate Scholarly Activities into Teaching

- Take lots of photos!
- Use real data to connect textbook with real life situations.
- Translate the textbook to real life experiences.
- Involve students in professional societies and professional meetings to network with future peers.
- Bring alumni, former graduate students, and professionals to campus to lecture/relate life experiences.
- Facilitate undergraduate experience and adventure with internships and work in your laboratory.
- Humor

# Take Lots of Photos!





# Use real data to connect textbook with real life situations

## Population Size Class Structure

### Hatteras-Kitty Hawk, 98-99

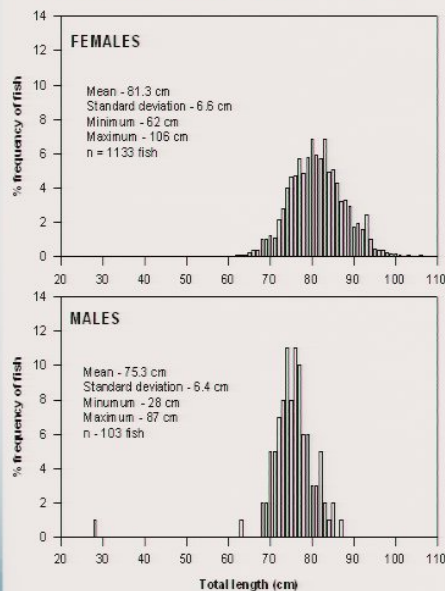


Figure 4: Percent total length (cm) frequency of male and female spiny dogfish captured inshore from Hatteras to Kitty Hawk, North Carolina during the winter of 1998-99 onboard the Bout Tine.

### Hatteras-SC, Feb-Mar 1999

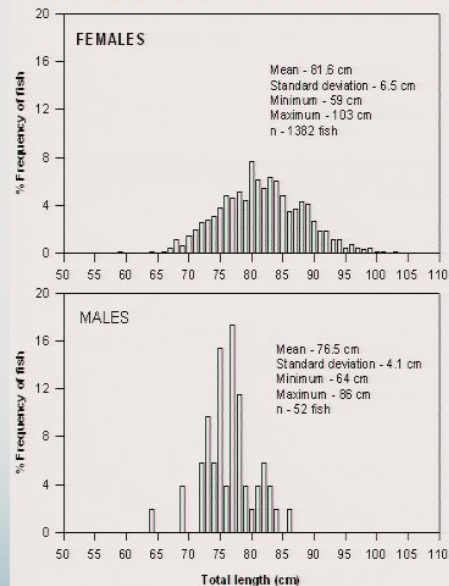


Figure 10: Length frequency (TL, %) of male and female spiny dogfish captured in coastal waters south of Cape Hatteras, North Carolina to the North Carolina-South Carolina state line by the Captain Dell during the winter of 1999.

# Translate the textbook to real life experiences.



Weekend field trips sampling water quality and wildlife



Kick seining in Green Mill Run

Involve students in professional societies and professional meetings to network with future peers.





Bring alumni, former graduate students, and professionals to campus to lecture/relate life experiences.



Dr. James Morris, alumnus 1999, 2001, World's expert on Atlantic invasion of lionfish (NOAA/National Ocean Service).



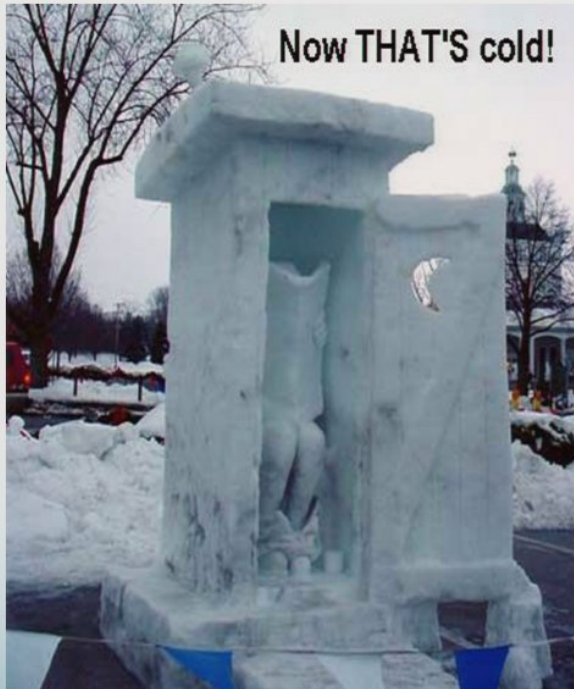
Commercial fisherman from Wanchese, NC

Facilitate undergraduate experience and adventure with internships and work in your laboratory.





# Humor!



Many thanks to my colleagues of the Biology Department for the nomination!

Thanks to all of my great students over the years for putting up with my life stories and goofy photos.

