## Transformational Learning at the GTMNERR

#### **Dr. Kelly Smith**



# What is Transformational Learning?

- Transformational Learning should fundamentally impact and hopefully enhance student personal development, intellectual growth, and professional achievement.
- Can occur in the classroom, but often happens outside the traditional framework

### GTMNERR Use for College Students

- Habitat diversity is excellent
- Field and laboratory support
- Monitoring and research activities enhance learning



#### **Student Activities**

- Weekly meetings with staff
- Developed field sampling skills
- Carried out teambased sampling programs based on common interests



#### **Diversity of Benthic Fauna**

- How does the dam impact benthic fauna?
- Kick-net sampling
- Compared diversity among
   Guana Lake sites
   & a Guana River
   site





#### Shore shrimp abundance and parasitism

- What were relative parasite loads?
- Counted and measured shore shrimp
- Counted parasites





#### Water quality study

- Impact of the dam on water quality?
- Monitored nutrients, chlorophyll a, salinity and DO
- Compared above & below the dam





#### Salt marsh periwinkle abundance

- How abundant are periwinkles at GTMNERR?
- Mark recapture study & transect analysis

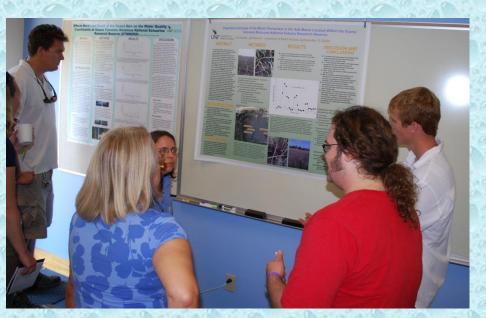




Photos from M Williams & K Haddix

#### **Student Outcomes**

- Research skills
- Career
  information
- Presentation skills



#### **Student Outcomes**

• Student Empowerment....



#### **Future Outlook**

- Student interest is strong, but
  - Expense is an issue
  - Travel time can eat into class time
- Perhaps... more intensive class over a shorter time period
- Inter-collegiate interaction undergraduate research symposium??

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#### Thank you.