**Conservation Design for Manatee in Puerto Rico**

**Special Topics Class BIO 592-008 & 009**

**Fall 2010**

**Syllabus**  
  
North Carolina State University

USGS NC Cooperative Fish and Wildlife Research Unit

Department of Biology   
Lead Instructors: Ashton Drew (cadrew@ncsu.edu) & Jaime Collazo (jaime\_collazo@ncsu.edu)  
Class time: TBD, 1-2 days per week, totaling 3 hours  
Room: TBD

Credits: 4 (3 as 592-008 and 1 as 592-009)  
  
**Course Objectives**  
  
This is a participatory research course, which means that (1) we do not know the answer to the questions being posed and (2) we will work together to design and carry out research to answer the question. The assignment for this course is: To document and deliver the science to inform a federal ruling regarding the establishment of manatee protection area(s) in Puerto Rico (\*link to federal article\*).

* **Technical:** We will work in collaboration with the US Fish and Wildlife Service and the government of Puerto Rico to assemble, interpret, and report currently available data and exert knowledge in support of the federal ruling. Specific tasks will likely include literature review, spatial data modeling in GIS, and facilitating expert workshops in Puerto Rico. The final report must convey the science in a manner that will support federal decision-making process and satisfy requirements of transparent, science-based conservation planning. All project participants will be co-authors of the report. By the end of the semester, we should have a very solid draft ready for review by participating experts and our state and federal partners.
* **Professional development:** Participate in collaborative research, improve communication skills, develop leadership skills, and experience a peer-review process (likely after the course is completed).

**How will a course like this work?**  
  
The basic idea is that we will operate as a collaborative research team. The approach is described in some detail in [*Hess & Drew, 2004*](http://www4.ncsu.edu/%7Egrhess/papers/Hess&Drew2004.pdf)*. Inquiry-guided learning through collaborative research. Pages 146-172 in V.S. Lee (editor). Teaching and Learning through Inquiry: A Guidebook for Institutions and Instructors. Stylus Publishing, Sterling VA.*

**Class participation and philosophy**  
  
By participating in this class, students accept responsibility to deliver a report under contract to the US Fish and Wildlife Service and the government of Puerto Rico. Thus, full participation both in and outside the classroom is essential. As a collaborative project, tasks are divided among group members according to individual skill sets and group needs. Meeting weekly deadlines is critical to deliver contracted draft document at course completion. All questions and thoughts are encouraged, because, as stated previously, you the students will take leadership of the objectives, methods, and final product. Our tasks as instructors are to facilitate this process and ensure the work meets federal and state requirements.

**Prerequisites**  
  
We are seeking 2-3 graduate students to participate in this project. Students should have coursework or experience in at least one of the following:

* ecology
* conservation biology
* environmental policy
* GIS
* spatial modeling/statistics
* conservation planning

**Consent of instructors is required**  
  
Please complete and submit an application - deadline and form available on [home page](http://www.basic.ncsu.edu/mpa_class/index.html) .

**Calendar**  
  
Because of the dynamic nature of this course, we cannot provide a week-by-week calendar - as team members, you will help build that calendar during the course. The calendar will develop as we go on a shared website.

**Grading**  
  
You will receive a letter grade for this course. Your grade will be based on completion of assignments, my (Ashton Drew) written evaluation of your contributions to the effort (which I will share with you), a peer evaluation of your efforts by all classmates (you will be told your average, but individual ratings will be kept in confidence), and a self-assessment of your efforts (which only I will see). We will go through an interim evaluation shortly after fall break so that you know where you stand in the eyes of your peers and me.

**University Policy Statements**  
  
**Disabilities**  
I take appropriate steps to accommodate students with disabilities. The [Disability Services for Students](http://www.ncsu.edu/provost/offices/affirm_action/dss/) (DSS) staff is available to serve as a resource in assisting the students obtain accommodations for their disabilities. Please let me (Ashton Drew) know if you require assistance with this.  
  
**Code of Student Conduct**  
Please review the [University Student Code of Conduct](http://www.ncsu.edu/policies/student_services/student_discipline/POL11.35.1.php) . I will refer violations to the Academic Integrity Board of the Office of Student Conduct. Violations can result in a failing grade for an assignment or course, or suspension from the University.