Social Science Methods for Long-Term Interdisciplinary Research: An LTER Cross-Site Course

Laura Ogden, Florida Coastal Everglades LTER
Ted Gragson, Coweeta LTER
Morgan Grove, Baltimore Ecosystem Study LTER
“From Yardstick to Gyroscope”

• **Course Goals**
  – Train graduate students in research methods appropriate to the LTER Decadal Plan’s framework
  – Introduce students to LTER social science research opportunities
Multi-site Participation

- Over 40 participants
  - 7 LTER sites
  - 18 universities
  - England, Mexico, Argentina

LTER Network
Live Classroom

Ethnographic methods

- Open-ended interviews
- Semi-structured interviews
- Structured interviews
- Participant observation

Wimba Interactive Classroom Screen
Course Topics: From LTER Decadal Plan

• Environmental Valuation
  – Hedonic valuation, Contingent valuation, Willingness to Pay

• Sense of Place
  – GIS parcel-level data, Ethnography, Telephone surveys

• Land Use/Land Cover Change
  – Remote-Sensing, Agent-based Modeling, Econometric Modeling
Course Topics: Critically Engage Methods

- **Environmental Justice**
  - Using census data in GIS
  - Archival research

- **Livelihoods**
  - Local knowledge
  - Scenario modeling
  - Simulation analysis

- **Climate Change & Natural Disasters**
  - Risk Assessment
  - Vulnerability Analysis
Final Projects

- Methods Essay & Presentation
  - Topic chosen from the Decadal Plan
  - Evaluation of multiple methods
  - Genesis for their research proposals

Rebecca Garvoille
FCE Graduate Student
Course Outcomes & Next Steps

• Course Assessment Survey
• Offer the course again next Spring
• Transform course materials and presentations into an LTER methods book
• Archive and publish class sessions as podcasts
• Develop an LTER socioecological theory course
List of Presenters

- Christopher Boone, Arizona State Univ.
- Morgan Grove, US Forest Service
- Laura Ogden, FIU
- Marla Emery, US Forest Service
- Rinku Roy Chowdhury, Univ. of Miami
- Tom Evans, Indiana
- Gary Kofinas, Alaska, Fairbanks
- Terry Chapin, Alaska, Fairbanks
- Geoffrey Buckley, Ohio
- Erika Svendsen, US EPA
- Dana Fisher, Columbia
- Scott Swinton, Michigan
- Pete Nowak, Wisconsin
- Ted Gragson, UGA
- Austin Troy, Vermont
- Anthony Oliver-Smith, UF