

FIFTH CALDWELL CONFERENCE HIGHLIGHTS MICROCHRONOLOGY IN ARCHAEOLOGY

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On May 14-16, the St. Catherines Island Foundation and the American Museum of Natural History co-sponsored the Fifth Caldwell Conference. This year's symposium, entitled "*Seasonality and Human Mobility along the Georgia Bight: Methodologies and Substantive Applications*," was co-organized by Elizabeth J. Reitz (Georgia Museum of Natural History), Irvy R. Quitmyer (Florida Museum of Natural History) and David Hurst Thomas (American Museum of Natural History).

Archaeological excavations typically recover multiple biological proxies reflecting both the seasonal behavior of people and the biological resources they exploit. Questions of seasonality are embedded within most archaeological studies of settlement patterns, resource availability, impact on resources, and social complexity. In the Fifth Caldwell Conference, researchers from seven states tackled the issue of microchronology, with particular reference to the archaeology of St. Catherines Island.

Understanding seasonal behavior requires an incremental perspective on chronology. Ceramic chronologies, for instance, provide a millennial-scale "hour-hand" to the archaeological timepiece. Radiocarbon dating is more precise, functioning as a century-level "minute hand" to the chronology. The study of incremental growth and seasonal availability of key marine and terrestrial taxa potentially provides a "second-hand" to this chronology—accurate to months (and even weeks) if properly calibrated by actual monitoring of modern populations. The Fifth Caldwell Conference addressed specific methodological issues (such as sample size, inter-site and intra-site variability, dating, and defining regional settlement patterns) that remain to be resolved as investigators proceed with seasonality studies on St. Catherines Island and elsewhere on the Georgia Bight.

The morning session began with four presentations: "*Seasonality and Mobility on the Georgia Bight: Why We Should Care*" by David Hurst Thomas; "*Interpreting Seasonality from Modern and Archaeological Fishes on the Georgia Coast*" by Elizabeth J. Reitz, Bruce M. Saul (Augusta State University), Jason W. Moak (Southeastern Natural Sciences Academy), G. Denise Carroll (Georgia Southern University) and C.W. Lambert (Augusta State University); "*What Can Plants and Plant Data Tell us about Seasonality?*" by C. Margaret Scarry (University of North Carolina) and Kandace Detwiler Hollenbach (University of Tennessee); and "*Annual Incremental Shell Growth Patterns in Hard Clams (*Mercenaria spp.*) from St. Catherines Island, Georgia: A Record of Seasonal and Anthropogenic Impact on Zooarchaeological Resources*" by Irvy R. Quitmyer and Douglas S. Jones (Florida Museum of Natural History).

Four additional papers were delivered in the afternoon: "*Oxygen Isotope Validation of Annual Macroscopic Shell Growth Increments in Modern and Zooarchaeological Hard Clams (*Mercenaria mercenaria*) from the Litchfield Beach Estuary, South Carolina*" by Douglas S. Jones, Irvy R. Quitmyer and Chester DePratter (University of South Carolina); "*Evaluating the Eastern Oyster (*Crassostrea virginica*) as a Proxy for Season of Zooarchaeological Collection*" by Nicole Cannarozzi (Florida Museum of Natural History); "*Evidence for Year-Round Occupation at Late Archaic Shell Rings of the Georgia Coast: Data from Oxygen Isotopic Profiles and Seasonally Sensitive Vertebrate Fauna*" by Carol Colaninno-Meeks (Georgia Museum of Natural History); and "*Intra-site Variability in Seasonal Occupation at Back Creek Village, St. Catherines Island, Georgia*" by Sarah Bergh (Georgia Museum of Natural History).

These scientific presentations are presently being edited for publication as an *Anthropological Paper* of the American Museum of Natural History.





Envirovet 2010 By Terry Norton

Photos by Rachel Harris & Val Beasley

The 2010 St. Catherines Island portion of Envirovet Summer Institute course from June 30 to July 3, included 4 days of wildlife capture, radio-tacking, and base-line health assessments and monitoring of a variety of species.

The overall goal of the course is to educate, inform, engage and inspire veterinari-



Mist netting instruction

ans and veterinary students of all backgrounds and nationalities to become integral members of teams protecting animal, human and ecosystem health in the one living world we share.

Envirovet aims to create a force of scientists with unique perspectives, knowledge, skills, and expertise required to implement an efficient approach to ecosystem repair that will enable synchronous gains in wildlife, domestic animal, human, and economic health.



Gopher Tortoise Health Assessments

The course runs for seven weeks and includes intensive lecture, laboratory, and field experiences. This year, twenty eight veterinarians, veterinary students and wildlife biologists participated in the course. These students were taught by a variety of instructors, including biologists from South Carolina DNR, Georgia DNR, Palmetto Bluff, UGA and Sewanee University. SCI teachers included Terry Norton, Jenifer Hilburn, Rachel Harris, Susan Inman, and Veronica Greco.



Setting Traps for Amphibians

The United States portion of the course begins at White Oak Conservation Center in Yulee Florida, then St. Catherines Island, the Georgia Sea Turtle Center, and finally Harbor Branch Oceanographic Institute in Florida. The students then travel to various locations throughout Tanzania for the remaining 4 weeks.



Field Exercise: Orienteering

They start the program with 'Avian capture and disease monitoring' This starts with mist-netting passerines (small forest birds), and ends in physical exams. They learn how to set-up the nets, pull the birds out of the net, take blood samples, and exam the birds, all while handling them safely. Then it is on to the beaches for 'Field Demonstrations: Shorebird Conservation and Capture.' In this section students help set up a cannon

net, a rocket net, and a whoosh net, and learn about how these nets are used to capture shorebirds, as well as shorebird conservation programs that instructors are involved in.



Sea Turtle Crawlway

The afternoon courses were and 'Introduction to Map Reading' and 'Field Exercise: Orienteering', and an evening of 'Cultural History of St. Catherines Island' by Royce Hayes. The second day was 'Reptile and Amphibian Capture Techniques' in the morning, and 'Gopher Tortoise Health Assessment and Conservation.' The final day is a class in 'St. Catherines Island Sea Turtle Nest Protection Program.'



Introduction to Map Reading

This year we had participants from several African nations, and India, Indonesia, Italy, Thailand, Brazil, Canada, and the United States.

This was St. Catherines Island Foundation's tenth year of participation in the course and was the best effort yet by the staff and other collaborating instructors. A huge Thank You to everyone involved.

