

Survey of St. Catherines Island's Aquatic

Beetles By Dr. William Wolfe

Students of the department of Biological and Environmental Sciences at Georgia College reveled in the opportunity to explore St. Catherines Island and its aquatic fauna with me. These students (from five countries) are currently participating in classes, including Entomology, Aquatic Entomology, and Invertebrate Zoology as well as independent research. Most of the students come fully trained with collecting and curating techniques of invertebrates and particularly beetles, and are already quite adept for our task of collecting and analyzing beetles of SCI.

These field trips always begin with the boat ride to the island. The SCIF staff that ferry us back and forth could chart the course with their eyes closed but for the first-time students there is a wave of excitement as they begin their island adventure on the water. While here they learn about sea turtle beach-nesting, colonial waterbird rookeries, Sandhill Cranes, ghost crabs, fiddler crabs, wildflowers too numerous to name, wilderness beaches, saltmarshes, ancient sand dunes, palm tree & palmettos, lemurs (always a pleasant surprise). Then there was a stoic bald eagle, a tiger swallowtail, a gulf fritillary, and a green darner that drifted by simultaneously as they walked the edge of the first pond.

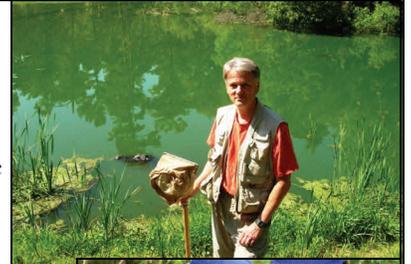
Every micro habitat that can be discerned is sampled including large and small temporary and permanent pools, both shaded (forested) and open, and with sparse to dense vegetation. Almost all collections are made with a triangular frame dip net. This is not a dainty process. It's similar to shoveling leaves and mud onto a sheet than waiting for the insects to crawl out. Students are startled to find out a days' worth of "dip netting" is exhausting; however, they are most incredulous to learn that the only way to effectively collect all the insects is by aspirating the little critters. All specimens are preserved in either 80% or 95% (if DNA analysis is planned) ethyl alcohol.

We have learned that the freshwater habitats at St. Catherine's are dominated by predaceous diving beetles (Dytiscidae), water scavenger beetles (Hydrophilidae), aquatic Hemiptera, and dragonflies (Odonata). Predacious diving beetles are the most abundant of all and the focus of the research so far. Twenty-three species of Dytiscidae are documented to date.

Eight representative species are illustrative to the left They are from top to bottom and left to right: *Acilius fraternus*, *Hydaticus bimarginatus*, *Copelatus chevrolati*, *Laccophilus fasciatus*, *Celina slossoni*, *Neoporos cimicoides*,

Hydrovatus pustulatus, and *Bidessonotus longovalis*.

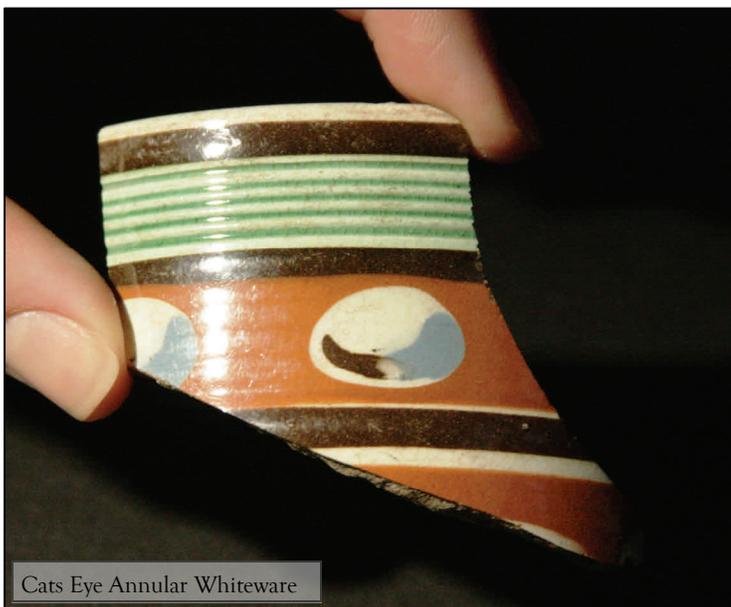
I have had the opportunity to conduct research projects on predacious diving beetles in 23 countries, mostly in Africa and South America. Many colleagues are astonished that my favorite place on earth to study Dytiscidae is St. Catherines Island. This treasure is a one-of-a-kind field laboratory maintained in a near wilderness condition with limited access. This combination of features coupled with the enthusiasm and assistance of the staff at St. Catherines provides a completely unique long-term field research opportunity for which I am very grateful. When this is multiplied by student mentoring opportunities and by the number of students who gained research experience, St. Catherines truly has been invaluable for the Georgia College Insect Museum fauna/biodiversity research program. Thank you St. Catherines Island Foundation and staff for everything you do!



Historic Ceramics of St. Catherines Island

By Katherine Malone Tarascio

This past spring, interns in the North American Archaeology Laboratory at the American Museum of Natural History completed analyzing a large collection of historic ceramics from St. Catherines Island. By “historic ceramics,” we mean the non-Indian pottery that dates to the post-colonial eras of island history. In this project, we have temporarily set aside both indigenous ceramics and Spanish-period pottery to focus specifically on the poorly-understood British and American archaeology of St. Catherines Island. So defined this ceramic sample comes from fourteen different archaeological sites on the island, places where we worked to mitigate disturbance caused by recent construction and digging fire breaks—including Cemetery Road, Meeting House Field, Fallen Tree, South End Settlement, and the horse barn.



Cats Eye Annular Whiteware

We taught interns how to identify diagnostic features (such as clay, body type, and decorative elements) and how to use these keys to assign a sherd to four basic typological categories; coarse earthenwares, refined earthenwares, porcelains, and stonewares. Sherds were then further identified by their “Standardized Ceramic Type,” a listing of categories and terms conventionally employed by historical archaeologists

Pearlwares comprised the largest proportion of the refined earthenware category. Blue and molded edge pearlware was common, with a production date range of 1785 to 1840. Transfer printed whiteware in a variety of colors was also quite frequent, reflecting a production date range of 1830 to the present. Next came annular ware types, with manufacture beginning in England during the mid to late 17th century (primarily on creamware bodies).



Assorted historic ceramics recovered from recent surveys on St. Catherines Island



Brown transfer print Whiteware

Importation and popularity of such ceramics peaked in North America in the late 18th century, although they are likewise found in contexts dating into the mid-19th century; the thick, banded raised lines of factory slip decoration survives on yellow wares into the early 20th century. Stone china and creamware made up only a fraction of the refined earthenwares in the St. Catherines Island collection. Stone china, with a production date range of 1840 to 1930, proved the most difficult to identify given both its manufacture and popularity periods which closely paralleled whiteware. Stoneware, porcelain, and coarse earthenware also turned up occasionally.

Multiples lines of archaeological evidence are always required in understanding the past, but this ceramic analysis provides a departure point for understanding the antebellum occupations of the island. This project was also important because it isolated an important type of collection of historic ceramics specific to St. Catherines Island. The new Historic Ceramic Analysis notebook and photographic collection will provide an important reference work for future projects conducted in the North American Archaeology lab at the American Museum of Natural History.