the Mississippi Gulf Coast Community College Science Department for anatomy students.

10:45 DEVELOPING A VIDEOTAPE DATA BASE AND RETRIEVAL SYSTEM
Dewey Bass* and Allen Tubbs, Cooperative Internship Program between Mississippi Gulf Coast Community College—Jackson County Campus, Gautier, MS 39553, and J.L. Scott Marine Education Center and Aquarium, Institute of Marine Sciences, University of Southern Mississippi, Biloxi, MS 39530

The J.L. Scott Marine Education Center and Aquarium has a variety of outstanding scientific videos, but has no practical method of organizing them for easy access. The purpose of this project is to develop a quick and easy method of organizing the videos by subject, length, and year with multiple cross-referencing. This will be accomplished by creating a computer data base and a readily accessible physical storage unit.

11:00 SCIENCE IN THE BOTANICAL ART OF WALTER INGLIS ANDERSON
Hema M. Denham*, John D. Caldwell, and Cynthia A. Moncreiff, Cooperative Intern Program Between Mississippi Gulf Coast Community College—Jackson County Campus Honors Biology Students, Gautier, MS 39553, and Gulf Coast Research Laboratory, Institute of Marine Sciences, University of Southern Mississippi, Ocean Springs, MS 39566-7000

A survey of the plants depicted in the murals painted by Walter Inglis Anderson on the walls of the Ocean Springs Community Center and “The Little Room” was conducted. The study was performed to see if the plants were depicted seasonally and in appropriate settings. Habitat associations were examined to determine if the artist truly portrayed nature with respect to community structure. Plant representations were analyzed for accuracy of morphological characteristics and scale. Seasonal and geographic consistencies were determined for individual panels within the murals studied. Published local floras and unpublished plant lists for local habitats likely to have been visited by Anderson were compared to species lists generated from the murals. Photographs of the murals and of local flora were compared to support the taxonomic identifications of the individual plant species. Conformity in the phytosociological communities in light of the whimsy of the artist is evident throughout his work, whether illustrating a bog, marsh, field or island. Elements that are out of place, season or time are highlighted, as are panels of paintings that represent more than one ecosystem or are large enough to encompass multiple habitats. Repetitions or the insertion of certain plants for symbolic reasons are discussed.

11:15 SHARKS ALIVE! — A COMPREHENSIVE STUDY OF CAPTIVE SHARK BIOLOGY

Christopher David Fain* and Kimberly Damon-Randall, Cooperative Internship Program between Mississippi Gulf Coast Community College—Jackson County Campus, Gautier, MS 39553, and J.L. Scott Marine Education Center and Aquarium, Institute of Marine Sciences, University of Southern Mississippi, Biloxi, MS 39530

Throughout history mankind has been fascinated with sharks. These “lions of the deep” have sparked both vivid dreams and nightmares. Many attempts have been made to alter the misconceptions surrounding sharks and their impact on mankind. These efforts have ranged from shark-hunting to attempting to keep them alive in captivity. Healthy captive sharks provide an invaluable resource to educators. An estuarine display tank with juvenile bonnethead sharks has been constructed at the J. L. Scott Marine Education Center and Aquarium. This tank has provided a backdrop for the new educational rotation, Sharks Alive! Recommendations on maintaining healthy sharks in captivity and various behaviors associated with captive sharks will be discussed.

THURSDAY AFTERNOON

Deer Isle Room

1:30 PHYSICAL SCIENCE ADD-ON ENDORSEMENT WORKSHOPS: AN EVALUATION AND IMPLICATIONS FOR WORKSHOP PLANNING
J. Emory Howell*, Brian S. Knippers, and Carla M. Jung, University of Southern Mississippi, Hattiesburg, MS 39406-5043, Peeples Middle School, Jackson, MS 39205, and Bradley University, Peoria, IL 61606

A study was conducted in order to determine what in-service teachers learned in a workshop setting that modeled hands-on learning-centered physical science instruction and the use of performance-based assessment techniques. Licensed high school science teachers were offered the opportunity to acquire the physical science endorsement through participation in workshops conducted at three Mississippi sites during the summers of 1996 and 1997. Techniques used to evaluate the workshop included observation, analysis of performance based assessment results, analysis of multiple choice test results, identification of persistent misconceptions about physical phenomena, participant interviews, participant journals, and written evaluation by participants. Significant differences were observed between the understanding measured by conventional paper-and-pencil testing and that measured by performance-based methods. The activities were well received by participants and follow-up interviews indicated that many of the activities were implemented into the physical science course. However, only a small number of the participants implemented alternative forms of assessment into their teaching. Assessment conducted during the workshop indicated the persistence...