

Center for Water and Wetland Resources

The University of Mississippi Field Station

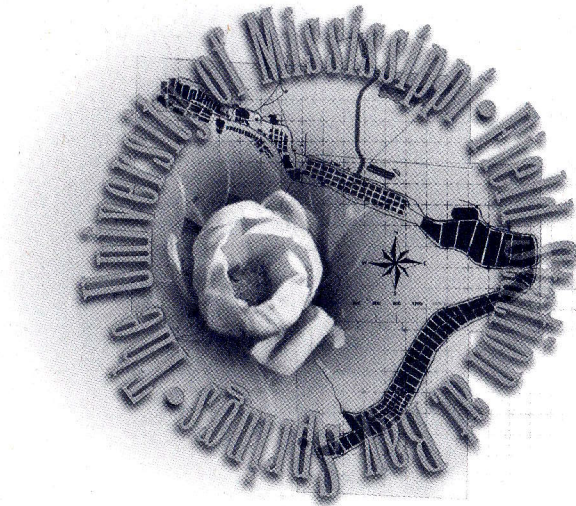


Dedication

Friday, June 1, 2001

Center for Water and Wetland Resources

The University of Mississippi Field Station



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2 p.m.

Program

Welcome

Dr. Robert Khayat
Chancellor
The University of Mississippi

Invocation

Reverend Jim Peterman
Pastor
Cambridge Methodist Church

Introductions

Dr. Robert Khayat

Presentation of Greeters

Dr. Ronald Borne
Interim Vice Chancellor for Research
The University of Mississippi

Greetings

The Honorable Ronnie Musgrove
Governor of Mississippi

The Honorable Patricia Lamar
Mayor, City of Oxford

The Honorable Keith Brown
Member, Board of Supervisors, Lafayette County

Address

The Honorable Thad Cochran
United States Senator for the State of Mississippi

The Beginnings of the Field Station: History and Overview

Dr. Luther Knight
Director Emeritus of The University of Mississippi Field Station and Professor Emeritus of Biology

Opportunities for the Future

Dr. Marjorie Holland
Director of The University of Mississippi Field Station and Center for Water and Wetland Resources

Presentation of the New Center for Water and Wetland Resources Buildings

The Honorable Stacy Davidson
Board of Trustees, State Institutions of Higher Learning

Acceptance and Closing Remarks

Dr. Robert Khayat

Benediction

Reverend Alan Cochet
Pastor, College Hill Presbyterian Church

Reception and Open House Immediately Following the Ceremony

History of The Center for Water and Wetland Resources

at The University of Mississippi Field Station

In 1947, The University of Mississippi Field Station began as a bait fish farm, Ole Miss Fisheries, Inc., later known as Minnows Incorporated, and opened for business under the ownership of the Herbert Kohn Corp. of Memphis. The original minnow farm consisted of 165 acres purchased from the Hickey family. Later additional land was purchased, and, by 1960, there were 142 ponds capable of producing 3 to 4 million fish a year. At maximum development, the fish farm occupied the Bay Springs Branch valley and that of an unnamed creek that joined the Bay Springs Branch to form part of the headwaters of Puskus Creek.

In the early 1980s, Minnows Incorporated closed, and Weyerhaeuser Inc. purchased the land. Recognizing the potential of the property for research and education, The University of Mississippi purchased an initial 500 acres of land from Weyerhaeuser, and the Field Station was dedicated in spring 1986. Two additional purchases (in 1989 and 1996) brought the total acreage to its current 740 acres. Dr. Luther A. Knight, Jr., served as the station's first director until 1991, when Dr. John H. Rodgers, Jr., assumed the position. His tenure ended in 1994.

The Field Station was placed under the administration of the Office of Research in 1995, and Dr. Knight was asked to serve as interim director. Dr. Marjorie M. Holland was appointed director of the Field Station and the Center for Water and Wetland Resources on August 15, 1995, and continues to serve in that capacity.

Today, The University of Mississippi Field Station is a 740-acre educational and research facility known as "the Mid-South's premier living laboratory." Located approximately 11 miles from the



Bramlett Pond



Dr. Marjorie M. Holland

UM campus in Oxford, the Field Station is an integral node of the international system of field stations and marine laboratories. With one of the largest and most diverse sites in this system, the UM Field Station sits within the headwaters of the Little Tallahatchie River, which flows into the Yazoo River, then into the Mississippi River, and on into the Gulf of Mexico.

More than 200 spring-fed ponds and mesocosms and more than 90 acres of diverse types of natural and constructed wetlands make the Field Station one of the foremost facilities of its kind in the world. This expansive, species-rich environment offers extraordinary opportunities for scientific training, educational outreach, technology transfer, and basic and applied research across an impressive range of disciplines.

Several federal and state agencies, along with private sector interests, have contributed to the development of the Field Station through collaborative research, outreach, and educational programs:

- The Mississippi Department of Wildlife, Fisheries, and Parks has maintained a long-term aquaculture and fisheries research program at the Field Station.
- The National Sedimentation Laboratory of the United States Department of Agriculture (USDA) Agricultural Research Service (ARS) has sampled surface and shallow groundwater quality and surface water hydrology as part of a reference database. The Sedimentation Laboratory continues to support collaborative studies of sedimentation processes, water quality, and innovative vegetative techniques for reducing contamination from agriculture.
- The National Science Foundation has supported planning and instrumentation grants.
- The USDA Natural Resources Conservation Service has funded construction of a series of artificial wetland cells.
- The USDA Forest Service has included the Field Station as one of its sampling sites for studying fish population dynamics.
- The United States Environmental Protection Agency is currently supporting investigations of stream water quality downstream of various timber management practices.
- The Mississippi National Guard's Engineering Company C selected the station as the site for one of its domestic assistance projects in both 1990 and 1991. Company C constructed 45 10th-acre ponds and a house for the Field Station manager.
- The Peace Corps, through CHP International, Inc., funded construction of a series of artificial ponds and used the Field Station for training of Peace Corps volunteers.



**Senator Thad Cochran (left) and
Dr. Luther A. Knight, Jr.**

- The Shell Development Corporation funded construction of an artificial stream facility and sponsored research on the impact of detergent additives on aquatic stream systems.
- Zoecon and ABC Laboratories provided for construction of an experimental tank facility.
- The Mississippi Mineral Resources Institute collaborated in the drilling of several groundwater monitoring wells.

Other collaborators in support of the Field Station's educational program development have included International Paper; the United States Environmental Protection Agency; the Mississippi Department of Environmental Quality; the Robert S. Ellis Family; the Hardin Foundation; the National Center for Physical Acoustics; The University of Mississippi departments of Biology, Physics, Chemistry, Geology and Geological Engineering, and Curriculum and Instruction; and The University of Mississippi Museums.

The Croft Institute for International Studies, the National Center for Natural Products Research, the Henry L. and Grace Doherty Charitable Foundation, the Fertilizer Institute, the National Science Foundation, the USDA Forest Service Center for Bottomland Hardwood Research, the USDA-ARS National Sedimentation Laboratory, and the Hardin Foundation joined with the UM Field Station to co-sponsor a highly successful May 2000 conference on "Sustainability of Wetlands and Water Resources."

The Henry L. and Grace Doherty Charitable Foundation has begun to fund an endowed chair at the University's Center for Water and Wetland Resources. The \$1.5 million endowment is set up as a two-to-one matching grant, with Ole Miss responsible for matching funds to support graduate stipends and visiting lecturers.

The exciting new Center for Water and Wetland Resources integrates education, research, and service to produce immediate and long-term benefits associated with the nation's environmental goals, as well as educational and technology-transfer objectives. The center provides an innovative combination of programs ranging from developing biologically based technology for cleaning water and reducing the economic and health impacts of contamination, to demonstrating practical solutions for reuse of water resources. Center programs provide an innovative combination of classroom, laboratory, and field experiences for diverse

constituencies, including university and K-12 students, educators, researchers, non-governmental organizations, and members of the agricultural, aquacultural, and business communities.

The Water and Wetland Resources Center complex features state-of-the-art laboratories, classrooms, demonstration areas, and experimental field sites. Groundbreaking for the center was led by Chancellor Robert Khayat and Senator Thad Cochran on June 1, 1996. Facilities were constructed with support from the Buildings and Facilities Program administered



Groundbreaking, June 1, 1996

by the USDA Cooperative State Research, Education, and Extension Service, and state of Mississippi funds. Total funding secured for this construction project was \$6.5 million, with funds provided on a one-to-one federal-to-state match.

Recent generous contributions of plant materials provided by the USDA Forest Service Forest Hydrology Lab and the Maynard W. Quimby Medicinal Plant Garden have facilitated attractive and educational landscaping opportunities around the CWWR building complex. At the Research Recognition Luncheon on April 26, 2001, Dr. Charles Cooper of the National Sedimentation Lab was noted as the Researcher/Scholar of the Year for his numerous contributions to The University of Mississippi Field Station.

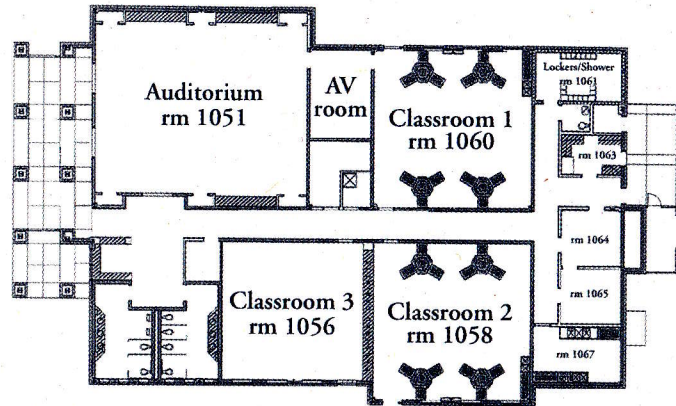
Some of the investigations housed in the Center for Water and Wetland Resources include:

- function and action of wetlands and aquatic systems
- how aquatic systems, especially wetlands, mitigate impacts of agricultural runoff containing pesticides, organics, inorganics, and metals in a cost-effective manner
- water reuse and waste contamination through biological technology
- effects of agricultural pesticides on aquatic systems at the microcosm and mesocosm scale
- bio-availability of materials in water and sediments
- identification of additional indicators (biomarkers, endpoints) of the health of aquatic environments
- remediation, degradation, and transformation of pesticides and other contaminants by microorganisms
- improvement of human health through reduced toxicity, detoxification, and microbial biotransformation of pollutants, toxic substances, and pesticides
- education and demonstration of practical solutions to agricultural water resource problems

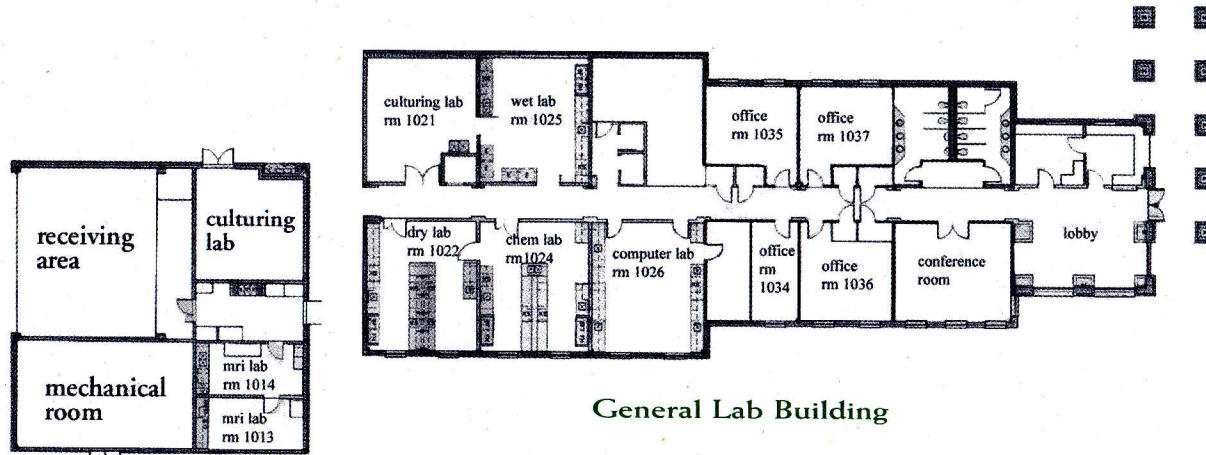


Sweet Bay Magnolia (photo by M.B. Huneycutt)

Center for Water and Wetland Resources Floor Plans

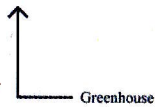


Demonstration-Technology Transfer Building



General Lab Building

Receiving Building



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Gary Miller	<i>Chair, Department of Biology</i>
Steve Reichling	<i>Memphis Zoo</i>
Matt J. M. Romkens	<i>USDA-ARS National Sedimentation Laboratory Director</i>
Jean Shaw	<i>Professor Emeritus, School of Education</i>
Robert Wetzel	<i>Bishop Professor, University of Alabama Department of Biological Sciences</i>
Don Whitehead	<i>Resource Management Service</i>
Darryail Whittington	<i>Environmental Administrator, Mississippi Department of Environmental Quality, Office of Pollution Control</i>

User Committee

Nolan Aughenbaugh	<i>Department of Geology and Geological Engineering</i>
Debbie Chessin	<i>Department of Education Curriculum and Instruction</i>
Charles Cooper (<i>co-vice chair</i>)	<i>USDA-ARS National Sedimentation Lab</i>
Gary Gaston	<i>Department of Biology</i>
Marjorie M. Holland (<i>chair</i>)	<i>Director, Field Station and Center for Water and Wetland Resources</i>
Duane Huggett	<i>Graduate Student in Pharmacology</i>
Al Mikell (<i>co-vice chair</i>)	<i>Department of Biology</i>
Ed Movitz	<i>Health and Safety</i>
Cliff Ochs	<i>Department of Biology</i>
Larry Shaffer	<i>Research Scientist, Center for Water and Wetland Resources</i>
Duane Shaw	<i>Mississippi Department of Fisheries, Wildlife, and Parks</i>
Stephen Threlkeld	<i>Department of Biology</i>
Melvin Warren	<i>USDA Forest Service</i>
Robert Woolsey	<i>MMRI</i>

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Eddie Bowen

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Bill Fryer
Jimmy Pryor

Field Station Staff

Marjorie M. Holland	<i>Director, Field Station and Center for Water and Wetland Resources</i>
Mark Baker	<i>Field Station Manager</i>
John Hart	<i>Research Associate, Center for Water and Wetland Resources</i>
Maureen Kent	<i>Field Station, Operations Coordinator</i>
David Mathis	<i>Field Station Water Systems Coordinator</i>
Chris Patton	<i>Field Station Senior Secretary</i>
Larry Shaffer	<i>Research Scientist, Center for Water and Wetland Resources</i>

Field Station Student Workers

Justin Ainsworth	Alex Pabst
Brad Babb	Dezra Peltier
Sherry Blount	Jamie Posey
Julie Chambers	Lisa Chambers-Strong
Kevin Houston	Katie Winsett
Eric Lowstuter	Keith Wright





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