

MONDAY MARCH 23, 2009

7:00 – 8:00 AM

STUDENT BREAKFAST (Students Only) (Plaza)

7:00 – 8:00 AM

CONTINENTAL BREAKFAST (Prefunction Savannah D)

SAVANNAH “C”
Shellfish and the Environment
(Shumway)

OGLETHORPE
Managing *Perkinsus*
(Soniati)

SAVANNAH “E”
Blue Crab Biology and Fisheries
(Perry)

8:10 AM

THE FUTURE IS NOW: IMPLEMENTING NOAA’S 10-YEAR PLAN FOR MARINE AQUACULTURE
Rubino and Bunsick

ENVIRONMENTAL MONITORING, DISEASE SURVEYS, AND OYSTER HUSBANDRY FOR THE MANAGEMENT OF *PERKINSUS MARINUS* IN THE GULF OF MEXICO
Soniati and Ray

POPULATION AND FISHERY DYNAMICS OF BLUE CRABS *CALLINECTES SAPIDUS* IN A SUBESTUARY OF CHESAPEAKE BAY
Aguilar, Johnson, Hines, Roberts, Goodison, and Kramer

8:30 AM

EUTROPHICATION IN COASTAL ECOSYSTEMS: WHAT IS THE ROLE OF BIVALVE SHELLFISH AQUACULTURE VERSUS LAND-BASED POLLUTION?
Burkholder

LONG-TERM VARIATION OF *PERKINSUS MARINUS* INFECTION IN GULF OF MEXICO OYSTERS
Kim and Powell

INFORMING MANAGERS: SPAWNING BIOLOGY OF BLUE CRABS
Darnell[†] and Rittschof

8:50 AM

Burkholder

PERKINUS MARINUS LEVELS IN HATCHERY-PRODUCED OYSTERS PLANTED ON MANAGED RESERVES IN MARYLAND
Paynter and Allen

THE PHYLOGEOGRAPHY OF THE BLUE CRAB *CALLINECTES SAPIDUS*: GENETIC VARIATION TO THE MAX
Feng, Gaffney, Williams, and Place

9:10 AM

COASTAL DEVELOPMENT IMPACTS ON SHELLFISH HARVEST: THE NORTH CAROLINA EXAMPLE
Mallin

THE EFFECT OF *PERKINSUS MARINUS* INFECTION ON THE POPULATION STRUCTURE OF HARVESTED AND UNHARVESTED OYSTER REEFS IN MOBILE BAY, ALABAMA
Brady, Rikard, Wallace, and Donegan

MITOCHONDRIAL DNA HETEROPLASMY IN BLUE CRAB *CALLINECTES SAPIDUS*
Feng[†], Williams, and Place

9:30 AM

Mallin

SEASONAL DYNAMICS OF *PERKINSUS MARINUS* DISEASE, REPRODUCTION AND RECRUITMENT OF OYSTER, *CRASSOSTREA VIRGINICA*, IN SW FLORIDA ESTUARIES
Volety, Haynes, Smith, Denkert, Sime, Goodman, and Doering

FIELD ASSESSMENT OF BLUE CRAB RESTOCKING IN UPPER CHESAPEAKE BAY
Johnson, Hines, Kramer, Goodison, Aguilar, Soulen, Roberts, Zohar, and Zmora

9:50 -10:20 AM

MORNING BREAK

Shellfish and the Environment

Managing *Perkinsus*

Blue Crab Biology and Fisheries

10:20 AM

NUTRIENT SEQUESTRATION IN MACROALGAE ASSOCIATED WITH CLAM CULTURE: POTENTIAL NUTRIENT TRADING CREDIT FOR AQUACULTURE
Luckenbach

MOLECULAR CHARACTERIZATION OF PARASITES OF THE GENUS *PERKINSUS* PRESENT IN CLAMS FROM FRENCH PRODUCTION AREAS
Arzul, Michel, Chollet, Robert, Garcia, Miossec, and François

THE FLORIDA BLUE CRAB FISHERY: A NEW ERA OF EFFORT MANAGEMENT
McMillen-Jackson

10:40 AM	ENVIRONMENTAL IMPACTS ON SHELLFISH CONDITION AND GROWTH: IMPLICATIONS FOR LARVAL SOURCES AND POPULATION MAINTENANCE Alphin, Posey, Markwith, and Colosimo	MOLECULAR IDENTIFICATION AND DISCRIMINATION OF <i>PERKINSUS</i> SPECIES: IMPLICATIONS FOR DEVELOPING MANAGEMENT STRATEGIES AND ASSESSING INTRODUCTION RISKS Reece, Moss, Scott, Burreson, Dungan, Sheppard, Coleman, Liggins, Diggles, Casas, La Peyre, Villalba, and Upston	WIND-FORCED RECRUITMENT DYNAMICS OF THE BLUE CRAB <i>CALLINECTES SAPIDUS</i> Ogburn and Forward
11:00 AM	THE ROLE OF MUSSELS IN OPEN-WATER, INTEGRATED MULTI-TROPHIC AQUACULTURE (IMTA) IN THE BAY OF FUNDY MacDonald, Robinson, Page, Reid, Chopin, and Luitkus	EXOTIC <i>PERKINSUS</i> SP. INCLUDING <i>PERKINSUS OLSENI</i> FOUND IN ORNAMENTAL REEF CLAMS, <i>TRIDACNA</i> SPP., IMPORTED INTO THE USA FROM THE INDO-PACIFIC FOR SALE TO THE GENERAL PUBLIC Sheppard, Mahapatra, Reese, and Coleman	INFORMING MANAGERS: ASSESSMENT OF BLUE CRAB SPAWNING STOCK Rittschof, Goldman, Ogburn, M.Z. Darnell, McDowell, and K.M. Darnell
11:20 AM	BIOGEOCHEMICAL RESPONSES OF SHALLOW WATER SEDIMENTS TO ENRICHMENT BY EASTERN OYSTER (<i>CRASSOSTREA VIRGINICA</i>) BIODEPOSITS Newell, Holyoke, and Cornwell	UNDERSTANDING THE BASIS OF OYSTER DISEASE REFUGIA IN DELAWARE BAY Bushek, Ford, Burt, Landau, and Scarpa	FECUNDITY AND EMBRYO DIAMETER OF PRIMIPAROUS AND MULTIPAROUS BLUE CRAB, <i>CALLINECTES SAPIDUS</i> , IN MISSISSIPPI WATERS Graham, Perry, Biesiot, and Fulford
11:40 AM	SESSILE INVASIVE SPECIES ON INTERTIDAL OYSTER REEFS IN FLORIDA Walters, Gilg, Nash, Schneider, and Hoffman	MANAGING <i>PERKINSUS MARINUS</i> THROUGH FRESHWATER INFLOWS TO ESTUARIES Ray and Soniat	POPULATION TRENDS OF BLUE CRABS IN COASTAL WATERS OF THE NORTHERN GULF OF MEXICO Perry, Reidel, Sanchez, Hartman, Heath, Guillory, and Blanchet

12:00 -1:30 PM

LUNCH BREAK

Shellfish and the Environment

The Threat of Human and Shellfish Vibrios (Elston and Richards)

Crustacean Population Biology and Genetics: Implications for Fishery Management (Bert)

1:30 PM	SHELLFISH AQUACULTURE AND BEST MANAGEMENT PRACTICES Hargreaves	<i>VIBRIO PARAHAEMOLYTICUS</i> ILLNESS PREVENTION EFFORTS. Downey	POPULATION GENETICS OF BENTHIC CRUSTACEANS: CAN WE TALK ABOUT SELECTION NOW? Yednock and Neigel
1:50 PM	USE CONFLICT CHALLENGES FACING PACIFIC NORTHWEST SHELLFISH CULTURISTS Dewey	EMERGING PATHOGENESIS OF <i>VIBRIO PARAHAEMOLYTICUS</i> Strom, Paranjpye, and Landis	STONE CRAB (GENUS <i>MENIPPE</i>) POPULATION GENETIC STRUCTURE: A REVIEW, AND THINGS TO COME Bert and McMillen-Jackson
2:10 PM	HUMAN DIMENSIONS OF SHELLFISH AQUACULTURE: RECOMMENDATIONS FOR RESEARCH AND PRACTICE Stonich	INDUCED ACID STRESS RESPONSE IN <i>VIBRIO PARAHAEMOLYTICUS</i> : PRE-ADAPTATION IN HIGH NA CL INCREASES SURVIVAL AT LOW pH. Boyd	STONE CRAB (GENUS <i>MENIPPE</i>) RECRUITMENT: EVIDENCE FOR NURSERY GROUNDS Crawford, Bert, and McMillen-Jackson

SAVANNAH “C”

OGLETHORPE

SAVANNAH “E”

2:30 PM

Stonich

IN VIVO HOST-PATHOGEN INTERACTION BETWEEN SOFTSHELL CLAM HAEMOCYTES AND TWO *VIBRIO SPLENDIDUS* STRAINS
Mateo[♦], Spurmanis, Siah, Araya, Berthe, Johnson, and Greenwood

LIFE-HISTORY ASPECTS OF STONE CRABS (GENUS *MENIPPE*): SIZE AT MATURITY, GROWTH, AND AGE
Gerhart and Bert

2:50 PM

PANEL DISCUSSION

RECENT STRUGGLES OF WEST COAST COMMERCIAL HATCHERIES TO PRODUCE PACIFIC OYSTER LARVAE
Eudeline, Barton, and Langdon

FLORIDA STONE CRAB, *MENIPPE MERCENARIA*, NURSERY HABITATS
Krimsky and Epifanio

3:10 -3:40 PM

AFTERNOON BREAK

Student Session: Writing Successful Grant Proposals (McGinn and Frank)

The Threat of Human and Shellfish Vibrios

Crustacean Population Biology and Genetics: Implications for Fishery Management

3:40 PM

UPDATE ON RE-EMERGENCE OF VIBRIOSIS IN SHELLFISH HATCHERIES AND NURSERIES
Elston, Humphrey, and Polyak

POTENTIAL EFFECTS OF CATASTROPHIC CYANOBACTERIA BLOOMS ON CARIBBEAN SPINY LOBSTER POPULATION DYNAMICS IN FLORIDA BAY, USA
Behringer and Butler

4:00 PM

A TRANSCRIPTIONAL REGULATOR, VTPR, CONTROLS *VIBRIO TUBIASHII* METALLOPROTEASE EXPRESSION
Hasegawa and Hase

AGE STRUCTURE OF THE CARIBBEAN SPINY LOBSTER, *PANULIRUS ARGUS*, IN A MARINE PROTECTED AREA IN THE FLORIDA KEYS
Matthews, Maxwell, Bertelsen, and Derby

4:20 PM

CHARACTERIZING THE RESPONSE OF *VIBRIO TUBIASHII* TO CHANGES IN ENVIRONMENTAL CONDITIONS USING A PROTEOMIC APPROACH
Roberts, Marushchak, and White

MICROSATELLITES REVEAL REGIONAL CONNECTIVITY AND SOME LOCALIZED SELF-RECRUITMENT IN THE SPINY LOBSTER *PANULIRUS ARGUS*
Tringali and Hunt

4:40 PM

PHAGE AS A POSSIBLE INTERVENTION FOR *VIBRIO TUBIASHII* IN SHELLFISH HATCHERIES
Richards

POPULATION GENETIC STRUCTURE AND PHYLOGEOGRAPHY OF THREE SYMPATRIC PENAEID SHRIMP SPECIES IN THE WATERS OF THE EASTERN UNITED STATES
McMillen-Jackson and Bert

5:00 PM

Roundtable Discussion

THE GENETIC DIVERSITY OF BLUE CRAB MEGALOPAE ENTERING THE CHESAPEAKE BAY AND THE POTENTIAL NEED FOR CROSS-STATE FISHERIES REGULATIONS
Williams and Place

TUESDAY MARCH 24, 2009

7:00 – 8:00 AM

CONTINENTAL BREAKFAST (Prefunction Savannah D)

SAVANNAH “C” Out on the Water: Industry Activities and Perspectives (Supan and Sturmer)

OGLETHORPE Promises and Pitfalls of DNA-based Parasite Diagnostic Methods (Ford and Burreson)

SAVANNAH “E” Shellfish Genetics and Genomics I (Gaffney)

8:10 AM

EXAMINING THE EFFECTS OF PREDATOR EXCLUSION STRUCTURES ASSOCIATED WITH GEODUCK AQUACULTURE ON MOBILE BENTHIC MACROFAUNA IN SOUTH PUGET SOUND, WASHINGTON

Smith[♦], and McDonald

MANAGEMENT STRATEGIES OF EAST COAST STATES CONCERNING INTERSTATE SHELLFISH TRANSPORT

Anderson

A BIOINFORMATICS APPROACH FOR DISCOVERING SHELL MATRIX PROTEINS

Johnstone, Staton, Sasaki, and Mount

8:30 AM

SEARCHING FOR SOLUTIONS: IMPEDIMENTS TO SHELLFISH HATCHERY PRODUCTION IN THE PACIFIC NORTHWEST, USA

Amos and Cheney

MISUSE OF PCR FOR SURVEILLANCE OF PROTISTAN PATHOGENS IN MOLLUSCS

Burreson

DEVELOPMENT OF FUNCTIONAL GENOMICS TOOLS FOR THE INVESTIGATION OF HARD CLAM-QPX INTERACTIONS

Allam, Perrigault, and Tanguy

8:50 AM

SENSORY CHARACTERIZATION PROGRAM FOR *MERCENARIA* SPP.

Garrido, Otwell, and Sturmer

COMPARISON OF DIAGNOSTIC TECHNIQUES FOR THE DETECTION OF MOLLUSCAN PATHOGENS

Figueras, Balseiro, and Novoa

ANALYSIS OF GENES ISOLATED FROM PLATED HEMOCYTES OF THE PACIFIC OYSTER

Roberts and Goetz

9:10 AM

FIELD TEST OF TRIPLOID OYSTERS, *CRASSOSTREA VIRGINICA*, ON MASSACHUSETTS SHELLFISH FARMS: FIRST YEAR PERFORMANCE

Walton and Murphy

PROBLEMS WITH USING PCR DIAGNOSTICS AS A BASIS FOR MANAGEMENT: *MERCENARIA MERCENARIA* AS A CASE STUDY

Carnegie and Burreson

SNPS IN A MATRIX METALLOPROTEINASE GENE IN THE EASTERN OYSTER, *CRASSOSTREA VIRGINICA*

Proestou and Gomez-Chiarra

9:30 AM

COMMERCIAL SINGLE OYSTER AQUACULTURE IN SOUTH CAROLINA

Anderson

APPLICATION OF DNA-BASED DETECTION METHODOLOGY TO MONITOR *HEMATODINIUM* SP., A PARASITE OF BLUE CRAB (*CALLINECTES SAPIDUS*)

Bowers, Hanif, Messick, Donaldson, Pitula, and Schott

EVALUATION OF HOUSEKEEPING GENES, VERY IMPORTANT CRITERIA IN MEASURING GENE EXPRESSION

Araya[♦], Siah, Mateo, Markham, McKenna, Johnson, and Berthe

9:50 -10:20 AM

MORNING BREAK

SAVANNAH “C”

Out on the Water: Industry Activities and Perspectives

10:20 AM	MICROALGAL CULTURE METHODS; A COMPARATIVE LOOK AT PRODUCTION SCALE TECHNOLOGIES UTILIZED IN BIVALVE AQUACULTURE Hemmell and Gandy
10:40 AM	AN OVERVIEW OF RECENT SHELLFISH INITIATIVES AND ACTIVITIES IN NORTH CAROLINA Wilbur
11:00 AM	LOUISIANA'S PUBLIC OYSTER FISHERY LIMITED ENTRY PROGRAM Tesvich and Supan
11:20 AM	EVALUATION OF THE SUNRAY VENUS CLAM <i>MACROCALLISTA NIMBOSA</i> UNDER FIELD NURSERY AND GROWOUT CULTURE CONDITIONS IN FLORIDA Sturmer, Scarpa, Creswell, and Laramore
11:40 AM	MARKET ACCEPTANCE OF THE SUNRAY VENUS CLAM (<i>MACROCALLISTA NIMBOSA</i>) CULTURED IN FLORIDA Adams, Sturmer, and Scarpa

OGLETHORPE

Promises and Pitfalls of DNA-based Parasite Diagnostic Methods

PCR DISEASE DIAGNOSTICS: PROMISING CORRECT RESULTS AND PITFALLS CONFOUNDING RESEARCH Bushek and Ford
POTENTIAL IMPLICATIONS OF IMPROVED DIAGNOSTIC METHODS FOR SHELLFISH AQUACULTURE Kraeuter and Ford

PANEL DISCUSSION

SAVANNAH “E”

Shellfish Genetics and Genomics I

CAN MEASUREMENTS OF GENE EXPRESSION LEVELS ON PACIFIC OYSTER SPAT PREDICT THEIR GROWTH AND SURVIVAL IN THE FIELD? Camara, Taris, Lang, and Langdon
MODULATION OF GENE EXPRESSION IN HAEMOCYTES FROM <i>OSTREA EDULIS</i> IN RESPONSE TO AN IN VITRO <i>BONAMIA OSTREAE</i> INFECTION Morga[♦], Arzul, Segarra, Faury, Chollet, and Renault
A TRANSCRIPTOMIC ANALYSIS OF LAND USE IMPACTS ON THE OYSTER, <i>CRASSOSTREA VIRGINICA</i> , IN THE SOUTH ATLANTIC BIGHT Chapman, Mancina, Beal, Veloso, Rathburn, Blair, Sanger, Holland, Warr, and Didonato
TRANSCRIPTIONAL PROFILE OF THE PENAEID SHRIMP <i>LITOPENAEUS VANNAMEI</i> TO HYPOXIA AND HYPERCAPNIC HYPOXIA Rathburn[♦], K. Burnett, Gross, Veloso, Beal, Cook, and L. Burnett
ASSESSING GENETIC DIVERSITY AND INDIVIDUAL ASSIGNMENT FOR SELECTED AND WILD POPULATIONS OF EASTERN OYSTER USING MICROSATELLITE MARKERS Yu[♦] and Guo

12:00 -1:30 PM

LUNCH BREAK

Out on the Water: Industry Activities and Perspectives

1:30 PM	IMPACTS OF DEVELOPMENT AND NON-POINT POLLUTION TO SHELLFISH BEDS AND HOW COUNTY ORDINANCES CAN SET STANDARDS FOR WETLAND PROTECTION AND BUFFERS Phillips
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Shellfish Quality and Safety (Rodrick and Shumway)

WHO HAS MADE THE MOST IMPACT ON SHELLFISH SAFETY - THE SCIENTIST OR THE REGULATOR? McCoubrey
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Shellfish Genetics and Genomics I

POPULATION GENETICS OF BAY SCALLOPS (<i>ARGOPECTEN IRRADIANS</i>): A HISTORY OF LONG-DISTANCE DISPERSAL AND RANGE EXPANSION Bert, Wilbur, Arnold, and McMillen-Jackson
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1:50 PM	SUCCESSFUL AND ECONOMICAL CAGE AND STAKE CULTURE OF <i>MERCENARIA</i> CLAMS IN COASTAL GEORGIA Roberts	McCoubrey	ANALYSIS OF GENETIC STRUCTURE WITHIN AND AMONG REMNANT POPULATIONS OF THE OLYMPIA OYSTER, <i>OSTREA CONCHAPHILA</i> Stick[†], Langdon, Banks, and Camara
2:10 PM	WHAT IT TAKES TO MASS PRODUCE OYSTERS AND NAVIGATING PERMITS TO USE DIFFERENT STRUCTURES, SUCH AS SUPPORT CAGES AND FLOATING CAGES Barrow	SHELLFISH HARVEST AREA DECISION-MAKING USING GIS, REMOTE SENSING, AND PREDICTIVE MODELS Kelsey, Scott, Porter, Siewicki, and Edwards	GENETIC DIFFERENCES AMONG OYSTER (<i>CRASSOSTREA VIRGINICA</i>) POPULATIONS ACROSS A GRADIENT OF DISEASE HISTORY ON MARTHA'S VINEYARD, MASSACHUSETTS Green-Beach[†], Bushek, and Guo
2:30 PM	IDEAS TO IMPROVE CURRENT CLAM MARKETING STRATEGIES IN GEORGIA Johnson	SHELLFISHERIES AND MARINE BIOTOXINS: A REVIEW OF THE SOURCES, TOXINS, AND DETECTION METHODS Morton	GENOTYPE X ENVIRONMENT INTERACTIONS FOR PRODUCTION TRAITS IN <i>CRASSOSTREA VIRGINICA</i> GROWN IN VIRGINIA Frank-Lawale, Degremont, and Allen
2:50 PM	CREATING A "FLORIDA-FRIENDLY" HARD CLAM THROUGH INDUSTRY-DRIVEN, APPLIED RESEARCH PROJECTS Sturmer, Baker, Petty, and Scarpa	THE EFFECTS OF VARIOUS TYPES OF FREEZING ON THE BACTERIAL CONTENT OF OYSTERS Rodrick	CROSS-BREEDING FOR IMPROVED DISEASE RESISTANCE IN EASTERN OYSTERS, <i>CRASSOSTREA VIRGINICA</i> Rawson, Lindell, Guo, and Sunila
3:10 PM	SOUTH CAROLINA'S RECREATIONAL SHELLFISH AQUACULTURE PROGRAM: CREATING WATER QUALITY STEWARDS Hadley	SHELLFISH DEPURATION Schneider	MAPPING QUANTITATIVE TRAIT LOCI AFFECTING Dermo AND MSX INFECTION IN THE EASTERN OYSTER <i>CRASSOSTREA VIRGINICA</i> Zhang, Bushek, Ford, and Guo
3:30 PM	Industry Roundtable	THE PACKAGING AND TRANSPORTATION OF MOLLUSCAN SHELLFISH Garrido	

4:00 – 6:00 PM

POSTER SESSION SAVANNAH “D”

7:00 – 11:00 PM

**STUDENT ENDOWMENT FUND AUCTION
SAVANNAH “A”**

NOTES

WEDNESDAY MARCH 25, 2009

7:00 – 8:00 AM

CONTINENTAL BREAKFAST (Prefunction Savannah D)

SAVANNAH “C”

***Mercenaria* Biology,
Fisheries, and Culture
(Arnold)**

OGLETHORPE

**Shellfish Archeology
(Stosel)**

SAVANNAH “E”

**Recent Advances in Shrimp
Aquaculture in the United States
(Leffler)**

8:10 AM

THE HARD CLAM *MERCENARIA* IN FLORIDA:
SPECIES INTERACTIONS AND IMPLICATIONS
Arnold

FISH & CRABS: EXPLOITATION OF MARINE
RESOURCES ON THE EUROPEAN ATLANTIC
FAÇADE DURING PREHISTORIC TIMES
**Alvarez-Fernández, Dupont, Dese-Berset,
Dréano, and Fernandez-García**

ENHANCING COMPETITIVENESS OF U.S.
SHRIMP AQUACULTURE THROUGH
INNOVATIVE SCIENTIFIC RESEARCH
Browdy, Venero, Stokes, and Leffler

8:30 AM

POPULATION STRUCTURE AND GENETIC
DIVERSITY IN WILD AND CULTURED
NORTHERN QUAHOGS, *MERCENARIA
MERCENARIA*
P. Baker, Austin, Bowen, Sturmer, and S. Baker

FIRST ARCHAEOLOGICAL DATA ON THE
EXPLOITATION OF THE GOOSENECK
BARNACLE *POLLICIPES POLLICIPES*
(GMELIN, 1790) IN EUROPE
Alvarez-Fernández

TECHNOLOGY AND RESEARCH ADVANCES
FOR THE PRODUCTION OF MARINE SHRIMP
IN RECIRCULATING AQUACULTURE
SYSTEMS
Kuhn, Boardman, Marsh, Lawrence, and Flick

8:50 AM

CULTURE OF CLAM HYBRIDS (*MERCENARIA
MERCENARIA*, *M. CAMPECHIENSIS*): HATCHERY
TO FIELD-NURSERY
Scarpa, Sturmer, Arnold, Geiger, and Baker

SEA URCHIN, BEYOND PREDATION AND
NUTRITION
Stosel

GROWTH OF PACIFIC WHITE SHRIMP
LITOPENAEUS VANNAMEI FED DIETS
CONTAINING DIFFERENT LEVELS OF SOY
PROTEIN CONCENTRATE REARED UNDER
CLEAR WATER SYSTEM
Sookying[†] and Davis

9:10 AM

IS IT POSSIBLE TO RESTORE *MERCENARIA
MERCENARIA* TO GREAT SOUTH BAY, NY
AFTER 30 YEARS OF DECLINE?
LoBue, Clapp, Doall, Carrano, and Goldner

ARCHAEOLOGICAL EVIDENCE FOR
PREHISTORIC INTENSIFICATION OF PISMO
CLAM EXPLOITATION.
Thakar-Hucks[†]

ESTABLISHING SPF STOCKS OF BAIT
SHRIMP *LITOPENAEUS SETIFERUS* AND
DEMONSTRATION OF LOW COST
MATURATION AND LARVAL SYSTEMS
NECESSARY FOR COMMERCIALIZATION OF
U.S. BAIT SHRIMP PRODUCTION
**Lawson, Haveman, Leffler, Lewis, Venero,
Stokes, and Browdy**

9:30 AM

DO SURFACE STRUCTURES PROMOTE
REPRODUCTION IN NORTHERN QUAHOGS,
MERCENARIA MERCENARIA
MacKenzie

SHELL MIDDENS AS ARCHIVES OF
PALEOBIOLOGICAL AND
PALEOENVIRONMENTAL DATA
Quitmyer, and Jones

DEVELOPING, DESIGNING, AND OPERATING
A ZERO EXCHANGE BIO-FLOC BASED
SHRIMP PRODUCTION SYSTEM
Stokes, Leffler, Venero, and Browdy

9:50 -10:20 AM

MORNING BREAK

SAVANNAH “C”

Mercenaria Biology, Fisheries, and Culture

10:20 AM OVER-WINTER MORTALITY OF SELECTED AND NON-SELECTED JUVENILE *MERCENARIA MERCENARIA*
Zarnoch

10:40 AM SIZE DEPENDENT SUSCEPTIBILITY OF JUVENILE *MERCENARIA MERCENARIA* MORTALITY AND SHELL GROWTH TO OCEAN ACIDIFICATION
Waldbusser, Green, and Bergschneider

11:00 AM A HALF CENTURY ASSESSMENT NORTHERN QUAHOG, *MERCENARIA MERCENARIA*, GROWTH IN NARRAGANSETT BAY, RHODE ISLAND
Henry[†] and Nixon

11:20 AM THE FACILITATION OF SEAGRASS (*ZOSTERA MARINA*) GROWTH AND PRODUCTIVITY BY *MERCENARIA MERCENARIA* VIA LIGHT AND NUTRIENT STRESS ALLEVIATION
Peterson, Carroll, Wall, and Gobler

11:40 AM FACTORS IMPACTING CONDITION AND SPAWNING OF THE NORTHERN QUAHOG (*MERCENARIA MERCENARIA*): IMPLICATIONS FOR RESTORATION
Doall, Padilla, and LoBue

OGLETHORPE

Shellfish Archeology

SEASONALITY DURING MIOCENE AND PLIOCENE WARM CLIMATE INTERVALS AS RECORDED IN FOSSIL *MERCENARIA* AND *CHESAPECTEN* SHELLS
Surge and Goewert

FRESHWATER MUSSEL BIOGEOGRAPHY IN THE TOMBIGBEE RIVER DRAINAGE AS REVEALED BY ARCHAEOLOGICAL SHELL
Peacock

PREHISTORIC OVER-EXPLOITATION OF *MERCENARIA* SPP. IN THE SOUTHEASTERN USA.
Jones and Quitmyer

SHIFTING THROUGH TIME: OYSTERS AND SHELL RINGS IN PAST AND PRESENT SOUTHEASTERN ESTUARIES
Dame

SAVANNAH “E”

Recent Advances in Shrimp Aquaculture in the United States

DEVELOPMENT OF SUSTAINABLE, COMMERCIALY VIABLE “ORGANIC” SHRIMP PRODUCTION BY INTEGRATING PLANT-BASED FEEDS WITH MICROBIAL BIOFLOC COMMUNITY STRUCTURE
Leffler, Venero, Ray, Lewis, Lawson, Haveman, and Browdy

ISOLATING KEY CONTRIBUTORS OF MICROBIAL BIOFLOC TO *LITOPENAEUS VANNAMEI* GROWTH: HOW DO BIOFLOC TAXONOMIC GROUPS AFFECT GROWTH WHEN PROVIDED AS DIETARY SUPPLEMENTS?
Kent[†], Browdy, Venero, Shuler, Seaborn, Battey, Leffler

EFFECT OF PHOTOAUTOTROPHIC AND HETEROTROPHIC BIOFLOC COMMUNITIES ON PRODUCTIVITY OF PACIFIC WHITE SHRIMP *LITOPENAEUS VANNAMEI* FED A PLANT-BASED DIET IN SUPERINTENSIVE, ZERO-WATER EXCHANGE SYSTEMS
Haveman, Venero, Lewis, Lawson, Shuler, Browdy, and Leffler

MANAGEMENT OF MICROBIAL BIOFLOC COMMUNITIES USING SETTLING TANK CLARIFIERS IN SUPERINTENSIVE, ZERO-EXCHANGE SHRIMP PRODUCTION SYSTEMS
Lewis, Browdy, Ray, Lawson, Shuler, Venero, Vinatea, and Leffler

DIFFERENCES IN SHRIMP *LITOPENAEUS VANNAMEI* PRODUCTION AND MICROBIAL DYNAMICS AS THEY RELATE TO DIETARY PROTEIN SOURCE AND SOLIDS MANAGEMENT IN MINIMAL EXCHANGE SUPERINTENSIVE CULTURE SYSTEMS
Ray, Browdy, Lewis, Venero, Venatea, Shuler, and Leffler

12:00 -2:00 PM

NSA BUSINESS LUNCHEON
SAVANNAH “A”

	Shellfish Restoration and Enhancement (Allen)	Molluscan Diseases (Gomez-Chiarri)	Crustacean Shell Diseased (Castro)
2:00 PM	SHELLFISH RESTORATION: YES WE CAN! Ashton-Alcox, Powell, Babb, Hearon, Cole, and Ozbay	DISEASES AFFECTING DIPLOID <i>CRASSOSTREA ARIAKENSIS</i> AND <i>C. VIRGINICA</i> OYSTERS REARED IN QUARANTINED MESOCOSMS RECEIVING AMBIENT WATERS FROM THE CHOPTANK RIVER, MD OR THE INDIAN RIVER LAGOON, FLORIDA Dungan, Scarpa, Carnegie, Kelly, McCollough, Newell, Laramore, Stokes, Hill, and Burreson	RECENT PROGRESS IN THE NEW ENGLAND SHELL DISEASE INITIATIVE Castro
2:20 PM	FLOATING OYSTER (<i>CRASSOSTREA VIRGINICA</i>) GARDENS FACILITATE OYSTER RECRUITMENT AND PROVIDE HABITAT IN DELAWARE'S INLAND BAYS: THE COMPARATIVE VALUE OF OYSTER CLUSTERS AND LOOSE SHELL Marenghi[†] and Ozbay	ASSESSING SELECTED PACIFIC OYSTER STOCKS FOR DISEASE RESISTANCE IN TOMALES BAY, CALIFORNIA Burge[†], Friedman, Olin, Sawyer, Finger, and Alden	CHARACTERIZATION OF MICROBIAL COMMUNITIES AND IMMUNE SYSTEM RESPONSES ASSOCIATED WITH SHELL DISEASE IN THE AMERICAN LOBSTER, <i>HOMARUS AMERICANUS</i> Allam, Dove, McElroy, Taylor and Fast
2:40 PM	LARGE SCALE OYSTER RESTORATION IN THE MARYLAND PORTION OF THE CHESAPEAKE BAY: SITE SELECTION, PLANTING AND MONITORING Allen and Abel	HOST-PATHOGEN INTERACTIONS AND PROTEOLYTIC ACTIVITY IN <i>PERKINSUS</i> <i>MARINUS</i> CHALLENGED EASTERN OYSTERS Vaughn[†], Proestou, and Gomez-Chiarri	COMPARATIVE HISTOPATHOLOGY OF SHELL DISEASE IN AMERICAN LOBSTERS (<i>HOMARUS AMERICANUS</i>) AND FOUR SPECIES OF CRAB FROM COASTAL WATERS OF THE NORTHEASTERN U.S. Smolowitz, DeFaveri, Quinn, and Chistoserdov
3:00 PM	COMPARISON OF INTERTIDAL OYSTER POPULATIONS BETWEEN A ROCK BREAKWATER AND A NATURAL REEF IN LOWER BARATARIA ESTUARY Gaspard and Melancon	JUVENILE OYSTER DISEASE, A (MANAGEABLE) CURSE FOR RHODE ISLAND'S OYSTER AQUACULTURE Markey[†], Leavitt, Tammi, and Gomez-Chiarri	LETHAL AND SUBLETHAL EFFECTS OF EPIZOOTIC SHELL DISEASE IN AMERICAN LOBSTERS Stevens
3:20 PM	OYSTER RESTORATION IN THE MID - ATLANTIC: BEATING A DEAD HORSE? Mann, Harding, and Southworth	UNDERSTANDING <i>BONAMIA</i> PARASITES BY EXPLORING THEIR PHYLOGENY, THEIR HOSTS, AND THEIR PAST Hill[†], Stokes, White, Webb, Kroeck, Howard, Reece, Hine, Carnegie, and Burreson	VARIOUS FORMS AND STAGES OF SHELL DISEASE IN THE AMERICAN LOBSTER SHARE A COMMON BACTERIAL PATHOGEN IN THEIR LESIONS Chistoserdov, Quinn, Gubbala, and Smolowitz
3:40 PM	METAPOPOPULATION DYNAMICS OF OYSTER RESERVES IN PAMLICO SOUND, NC Puckett and Eggleston	THE COMBINED EFFECTS OF SUB-OPTIMAL TEMPERATURE AND SALINITY ON THE VIABILITY OF <i>PERKINSUS MARINUS</i> , A PROTISTAN PARASITE OF THE EASTERN OYSTER <i>CRASSOSTREA VIRGINICA</i> Gayle, Casas, M.K. La Peyre, and J.F. La Peyre	HISTOCHEMICAL ANALYSIS OF CARBONIC ANHYDRASE ACTIVITY IN AMERICAN LOBSTERS (<i>HOMARUS AMERICANUS</i>) AFFECTED BY EPIZOOTIC SHELL DISEASE Meres[†]

	SAVANNAH “C”	OGLETHORPE	SAVANNAH “E”
4:00 PM	MUSSEL POWERED LIVING SHORELINES FOR SALT MARSH EROSION CONTROL Kreeger, Bushek, Padeletti, Moody, and Whalen	OCCURRENCE AND ANTIMICROBIAL DRUG RESISTANCE OF POTENTIAL BACTERIAL PATHOGENS FROM SHELLFISH IN GRENADA Rodriguez and Hariharan	THE MINERALS INVOLVED IN LOBSTER SHELL VULNERABILITY Kunkel, Jercinovic, and Nagel
4:20 PM	THE INFLUENCE OF REARING METHOD ON PINTO ABALONE, <i>HALIOTIS KAMTSCHATKANA</i> , GROWTH AND SURVIVAL AS IT RELATES TO RESTORATION IN WASHINGTON STATE Stevick, Friedman, Straus, Vadopalas, Rothaus, and VanBlaricom	DEVELOPMENT OF DISEASE RESISTANCE IN BLACK ABALONE Friedman, Wight, Crosson, and VanBlaricom	THE “100 LOBSTERS” PROJECT: A COOPERATIVE PROJECT ON EPIZOOTIC SHELL DISEASE IN THE AMERICAN LOBSTER Shields, Castro, and Moss
4:40 PM	THREE YEARS AND COUNTING: PROTRACTED BAY SCALLOP RECRUITMENT PERIODS MAY BE THE NORM IN ONE SOUTH FLORIDA POPULATION, RATHER THAN THE EXCEPTION Geiger, Stephenson, Arnold, and Parker	UNDERSTANDING DISEASE RESISTANCE IN ESTUARINE POPULATIONS AND RESPONSE TO CLIMATE CHANGE Hofmann, Klinck, Bushek, Ford, Guo, Powell, Haidvogel, Wilkin, and Hedgecock	PROTOZOAN AND METAZOAN COMMUNITIES ASSOCIATED WITH SHELL LESION AND HEALTHY SHELL SURFACES OF THE AMERICAN LOBSTER (<i>HOMARUS AMERICANUS</i>) AFFLICTED BY EPIZOOTIC SHELL DISEASE Quinn, Chistosserdo, and Smolowitz
5:00 PM	PROGRESS IN RESTORATION OF NEW YORK BAY SCALLOP POPULATIONS Tettelbach, Smith, Patricio, Cahill, Chagnon, Clauss, Stark, Donargo, Hughes, and Tetrault		

THURSDAY MARCH 26, 2009

7:00 – 8:00 AM

CONTINENTAL BREAKFAST (Prefunction Savannah D)

	SAVANNAH “C” Introduced and Invasive Species (Baker)	OGLETHORPE Shell Formation (Hansen)	SAVANNAH “E” Environmental Influences (Encomio)	SAVANNAH “D” Shellfish Genetics and Genomics II (contributed) (Camara)
8:10 AM	EARLY DETECTION AND MONITORING OF AQUATIC INVASIVE SPECIES: EVALUATION OF METHODS FOR FRESHWATER EURASIAN (QUAGGA AND ZEBRA) MUSSELS IN CALIFORNIA Culver and Daft	THE MINERALIZATION FRONT OF THE EASTERN OYSTER IS CELLULAR Mount, Gohad, Johnstone, K. Hansen, and D. Hansen	MICROALGAE CELL SURFACE CARBOHYDRATES AS RECOGNITION SITES FOR PARTICLE SORTING IN SUSPENSION FEEDING BIVALVES Espinosa, Perrigault, Ward, Shumway, and Allam	GENETIC DIVERSITY OF WILD, NATURALIZED, AND SELECTIVELY BRED POPULATIONS OF THE PACIFIC OYSTER (<i>CRASSOSTREA GIGAS</i>) ASSESSED USING AFLP MARKERS Camara

8:30 AM	THE INFLUENCE OF BOAT HULL ANTIFOULING AND CLEANING STRATEGIES ON RECRUITMENT OF AQUATIC INVASIVE SPECIES Culver, Johnson, Page, and Dugan	MEMBRANE TEMPLATE SYNTHESIS OF MICRO-SCALE SINGLE CRYSTAL CALCITE STRUCTURES Falvo, Spivak, and Carroll	EFFECTS OF ENVIRONMENTAL FACTORS ON <i>MERCENARIA MERCENARIA</i> IMMUNITY, QPX SURVIVAL AND HOST-PATHOGEN INTERACTIONS Perrigault[♦], Dahl, Liu, Collier, Barnes, and Allam	GENETIC STRUCTURE OF NATIVE AND INTRODUCED POPULATIONS OF THE CHARRU MUSSEL <i>MYTELLA CHARRUANA</i> Hoffman, Gillis, and Walters
8:50 AM	TARGETING NEW VECTORS THAT CONTRIBUTE TO THE INTRODUCTION AND SPREAD OF NON-NATIVE MARINE SPECIES McGuire and Power	VISUALIZATION OF AN ION TRANSPORTING EPITHELIUM IN <i>BALANUS AMPHITRITE</i> USING CORRELATIVE MICROSCOPY: POTENTIAL FUNCTION IN BIOMINERALIZATION AND OSMOREGULATION Gohad, Dickinson, Orihuela, Ritschoff, and Mount	HYPOOSMOTIC CELLULAR VOLUME REGULATION IN BIVALVES: EFFECT OF CALCIMIMETICS Deaton	SEX RATIO IN DELAWARE BAY OYSTER POPULATIONS: PROTANDRY, POPULATION DYNAMICS, AND FISHERY MANAGEMENT Morson, Powell, Ashton-Alcox, Kim, and Marzec
9:10 AM	MANAGING INVASIVE SPECIES IN THE SOUTHERN GULF OF ST. LAWRENCE Locke and Landry	TOWARDS BIOMIMETIC CERAMIC COATINGS: CELLULAR ASPECTS OF OYSTER SHELL BIOMINERALIZATION Johnstone, K. Hansen, Gohad, D. Hansen, and Mount	P53, UBIQUITIN AND AHR IN SOFT SHELL CLAM HAEMOCYTES EXPOSED TO PAH/FUNGICIDES MIXTURE Pariseau[♦] and Siah	GENERATION TIME AND THE STABILITY OF SEX- DETERMINING ALLELES IN OYSTER POPULATIONS AS DEDUCED FROM A GENE-BASED POPULATION DYNAMICS MODEL (DYPOGEN) Powell, Klinck, Hofmann, and Hedgecock
9:30 AM	POPULATION GENETICS OF INTRODUCED AND NATIVE POPULATIONS OF THE ASIAN GREEN MUSSEL, <i>PERNA VIRIDIS</i> Gilg	ASSESSMENT OF OYSTER SHELL STRUCTURAL PROPERTIES FOR THE DEVELOPMENT OF 'GREEN' COMPOSITE MATERIALS Yoon, Mount, D. Hansen, and K. Hansen	THE EFFECT OF COLD EXPOSURE ON MORTALITY IN THE ASIAN GREEN MUSSEL <i>PERNA VIRIDIS</i> : IMPLICATIONS FOR POTENTIAL RANGE EXPANSION Urian[♦] and Gilg	CRYOPRESERVATION OF GAMETES, EMBRYOS, AND LARVAE IN SHELLFISH Yang and Tiersch

9:50-10:20 AM

MORNING BREAK

Crustacean Health Management (Laramore)

Crustacean Biology (Stevens)

Environmental Influences (Encomio)

Molluscan Ecology (Creswell)

10:20 AM

THE EPIDEMIOLOGICAL STATUS OF PAV1, AND THE EFFECTS OF INFECTION ON CARIBBEAN SPINY LOBSTER (*PANULIRUS ARGUS*) CONDITION, OLFACTION, AND PREDATION RISK
Behringer, Butler, and Shields

FEMALE LOBSTER MATURITY AND REPRODUCTIVE CYCLE: ITS IMPLICATION IN THE FISHERY MANAGEMENT
Comeau

ELEMENTAL COMPOSITION OF THE JUVENILE SHELLS OF THE FLORIDA BAY SCALLOP, *ARGOPECTEN IRRADIANS CONCENTRICUS* AND THE NORTHERN QUAHOG *MERCENARIA MERCENARIA* AS AFFECTED BY DIET
Elsaesser[♦], Blake, and Shumway

THE EFFECT OF VERTICAL MOVEMENT ON LARVAL TRANSPORT OF EASTERN OYSTER IN MOBILE BAY AND EASTERN MISSISSIPPI SOUND, ALABAMA: A MODELING STUDY
Kim[♦], Park, and Powers

	SAVANNAH “C”	OGLETHORPE	SAVANNAH “E”	SAVANNAH “D”
10:40 AM	MOLECULAR CHARACTERIZATION OF A <i>CALLINECTES SAPIDUS</i> REOVIRUS AND DEVELOPMENT OF TOOLS TO MONITOR ITS PRESENCE IN WILD AND IN CAPTIVE CRABS Bowers, Hanif, Messick, and Schott	KING CRAB AQUACULTURE AND ENHANCEMENT IN ALASKA Eckert, Daly, Swingle, Leroux, Hetrick, Persselin	OYSTERS AS INDICATORS IN SUB-TROPICAL DRY CLIMATES Hertler, Ramirez-Toro, and Kreeger	DISPERSAL PATTERNS OF OYSTER LARVAE AT DELAWARE BAY: A MODELING STUDY Narvaez[♦], Klinck, Hofmann, Powell, Wilkin, and Haidvogel
11:00 AM	<i>HEMATODINIUM</i> AND MICROSPORIDIAN INFECTIONS IN BLUE CRABS (<i>CALLINECTES SAPIDUS</i>) FROM TAMPA BAY, FLORIDA Machniak, McMillen-Jackson, and Landsburg	EFFECTS OF DIET, STOCKING DENSITY, AND SUBSTRATE ON SURVIVAL AND GROWTH OF HATCHERY-CULTURED RED KING CRAB (<i>PARALITHODES CAMTSCHATICUS</i>) JUVENILES IN ALASKA, USA Daly[♦], Swingle, and Eckert	ANTIOXIDANT STATUS OF OYSTERS AND SUSCEPTIBILITY TO PATHOGENS AND ENVIRONMENTAL STRESSORS Ringwood, Froelich, Ogint, Doyle, McCarthy, and Oliver	ABILITY AND PREFERENCE OF <i>ARGOPECTEN IRRADIANS</i> LARVAE TO SETTLE ON VARIOUS SAV Bonal[♦]
11:20 AM	MICROSPORIDIOSIS IN WILD-CAUGHT PINK SHRIMP, <i>FARFANTEPENAEUS DUORARUM</i> , IN THE INDIAN RIVER LAGOON, FLORIDA, USA Kiryu, Landsberg, Paperno, Sauer, and Sebastian	CRUSTACEANS AS INDICATORS OF ECOSYSTEM HEALTH Messick, Jacobs, Lee, Walters, Brinkley, Cho, Frischer, Schott, Chung, and Wood	AN INNOVATIVE APPROACH TO DETECTING WASTEWATER INFLUENCE ON OYSTERS Biancani[♦], Camichael, Aven, Calci, Burkhardt, and Daskin	<i>IN SITU</i> DETERMINATION OF BIODEPOSITION BY THE EASTERN OYSTER <i>CRASSOSTREA VIRGINICA</i> IN AN INTER-TIDAL SYSTEM, ATLANTIC CANADA Zhou, Grant, Lu, Mallet, and Barrell
11:40 AM	DEVELOPMENT AND APPLICATION OF A QUANTITATIVE PCR (QPCR) ASSAY TO ASSESS THE LIFE HISTORY OF <i>HEMATODINIUM</i> , A PARASITIC DINOFLAGELLATE, AND ITS IMPACT ON TANNER CRAB POPULATIONS IN ALASKA Crosson[♦], Friedman, and Morado		EFFECT OF DISSOLVED OXYGEN STRESS ON STABLE ISOTOPE VALUES (C & N) IN THE EASTERN OYSTER, <i>CRASSOSTREA VIRGINICA</i> Patterson[♦], Boettcher, and Carmichael	INTENSIVE OYSTER CULTURE IN VERY SHALLOW ESTUARIES: BIODEPOSITION VERSUS FLUSHING RATES AS LONG-TERM MANAGEMENT CONSIDERATIONS Southworth, Mann, Reilly, and Harding

12:00 PM **LUNCH/ END OF MEETING**

NOTE: [♦] INDICATES STUDENT PRESENTATION