


AQUACULTURE

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Sea Grant Depository



*A Guide to
Sea Grant Extension
Programs and Services of the
UNIVERSITY of MARYLAND SYSTEM*

Cooperative Extension Service
Sea Grant College Program



AQUACULTURE: A GROWING INDUSTRY

The COOPERATIVE EXTENSION SERVICE of the UNIVERSITY OF MARYLAND SYSTEM is proud to bring you the 1991 Guide to Aquaculture Programs. In this publication you will find a broad range of educational activities designed to help you decide whether to get into the business of raising fish and shellfish and, if so, how to become an efficient producer. It is another way that Extension is helping the agricultural industry grow and prosper.

This year you will find programs offered by other groups within the UNIVERSITY OF MARYLAND SYSTEM. This reflects our continuing effort to draw upon the diversity and expertise which exists in our component institutions and bring them together to assist our citizens. It is another way in which EXTENSION can serve as a bridge among different groups.

"Helping People Help Themselves" is what EXTENSION has done for over 75 years. We have helped to lead the way in agricultural production and are now doing so in aquaculture. Maryland has come a long way in the last decade in developing an aquaculture industry. The COOPERATIVE EXTENSION SERVICE is proud to be a part of this exciting new industry as it continues to grow in the 1990's.

We invite you to use our services in support of aquaculture. You will find a team of professionals dedicated to helping you succeed. Our programs for 1991 are the best yet!



DR. CRAIG S. OLIVER, DIRECTOR
COOPERATIVE EXTENSION SERVICE
UNIVERSITY OF MARYLAND SYSTEM

TABLE OF CONTENTS:

	<u>Page</u>
INTRODUCTION: Dr. Craig Oliver, Director MCES	1
SCHEDULED PROGRAMS	3
SHORT COURSES	17
CONFERENCES	19
PUBLICATIONS	24
NEWSLETTERS	25
VIDEOS	25
CONTACTS	26

AVAILABLE PROGRAMS:

The UNIVERSITY OF MARYLAND SEA GRANT EXTENSION PROGRAM (SGEP) has many programs available to the aquaculture industry and other Maryland groups. Within Maryland, the services of the staff may be obtained through your local County Extension Office.

In addition to the programs listed in this publication, the staff can provide educational activities on many different species and subjects. Programs can be arranged on PRODUCTION, MANAGEMENT, ECONOMICS, MARKETING, QUALITY AND PREPARATION topics. The staff also works with many commercial aquaculture businesses and can arrange visits and tours for groups although it should be realized that working farms may not be open to the public on a regular basis. For additional information, contact the Sea Grant Extension Program Area Agent nearest you.

SCHEDULED PROGRAMS

The following programs have been scheduled for 1991. They were planned by local County agents working with Area staff and Specialists to address topics relevant to individual regions.

Please read through the listings to see what programs are offered near you. Further information may be obtained from the "CONTACT" source or from the Sea Grant Extension Program (SGEP) Area Agents. You are advised to call if you are interested in attending any of the programs since many have limited attendance and pre-registration is often required or requested. Also, printed materials are frequently distributed at the programs and calling ahead will ensure that enough copies are available for all who attend.

DATE: January 23
SUBJECT: **POND CONSTRUCTION AND WATER QUALITY**
LOCATION: Princess Anne
TIME: Evening
NOTE: Lower Shore Chapter Meeting of the MD
Aquaculture Association.
CONTACT: Max Chambers - 301/651-9339.

DATE: JANUARY 23
SUBJECT: **AQUACULTURE - THE GROWING OF FISH
AND SHELLFISH**
LOCATION: St. Mary's College, St. Mary's City.
TIME: 6:00 to 7:30 p.m.
NOTE: Registration required.
CONTACT: St. Mary's College - 301/862-0328

DATE: January 26
SUBJECT: **INTENSIVE AQUACULTURE FOR SMALL
SCALE PRODUCERS**
LOCATION: MD Department of Agriculture Conference Room,
Annapolis
TIME: 8:00 a.m. to 5:00 p.m.
NOTE: Registration required.
CONTACT: MD Department of Agriculture, Office of
Aquaculture.

DATE: January 30
SUBJECT: **AQUACULTURE:THE GROWING OF FISH AND
SHELLFISH.**
LOCATION: St. Mary's College, St. Mary's City
TIME: 6:00 to 7:30 p.m.
NOTE: Registration required.
CONTACT: St. Mary's College - 301/862-0328

DATE: February 2
SUBJECT: **INTENSIVE AQUACULTURE FOR SMALL SCALE PRODUCERS**
LOCATION: University of Maryland Eastern Shore, Princess Anne
TIME: 8:00 a.m. to 5:00 p.m.
NOTE: Registration required.
CONTACT: MD Department of Agriculture, Office of Aquaculture.

DATE: February 5 (February 6 weather date)
SUBJECT: **CAGE CULTURE AND INTRODUCTION TO AQUACULTURE**
LOCATION: Garrett County Extension Office, Oakland
TIME: 7:00 to 10:00 p.m.
NOTE: Raising fish for home use and possible sale; potential for commercial aquaculture in region
CONTACT: Garrett County Extension Office

DATE: February 6
SUBJECT: **AQUACULTURE: THE GROWING OF FISH AND SHELLFISH**
LOCATION: St. Mary's College, St. Mary's City
TIME: 6:00 to 7:30 p.m.
NOTE: Registration required.
CONTACT: St. Mary's College - 301/862-0328

DATE: February 8
SUBJECT: **FINANCIAL PLANNING AND ANALYSIS FOR AQUACULTURE ENTERPRISES**
LOCATION: Sheraton Fontainbleu, Ocean City
TIME: 9:00 a.m. to 5:00 p.m.
NOTE: Registration required; day-long program.
CONTACT: Area Agents, Sea Grant Extension Program.

DATE: February 8
SUBJECT: **VESSEL SAFETY WORKSHOP**
LOCATION: Various
TIME: 9:00 a.m. to 5:00 p.m.
NOTE: Pre-registration requested
CONTACT: Area Agents, Sea Grant Program

DATE: February 9
SUBJECT: **STARTING AN AQUACULTURE BUSINESS**
LOCATION: Ocean City Convention Center, Ocean City
TIME: 11:00 to 11:30 a.m.
NOTE: Part of seminar program at East Coast
Aquaculture Expo
CONTACT: Area Agents, Sea Grant Extension Program

DATE: February 9
SUBJECT: **HYBRID STRIPED BASS AQUACULTURE**
LOCATION: Ocean City Convention Center, Ocean City
TIME: 11:30 a.m. to 12:30 p.m.
NOTE: Part of seminar program at East Coast
Aquaculture Expo
CONTACT: Area Agents, Sea Grant Extension Program

DATE: February 9
SUBJECT: **CHANNEL CATFISH AQUACULTURE**
LOCATION: Ocean City Convention Center, Ocean City
TIME: 12:30 to 1:30 p.m.
NOTE: Part of seminar program at East Coast
Aquaculture Expo
CONTACT: Area Agents, Sea Grant Extension Program

DATE: February 9
SUBJECT: **CRAWFISH AQUACULTURE**
LOCATION: Ocean City Convention Center, Ocean City
TIME: 1:30 to 2:30 p.m.
NOTE: Part of seminar program at East Coast
Aquaculture Expo
CONTACT: Area Agents, Sea Grant Extension Program

DATE: February 9
SUBJECT: **MARKETING SEAFOOD AND AQUACULTURE
PRODUCTS**
LOCATION: Ocean City Convention Center, Ocean City
TIME: 3:00 to 4:00 p.m.
NOTE: Part of seminar program at East Coast
Aquaculture Expo
CONTACT: Area Agents, Sea Grant Extension Program

DATE: February 10
SUBJECT: **PROPER WATER PUMP APPLICATIONS**
LOCATION: Ocean City Convention Center, Ocean City
TIME: 11:00 a.m. to 12:00 noon
NOTE: A part of seminar program at East Coast
Aquaculture Expo
CONTACT: Area Agents, Sea Grant Extension Program

DATE: February 10
SUBJECT: **BUILDING AND REPAIRING WITH FIBERGLASS**
LOCATION: Ocean City Convention Center, Ocean City
TIME: 12:00 noon to 1:00 p.m.
NOTE: Part of seminar program at East Coast
Aquaculture Expo
CONTACT: Area Agents, Sea Grant Extension Program

DATE: February 10
SUBJECT: **SUCCESSFUL SOFT CRAB SHEDDING**
LOCATION: Ocean City Convention Center, Ocean City
TIME: 1:00 to 2:00 p.m.
NOTE: Part of seminar program of East Coast
Aquaculture Expo
CONTACT: Area Agents, Sea Grant Extension Program

DATE: February 10
SUBJECT: **WATER QUALITY MANAGEMENT AND
DEMONSTRATIONS**
LOCATION: Ocean City Convention Center, Ocean City
TIME: 2:00 to 3:00 p.m.
NOTE: Part of seminar program of East Coast
Aquaculture Expo
CONTACT: Area Agents, Sea Grant Extension Program

DATE: February 14
SUBJECT: **STARTING AN AQUACULTURE BUSINESS**
LOCATION: Bel Air United Methodist Church, Bel Air
TIME: 7:00 to 9:00 p.m.
NOTE: Part of Harford County Mid-Winter Agriculture
Meetings
CONTACT: Harford County Extension Office

DATE: February 14
SUBJECT: **AQUACULTURE - FARMING THE WATER**
LOCATION: Chestertown
TIME: 10:00 a.m. to 2:00 p.m.
NOTE: Part of a day-long agricultural program
CONTACT: Kent County Extension Office, Chestertown

DATE: February 15
SUBJECT: **INTRODUCTION TO AQUACULTURE**
LOCATION: Bel Air United Methodist Church, Bel Air
TIME: 1:30 to 2:30 p.m.
NOTE: Part of Harford Co. Mid-Winter Agric. Meetings
CONTACT: Harford County Extension Office

DATE: February 16
SUBJECT: **THE ECONOMIC POTENTIAL FOR U. S. AQUACULTURE**
LOCATION: Sheraton Washington Hotel, Washington, D.C.
TIME: 8:30 to 11:30 a.m.
NOTE: Included in program for the American Association for Advancement of Science - covers clams, shrimp, catfish, salmon, striped bass
CONTACT: Doug Lipton (301/405-1280)

DATE: February 19
SUBJECT: **PRODUCING AND MARKETING CRAWFISH**
LOCATION: Somerset County Extension Office, Princess Anne
TIME: 9:30 a.m. to 12:00 noon
NOTE: For new producers and existing producers who would like assistance in marketing their product
CONTACT: Somerset County Extension Office or MD Dept. of Agriculture Office of Aquaculture

DATE: February 19
SUBJECT: **CHANNEL CATFISH AQUACULTURE**
LOCATION: SMGCD Building, Hughesville, Charles County
TIME: TBA
NOTE: Flow through and closed cycle crab shedding systems - design, operation and management
CONTACT: St. Mary's County Extension Office

DATE: February 21
SUBJECT: **PRODUCING AND MARKETING CRAWFISH**
LOCATION: Talbot County Extension Office, Easton
TIME: 7:00 to 10:00 p.m.
NOTE: For new producers and existing producers who would like assistance in marketing their product.
CONTACT: Talbot County Extension Office or MD Dept. of Agriculture Office of Aquaculture

DATE: February 27
SUBJECT: **FARM POND MANAGEMENT**
LOCATION: Harford County Extension Office, Forest Hill
TIME: 7:00 to 9:00 p.m.
NOTE: Managing your farm pond for productive use
CONTACT: Harford County Extension Office

DATE: March 6 (T)
SUBJECT: **SUCCESSFUL SOFT CRAB SHEDDING**
LOCATION: St. Mary's County
TIME: TBA
NOTE: Flow through and closed cycle crab shedding systems - design, operation and management
CONTACT: St. Mary's County Extension Office

DATE: March 12
SUBJECT: **REGIONAL AQUACULTURE DAY PROGRAM**
LOCATION: Carroll County Extension Office, Westminster
TIME: 9:00 a.m. to 3:00 p.m.
NOTE: Part of two-day regional aquaculture program; presentations by specialist this day.
CONTACT: Carroll County Extension Office

DATE: March 13
SUBJECT: **REGIONAL AQUACULTURE DAY PROGRAM**
LOCATION: Various
TIME: 9:00 a.m. to 3:00 p.m.
NOTE: Part of two-day regional aquaculture program;
field trips to aquaculture sites this day.
CONTACT: Carroll County Extension Office

DATE: March 14
SUBJECT: **POND MANAGEMENT AND USE IN
AQUACULTURE**
LOCATION: Somerset County Extension Office, Princess
Anne
TIME: 7:00 to 9:30 p.m.
NOTE: Lower Shore Regional Aquaculture Meeting
CONTACT: Somerset, Wicomico and Worcester County
Extension Offices

DATE: March 19
SUBJECT: **FARM POND MANAGEMENT**
LOCATION: SMECO Building, Prince Frederick
TIME: 7:00 to 9:00 p.m.
NOTE: Southern Maryland Regional Program; managing
your pond for productive use.
CONTACT: Calvert or St. Mary's County Extension Office

DATE: March 20
SUBJECT: **CAGE CULTURE WORKSHOP**
LOCATION: Baltimore County Extension Office, Cockeysville
TIME: 2:00 to 10:00 p.m.
NOTE: 2:00 to 6:00 p.m. - Field demonstrations on cage
construction and water quality
7:00 to 10:00 p.m. - Speakers' program
CONTACT: Baltimore County Extension Office

DATE: March 21
SUBJECT: **SEAFOOD BUSINESS MANAGEMENT**
LOCATION: Salisbury State University, Salisbury
TIME: 9:00 a.m. to 4:00 p.m.
NOTRE: Registration required
CONTACT: Perdue Business School, Salisbury State University

DATE: March 21
SUBJECT: **POND MANAGEMENT AND AQUACULTURE PRODUCTION**
LOCATION: Frederick County
TIME: 10:00 a.m. to 2:00 p.m.
NOTE: Managing a pond for fish and shellfish production
CONTACT: Frederick County Extension Office

DATE: April 1
SUBJECT: **POND MANAGEMENT**
LOCATION: Baltimore County Extension Office, Cockeysville
TIME: 7:00 to 9:00 p.m.
NOTE: Basic management of the farm pond
CONTACT: Baltimore County Extension Office

DATE: April 4-6
SUBJECT: **ENGINEERING ASPECTS OF INTENSIVE AQUACULTURE**
LOCATION: Holiday Inn, Ithaca, NY
TIME: Various
NOTE: Sponsored by the Northeast Regional Aquaculture Center, registration required.
CONTACT: Sea Grant Extension Program Area Agents

DATE: April 10
SUBJECT: **POND MANAGEMENT**
LOCATION: Carroll County Extension Office, Westminster
TIME: 7:00 to 9:00 p.m.
NOTE: Basic farm pond management
CONTACT: Carroll County Extension Office

DATE: April 15-19
SUBJECT: **HYBRID STRIPED BASS PRODUCTION SHORT COURSE**
LOCATION: Horn Point Environmental Lab, Cambridge, and other sites
TIME: Week long
NOTE: Refer to section on 'Short Course' programs
CONTACT: Extension Office, Horn Point Lab, Cambridge

DATE: April 18
SUBJECT: **AQUACULTURE BUSINESS MANAGEMENT**
LOCATION: Salisbury State University, Salisbury
TIME: 9:00 a.m. to 4:00 p.m.
NOTE: Managing an aquaculture operation profitably
CONTACT: Perdue Business School, Salisbury State University

DATE: May 7
SUBJECT: **AQUATIC WEED CONTROL**
LOCATION: Public Library, Newmarket, St. Mary's County
TIME: 7:00 to 9:00 p.m.
NOTE: Identifying and controlling nuisance vegetation
CONTACT: St. Mary's County Extension Office

DATE: May 9
SUBJECT: **VISIT TO A WORKING FISH FARM**
LOCATION: Walnut Point Farm, Chestertown
TIME: 10:00 a.m. to 2:00 p.m.
NOTE: Displays and tour of hybrid striped bass farm
CONTACT: Area Agents, Sea Grant Extension Program

DATE: May 13-17
SUBJECT: **OYSTER AQUACULTURE SHORT COURSE**
LOCATION: Horn Point Environmental Lab, Cambridge, and other sites
TIME: Week long
NOTE: Refer to section on "Short Course" programs
CONTACT: Extension Office, Horn Point Lab, Cambridge

DATE: May 15
SUBJECT: **AQUATIC WEED CONTROL**
LOCATION: Talbot County Extension Office
TIME: 7:00 to 9:00 p.m.
NOTE: Identifying and controlling nuisance vegetation
CONTACT: Talbot County Extension Office

DATE: May 15
SUBJECT: **REMOTE SETTING OF OYSTER SPAT**
LOCATION: Horn Point Environmental Lab, Cambridge
TIME: 10:00 a.m.
NOTE: Demonstration of cost effective methods of spat production
CONTACT: Talbot County Extension Office

DATE: May 21
SUBJECT: **REMOTE SETTING OF OYSTER SPAT**
LOCATION: Avenue, St. Mary's County
TIME: 10:00 a.m.
NOTE: Demonstration of cost effective methods of spat production
CONTACT: St. Mary's County Extension Office

DATE: May 22
SUBJECT: **POND MANAGEMENT AND AQUACULTURE PRODUCTION**
LOCATION: Talbot County Extension Office, Easton
TIME: 7:00 to 9:00 p.m.
NOTE: How to manage a pond and use it to produce food
CONTACT: Talbot County Extension Office

DATE: May 23
SUBJECT: **REMOTE SETTING OF OYSTER SPAT**
LOCATION: Bellevue, Royal Oak
TIME: 10:00 a.m.
NOTE: Demonstration of cost effective methods of spat production
CONTACT: Talbot County Extension Office

DATE: June 11-13
SUBJECT: **COLLEGE DAYS**
LOCATION: Northeast
TIME: 3 days
NOTE: Seafood topics included in overall program
CONTACT: Local County Extension Office

DATE: June 13
SUBJECT: **VISIT TO A WORKING FISH FARM**
LOCATION: Walnut Point Farm, Chestertown
TIME: 10:00 a.m. to 2:00 p.m.
NOTE: Displays and tour of hybrid striped bass farm
CONTACT: Area Agents, Sea Grant Extension Program

DATE: July and August (various)
SUBJECT: **TOURS TO AQUACULTURE DEMONSTRATION AREAS**
LOCATION: Various
TIME: Various
NOTE: Crop tours during summer months may include stops at aquaculture demonstration areas or working fish farms
CONTACT: Local County Extension Office

DATE: September 12
SUBJECT: **VISIT TO A WORKING FISH FARM**
LOCATION: Walnut Point Farm, Chestertown
TIME: 10:00 a.m. to 2:00 p.m.
NOTE: Displays and tour of hybrid striped bass farm
CONTACT: Area Agents, Sea Grant Program

DATE: October 10
SUBJECT: **VISIT TO A WORKING FISH FARM**
LOCATION: Walnut Point Farm, Chestertown
TIME: 10:00 a.m. to 2:00 p.m.
NOTE: Displays and tour of hybrid striped bass farm
CONTACT: Area Agents, Sea Grant Program

DATE: October 19 and 20
SUBJECT: **AQUACULTURE PRODUCT
DEMONSTRATION**
LOCATION: St. Mary's County Fairgrounds
TIME: 11:00 a.m. to 6:00 p.m.
NOTE: Included in St. Mary's County Oyster Festival
CONTACT: St. Mary's County Extension Office or
Tom Burke (301/373-5242)

DATE: November 19 and 20
SUBJECT: **AQUACULTURE AND SEAFOOD PRODUCT
DEMONSTRATIONS**
LOCATION: Convention Center, Baltimore
TIME: All day
NOTE: Part of the Mid Atlantic Food Service and
Lodging Exposition
CONTACT: Gayle Mason-Jenkins, UMES (301/651-3619)

SHORT COURSES

The **NORTHEAST REGIONAL AQUACULTURE CENTER (NRAC)** funds research and education programs for aquaculture development. The **UNIVERSITY OF MARYLAND SYSTEM** is proud to participate in many of the Center's efforts. As part of our program with NRAC, we will offer two short courses during 1991. These will provide hands-on training and allow the student to gain practical experience in the culture of important fish and shellfish species.

The hatchery facilities at the University's Horn Point Environmental Lab will be the focal point of these programs. Classwork as well as field experiences at working aquaculture operations will be included. Some student housing is available and class sizes are limited. **EXTENSION AGENTS AND SPECIALISTS WITH AQUACULTURE PROGRAM RESPONSIBILITIES ARE GIVEN PREFERENCE IN REGISTRATION.**

For further information contact the SEA GRANT EXTENSION OFFICE at the UNIVERSITY OF MARYLAND HORN POINT LAB, P.O. BOX 775, CAMBRIDGE MD 21613, TEL: 301-228-8200, FAX: 301-476-5490.

RAISING STRIPED BASS & THEIR HYBRIDS (APRIL 15-19, 1991)

MCES, in cooperation with the University's Horn Point Lab, will teach a week long intensive training program on the culture of Striped Bass and their Hybrids, including the production of polyploids, for those requiring in-depth knowledge of production. Funded by the NORTHEAST REGIONAL AQUACULTURE CENTER, the class size is LIMITED TO 10 STUDENTS.

OYSTER AQUACULTURE PRODUCTION (MAY 13-17, 1991)

MCES, in cooperation with the University's Horn Point Lab, will teach a week long intensive training program on oyster aquaculture including hatchery operations, algae production, remote setting, and genetic manipulation of stocks. Funded by the NORTHEAST REGIONAL AQUACULTURE CENTER, the class size is LIMITED TO 10 STUDENTS.

INTERSTATE CONFERENCES AND WORKSHOPS

The UNIVERSITY OF MARYLAND COOPERATIVE EXTENSION SERVICE is proud of its work with other institutions in the region in support of aquaculture. Multi-state programs draw on the strengths of different organizations and help to effectively disseminate information.

AQUACULTURE IN THE MID ATLANTIC is the largest multi-state educational program in the region. It is sponsored and planned by representatives of Land Grant and Sea Grant Colleges from Maryland, Virginia, the District of Columbia, Delaware, New Jersey, and Pennsylvania.

For 1991, the conference will be held at the Sheraton Inn and Conference Center in Fredericksburg, VA and take place from June 4 through 6, 1991. There will be FOUR CONCURRENT PROGRAMS going on at a time as well as a TRADE SHOW of aquaculture supplies and equipment.

In addition to the industry programs, there will be a SPECIAL TRAINING SESSION FOR EXTENSION AGENTS AND SPECIALISTS. The primary topic will be "Use of Video in Extension Programs" and will provide training in video tape production. Following the training session, afternoon programs will be taped by attendees for later review.

For more information and registration materials, please contact the Sea Grant Extension Program Area Agents.

The 1991 program sessions will include:

DATE: June 4
SUBJECT: **WATER QUALITY AND AERATION**
LOCATION: Lakeside Pavilion
TIME: Afternoon
NOTE: Demonstrations of water quality testing equipment and aeration systems.

DATE: June 4
SUBJECT: **JOINT MEETING -- MID-ATLANTIC
AQUACULTURE ASSOCIATIONS**
LOCATION: Conference Area
TIME: Morning
NOTE: Open meeting of aquaculture organizations from
sponsoring states.

DATE: June 4
SUBJECT: **EXTENSION IN-SERVICE TRAINING PROGRAM**
LOCATION: Conference area
TIME: Morning
NOTE: Video production training for agents and
specialists.

DATE: June 4
SUBJECT: **FINANCIAL ANALYSIS OF AN AQUACULTURE
BUSINESS - PART I**
LOCATION: Conference area
TIME: Afternoon
NOTE: Putting together a business plan and analyzing
potential for success in aquaculture.

DATE: June 4
SUBJECT: **PHASE I - FISH PRODUCTION**
LOCATION: Conference area
TIME: Afternoon
NOTE: Fingerling production methods.

DATE: June 4
SUBJECT: **FISH DISEASE IDENTIFICATION AND CONTROL (T)**
LOCATION: Conference area
TIME: Afternoon
NOTE: Overview of fish disease in production units and what may be used for control; discussion of regulations in effect.

DATE: June 5
SUBJECT: **CAGE CULTURE AND FISH TRANSPORTATION**
LOCATION: Lakeside Pavilion
TIME: Morning
NOTE: Demonstrations on breeding, stocking and managing fish in floating cages; methods and equipment used to transport live fish.

DATE: June 5
SUBJECT: **CONSUMER EDUCATION UPDATE '91**
LOCATION: Conference area
TIME: All day (both sessions)
NOTE: Issues for the professional consumer educator working with seafood topics; continuing education and professional organization certification credits applied for.

DATE: June 5
SUBJECT: **FINANCIAL ANALYSIS OF AN AQUACULTURE BUSINESS - PART II**
LOCATION: Conference area
TIME: Morning
NOTE: (Continuation of Part I) - Finishing the business plan and looking for financing through commercial institutions and others.

DATE: June 5
SUBJECT: **CLOSED SYSTEM AQUACULTURE**
LOCATION: Conference area
TIME: Morning
NOTE: Analysis of the state-of-the-art in closed loop or recirculating aquaculture systems.

DATE: June 5
SUBJECT: **WATER QUALITY AND AERATION**
LOCATION: Lakeside Pavilion
TIME: Afternoon
NOTE: Demonstrations of water quality testing equipment and aeration systems.

DATE: June 5
SUBJECT: **ECONOMIC EVALUATION OF ALTERNATIVE AQUACULTURE SYSTEMS**
LOCATION: Conference area
TIME: Afternoon
NOTE: Methods of looking at different production systems to see which will provide the most potential profit.

DATE: June 5
SUBJECT: **CRAWFISH PRODUCTION/FEEDS AND FEEDING**
LOCATION: Conference area
TIME: Afternoon
NOTE: Growing crawfish in the Mid Atlantic area; use of feeds, equipment; and methods of calculating the proper rates for optimum growth.

DATE: June 6
SUBJECT: **CAGE CULTURE AND FISH TRANSPORTATION**
LOCATION: Lakeside Pavilion
TIME: Morning
NOTE: Demonstrations on building, stocking and managing fish in floating cages; methods and equipment used to transport live fish.

DATE: June 6
SUBJECT: **SHELLFISH PRODUCTION METHODS**
LOCATION: Conference area
TIME: Morning
NOTE: Methods of producing and growing shellfish in the Mid Atlantic region.

DATE: June 6
SUBJECT: **MARKETING AQUACULTURE PRODUCTS**
LOCATION: Conference area
TIME: Morning
NOTE: Ways to sell your product in todays marketplace.

DATE: June 6
SUBJECT: **LAWS, REGULATIONS AND AGENCIES REGULATING AQUACULTURE**
LOCATION: Conference area
TIME: Morning
NOTE: Representatives from federal and state agencies affecting aquaculture will discuss issues relating to the industry.

DATE: June 6
SUBJECT: **INDIVIDUAL ASSISTANCE FROM STATE AND FEDERAL AGENCIES**
LOCATION: Conference area
TIME: Afternoon
NOTE: Representatives from previous section will be available to discuss individual problems and projects with industry members.

DATE: June 6
SUBJECT: **PRODUCING SHELLFISH FOR COMMERCIAL GROWOUT**
LOCATION: Lakeside Pavilion
TIME: Afternoon
NOTE: Demonstration of equipment and methods to produce oysters for commercial growout.

DATE: June 6
SUBJECT: **HYDROPONICS AND AQUACULTURE (T)**
LOCATION: Conference area
TIME: Afternoon
NOTE: The integration of aquaculture in commercial hydroponics production units. (T)

PUBLICATIONS, PERIODICALS, AUDIO VISUAL

The University of Maryland Sea Grant Extension Program produces a wide range of publications dealing with aquaculture topics. Single copies of most publications are free of charge and stocked by many local county Extension offices. Larger ones carry a minimal charge for cost of printing. For a list of publications, contact the **University of Maryland Sea Grant College Communications Office, 1224 H J Patterson Hall, College Park, MD 20742, TEL: 301 405 6371.**

NEWSLETTERS

The MARYLAND AQUAFARMER, a newsletter for fish and shellfish farmers in Maryland, is produced four times a year by the Sea Grant Extension Program agents and specialists and distributed free of charge to those having an interest in aquaculture. The newsletter is the primary means of announcing upcoming programs, letting the industry know what the latest research and education programs are, and keeping fish and shellfish farmers up to date on what's happening that can affect them in their business.

Copies and subscriptions may be requested by writing to: Editor, **MARYLAND AQUAFARMER**, Talbot County Extension Office, P O. Box 519, Easton, MD 21601. The telephone number is 301 822 1166 and we are available by FAX at 301 822 5627. Back copies are available while in stock.

Also, most County Agricultural Science Agents have newsletters which address topics of interest to farmers in their areas and announce programs, demonstrations, and tours. In most cases these are distributed on a monthly basis and offer a quick means of becoming informed about Extension activities. For mailing list information, call your local County Extension office.

EDUCATIONAL VIDEO TAPES

Video tapes on aquaculture are available on loan, free of charge, to Maryland residents through the Cooperative Extension Service. Some are University of Maryland productions while some have been produced by other agencies and institutions and may have application to Maryland aquaculture. Also, several are currently in production which address specific species and conditions in which prevail in this area. While all copies are not in the inventory of all county offices, they are available on interoffice loan and we urge you to check with your local county Extension office for titles and availability.

CONTACTS:

If you need information about aquaculture, your local County Extension Office is the fastest way to access the **UNIVERSITY OF MARYLAND SYSTEM**. County and regional programs are planned and coordinated by local agents. For further information on the programs offered by the **UNIVERSITY OF MARYLAND SYSTEM**, contact the Area Marine Agents or your local County Extension Office.

YOUR UNIVERSITY OF MARYLAND SYSTEM



AREA MARINE AGENTS

EASTERN SHORE

Donald W. Webster
Talbot Extension Office
PO Box 519
Easton MD 21601
TEL 301 822 1244
FAX 301 822 5627

SOUTHERN MARYLAND

Richard E. Bohn
St. Mary's Extension Office
PO Box 663
Leonardtown MD 20650
TEL 301 475 4485
FAX 301 475 4489

UPPER CHESAPEAKE

Daniel E. Terlizzi
Harford Extension Office
220 South Main Street
Bel Air MD 21014
TEL 301 838 6000 EXT 255
FAX 301 879 8203

PROGRAM SPECIALIST

OYSTER AQUACULTURE

Don Meritt
Horn Point Environmental Lab
PO Box 775
Cambridge MD 21613
TEL 301 228 8200
FAX 301 476 5490

FINFISH AQUACULTURE

Reggie Harrell
Horn Point Environmental Lab
PO Box 775
Cambridge MD 21613
TEL 301 228 8200
FAX 301 476 5490

RESOURCE ECONOMICS

Douglas Lipton
Dept. of Ag & Resource Econ
Symons Hall
College Park MD 20742
TEL 301 405 1280
FAX 301 314 9091

SEAFOOD AND NUTRITION

Gayle Mason-Jenkins
Program Dev. Specialist
Univ. of MD-Eastern Shore
Princess Anne MD 21853
TEL 301 651 3619
FAX 301 651 3915

AREA NATURAL RESOURCE SPECIALISTS

WYE RESEARCH & EDUC. CTR	WESTERN MARYLAND CTR
Robert Tjaden	Jonathan Kays
Natural Resources Spec.	Natural Resources Spec.
PO Box 169	18330 Keedysville Road
Queenstown MD 21658	Keedysville MD 21756
TEL 301 827 8056	TEL 301 432 2735
FAX 301 827 9039	FAX 301 797 1130

**AGRICULTURE, NATURAL RESOURCES, AND SEA GRANT
EXTENSION PROGRAM ADMINISTRATION**

Dr. Ralph Adkins, Associate Director
University of Maryland
Cooperative Extension Service
Symons Hall
College Park MD 20742
TEL 301 405 2906
FAX 301 314 9202

COUNTY EXTENSION OFFICES

ALLEGANY COUNTY, 708 Fayette Street, Cumberland MD 21502
TEL: 301 724 3320 FAX: 301 722 4015

ANNE ARUNDEL COUNTY, 101 Crain Highway NW, Glen Burnie MD 21061
TEL: 301 222-6755 FAX: 301 222 6747

BALTIMORE CITY, 17 S. Gay Street, Baltimore, MD 21202
TEL: 301 396 1888 FAX: 301 396 5667

BALTIMORE COUNTY, 9811 Van Buren Lane, Cockeysville MD 21030
TEL: 301 666 1022 FAX: 301 667 6219

CALVERT COUNTY, P. O. Box 1410, Prince Frederick MD 20678
TEL: 301 535 3662

CAROLINE COUNTY, P. O. Box 310, Denton MD 21629
TEL: 301 479 4619 FAX: 301 479 2125

CARROLL COUNTY, 700 Agricultural Center, Westminster MD 21157
TEL: 301 848 4611 FAX: 301 876 0132

CECIL COUNTY, P. O. Box 326, Elkton MD 21921
TEL: 301 398 0200 FAX: 301 392 9025

CHARLES COUNTY, Box 218, White Plains MD 20695
TEL: 301 645 3903 FAX: 301 645 3029

DORCHESTER COUNTY, P. O. Box 299, Cambridge MD 21613
TEL: 301 228 8800 FAX: 301 228 3868

FREDERICK COUNTY, 200 Montevue Lane, Frederick MD 21701
TEL: 301 694 1594 FAX: 301 694 1588

GARRETT COUNTY, 202 South Third Street, Oakland MD 21550
TEL: 301 334 1990 FAX: 301 334 1989

HARFORD COUNTY, P. O. Box 663, Forest Hill MD 21050
TEL: 301 838 6000 FAX: 301 879 8203

HOWARD COUNTY, 3524-L Ellicott Mills Dr., Ellicott City MD 21043
TEL: 301 313 2707 FAX: 301 313 2712

KENT COUNTY, 203 Calvert Street, Chestertown, MD 21620
TEL: 301 778 1661 FAX: 301 778 9075

MONTGOMERY COUNTY, P. O. Box 5556, Derwood MD 20855
TEL: 301 590 9638 FAX: 301 590 2828

PRINCE GEORGE'S COUNTY, 6707 Groveton Drive, Clinton MD 20735
TEL: 301 868 8783 FAX: 301 599 6714

QUEEN ANNE'S COUNTY, P. O. Box 188, Centreville MD 21617
TEL: 301 758 0166 FAX: 301 758 3687

ST. MARY'S COUNTY, P. O. Box 663, Leonardtown MD 20650
TEL: 301 475 4485 FAX: 301 475 4489

SOMERSET COUNTY, 300 Park Drive, Princess Anne MD 21853
TEL: 301 651 1351 FAX: 301 651 0806

TALBOT COUNTY, P. O. Box 519, Easton MD 21601
TEL: 301 822 1244 FAX: 301 822 5627

WASHINGTON COUNTY, 1260 Maryland Avenue, Hagerstown MD 21740
TEL: 301 791 1304 FAX: 301 791 3193

WICOMICO COUNTY, P. O. Box 1836, Salisbury MD 21801
TEL: 301 749 6141 FAX: 301 749 3604

WORCESTER COUNTY, P. O. Box 219, Snow Hill MD 21863
TEL: 301 632 1972 FAX: 301 632 3023

INDUSTRY ORGANIZATIONS:

MARYLAND AQUACULTURE ASSOCIATION

As businesses develop, they see the need to organize in order to represent their interests. The aquaculture industry in Maryland reached that point during 1989 when the **MARYLAND AQUACULTURE ASSOCIATION** was formed. The organization has already been responsible for organizing a state wide "open house" where fish and shellfish farmers showed off their operations to the public, as well as participating in fairs, trade shows, and other programs.

For further information contact:

MARYLAND AQUACULTURE ASSOCIATION

P O Box 641

Salisbury MD 21801

Officers

MAX CHAMBERS, President

TEL: 301 651 9339

FRANK TIRALLA, Vice President

TEL: 301 628 1928

MD DEPARTMENT OF AGRICULTURE

Within the State of Maryland, the Department of Agriculture is designated as the lead agency for coordination and promotion of aquaculture. Within this agency there are units that provide assistance to the industry.

The **OFFICE OF AQUACULTURE** provides assistance to the prospective aquaculturist in regulations, permitting, financial assistance programs, and general guidance to the proper state agencies for specific problem resolution.

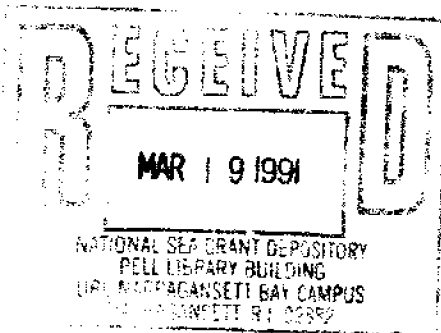
For information or assistance contact:

OFFICE OF AQUACULTURE
MD Dept of Agriculture
50 Harry S Truman Parkway
Annapolis MD 21401
TEL: 301 841 5724

The **OFFICE OF SEAFOOD MARKETING** provides information and assistance to harvesters, producers, buyers, sellers, distributors, and processors of fish and shell fish. They produce a wide range of informational materials about Maryland seafood and participate in a number of market promotion programs.

For information or assistance contact:

OFFICE OF SEAFOOD MARKETING
MD Dept of Agriculture
50 Harry S Truman Parkway
Annapolis MD 21401
TEL: 301 841 5770



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