

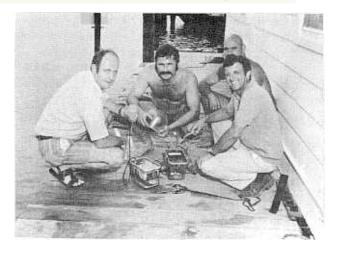
# VIMS Divers Join International Program

Two VIMS scientists, Dr. M. P. Lynch and Michael Castagna, have been selected to participate in an international diving mission in Lubecker Bay of the Baltic Sea near Hamburg, Germany.

Two other divers, Dr. J. Morgan Wells of the Manned Undersea Science and Technology (MUS&T) office of the National Oceanic and Atmospheric Administration (NOAA), and William Phoel of the National Marine Fisheries Service of NOAA, complete the U.S. team which will join aquanauts from Germany, France and Great Britain for the saturation diving mission.

The team was chosen by the MUS&T office which will provide funds for the venture. Seven general scientific goals have been established for the threeweek saturation dive during August and September. Each member will spend a full week working in the submarine habitat.

The divers will utilize a German undersea chamber called Underwater Laboratory HELGOLAND. The habitat contains 42 cubic meters of space and was designed to comfortably accommodate four aquanauts in depths down to 100 meters. For this operation, the VWL HELGOLAND will be placed at a 15 meter depth.



Divers are (l to r) Dr. Maurice Lynch, Dr. J. Morgan Wells, William Phoel and Michael Castagna.

Using SCUBA equipment, the divers will leave the undersea chamber to conduct experiments along the sea floor. Included in their gear will be underwater communications devices with a range of 250 meters. Samples and specimens will be returned to the chamber for laboratory analysis.

The U.S. team held meetings at VIMS from July 30 to August 2 to review the U.S. technology that will be used in the mission and to discuss procedures for achieving the various goals. The divers will depart for Germany this month to participate in a oneweek training program in preparation for the descent.

# FIGHT POLLUTION: Dial H A T S

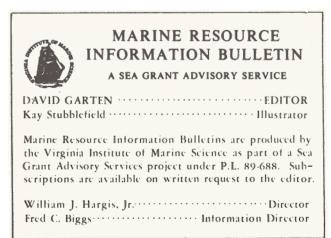
Virginians can help keep their waters clean by reporting pollution sources or unusual numbers of dead or dying fish to Hazard Alert Team Standby (HATS) -- a team of water quality experts available on a round-the-clock basis to investigate emergency situations.

Established in 1970 by the State Water Control Board, the HATS team investigates emergency situations that usually arise from waste treatment plant malfunctions, accidental spills and other sudden pollution sources.

Fish kills may result from natural causes such as sudden temperature changes, environmental stress, or disease. Often, however, dead or dying fish may be a sign of water pollution. It is the responsibility of the Water Control Board to investigate all such kills and to determine the cause.

If you notice dead fish or fish in distress, the following observations will make your report more valuable:

• Fish reaction -- gasping at surface or trying to get out of the water?



Approximate count.

 Species involved -- one species or a variety?

• Date and time of first observation.

 Unusual water conditions color, odor, etc.

 Weather conditions prior to and during kill.

If you spot a fish kill or sources of pollution call 804/ 770-2241 and ask for the HATS Team Chief. During nights, holidays or weekends, calls will be intercepted by the Capitol operator who will provide the home number of the on-duty HATS chief. During office hours contact the State Water Control Board regional office in your area:

```
Southwest
Abingdon -- 703/628-5183
```

Valley Bridgewater -- 703/828-2595

West Central Roanoke -- 703/563-0354

Northern Springfield -- 703/354-6620

Piedmont Richmond -- 804/770-5401

Tidewater Virginia Beach -- 804/499-8742

(Source: Virginia Wildlife Vol. XXXV, No. 7. Virginia Commission of Game and Inland Fisheries, Richmond, Va.)

# Meat Quality Above Average in Most Rivers

Oyster meat quality in the James River ranged from average to above average during July. At all stations the index was equal to or higher than values recorded for June. This increase, typical of the James during the summer season, is associated with the gonadal development of the mollusc prior to spawning. On the average, quality was equal to or higher than it was one year ago.

Quality in the York River remained above average. However, there was a slight drop recorded at all stations suggesting that limited spawning has occurred throughout the system. Quality was higher at all stations during July than it was a year ago.

Rappahannock River oysters were above average at all stations in July but had declined slightly from the June values. This suggests that limited spawning also has occurred in this system. On the average, quality during July was much higher than it was a year ago.

KEY	то	INDEX	NUMBERS
-----	----	-------	---------

4.0 TO	5.9 ·····BELOW AVERAGE
6.0 TO	7.5 · · · · · · · · · · · · AVERAGE
7.6 ANI	<b>UP</b> ······ABOVE AVERAGE

yls maibapart ba				
	Ju	ine	Jı	ly
JAMES RIVER	1973	1974	1973	1974
Brown Shoals	_	_	_	_
White Shoals		8.5	6.4	8.9
Wreck Shoals				
shallow	5.0	6.9	6.5	7.6
deep	5.4			7.0
Point of Shoals	4.6		6.0	
Horse Head	3.1		7.3	8.4
Deep Water Shoals	-	_	-	-
YORK RIVER				
Green Rock	7.1	10.2	7.3	9.7
Pages Rock	6.8		6.9	
Aberdeen Rock	7.4		8.2	10.2
Bells Rock		11.0	6.9	10.3
RAPPAHANNOCK RIVER				
Urbanna	9.9	12.9	8.0	10.0
Smokey Point				2010
shallow	9.9	11.8	8.2	9.6
deep	10.4			
Morattico	8.3		7.3	
Bowlers Rock	9.2	12.4	7.8	10.3

#### BOATING SAFETY TIPS ISSUED

The U.S. Coast Guard has issued performance standards for safe powering, safe loading and quantity of flotation material required for nearly all new boats less than 20 feet in length. Sailboats, canoes, kayaks and inflatable boats are not included.

Boat owners are urged to look for the Coast Guard capacity label and the manufacturer's certification plates. The label tells what is considered to be the boat's safe capacity for horsepower, weight and people; the plates indicate that the manufacturer certifies that his boat meets the Coast Guard standards.

The Coast Guard also is investigating all reports made by boat owners of safety-related defects in their boats. If you believe there may be a substantial risk of injury because of a defect, you should contact your nearest Coast Guard District Office in writing. If it is a serious defect such as one that could cause the boat to blow up or have sudden steering failure, the boat owner is urged to call rather than write.

After fully investigating the complaint, the Coast Guard can require the manufacturer to notify all of the other owners of the model with the defect and to undertake repair at no expense to the owner. In addition, if the nature of the defect warrants immediate action to prevent loss of life, a public news release of the investigation may be made.

#### SIZE RESTRICTIONS ON FISH

While it is commonly accepted that Virginia's commercial fishermen operate under limitations on the size of certain fish they can keep, it is not so well known that saltwater sportfishermen also come under the same size restrictions for their catch.

The Virginia Code (Section 28.1-49.1, 28.1-50) states that it is unlawful for any person fishing in tidal waters under the jurisdiction of the Marine Resources Commission to catch and retain the fish listed below unless their respective restrictions are satisfied.

Any fish caught which does not meet these size restrictions must be returned immediately to the water, unless it is obviously injured or dead. All measurements are taken from the nose to the tip of the tail.

Of the various sport fish found in tidal waters, only those listed below have size restrictions.

- - •

Fish	Minimum Legal Size		
Striped Bass (Rockfish) Croaker Summer Flounder Cobia Sturgeon	<pre>14 inches     8 inches     12 inches     20 inches     None to be</pre>		
Channel Bass (Red Drum) Striped Bass (Rockfish)	taken Maximum Size <u>Restrictions</u> 2 fish per day over 32 inches 2 fish per day over 40 inches		



Q: I have been told that VIMS has a great store of information about aquaculture. I would appreciate your sending me as much information as you could on the subject.

> S.L.D. Greenway, Virginia

A: VIMS is currently compiling an extensive bibliography of aquacultural research reported in the literature since 1970. Articles are assigned subject index terms such as "Oyster" or "Disease Treatment" to make possible retrieval of information from computer cards. We microfiche (a form of microfilm) all articles which we have permission to copy.

> Although copies of the computer cards and microfiche are retained at VIMS, the National Aquaculture Information System itself is maintained by Dr. Elain V. Collins, National Oceanographic Data Center, Rockville, MD 20852. Requests for specific information should be addressed to her. The collection is too large to send it all to you, but if you are interested in more general information, we suggest you obtain:

Bardach, J.E., J.H. Ryther and W.O. McLarney. 1972. Aquaculture. The farming and husbandry of freshwater and marine organisms. John Wiley and Sons. New York. 868 p.

### Holding Tank Hearings Scheduled For September

The State Water Control Board will convene two hearings to receive testimony relative to amending the implementation period for Regulation No. 5 - Control of Pollution from Boats.

Regulation No. 5 was adopted by the Board and became effective on March 7, 1973. The Regulation required all boats with marine toilets to have holding tanks by March 7, 1975. The two-year implementation period of this Regulation would be extended for up to one year.

Hearings will be convened on:

Sept. 12, 1974 at 10 a.m. in the Metropolitan Room of the Colony House Executive Motor Hotel, 5215 West Broad Street, Richmond, VA

Sept. 16, 1974 at 10:30 a.m. in the Norfolk City Council Chambers, Norfolk City Hall, Norfolk, VA

Anyone wishing to testify is requested to make his presentation and the originals of any exhibits available at the hearing for entering into the hearing record. Address all correspondence to Miss Anne M. Field, Pollution Control Specialist, State Water Control Board, P.O. Box 11143, Richmond, VA 23230.

#### $\sim$

Did you know that...

Fish swim primarily by contrac ting bands of muscles in sequence on alternate sides of the body sc that the tail is rapidly whipped from side to side in a sculling motion.

## **BOATBUILDERS, REPAIRERS:** Insurance Relief Action Possible

The Department of Labor is still considering the ruling on the Longshoremen and Harbor Workers Compensation Act which was extended in 1972 to include shoreside boatbuilding and repair facilities.

The National Association of Engine & Boat Manufacturers suggests that companies with greatly increased compensation insurance costs resulting from the act apply to the Department of Labor for relief or a ruling.

Address request, with full substantiating data and arguments to:

Mr. Cornelius Donohue Deputy Associate Solicitor Division of Employee Benefits Room 4221 U.S. Department of Labor 14th & Constitution Ave., NW Washington, DC 20210

### **CERTIFIED CRAB MEAT PLANTS IN VIRGINIA**

The following crab meat plants have been added to the list of plants certified by the Virginia Department of Health. All certificates expire March 31, 1975 unless cancelled or revoked prior to that date. This list is prepared by members of the Tri-State Seafood Committee as an aid to seafood buyers in locating certified crab meat suppliers. Other plants will be listed as they are certified.

NO.	NAME	ADDRESS
36 C	Millers Crab Shore	Colonial Beach
22 C	Nandua Seafood Co.	Hacks Neck
93 C	Owens & Blake Seafood, Inc.	Hayes
86 C	Tangier Island Seafood Co., Inc.	Tangier

### MARINE RESOURCE INFORMATION BULLETIN

VIRGINIA INSTITUTE OF MARINE SCIENCE Gloucester Point, Virginia 23062

ADDRESS CORRECTION REQUESTED

BULK RATE U S POSTAGE PAID Gloucester Point, Va. PERMIT NO. 6