

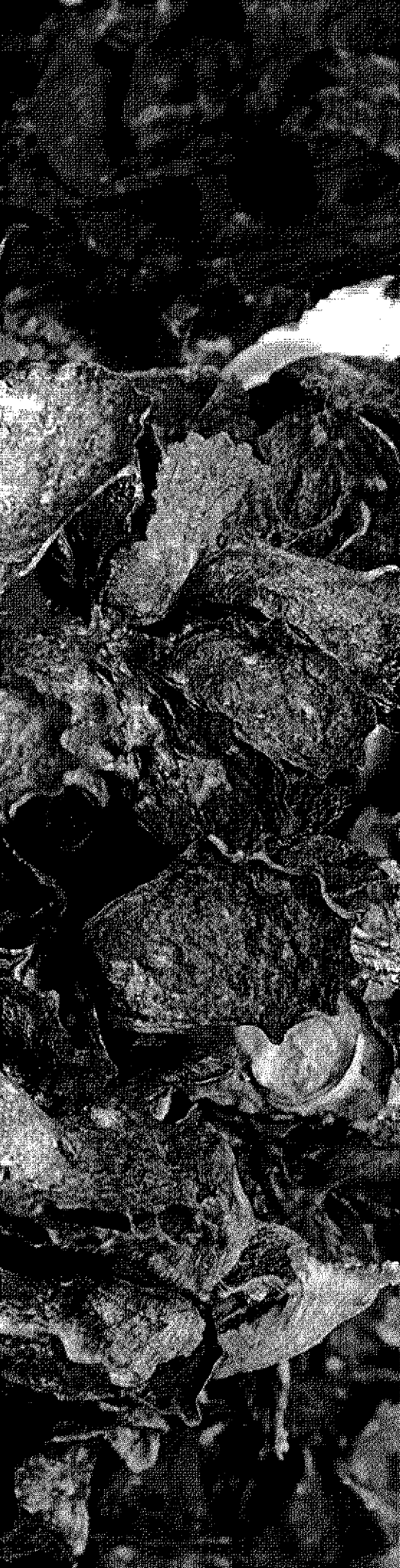
SHELLFISH CULTURE FORUM: INDUSTRY ISSUES

An Annual Evaluation

March 19, 2002

Nassawadox, Virginia

Virginia Sea Grant Marine Advisory Program
Virginia Institute of Marine Science
College of William and Mary
Gloucester Point, Virginia



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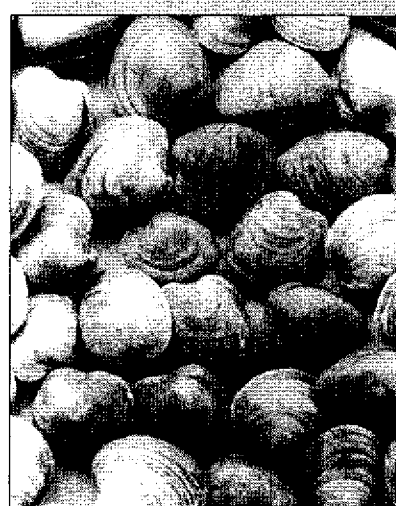
On Tuesday, March 19, 2002, approximately 50 shellfish growers gathered in Nassawadox on Virginia's Eastern Shore for a Shellfish Culture Forum. The Virginia Institute of Marine Science (VIMS) and the Virginia Sea Grant College Program (VSGCP) sponsored the forum, in cooperation with the Virginia Shellfish Growers Association (VSGA). It was intended to highlight issues currently impacting the shellfish culture industry or issues that could potentially become important for the industry. The meeting was led by Mike Oesterling, fisheries and aquaculture specialist for the Virginia Sea Grant Marine Advisory Program at VIMS, and Tom Gallivan, current president of VSGA. The forum was designed to inform and serve as a means for shellfish culturists to express their opinions on pertinent issues.

Cultivated Clam Pilot Crop Insurance Program

Hank Jones led the discussion regarding the USDA pilot crop insurance program for cultivated clams. Hank provided information about insurance levels and claims made over the past several years for all states currently in the pilot program (Massachusetts, Virginia, South Carolina, and Florida). In the year 2000, Florida clam farmers paid \$727,471 in premiums and received claim payments in excess of \$1.4 million (68 claims); Massachusetts growers paid \$72,817 in premiums and received claim payments over \$107,000 (11 claims); no claims were paid in South Carolina or Virginia in 2000. In 2001, Florida again led in claim payments (78) of over \$1.5 million on premiums of \$910,517; Massachusetts and South Carolina had no claim payments in 2001. Virginia had its only claim payment to date in 2001; on premium payments totaling more than \$409,000, a single claim payment of \$151,200 was made.

In part because of the claim payment history in Florida, the pilot crop insurance provisions have been modified to represent a more level playing field among all participating states. Hank provided copies of the provisions and pointed out several important items, which had been points of confusion in the past. One item concerned "noncontiguous" grounds, for insurance purposes. It is important for growers to recognize which grounds are actually being covered by their insurance, based upon the noncontiguous clause in the provisions. Hank then reviewed several other provisions and identified exactly what was and was not considered a legitimate cause for claim payment. One point

made was the need for good record keeping, and a suggestion that growers obtain aerial photographs of their growing grounds as additional documentation of their activities, in the event that a claim is made.



User Conflicts

The term "user conflicts" actually takes many different forms. While several specific examples were discussed (see below), the overall discussions focused on the need to better educate the general public about what clam farming is all about. Tom Gallivan stressed that everyone needs to "not just market clams, but market clam farming." Experiences were related about how some lease applications had been opposed by various groups, mainly because the groups did not adequately understand the culture process. To the credit of the Virginia Marine Resources Commission (VMRC), these protests were generally ineffective, and the leases were awarded. In follow-up conversations with some individuals who had originally protested the lease, they agreed that the culture activities were not the problem they had anticipated. Another discussion followed on how to best educate the

public, with suggestions of field visits to facilities and public event displays.

The issue of "scenic vistas" was discussed; in particular, a current problem on the West Coast was related. A group of waterfront property owners argued and sued that a mussel culturing activity was aesthetically unacceptable. In other words, they didn't like seeing the operation from their back porches. This effort was defeated. However, that lawsuit has now evolved into a "pollution" issue, with the same landowners now claiming that mussels release, or "discharge," pollutants into the water and should be considered "point sources" and thus be required to have a National Pollution Discharge Elimination System (NPDES) permit. Although the landowners lost in a lower district court, they have appealed to the Federal Circuit Court.

This case could have significant national implications if the shellfish growers lose. First, if mussels "pollute," then so do other shellfish. Thus, it could be argued that any type of shellfish culture could be required to obtain a NPDES permit. Additionally, this could impact restoration efforts where seed is being planted on reefs, etc. NPDES permit applications can be very time consuming and costly, making culture or restoration efforts more difficult. Second, shellfish are excellent water cleaners via their filter-feeding activities, and the notion that they are now the source of pollution could adversely impact marketing, or more importantly, be used by those opposed to culture activities.

A recurring topic about the potential user-conflicts regarding derelict nets or loose gear was also discussed. Problems associated with identifying who is responsible for loose gear make it imperative that the industry self-police itself, before other agencies become involved. It was pointed out that illegally "dumping" plastics in the ocean could result in hefty fines. Public perception is important, and a big, balled-up net stands out when it's high-and-dry in the marsh. Growers were encouraged to confront anyone they see "turning loose nets" or, if uncomfortable with that, notify

the VMRC. If you find an abandoned net, bring it ashore. Every piece of clam netting that's brought ashore not only benefits the environment, but results in good public relations for the industry.

Eco-tourism is increasing all along the eastern seaboard and raises a potential for user conflict with clam culture activities. One activity in particular, bird watching, was mentioned. It was reported that in New Jersey, lease applications were denied because of the potential impacts on shore birds and bird watchers. These types of interactions will continue as eco-tourism increases. It is vitally important that, with more people out on the water who are ecologically conservative, shellfish growers present good stewardship images and emphasize the environmentally-friendly aspect of shellfish culture.



Submerged Aquatic Vegetation (SAV)

An update was presented on the status of House Joint Resolution 765 (HJR 765). HJR 765 originated in the 2001 Virginia legislative session and focuses on the shallow water areas of Chesapeake Bay. VIMS, along with input from other agencies and stakeholders, was directed to collect information regarding the resources and uses occurring in water less than six feet deep. The information will be used in developing a management plan for shallow waters. Immediately after HJR 765 was passed in 2001, VSGA sent a letter to the director of VIMS emphasizing the group's

desire to be included in the process leading up to a management plan for shallow waters. VIMS is currently synthesizing all the available information and putting it into an easily understood format. Representative members of the shellfish culture industry will be invited to meetings to make sure that information is not missing, provide additional information, and help determine the best way to present the material so that it will be easily understood. Should anyone have questions regarding HJR 765, contact Lyle Varnell at VIMS (804-684-7764) for additional information.

In the past, SAV has primarily been an issue with growers on the Bayside of the Eastern Shore or within Chesapeake Bay proper. However, more attention is now being focused on the potential for SAV restoration on the Seaside of the Eastern Shore. Growers on the Seaside need to begin paying more attention to SAV in their growing areas and be prepared to respond to questions about their activities and potential impacts upon SAV.

The need for continued research on the beneficial aspects of intensive clam culture on SAV growth was stressed. Industry-wide opinion is that clam beds actually help SAV recovery. A recently conducted project in the Hungar's Creek region suggests that clam beds have no downstream impact on water quality. Unfortunately, this study did not really address the issue of whether or not clam beds help SAV get established. Several speakers commented about the lack of commitment from VIMS to address the potential beneficial environmental aspects of intensive shellfish culture. They expressed concern about conflicts with existing VIMS submerged aquatic vegetation programs and the expansion of shellfish aquaculture.

Regulations/Permits

Army Corps of Engineers Nationwide Permit #4 and Regional Permit #19 are the instruments that allow shellfish culture to proceed without requiring a formal Corps of Engineers permit.

Mike Oesterling strongly urged all shellfish growers to visit the web sites for these two permits and become familiar with the wording and requirements (Nationwide Permit #4, <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/nwpcnd.htm>; Regional Permit #19, <http://www.nao.usace.army.mil/Regulatory/rp-19.htm>).

Recently, Regional Permit #19 has come under scrutiny; primarily, its application to the controversy surrounding the potential use of *Crassostrea ariakensis* (Suminoe oyster) for aquaculture production. Irrespective of the *ariakensis* issue, hard clam growers should follow this debate, as there could be some negative spin-offs. It has to do with some of the wording in Regional Permit #19. In order to qualify under Regional Permit #19, an activity must be permitted by the VMRC. At this point, the VMRC does not issue a permit for shellfish aquaculture. This situation could be remedied relatively easily by simply having a permit issued at the time of lease renewal. However, for this to happen the shellfish culture industry will need to request that the VMRC implement a permitting system. It was mentioned that the VMRC Aquaculture Management Advisory Committee would be the appropriate starting point.

Diseases

Oysters: Relatively dry conditions prevailed throughout most of 2001, resulting in below average streamflows. As a result, salinities were elevated throughout the Bay and its tributaries. As a consequence of relatively warm water temperatures, high salinities, and high oyster parasite abundances in 2000, both MSX (*Haplosporidium nelsoni*) and Dermo (*Perkinsus marinus*) were widely distributed among Virginia oyster populations in 2001. Both parasites were responsible for oyster mortalities last year. Given continued dry conditions and warm temperatures, it is not unreasonable to expect that 2002 will also see the parasites causing oyster mortalities.

Clams: Most clam growers have heard confirmation of cultured clam mortalities attributed to

QPX (quahog parasite unknown) on the Seaside of the Eastern Shore last year. There have also been unsubstantiated reports of other clam deaths that could possibly be attributed to QPX infections. Within the next few months, VIMS personnel will initiate a QPX survey. A question was raised regarding whether or not QPX has ever been found within the Chesapeake Bay. Thus far, no QPX has been identified from samples – wild or cultured – taken from within the Bay proper. Concern was expressed that the current drought conditions and elevated salinities may make the lower Seaside of the Eastern Shore susceptible to QPX. As recently as within the past month, clam samples from Plantation Creek have tested negative for QPX.

A recent VIMS study has demonstrated a connection between the source of clam seed and its susceptibility to acquiring QPX infections. It appears that seed from southern stocks are more prone to acquire QPX infections, and as the seed source moves northerly, susceptibility declines.



Crassostrea ariakensis

The Suminoe oyster has attracted a great deal of attention lately from all quarters. The recently concluded 2002 Virginia General Assembly passed a resolution dealing with both native oyster restoration and *Crassostrea ariakensis*. House Joint

Resolution 164 (HJR 164) supports continuing efforts to revitalize the Virginia oyster industry. While HJR 164 renewed the General Assembly's commitment to restoration efforts with our native oyster (*Crassostrea virginica*), a key point in the resolution was an affirmation that the General Assembly supports continued efforts to establish commercial aquaculture production of genetically sterile (triploid) *Crassostrea ariakensis*. In discussions leading up to the eventual passage of HJR 164, several versions of the resolution were debated. One of these advocated the introduction of reproductively capable animals (diploid) if after three years of research no negative impacts could be identified. The final accepted version suggests that after three years of research with no negative impacts being identified, introduction of reproductively capable animals could be considered.

The introduction of *Crassostrea ariakensis*, diploid or triploid animals, is hotly debated and will continue. The National Academy of Science has just initiated a committee to identify what information is known about the Suminoe oyster, what research is needed, and what the risks might be to an introduction.

Associations

Within the shellfish culture industry, a general lack of unity prevails. While it's nice to be an individual and self-sufficient, there are times when there is indeed safety in numbers. At those times, having an industry association that can go before the powers that be and say "our association supports or opposes such-and-such" carries more weight than individual expression.

For over 10 years there has been in existence a Virginia Shellfish Growers Association (VSGA). Sometimes the association has been very active or vocal on issues; other times it's been pretty quiet. Many times there have been major disagreements among its members about how the association should be run or its position on a particular issue. However, over its existence, VSGA has caught the attention of the VMRC and other state agencies

and is recognized as an industry voice. With the above issues looming, it's time for the VSGA to become active once again. The only way this will happen is if people become members and, instead of complaining about problems to their friends, band together to try to solve them.

While it is important to support a local association, there is also an effort to establish a regional East Coast Shellfish Growers Association (ECSGA). Shellfish growers along the Atlantic coast are being encouraged to band together in a fashion similar to the highly successful Pacific Coast Shellfish Growers Association (PCSGA, <http://pcsga.org>) and to work for the betterment of the shellfish culture industry on the East Coast. At the annual meeting of the National Shellfisheries Association, a full day will be devoted to the planning and organization of the ECSGA. Shellfish growers will hear more and more about the development of the ECSGA as time goes by.

Summary

It is important that shellfish growers recognize their common needs and continue to come together to discuss issues facing their industry. It is anticipated that the Shellfish Culture Forum will become an annual event for industry members to exchange information and express their opinions on these issues. Such exchanges can reveal industry needs, which form the basis for future research and advisory programs.

