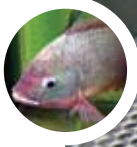


► Focus On Society Development



► 6th International Conference on Recirculating Aquaculture, Roanoke, WV



► 2005 AES Member Survey Results



## President's Letter (January 14, 2006)

We have all survived the holidays and are back dealing with work and home issues. In this letter, I would like to address major issues facing the society and engineers working in the aquaculture field. First, a few thoughts about technical societies in general. In the past, I have been active in the Fish Culture and Bioengineering Sections of the American Fisheries Society. For a number of reasons, I am no longer active in either of these groups. Organizations and people age and it is common even in societies that have been very active over decades to face sharp decline in membership and activities and in some cases, even collapse. The opinions presented in this letter are personal (and biased) but I hope they will simulate a wider discussion of some of the issues facing our society. Major issues discussed in this letter include:

- (1) How does our society function?
- (2) Who really runs the society and membership involvement?
- (3) How do we encourage new members to become active in the society?
- (4) What are the roles of international members?
- (5) How do we expand the role of engineers and the AES in the aquaculture field?

### How does our society function?

The Aquacultural Engineering Society is largely a volunteer society. Compared to other engineering societies, our annual dues are low. While the society is operating in the black and has a sizable reserve, we do not have a large

source of money to fund ongoing activities. In the past, we have helped pay for some society services (web site development and accounting services), but it is unlikely that we paid for the full costs of these services. Without a major change in dues structure or another source of funding, the AES will have to continue to operate as a volunteer society.

### Who really runs the society and membership involvement?

In a biological sense, I would like to divide society members into two groups: producers and consumers. Producers are current (and past) officers, Board of Directors, and committee members. Consumers are members of the society that receive AES services (primarily the journal or attend AES sessions at meetings) but do not directly contribute to the society. Out of 200-250 members of AES, there have only been about 35 producers over its 10-year history, and 95% of the society work at any one time is done by less than 10-12 members. Consumers are important to the society as total membership is important in our dealings with Elsevier and WAS but the role of the consumer in the society is passive. The long-term health of the society depends on the work of the producers not the total membership count. It is important to understand what services our membership would like, but it is more important to figure out how we are going to provide those services with largely volunteer labor.

### How do we encourage new members to become active in the society?

The health of this society depends on adding one or two new members to committee positions

or the Board of Directors each year. Too much of the work is being done by members that have belonged to the society since its founding. We need to be willing to let new members try something different and take the society down a different path. It is always useful to have a few white-haired fellows around as there is little reason to repeat serious errors that we have already made but we shouldn't get in the way of progress. For example, many of us have a background in traditional commercial or agency finfish culture, but today, there is more interest in development and construction of laboratory fish facilities. Some of the state and federal agencies that have supported fish culture research in the past are de-emphasizing hatchery production because of potential genetics impacts on wild stocks.

It is also interesting to explore specifically how to get more graduate students and new graduates active in the society. What is preventing their participation and how do we address these issues? We need to try to divide society committee and officer duties more evenly. It is unreasonable to expect that a new graduate would agree to devote more than 3-5 hours per month to the AES. We need to develop committees and assignments that are interesting and relevant to new grads and will be looked upon favorably by employers.

While much of the daily work of the society is done by mail, phone, or e-mail, a lot of the formal work is accomplished at the annual meeting. It is an expectation that the 2<sup>nd</sup> vice president, 1<sup>st</sup> vice president, president, and secretary-treasurer will attend the annual meetings. Therefore, we

*continued on page 2*

continued from page 1

are expecting personal, agency/company, or university sources to contribute \$6,000-\$10,000/year to running of the society. While many of us may attend the WAS meetings regardless of the AES meeting, travel costs may seriously limit some individual's participation. Should the society help with travel funds for individual officers lacking travel support? The society already assists with student travel. If we chose to assist with officer travel, what source of money should be used; how would we prioritize the award of these funds; and what should be the maximum yearly limit be?

What are the roles of international members?

I have not reread the bylaws, so I am going to write this section in a very general way. The AES was organized under the laws of the United States and up to now; most of the officers have resided in the U.S. The society is becoming more active in Europe and the next Issues Forum is planned for The Netherlands in 2007. There are legal reasons why the secretary-treasurer position must be filled by someone in the U.S., but are we willing to consider a President from outside the U.S.? With faxes and e-mail, it doesn't matter if you are dealing with someone 50 miles away or 10,000 miles away and across two oceans. If we are willing to consider this option, should we also be willing to help with travel costs to the annual meeting?

How do we expand the role of the engineers and AES in the aquaculture field?

I think that this topic should be given more thought and possibly the appointment of a new committee chair. There are perhaps hundreds of possible approaches and the "best method" is the method that someone is willing to actually implement. Good ideas are a dime a dozen. In keeping with our volunteer organization, I would like to propose [to organize] the following ½ day session at the next US WAS/AA meeting: (see below)

With the exception of the first talk, these sessions are self-organizing (one grabs people that are already coming to the meeting). I would hope that this session could be a regular part of all WAS/AA meeting. We would need to discuss this with John Cooksey and see what we might get in return (more complimentary registrations would be helpful to get people to participate)?

I appreciate your help with these issues and hope that you will be able to attend the BOD and membership meetings at the Las Vegas meeting.

Best wishes,  
John Colt  
President

## Proposed Session: Aquacultural Engineering in Aquaculture Development

TITLE	PURPOSE OR APPROACH
The role of engineering consultants in aquaculture -an engineering prospective (30 minutes)	Outline roles and responsibilities of engineering consultants in project develop, design, and construction. What do you get for your money, what should you expect, and how does the process work?
The role of engineering consultants in aquaculture –a private sector and agency prospective (30 minutes)	Panel Discussion with private sector and agency staff with recent design and construction experience. How did the process work for them?
Aquaculture consultants – Panel discussion (45 minutes)	Introduce active consultants and have them describe past or current projects (5 minutes/company; hand out company pretties, and business cards; talk about potential jobs that may be available)
Aquacultural engineering academic programs and graduate research opportunities – Panel discussion (45 minutes)	Description of individual academic programs and potential graduate research positions (what grad or research positions are out there?)
Meet with your favorite aquaculture engineer (or ten minutes of free consulting time) (30 minutes + unlimited time in the bar after the meeting)	This session would allow the audience to sit down with an aquacultural engineer and ask specific questions.



## RECIRCULATING AQUACULTURE TECHNOLOGY SHORT-COURSE

*May 8 & 9, 2006 Firenze (Florence), Italy*

Location: Grand Hotel Baglioni, Piazza Unità Italiana 6, Firenze (Florence), Italy

Note: Discount for early registration by April 15

Aquaculture, as a business, seems to be able to capture the imagination of a wide variety of individuals worldwide. Recirculating aquaculture technology (systems that recondition and reuse water) is the latest sector in aquaculture to have attracted attention and considerable venture capital. This short-course is designed for a broad audience. We will seek to provide non-biased, research-based information to those that are interested in, or those using recirculating aquaculture fish production systems. The information presented comes either from the first-hand research results and experiences of the presenters or those of collaborators or

colleagues around the globe. Species currently being cultured at the NC State University Fish Barn are tilapia, yellow perch and southern flounder. Species being cultured in cooperating marine recirculating systems research include summer flounder and black sea bass. Short-course registration includes two days of lectures, a technical workbook and CD, and coffee, tea and lunch for both days.

### Registration Information

Short-course registration includes a technical workbook, lunch and morning and afternoon breaks for both days.

### Contact Information

Tel. +1 760 432 4270;  
Fax: +1 760 432 4275;  
Email: [worldaqua@aol.com](mailto:worldaqua@aol.com)  
[www.was.org](http://www.was.org)



# 6th International Conference on Recirculating Aquaculture Symposia and Trade Show

July 20-23, 2006 Hotel Roanoke & Conference Center Roanoke, VA

The 6<sup>th</sup> Annual International Conference on Recirculating Aquaculture Symposia and Trade Show is the premier forum for sharing ideas, the latest research, opportunities and technologies in recirculating aquaculture systems. It is designed for entrepreneurs, researchers, operators, managers, fishery biologists, veterinarians, engineers, food technologists, teachers, government regulators and administrators, financial managers and lenders, advisory and extension personnel. The conference features symposia on nutrition, waste management, genetics and physiology, recirculatory pond systems, species and endangered species, aquaria, fish health, bait fish, ornamentals, business management, economics and financing, international operations, education and outreach. The popular trade show will feature exhibits from businesses, government and educational organizations that provide equipment and services to producers and supporting businesses in the

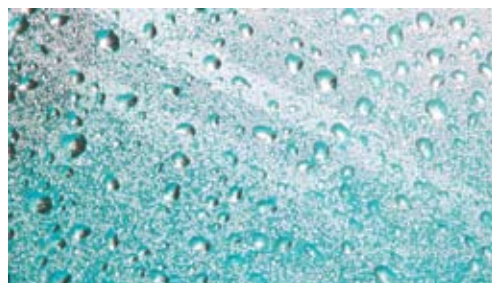
aquaculture industry. Also included again this year will be guided tours of selected recirculating aquaculture research facilities.

### Program Highlights

- Symposium 1* - RAS in Penaeid Shrimp Culture
- Symposium 2* - Penaeid Shrimp Culture Extended
- Symposium 3* - Developing Aquaculture Markets That Are Not Commodity Markets
- Symposium 4* - Current Issues in Fish Health
- Symposium 5* - Intensive Marine Finfish Production
- AES Session I* - Marine Recirculating Aquaculture Systems for Mollusks
- AES Session II* - Engineering Issues for Marine Systems - Design, Biosecurity, and Storm Preparation

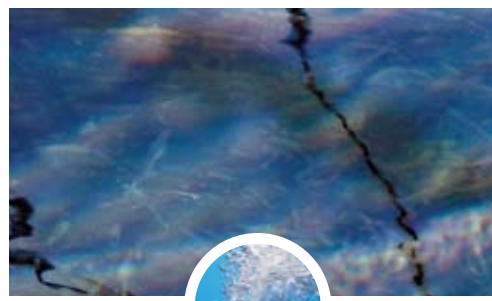
*Freshwater Institute Session* - Improvements in Aquaculture Waste Management Practices

For more information, please contact Ms. Terry Rakestraw, Virginia Tech, Mail Code 0418, Blacksburg, Virginia 24061, telephone: (540) 231-6805, or e-mail your questions to: [aqua@vt.edu](mailto:aqua@vt.edu) or visit: [www.conted.vt.edu/aquaculture/r-aqua/index.html](http://www.conted.vt.edu/aquaculture/r-aqua/index.html)



The AES is looking for sponsors within the aquaculture industry to support the cost of producing the AES News. The sponsors listed below have donated generously to support the AES in 2005.

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## AES Information

The AES News is printed quarterly by the Aquacultural Engineering Society. You can receive the AES News by joining the Aquacultural Engineering Society. If you would like to discuss the contents of the AES News, or, if you would like to contribute information to the AES News, please contact the editor:

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**[info@praqua.com](mailto:info@praqua.com)**

# 2005 AES Member Survey

72 Respondents; Approximately 1/3 Of Membership

## 1. AES members respond that they are:

	Response (%)
Aquaculture Producers	27.8
Equipment Suppliers	26.4
Consultants	40.3
Researchers	37.5
Academics	34.7
Other (government, extension, etc.)	15.3

## 2. On average, 39.4% of AES members responded that they have a degree in engineering.

## 3. AES members respond that they joined AES for the following reasons:

	Response (%)
For access to the journal Aquacultural Engineering	38.9%
For notification of AES meetings & events	15.3%
For a venue to discuss Aquacultural Engineering issues with others	27.8%
For all of the reasons above	62.5%
Other:	
• For education	
• To network with other in AES	
• To help find a job.	
• To access other avenues in aquaculture	11.1%
• To access technical papers	
• To make other aware of research issues	

## 4. What additional services would you like AES to provide? Approximately 60% of those taking the survey responded.

Please note that due to limited space the results to this question can be found on the AES website at [www.aesweb.org](http://www.aesweb.org)

## 5. What would you like to do to assist the AES? Approximately 50% of those taking the survey responded.

Please note that due to limited space the results to this question can be found on the AES website at [www.aesweb.org](http://www.aesweb.org)

## 6. What type of program do AES members want at our annual conference? Approximately 50% of those taking the survey responded.

Please note that due to limited space the results to this question can be found on the AES website at [www.aesweb.org](http://www.aesweb.org)

## 7. What other type of services do AES members want? Approximately 35% of those taking the survey responded.

Please note that due to limited space the results to this question can be found on the AES website at [www.aesweb.org](http://www.aesweb.org)

## 8. Approximately 20% of those taking the survey thought that the AES's current constitution discouraged member involvement. Of those that commented, almost all noted that the requirement that one possess an engineering degree to be a board member or officer should change.

## 9. What do AES members think about our current organization, e.g., power in the Board of Directors vs. direct elections? Approximately 40% of those taking the survey responded.

- Appears to work well (17 provided this response) with a couple of caveats noted:
  - Those involved work very hard and are dedicated for the advancement of the society;
  - More industry representatives would help.
  - The old boys network works even though I feel excluded from that network.
  - Leadership is limited to a small group, probably because nobody else was interested. Not unusual for small organizations.

- I prefer direct elections. I think it tends to get more people involved and active. Concentrating the power in the board might make it easier to run the organization but it gives the perception of an exclusive club.

- I remain convinced that non-engineers could and would strengthen the Board of Directors

- It is difficult to become involved in the executive. The executive does not take every opportunity to bring in new young members that want to get involved. It would be advisable to leave a couple of positions open for "new" executive members. This would ensure that there is always a fresh group of interested individuals to continue leading the AES. As it is, the executive seems to cycle through the same people year after year. This demands a lot of continued effort by a few and is not sustainable in the long run.

- Direct elections would be ideal (3 provided this response). Elect x number of board members a year. Have a term of two years. The president may be elected from within.

- I would like to hear a discussion of what the current leadership system is and what those who serve in it think about it. If it works don't fix it but if leadership feels that a more participatory structure would improve the organization then it should be considered.

- I think we need more diversity. The word that I am looking for or the word it brings people that think out of the box.

- No comment or unsure (8 provided this response).

## 10. Other issues with the AES that those responding wished to note:

- I think that AES should collaborate with other aquacultural related professional societies (WAS, AFS-Bioengineering), producer groups, and university personnel to write a rebuttal to the many criticisms of aquaculture.
- Engineers need to have an appreciation for topics other than engineering. For example, design of RAS requires knowledge of biosecurity and physiological principles.
- It seems like AES' primary focus is to publish papers, not to help aq. engineers
- The AES website seems to have OUTDATED news as a prominent feature



## Aquaculture America 2006 Update

The AES has finalized the details for our upcoming annual meetings at the Aquaculture America 2006 meeting in Las Vegas, NV

AES Board of Directors Meeting  
Riviera Hotel Room 203  
Tuesday, Feb. 14  
8:30 - 10:30am

AES Membership Meeting  
Riviera Hotel Grande Ballroom A  
Wednesday, Feb. 15  
5:00pm after the AES session