U.S. Aquaculture Society

Wow, what a ride!

My first introduction to aquaculture was as a M.S. graduate student at Mississippi State University. I wanted to do something more fulfilling with my life, so I decided to get into the exciting area of research and development for a newly initiated project with freshwater shrimp. I ditched my job as a bench chemist for a large soap/lotion manufacturer and moved south. After graduate school, I moved to the Mississippi Delta and worked at the catfish research center in Stoneville, MS. There my supervisor provided my first opportunity to experience a World Aquaculture Society conference in 1989 at the Westin Bonaventure Hotel in Los Angeles, CA. I was hooked!

I went back to graduate school to get a Ph.D. in toxicology but steered my dissertation research back to aquaculture by studying the effects of pesticide overspray and their neurotoxic effect on catfish. After graduation, I did a two-year post-doc in New Zealand studying the effects of pulp-mill effluent on trout and native aquatic organisms. Then I came home and finally settled in Stuttgart, AR at the USDA/ARS Stuttgart National Aquaculture Research Center.

The 1989 World Aquaculture Society conference was where a group of us met to discuss forming a U.S. Chapter of WAS. I vaguely remember being at this gathering with a few of the "more experienced" guys who are still around today; USAS was formed in June 1990.

Thank Yous and Welcomes

Thanks to David Cline for his service to USAS over the years, especially this last year as USAS President. We will follow his sage advice, along with that from other Past-Presidents, to guide us for the future. Also thanks to outgoing Board Members Eric Peatman and Allen Pattillo for their service to USAS. I'd like to welcome Angela Caporelli (President-Elect), Chris Green (Vice-President), Ken Cain and Dennis McIntosh (Board Members), Taylor Lipscomb (Student Liaison), and Adam Daw (Apprentice Student Liaison), as well as all the new Members of the committees (usaquaculture.org/committee-chairs) the Board has populated to help USAS with our mission and projects. As always, many thanks to the WAS/USAS Home Office for continued support and help.

I know David Cline talked about Aquaculture America 2018 in his last column and I want to emphasize again what an outstanding, well-attended meeting it was, with an excellent turnout for our Aquaponics and Statistics workshops; thanks to Allen Pattillo and Steve Rawles for organizing them.

The USAS Board has been busy with some behind-the-scenes planning and projects that should come to fruition soon. One of the projects was the recent member survey by the USAS Membership & Promotion Committee (see below). We had a 26 percent response rate, which believe it or not, is pretty good; so thanks to those who responded, and for those who didn't, let's try to do better next time USAS asks for your input. Member input is valued and appreciated!

We have heard what ¼ of the USAS members are telling us, so we will see what we can do with these results. We will also work on putting together a report on all of the survey results in the near future. Remember, the squeaky wheel gets the grease, so let us know if there is something you'd like to see the Society doing.

As always, we encourage members of USAS (and all WAS Chapters) to support and submit your quality manuscripts to JWAS!

Thanks! — *David Straus, President*

Aquaculture America 2018 by the Numbers and Results of the USAS Member Survey

Bill Walton, David Cline, Forest Wynne, Dennis McIntosh, Matt Parker and Dave Straus

Aquaculture America 2018

The US Aquaculture Society (USAS), along with the World Aquaculture Society, brought together over 2,000 people from 61 countries around the world at our Aquaculture America 2018 conference in February. The conference featured 624 speakers and 108 poster presentations from academia, industry, government and non-profit organizations. In addition to the presentations (given in 63 sessions over three days), the trade show featured 174 booths, offering up the latest technology and innovations to potential customers. The meeting's theme was 'Shaping the Future - Telling Our Story,' with an emphasis on addressing consumer perceptions and concerns about aquaculture.

Next year's meeting, Aquaculture 2019, will be in New Orleans, LA from March 7 - 11. It is anticipated to be even larger with more sessions, speakers and countries represented. It will be hosted by the World Aquaculture Society, the Fish Culture Section of the American Fisheries Society, the National Shellfisheries Association, the US Aquaculture Society, the National Aquaculture Association and the Aquaculture Suppliers Association. Check out http://usaquaculture.org/ for more information about the US Aquaculture Society and https://www.was.org/ for news about upcoming meetings.

USAS Member Survey

Following Aquaculture America, the USAS Promotion and Membership Committee sent a survey to our members to gauge member satisfaction and interest in various opportunities, such as webinar topics, workshop topics and potential meeting venues. (If

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you would like more information, the full Qualtrics survey report can be found at usaquaculture.org/membership.)

The survey was opened on April 9 and closed on April 25. Members were asked by email on three separate occasions to complete the survey, as well as encouraged on USAS social media platforms including Facebook, Twitter, and Instagram (@usaquasoc). A total of 261 responses were collected, out of 990 current members, for a response rate of 26 percent. The survey used Qualtrics software to tabulate data.

Of the respondents, 78 percent were male, 19 percent female, and 3 percent preferred to not answer. By age, 12 percent were 30 or under, 21 percent were 31-40, 19 percent were 41-50, 23 percent were 51-60, 21 percent were over 60 (with 4 percent preferring to not answer). We do not have data on chapter demographics, so it is not clear if these responses are representative of the current USAS membership. It is notable that only about one-third of respondents were 40 or younger. Despite this, 15 percent of respondents indicated that they were USAS members, which is representative of the current student membership in USAS. The survey was predominantly completed by those in academia (45 percent), followed by the other category (23 percent), producers (13 percent), extension (10 percent), and consultants (8 percent). In the other category, government positions, supporting industries (e.g., equipment manufacturers), non-profits were listed frequently enough to include these as categories in any future surveys.

Geographically, there were five or more respondents from AZ, AR, CA, HI, ID, IL, LA, MD, MA, NC, WA, and 10 or more respondents from: AL, FL, KY, MS, and TX. The states with the most respondents were FL, AL and KY. There were 30+ respondents from outside the United States.

What Did We Learn?

USAS has worked with other groups to provide eighteen webinars to date. Recordings can be found at usaquaculture.org/webinars. Looking forward, we sought input about potential webinar topics that could be developed. For this question, we asked members to rate their interest on a scale of 1 to 5 (where 1 is no interest and 5 is extremely high interest) for a number of topics. The webinar topic of greatest interest is on changing public perception of aquaculture (Table 1). The column on the right of Table 1 is the percentage of respondents that ranked the topic as a high priority (as a 4 or 5). There was also considerable interest in strategies for improving feed conversion ratios and trends in aquaculture feeds, as well as a webinar about local foods and aquaculture products. Table 1.

The survey also requested suggestion of other webinar topics, which predictably generated a wide range of responses. Potential additional topics included some related to feeds (e.g., quality control, exogenous enzymes, feed-mill design), development of aquaculture (including offshore, ornamental, etc.) and social issues such as a discussion of gender in aquaculture.

In addition to webinars, USAS offers workshops in conjunction with the annual meeting as a benefit to members (usaquaculture.org/workshops). We plan to continue these workshops at future meetings and sought input on topics, again using the scale of 1 to 5. The two highest-rated workshop topics were best aquaculture practices and aquatic animal health. These were followed closely by recirculating aquaculture system design, engineering and operation, and fish nutrition. Table 2.

Again, a number of additional workshop topics were suggested, including economics (aquaculture economics, investment do's and don'ts), feed formulation and quality control, value-added aquaculture products and shrimp grow-out automation.

Certainly one of the most common suggestions that USAS Board members receive from members is about potential meeting venues. Although substantial planning is involved in any meeting, with venues selected and contracted years in advance, input from the USAS Board has been requested by the WAS Board regarding venue selection. To better guide our input, respondents were asked to rate their interest in potential venues on a scale from 1 to 5. Table 3.

Of the suggested venues, several in Florida earned high marks including Tampa, Jacksonville and Fort Lauderdale. Additionally, Charlotte, North Carolina, as well as Savannah and Atlanta (Georgia) had high interest. Los Angeles, California and St. Louis, Missouri fared poorly in the survey. A number of additional venues were suggested, including several that are the sites of upcoming meetings (e.g., New Orleans, Honolulu and San Diego). Other possibilities included Mobile, Alabama, Baton Rouge, Louisiana, San Jose, California, and Virginia Beach, Virginia.

For meeting venues, we note that these are only member suggestions. It is important to keep in mind that final selection of locations for Aquaculture America meetings must also account for specific venues that have sufficient space for the trade show, an adequate number of meeting rooms for concurrent sessions, and have the necessary hotel and airport amenities for our attendees.

Beyond feedback about webinars, workshops and meeting venues, we also used the survey to ask USAS members about other topics. Almost half (47 percent) of respondents indicated that there were likely or very likely to purchase USAS merchandise if available. Members also overwhelmingly agreed that they would be likely or very likely to pay $10 a year to be a member of USAS. (Current chapter dues are $5).

In terms of online communication to members, we were surprised at the relatively low rates of social media 'follows' by respondents (Table 4). Facebook was the most commonly used platform (29 percent of respondents), followed by LinkedIn and YouTube. Twitter and Instagram, which were started approximately two years ago, were followed by only 8 percent each of respondents. We are analyzing the data further to see if there are significant differences in these response rates between students and non-students, as different platforms may better serve different member groups better than others. Only 10 percent of respondents indicated that they had ever posted to any of these platforms. In terms to the USAS website (www.usaquaculture.org), 12 percent of respondents indicated that they had visited the site in the last week, while 29 percent responded that they had visited in the last month, and 42 percent responded that they had visited in the last year, while 16 percent responded that they had never visited the website. Table 4.

So, there you have it! We are putting these data to work to help guide USAS Board decisions about webinars, workshops and meeting venues, as well as using these responses to help us evaluate our social media and website efforts and setting baselines for future comparisons. There are already discussions by some of our newer members to get more respondents to the next survey if planned during a conference to increase feedback. The USAS belongs to the members and participation helps enable the Board to serve the Society. We greatly appreciate the feedback that we received.

TABLE 1. Survey results for member interest in potential webinar topics.

Field	*Mean*	*Std. Dev.*	*% High*
Changing public perception of aquaculture	4.1	1.1	73
Strategies/technologies for improving feed conversion ratios	3.8	1.2	65
Trends in aquaculture feeds	3.7	1.2	60
Local foods/aquaculture products	3.7	1.2	63
Basics in recirculating aquaculture systems	3.5	1.2	54
Extension programs in aquaculture	3.5	1.1	53
Experimental design/statistics	3.5	1.3	53
Use of probiotics in aquaculture	3.5	1.2	52
Water quality basics	3.4	1.3	50
Interstate transport of aquaculture products	3.2	1.3	41
Considerations for small-scale seafood processing	3.1	1.2	39
Algae biomass	3.1	1.2	41
K-12 aquaculture education	2.9	1.2	34
Recent developments in shellfish import/export to European Union	2.6	1.3	27
Sea vegetables	2.6	1.3	27

TABLE 2. Survey results for member interest in potential workshop topics.

Field	*Mean*	*Std. Dev.*	*% High*
Best aquaculture practices	3.7	1.1	62
Aquatic animal health	3.7	1.1	62
RAS design/engineering/operation	3.6	1.3	58
Fish nutrition	3.5	1.3	56
Water quality	3.5	1.2	50
Marketing aquaculture products	3.4	1.3	49
Advanced aquaponics (possibly offered over two days)	3.4	1.3	49
Alternative species	3.4	1.3	48
Mariculture	3.3	1.3	50
Aquaponics	3.3	1.3	46
Biofloc systems	3.3	1.3	47
Scientific communication	3.2	1.2	41
Statistics	3.2	1.3	41
Sales and marketing	3.2	1.2	38
Marine stewardship	2.9	1.2	29

TABLE 3. Survey results for member interest in potential meeting venues.

Location	*Mean*	*Std. Dev.*	*% High*
Tampa, FL	3.7	1.2	63
Charlotte, NC	3.5	1.2	51
Savannah, GA	3.4	1.2	52
Atlanta, GA	3.4	1.2	50
Jacksonville, FL	3.4	1.2	48
Fort Lauderdale, FL	3.4	1.3	50
Phoenix, AZ	3.2	1.3	49
Washington, D.C.	3.2	1.4	41
Memphis, TN	3.1	1.2	41
Los Angeles, CA	3.0	1.4	42
St. Louis, MO	2.6	1.2	22

TABLE 4. Survey results for member follows on social media platforms.

Social Media Platform	*Yes (%)*	*No (%)*	*Not Sure (%)*
Facebook	29	67	4
Twitter	8	88	3
Instagram	8	88	3
YouTube	13	83	4
LinkedIn	18	72	10