Aquaculture Messaging:

A Summary Report of a Workshop

A Report from the Aquaculutre Messaging Workshop hosted by the Aquarium of the Pacific.

November 14-15, 2013

ACKNOWLEDGEMENTS

We would like to thank Don Kent, president of the Hubbs Sea World Research Institute and his wife Cara for making the trip to Long Beach on their anniversary to speak with the participants about the current state of aquaculture in the Southern California Bight. We also thank Linda Brown for coordinating all of the logistics and Rachel Fuhrman for taking copious notes and assisting with the preparation of the report.

Photos courtesy of NOAA Fisheries (**http://www.nmfs.noaa.gov**)

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PREFACE

On November 14-15 representatives from a number of aquariums met with aquaculture experts to try to develop some key factual statements about aquaculture that institutions should consider when creating messaging on the topic for their publics. In advance of the workshop each institution was invited to submit five key messages for discussion; these became the point of departure. We discussed, debated, and revised these over a day and a half and developed unanimity or strong consensus on those listed in this report. One of the overall themes that was clear among all groups was that the majority of the large fish in the ocean are gone, and wild-capture fisheries can't keep up with the world's appetite for seafood. For the health of our oceans and for future generations we need to develop additional sources for sustainable seafood. Responsibly produced aquaculture, farming for fish and other seafood, holds great promise as part of a solution to ever increasing pressures on our ocean resources. There was no commitment by institutions to deliver any of these messages discussed within the meeting.

Introduction

Public aquariums and similar institutions have been an integral part of the sustainable seafood discussion; many have created educational messaging and programming on the topic to educate the public and change sourcing practices throughout the supply chain. While efforts such as the Conservation Alliance for Seafood Solutions exist, not all public aquariums participate equally and program and institutional mission statements vary, thus the messages being presented to the visiting public as to what constitutes sustainable seafood, and in particular the role of aquaculture in this discussion, vary. Because it is the fastest growing food production system in the world and now accounts for more than half of the global seafood supply, it is essential that these institutions generate more strategic alignment and messaging consistency on the topic. Working together, there is an opportunity for the aquarium community to increase the public's understanding of responsible aquaculture and its role in the seafood supply and society.

On November 14-15, 2013 the Aquarium of the Pacific and the New England Aquarium hosted a workshop at the Aquarium of the Pacific in Long Beach, California with the goal of bringing representatives from public aquariums together to generate greater awareness of responsible aquaculture and alignment around messaging. The representatives, mostly from West Coast institutions, met with aquaculture experts to try to develop consensus on some key, fact-based messages about aquaculture that they thought the public should receive.

For the purposes of this workshop, aquaculture was defined as:

> ***"The breeding, rearing, and harvesting of aquatic organisms in various marine and freshwater environments for direct human consumption."***

In advance of the workshop each institution was invited to submit five key messages for discussion. At the workshop, participants were asked to discuss, debate, and revise the messages to develop consensus on the messages that are important and certain.

Working Towards a Consensus

It is important for aquariums and similar institutions to keep their reputation as a trusted, balanced, and unbiased source of information. To ensure that the messages resulting from the workshop were conducive to maintaining this reputation, the group first discussed at length the qualities of effective communication. The qualities discussed included:

- the importance of clarity and consistency;
- incorporating both brevity and succinctness;
- maintenance of neutrality and the avoidance of clear promotion or blatant advocacy; and
- being cautious of absolute statements or judgments.

The importance of framing was also discussed, in that institutions must be aware of their audience and frame messages in a simple, positive, and personal way that will resonate with them.

Once the framework for good messaging was agreed upon, participants were asked to distribute themselves into four break-out sessions. The assignment was to join a group of like-minded experts and to come up with a statement including the word aquaculture which was fact based and as value free as possible. These messages were then presented back to the group and discussed at length.

With these messages in mind, the participating scientific experts with the most experience and background in aquaculture were asked to convey what they identified as the most important fact about aquaculture that the public should know. These experts were:

- Dr. Paul G. Olin, Aquaculture Specialist, California Sea Grant at UCSD/ Scripps Institution of Oceanography;
- Dr. Dallas Weaver, Independent Aquaculture Contractor;

- Dr. Michael B. Rust, Science Coordinator, Office of Aquaculture NOAA Fisheries; and

Each panel presented a key message about aquaculture to the group for discussion. After much deliberation and some dissension, the group came to a consensus on four crucial fact-based messages, which are as follows:

1. Seafood is a good source of healthy food. Over half the seafood found in most grocery stores is from aquaculture. Environmentally responsible seafood production from wild-caught fisheries and aquaculture are best choices.

2. The majority of the large fish in the ocean are gone. The ocean can't keep up with the world's appetite for seafood. For the health of our oceans and for future generations we need to develop additional sources for sustainable seafood. Responsibly managed aquaculture, farming for fish and other seafood, holds great promise as part of a solution to ever increasing pressures on our ocean resources.

3. Responsibly managed aquaculture is helping to fill the gap between the seafood demand and the fully exploited capture fisheries.

4. There are good examples of responsibly managed fisheries and aquaculture that need to be replicated.

Once the group was able to find agreement on these four broad tenants, they turned their attention to the messages that the institutions had sent in advance of the workshop and went over each one to find agreement. Some messages were combined with others due to similarity or repetitiveness, and all messages that found agreement were scrupulously articulated such that they could stand alone with no context. Other messages were dismissed entirely as either unimportant to the discussion, not fact based, or not in alignment with some of the institution's mission statements. These issues will be discussed further in the next section. The messages in this report were agreed upon unanimously as important and certain, with one exception, for which a strong consensus (≥ 80%) was reached.

Key Aquaculture Messages

Environment

1. Wild-capture fisheries cannot keep pace with the growing human demand for seafood.

2. Aquatic animals are more efficient at converting feed to protein than terrestrial farm animals.

3. There are various forms of aquaculture, all with different associated benefits and impacts.

4. Significant improvements continue to be made to some farming practices and technologies used by aquaculture producers to limit their environmental impacts.

5. It is critical to locate aquaculture facilities to minimize potential environmental impacts.

6. Increasing the scale of aquaculture production raises ongoing concerns about the potential cumulative impacts on local, regional, and global scales. Some impacts are not fully understood.

Market/Demand

7. According to the United Nations Food and Agriculture Organization (FAO) and the National Oceanic and Atmospheric Administration (NOAA), aquaculture is an important and growing facet of global seafood supply. More than 50 percent of the global seafood supply is now provided by aquaculture.

Socio-Economics

8. There are some environmental and socio-economic advantages to responsibly managed domestic aquaculture production.

9. The U.S. is the largest importer of aquaculture products; only 5 percent of the U.S. seafood supply comes from domestic aquaculture production.

Seafood and Health

10. U.S. and Canadian wild-capture fisheries and aquaculture are subject to stringent safety regulations, making their products among the safest in the world for human consumption.

Consumer Information (Making Responsible Choices)

11. Responsible seafood choices depend on public access to reliable, unbiased information based on the best available science.

12. It is important to consider the potential impacts, both positive and negative, before promoting and expanding commercial aquaculture. We need to promote the best performers and work to improve the poorer performers. These operations should be subject to efficient scientific and credible farm-by-farm or regional assessments to ensure compliance with best management practices.

13. There are groups working to certify seafood in terms of sustainability.

Discussion

Concerns regarding messages either being altered or not included in this report stemmed from varying institutional priorities and an assertion that some messages were not aligned with the mission statements of individual institutions. Some institutions maintained that matters regarding health, economic, and social issues were beyond the scope and expertise of their institutions, while others voiced the opinion that these issues are integral to the discussion. Variation in approach to aquaculture also stemmed from how willing each institution was to engage in matters of policy. Participants agreed that the messages included in this report are important and certain.

Conclusion

The goal of this workshop was to develop 5-10 key fact-based messages regarding aquaculture for which participating institutions could come to a consensus as being factual and important for the public to know. Workshop participants representing aquariums, government agencies, the aquaculture industry, and academia came from diverse disciplines including: science, social science, policy, and education. This dialogue is an important step towards greater alignment on aquaculture messaging within the aquarium and environmental NGO community.

Next Steps

The Aquarium of the Pacific intends to use these messages to educate and bring awareness of this timely and important topic to their public. We anticipate that other aquariums and institutions will do the same, although it is up to each institution if they will use these messages.

Appendix A

Workshop Participants

Name	Institution
Botnick, Chris	NOAA Fisheries
DeJong, Dolf	Vancouver Aquarium
Duguay, Linda	USC Sea Grant
Fawcett, Jim	USC Sea Grant
Fuhrman, Rachel	Aquarium of the Pacific
Mastro, Ed	Cabrillo Marine Aquarium
Olin, Paul	California Sea Grant
Pieper, Richard	Aquarium of the Pacific
Rust, Mike	NOAA Fisheries
Schaadt, Mike	Cabrillo Marine Aquarium
Schubel, Jerry	Aquarium of the Pacific
Thompson, Kim	Aquarium of the Pacific
Weaver, Dallas	Independent Aquaculture Consultant

Note: Representatives from other participating aquariums requested that their names be removed. They did, however, participate actively in the discussions and agreed to the messages as stated in this document.

Appendix B

Workshop Agenda

November 14 - Day 1

0800 Continental Breakfast in Meeting Room

0830 Welcome, Self Introductions, and Overview of Workshop

- Welcome (AOP/NEAq staff)
- Brief introduction to workshop and rationale (Jerry Schubel, Michael Tlusty, Mike Rust)
- Desired Outputs and Outcomes (Kim Thompson and Michael Tlusty)
- Each institution briefly describes its sustainable seafood program, shares its 5 key aquaculture messages, and indicates if and how it deliver those messages. (10 minutes/institution)
- Posting of Key Messages /Search for Convergence and Divergence

1200 Lunch…

1300 Facilitated Discussion to Identify Clusters of Important and Uncertain Key Messages on which to Focus to Generate Public Awareness About the Need for Responsible Aquaculture

1430 Breakout Groups as Appropriate

1530 Agreeing on the Slate of Messages (Top 10)

1630 Honing the Messages: Step 1

1700 Adjourn

1800 Reception and Dinner at the Aquarium, Aquaculture overview by Don Kent, President and CEO at the Hubbs Sea World Research Institute in San Diego.

November 15 - Day 2

0800 Continental Breakfast in Meeting Room

0830 Continue Group Discussion to Hone the Messages in Sub-Groups as Appropriate

1000-1200 Identification of A Range of Delivery Systems for the Key Messages…

Conclusions

- Review messages that were agreed upon by the group
- Discuss next steps for the workshop
- Report
- National workshop at NE Aquarium (Pending funding)
- Recommend next steps for implementation at participating institutions
- Build a coalition to obtain funding from Sea Grant
- Seek institutional commitments

1230 Lunch & Adjourn

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