



Hui your Resources: Successes of Collaboration & Cooperation to Advance Aquaculture

Aquaculture America

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Overview

- Highlight the theme of the session
- Discuss the Mission Statement for Women in Aquaculture
- Open discussion from the “community”
- Examples of some successes when you Hui your resources
- Opportunities for Collaboration and Cooperation to Advance Aquaculture

The theme of the session...

Feed Producers
Federal/National Hatcheries
NGO groups INVESTOR GROUPS Chefs
Professors CONSUMER WRAC
Aquaculture Community
Seafood Broker Raw Material Suppliers STUDENTS
USDA/NOAH Researchers State Hatcheries
Farmers AQUACULTURE TECH
Tribal Hatcheries Equipment Suppliers
Regulators
RESTAURANTS
AA
NAA
WAS
SRAC
PRAC

What does your community look like?



Coordinate Research efforts

Sales & Promotion

Hatchery Manager

Product Manager

Research Tech

Consultant

Operations Manager

Student

Account Manager

Student

YOU are the Community of Aquaculture

- How many students?
- How many producers of aquaculture products; ie: fish, shellfish, algae?
- How many State/Federal or Government agencies?
- How many are vendors service this aquaculture industry? Feed, equipment, raw materials etc.?
- How many are educators; teachers, professors, researchers?

Women in Aquaculture Mission Statement

2 Major Points in the Mission Statement

1. Women in Aquaculture is a forum where women representing industry, state and federal agencies, academia, and NGOs can work together to address the **unique** challenges facing restoration and commercial aquaculture.

2. This community will help
 - a. facilitate public education about aquaculture,
 - b. the sharing of scientific **innovation**,
 - c. the development of industry management strategies, and
 - d. improving the permitting process through open multidisciplinary dialogue.

#1 Unique Challenge

How do we feed the **9 billion** people (by 2050)

- We are going to need 40% more protein to feed all these people (FAO)
 - Sustainable
 - Cheap
 - Quality Protein source

HOW?

We feed them with aquaculture...simple enough let's do it!

How do we do it?



Collaboration and Cooperation to the MAX

The sharing of scientific innovation

- Recirculating aquaculture systems
- Offshore aquaculture systems
- Nutritional Advances in Feed Formulations

Public awareness.. Aquaculture as a part of the solution

Develop a game plan...Key players, who/what/how do they contribute?

- FAO/Global Aquaculture Alliance
- Governmental organizations throughout the world etc. etc.

Do it all within the guidelines set, not just locally, globally

- Meet supply using sustainable raw materials
- Minimal environmental impact

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BTW each of these above are Part 2 of the mission statement

#2 Unique Challenge:

Regulations and permitting restrictions on farming

What are the cost of us doing business..... and what are the cost if we **DON'T** get a chance to do business (Dr. Carol Engle)

2016:

US imported **\$19,866,482,185** worth of seafood

6,134,804,200 lbs. - Intra Fish Media

Today, up to **90%** of seafood consumed in the United States is imported, and about half of this is wild-caught - NOAA

More importantly... What challenges do you come up with?

- 4 out of 9 replies - **REGULATIONS**
- *Promotes **failure**, restricts growth, shy's people away all together...*
- *Time consuming and costly to stay in compliant; **who's minding the fish?***
- Overcoming **excessive** government regulations
- **Prohibit** actual daily operations as well
- Environmental regulations specifically relating to water and the ground in and around water
- **Agreed** we need regulations....where do you draw the line?

More importantly... What challenges do you come up with?

- 3 out of 9 replies – **EDUCATING** consumers via Marketing/Promotion/Success stories of the positive gains to help grow the market for of aquacultured products
- Consumers are rightly confused, even **fearful**, of farm-raised seafoods
- **Re-educated consumers**, remove unfair stigma of aquaculture products
- Ask consumers what **sustainable** seafood is? Response vary...
- Include the **positive gains** we are making in feed ingredients, responsible use of medications and the science that proves the health benefits of US farm raised fish
- **Proposed solution:** A unified industry promoting a single, standardized framework to ensure food safety would go a long way toward market growth by elevating consumer confidence in farm-raised seafood

Am I preaching to the choir here.....

- Provide a clear message to our new and newly growing aquaculture community.
- Help each other to expand our knowledge base
- Become more effective at representing & promoting Aquaculture

Let's open this for discussion.....

To the Community here:

- Are there other **UNIQUE** Challenges????

Success stories of Collaboration & Cooperation

Technological advancements:

Nutritional:

- Algae oil in feeds providing EPA and DHA
- alternative raw materials reducing standard fish meal in diets from 40% to as low as 0% in salmon and trout

Operational:

- Increase production without utilizing more water
- Ability to utilize the discharge from aquaculture farms for secondary use.

Research efforts

WRAC efforts industry & academia collaborations

- Factors effecting egg quality and caviar yield in Sturgeon
- Cost effective alternative protein diets for rainbow trout
- Coldwater Disease Prevention and control though vaccine development and diagnostic improvements

Success stories of Collaboration & Cooperation

- Seafood watch trout ratings changed
- When the catfish industry fell on hard times- it pushed them to innovate and benchmark
- Farm raised fish making the cover of the San Francisco Chronicle's Top 100 Restaurants magazine...beginning to see a change in the perceptions of farm raised fish
- A joint **NOAA and USDA aquaculture feeds initiative** approval of taurine to be added in fish feed in the USA

Opportunities in Aquaculture

Research & Development (R & D)

- Species development, fish culture
- Genetics/Diseases
- Technology development
- Nutrition
- Teaching

Government Positions

- National Oceanographic & Atmospheric Administration (NOAA)
- US Fish and Wildlife
- US Department of Agriculture

Sales & Marketing

- Vendors of equipment and products
- Getting the positive word out about AQUACULTURE

Commercial Operations

- Management
- Hatchery
- Grow out production

How will you “Hui” your resources to get the job done?

- **GAIN EXPERIENCE** - Volunteer/Work, Attend conferences, Get out there...opportunities will come...jump on them!
- **TEAMWORK** – Surround yourself with other **PASSIONATE** people **YOU** be a key player
 - Network
 - Collaborate

Questions?

- Come by Skretting Booth 618