

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...





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. <u>improving the permitting process</u> through open multidisciplinary dialogue.

#1 Unique Challenge

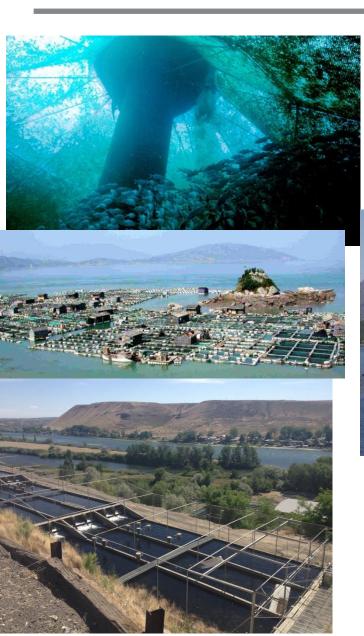
How do we feed the 9 billion people (by 2050)

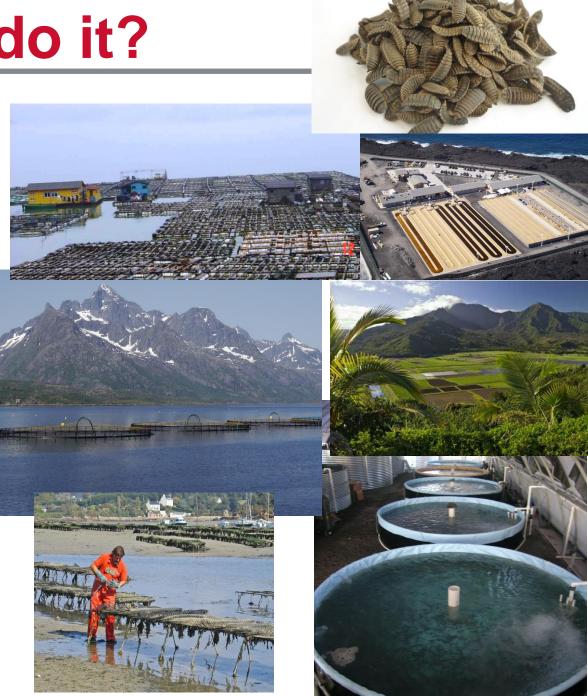
- We are going to need 40% more protein to feed all these people (FAO)
 - Sustainable
 - · Cheap
 - Quality Protein source

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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#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 <u>NOAA and USDA aquaculture feeds initiative</u> 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