Ensuring Sustainable and Responsible Aquaculture

2nd Annual State of the Science Symposium
September 14th, 2018
Seafood’s Potential to Ensure Our Future Food Security Session

Devan Meserve
Global Aquaculture Alliance
Why do we need aquaculture?
Farming seafood via Aquaculture relieves pressure from the ocean’s depleted wild fisheries.

By 2030, nearly two-thirds of all seafood produced for human consumption will come from aquaculture [World Bank].

Farmed fish is the most efficient form of animal protein on the planet [National Geographic].

With the global population expected to reach 9.6 billion by 2050, the demand for healthy, sustainable animal proteins is continuing to increase.

<table>
<thead>
<tr>
<th>Animal</th>
<th>Estimated Feed Required to Gain One Pound of Body Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sheep</td>
<td>6.8 POUNDS</td>
</tr>
<tr>
<td>Pig</td>
<td>2.9 POUNDS</td>
</tr>
<tr>
<td>Chicken</td>
<td>1.7 POUNDS</td>
</tr>
<tr>
<td>Fish</td>
<td>1.1 POUNDS</td>
</tr>
</tbody>
</table>
What are some of the common myths and misperceptions surrounding aquaculture?
**US TV doctor raises concerns over tilapia, shellfish**

Dr. Oz urged viewers not to buy tilapia from China or southeast Asia.

By Matthew Healy
November 14, 2017 20:15 PST Updated November 14, 2017 20:15 PST

US celebrity doctor, Dr. Mehmet Oz, raised a number of concerns on seafood safety on his television show Tuesday, specifically in regard to tilapia and shellfish.

*During the show, Dr. Oz explained how tilapia is a relatively inexpensive fish, mainly because they are predominantly farm-raised in tanks "bursting at the seams" with water that is rarely changed, if ever. Reports have attributed this practice to a number of health issues.*

**Antibiotics In Your Fish: Researchers Find Traces Of Antimicrobials In Seafood, Posing Concern For Resistant Bacteria**

By Lecia Bushak
Oct 23, 2016, 04:23 PM

**SALMON SHOCKER #8**

*It's been painted pink!*

**FDA to detain Malaysian shrimp imports after finding unsafe antibiotic residue**

By Madelyn Kearns, Associate Editor
Published on Thursday, April 21, 2016

*It's eating chicken poop!*
How much of our farmed seafood is imported?
Shrimp
• More than 90% of supply is imported; greater than 1.4 billion lbs in 2017
• Top importing countries: India, Indonesia, Thailand, Ecuador and Vietnam

Salmon
• Imported more than 900 million lbs of Atlantic salmon in 2017
• Top importing countries: Chile, China*, Norway, Thailand*, Canada, UK

Tilapia
• Virtually 100% of supply is imported; about 400 million lbs in 2017
• Top importing countries: China, Indonesia, Honduras, Columbia, Costa Rica

Catfish (channel and pangasius)
• More than 60% of supply is imported; greater than 240 million pounds in 2017
• Top importing countries: Vietnam and China

Molluscs
• About 50% of supply is imported; almost 120 million pounds in 2017
• Top importing countries: China, Chile, New Zealand, Argentina, Japan
Who assures sustainable seafood?
How Sustainable is Salmon?

GREENPEACE

Monterey Bay Aquarium

Seafood Watch

WWF

Global Aquaculture Alliance
Global farmed salmon industry are leaders

1. Certified by leading ecolabels
2. Industry coordinates precompetitively - Global Salmon Initiative
3. Significant issues still exist, but industry addressing these
Why does the marketplace require 3rd party certification to assure sustainability?
What does certification mean?

• On location audits
• Demonstrates products are safe and responsibly produced
• Provides access to the marketplace
• Encourages a closer look at operations to make improvements
Food Safety
Assurance that no banned antibiotics or other chemicals are used and that all approved chemical treatments are carried out in a responsible fashion.

Social Responsibility
Adherence to local laws for worker safety, child labor and community rights.

Environmental Responsibility
Compliance with standards that address such issues as habitat conservation, water quality and effluents.

Animal Health & Welfare
Best practices in animal husbandry, addressing issues such as disease control.
Our Vision

To feed the world through responsible aquaculture
Our Mission

To improve the environmental, social, and economic performance of the aquaculture supply chain
What Makes Us Experts?

ADVOCATE

EDUCATE

DEMONSTRATE

Global Aquaculture Alliance™

My GAA Academy

GAA films

GOAL: GUAYAQUIL, ECUADOR

SEPTEMBER 24-27, 2018

Responsible Aquaculture Foundation™
What is BAP?

**Comprehensive**
- Covers the entire aquaculture production chain – hatcheries, feed mills, farms & processing plants
- Standards cover the 4 pillars of responsible aquaculture: environmental, social, food safety & animal health and welfare
- Covers virtually 100% of finfish, crustacean & mollusk species

**Proven**
- Third-party benchmarking: GSSI, GFSI, GSCP
- Standards are scientific rigorous and always evolving

**Trusted**
- Administered by the Global Aquaculture Alliance
- Robust Program Integrity
- Third-party Standards Oversight Committee (SOC), certification bodies and auditors, ensuring the audit is fair
- Supply chain transparency program
- Endorsed by over 150 retail & foodservice companies worldwide
‘3G’ Integrity from Independent Benchmarkers

- Environmental Integrity: Global Sustainable Seafood Initiative (GSSI)
- Food Safety: Global Food Safety Initiative (GFSI)
- Social Accountability: Global Social Compliance Programme (GSCP)
TC: Technical Committee
- Species-specific technical committees develop draft standards
- Members approved by SOC

SOC: Standards Oversight Committee
- Draft standards reviewed by a 12-member, independent SOC, whose diverse industry and non-industry members recommend changes, as necessary
- SOC consists of four representatives of the NGO community, four representatives of academia/regulatory/policy and four representatives of industry
- “Yes” vote from minimum of two NGOs needed for draft standards to be approved
- Draft standards then published for 60 days of public comment
Best Aquaculture Practices Market Endorsers
DON’T CHOOSE BETWEEN WILD AND FARmed THEY ARE BOTH GOOD CHOICES!

Ask!

What is your responsible sourcing policy?
Thank You

ADDRESS
85 New Hampshire Ave, Suite 200
Portsmouth, NH 03801

EMAIL
devan.meserve@aquaculturealliance.org

PHONE
(603) 317-5000

@bestaquaculturepractices
@BAP_aquaculture
@aquaculturealliance
Linkedin.com/company/aquaculturealliance