

Building Confidence in Aquaculture: Thoughts on the Future in the Pecha Kucha Style

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Matt Thompson

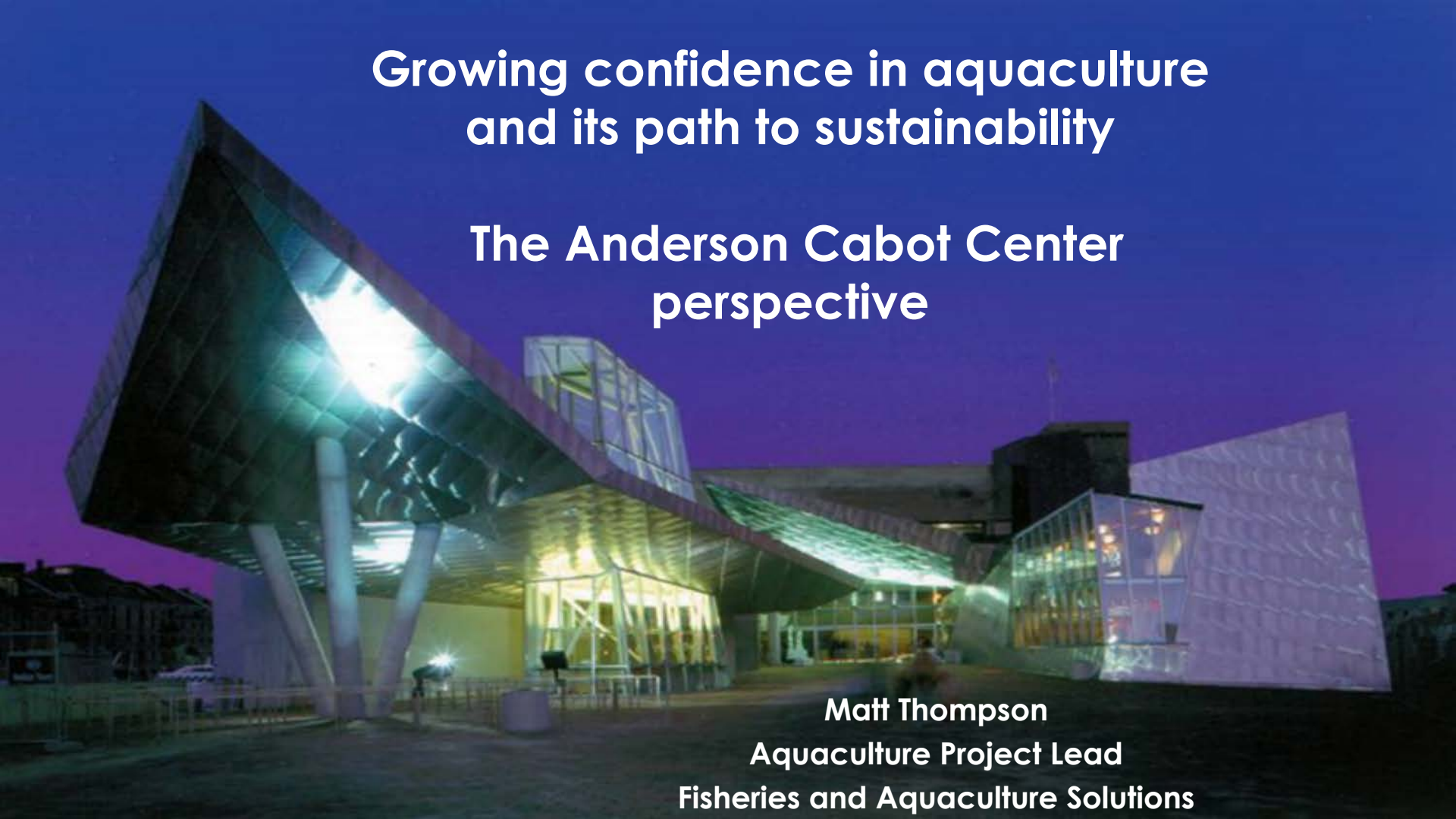
Matt is the aquaculture project lead for the Anderson Cabot Center for Ocean Life at the New England Aquarium. He is primarily responsible for researching and developing recommendations related to aquaculture for corporate partners, but he also undertakes special projects designed to expedite the development and uptake of more sustainable aquaculture practices.

AQUACULTURE
LEAD
NEW ENGLAND
AQUARIUM

Growing confidence in aquaculture and its path to sustainability

The Anderson Cabot Center perspective

Matt Thompson
Aquaculture Project Lead
Fisheries and Aquaculture Solutions



104 opportunities per year to choose seafood that ensures the long term health of aquatic ecosystems



Fisheries and Aquaculture Solutions

Pioneering corporate partnerships for seafood sustainability



Our role in partnerships

Sustainability Policy

Environmental Assessment

Improvement
Strategies

Market Claims

Staff
Education

Wider
engagement



Drivers of confidence in sustainability



Photo credits: 1. Thompson, (2012), 2. www.fis.com/fis/worldnews/worldnews.asp?l=e&id=47798&ndb=1 (NOAA/Stock File/FIS, 3., http://alexandramorton.typepad.com/photos/fish_farms/sealiondrownedinfishfarmnet.html 4. : www.americastilapiaalliance.org, 5. jornalgggn.com.br/blog/lucianohortencio/outono-no-parque-do-coco, 6., www.salmonfarmsireland.com/2013/09/complaint-may-reopen-sea-lace-inquiry.html, 7. Thompson (2012), histriodelacocinarecetasydemas.blogspot.com, www.beautifulpacificnorthwest.com/salmon-life-cycle.html, Eppling (2011).): 8. Seattle Times/Beau Garreau / DAKO. 5 STUDIOS

Four culture changes to increasing confidence

1

Be
Proactive

2

Be
Transparent

3

Be
Accurate

4

Be
Collaborative

Being proactive is learning from previous mistakes

ISA in
Chile

Area
Management
systems

Spread of
EMS

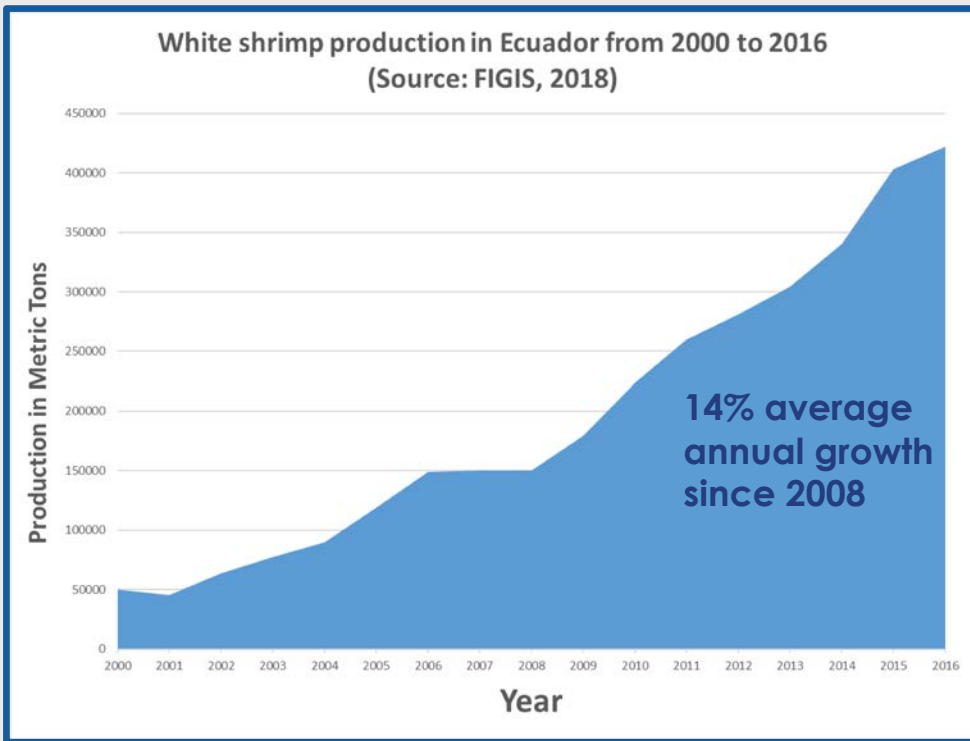
Invasive
species

Enhanced biosecurity

Vaccines

Antimicrobial
resistance

Being proactive during industry rapid growth



Intensification increases environmental risks

Farm management and regulation must improve accordingly.

Being proactive is advancing solutions while addressing trade offs

Solution

**Selective
Breeding**

→ Climate change adaption

→ Alternative feed ingredients

→ Disease resistance

→ Feed Efficiency

Being proactive is advancing solutions while addressing trade offs

Solution

Selective Breeding

Climate change adaption

Alternative feed ingredients

Disease resistance

Feed Efficiency

Trade off

Escape

Improve holding systems

Sterility (e.g., triploids)

Protect wild genetic resources

Why be transparent? Because bad news can taint an industry

Again in July, FDA Rejects Indian Shrimp for Antibiotic Contamination and Salmonella

📅 August 6, 2018

The U.S. Food and Drug Administration (FDA) has released information regarding import refusals in July reporting that 2 out of the 157 (1.3%) total seafood entry line refusals last month were of shrimp for reasons related to banned antibiotics.



Bloomberg

Markets

Great Salmon Escape Threatens to Taint Chile's Fish Farms

By [Daniela Guzman](#)

July 9, 2018, 6:18 PM EDT Updated on July 10, 2018, 5:04 AM EDT

- ▶ Latest environmental incident threatens local economies
- ▶ 250,000 fish recovered with 680,000 still missing after escape

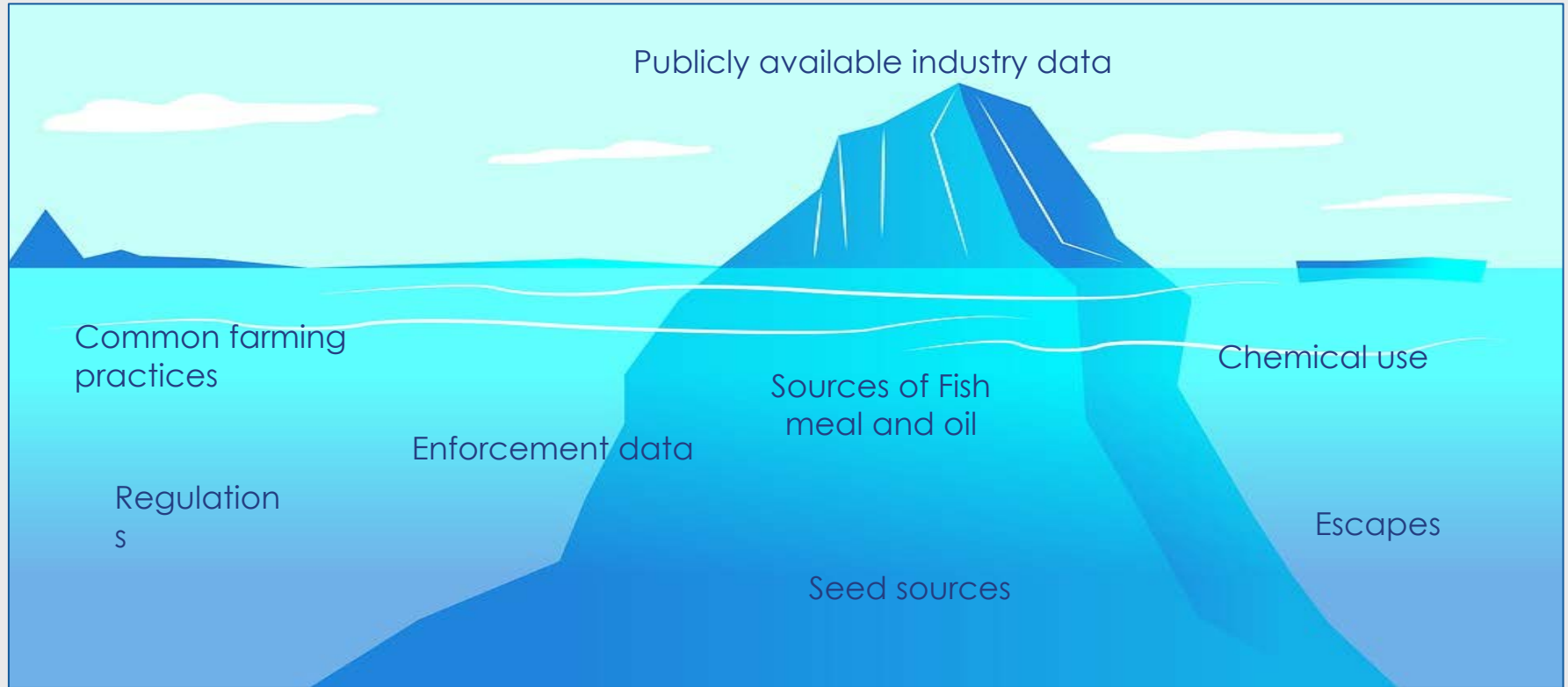
Sources: 1., www.shrimpalliance.com/category/trade/antibiotics/
2: www.state.gov/documents/organization/282798.pdf, 3. (Guzman (2018) Bloomberg news
<https://www.bloomberg.com/news/articles/2018-07-09/great-salmon-escape-threatens-to-taint-chile-fish-farm-industry>

Be transparent



Source: pixabay.com/en/photos/iceberg/

Be transparent



Source: pixabay.com/en/photos/iceberg/

Be transparent and share data

iQShrimp

driven by iQuatic™



iQ-Shrimp™ driven by iQuatic™ is the first cloud-based gain real-time visibility into their farm operations.

The technology captures data pond-side through mobile provides a live operations dashboard view of pond status proactively manage risk like never before.

Combining the production data with environmental data production outcomes and maximize profits. As more data better insights and recommendations on feeding schedules

[Sign Me Up](#)

Could we agree on common data to collect and share publicly?

Who is Farmforce for?

Farmforce can be utilised by a variety of people and organisations.



Be accurate, especially when making market claims



2. The Sin of No Proof


Source:
TerraChoice (2010). sinsofgreenwashing.com


Be accurate...on traceability



AP Investigation: Fish billed as local isn't always local

By ROBIN MCDOWELL,
MARGIE MASON and
MARTHA MENDOZA
Jun. 15, 2018

 <https://apnews.com/73646ad2aaac4666a7124806b2e6a5bc>

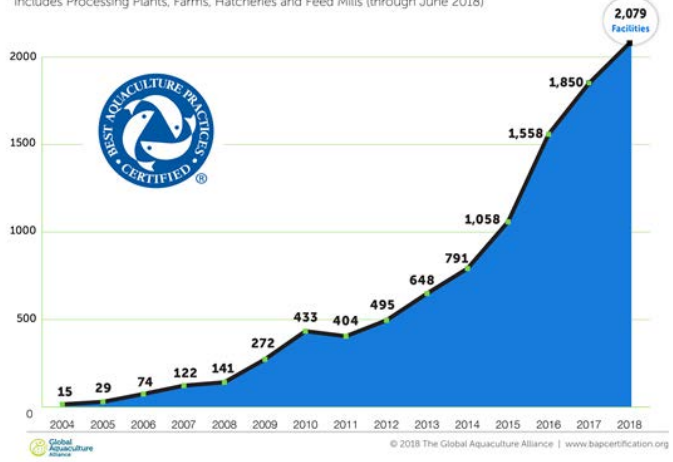
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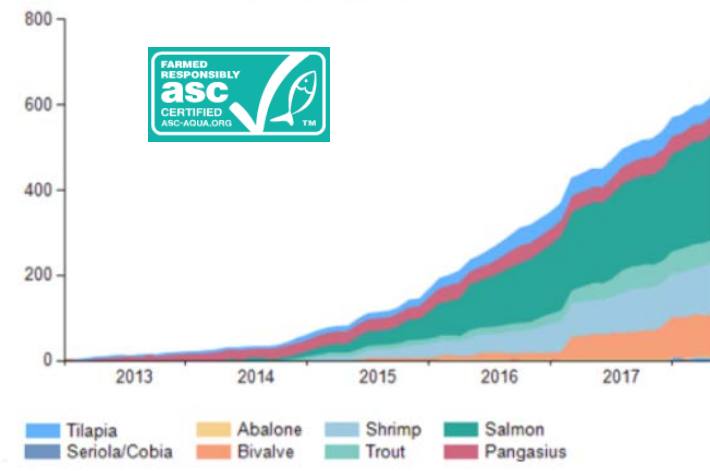
Be accurate...and value verification

Number of BAP Certified Facilities

Includes Processing Plants, Farms, Hatcheries and Feed Mills (through June 2018)



Certified farm trend by species



Be accurate...and protect the trust in certification



WHAT'S BEHIND THE LABEL?

Assessing the Impact of MSC and ASC Seafood Certifications in Canada

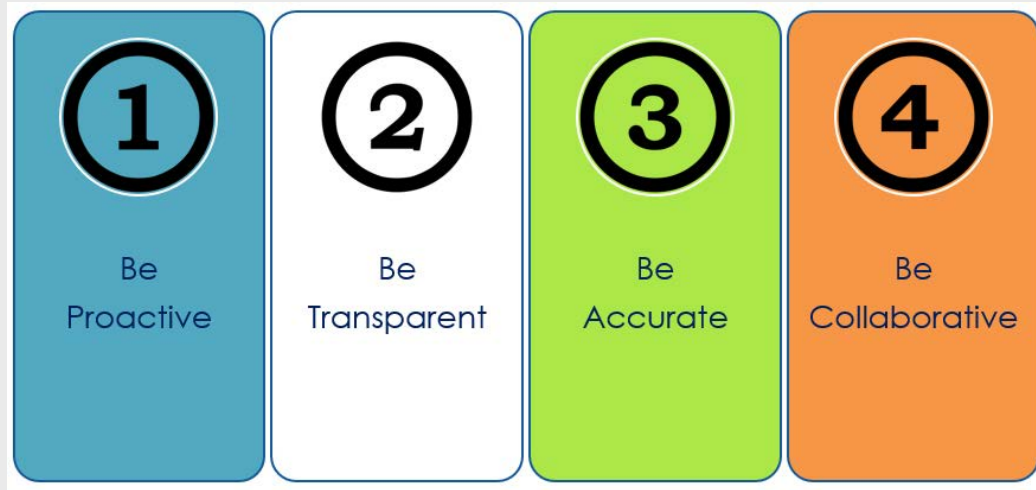
Authors: Shannon Arnold and Kelly Roebuck



Be collaborative...and form effective partnerships



Thank you!



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