

Assessing the Breadth & Depth of Shrimp Aquaculture Certification Schemes

PRESENTER MICHAEL TLUSTY | NEW ENGLAND AQUARIUM, UMASS BOSTON

GLOBAL OUTLOOK FOR AQUACULTURE LEADERSHIP GUANGZHOU, CHINA | DAY 3

HEALTHY FISH | HEALTHY PEOPLE | HEALTHY PLANET





ASSESSING THE BREADTH & DEPTH OF SHRIMP AQUACULTURE CERTIFICATION SCHEMES

Michael Tlusty, PhD

Director of Ocean Sustainability Science
Anderson Cabot Center for Ocean Life at the New England Aquarium
@TlustyM



There are many certifications — Aquacu Alliance How do they compare, and can they work together?





Global





My belief is....

We don't need <u>one</u> certification. For seafood to continually improve, we need <u>many</u>. They need to be differentiated and we need to link them to create a path toward greater sustainability.



Multiple certifications — part of a strategy to improve all of aquaculture

Global

2016 Guangzhou China

Ensure regulatory environment keeps Innovate pace with sector development Certify # of producers Lower environmental impacts→



The challenge: Shrimp standards

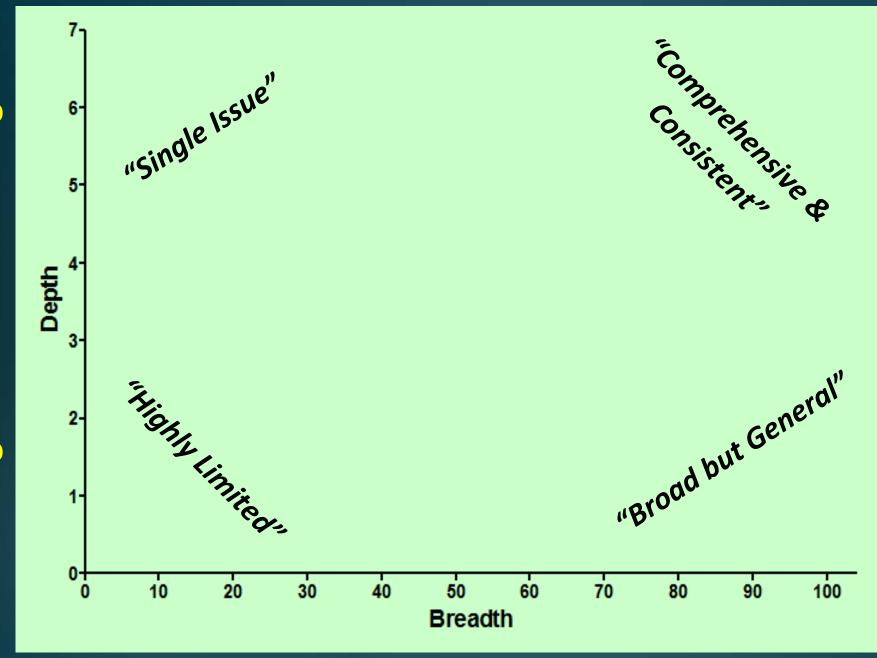
Can we tell the difference between:

- 3 international standards
 BAP, ASC, GlobalGAP
 3 national standards
 Thailand, Vietnam, Indonesia
 Across five categories of impacts
 - Environmental protection
 - Social issues and community protection
 - Feed
 - Supply risk (e.g., disease)
 - Food safety







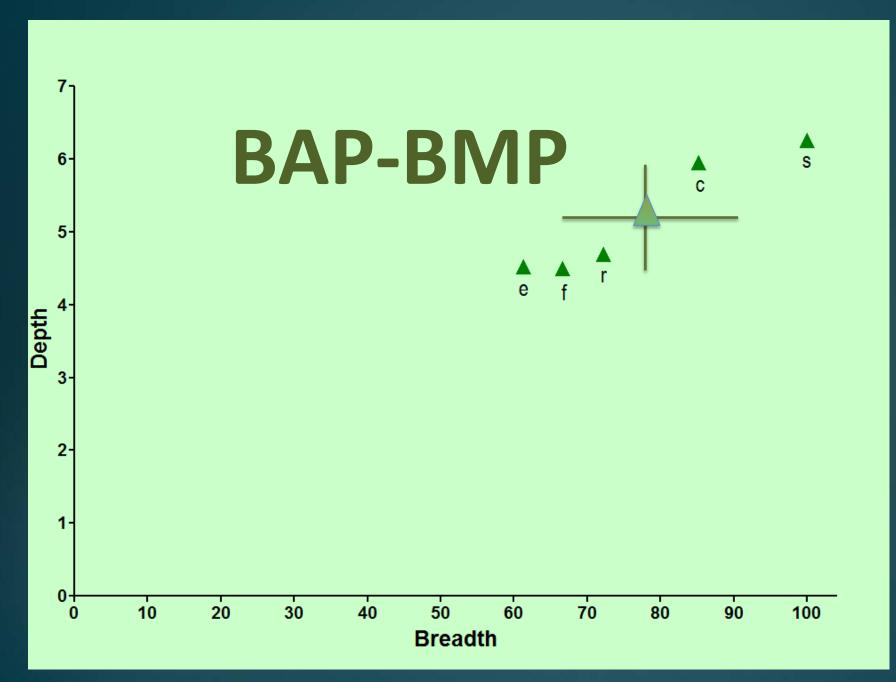






Narrow

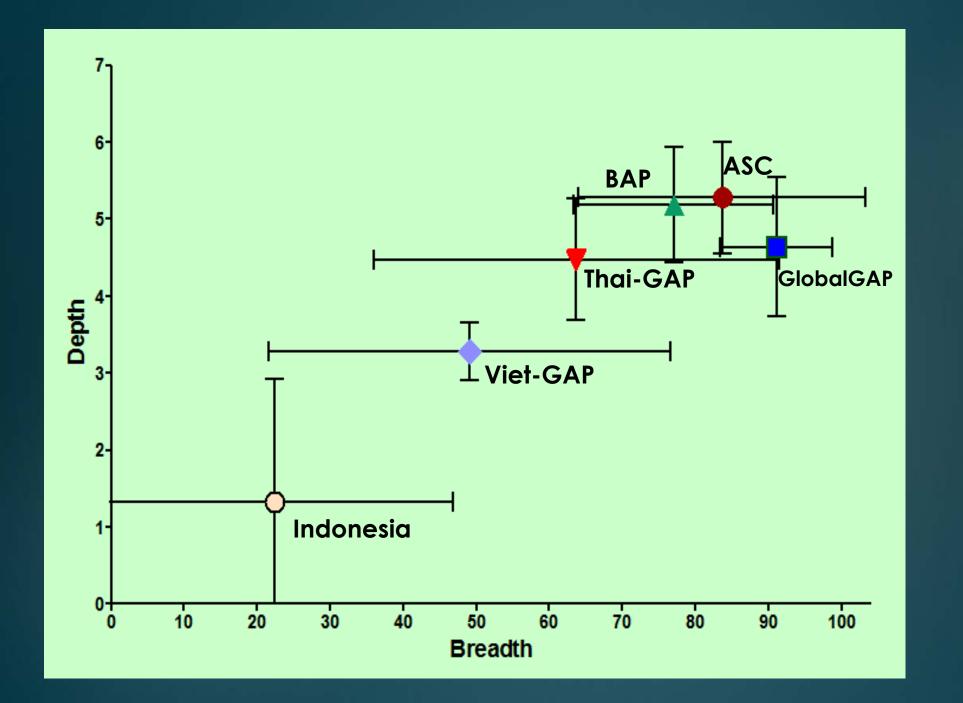
Broad





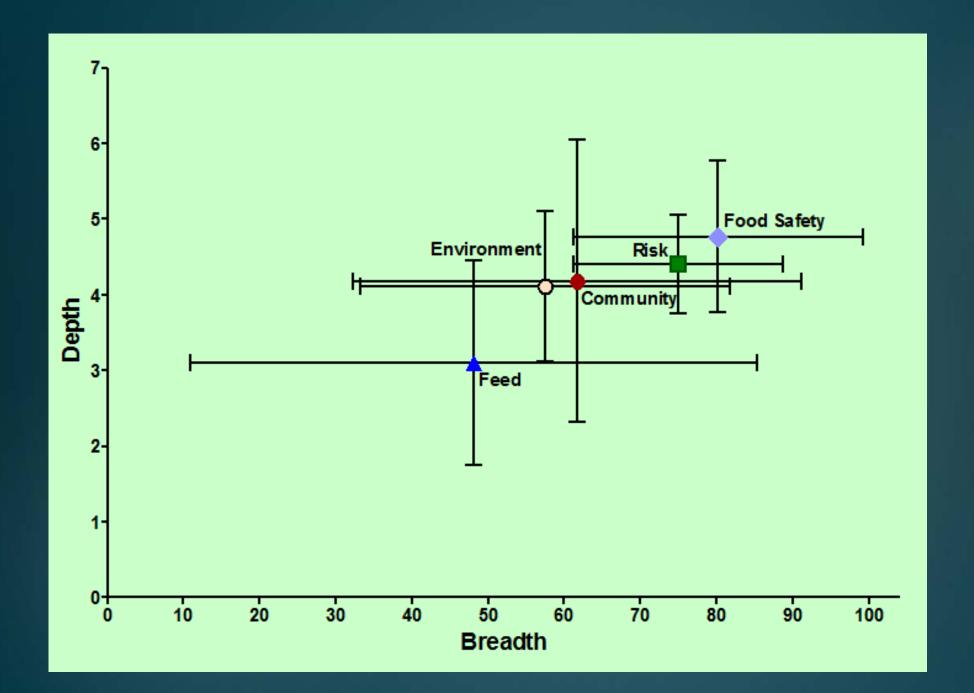
- e Environmental protection
- c Social issues and Community
 Protection
- f Feed
- r Supply risk (e.g., disease)
- s Food safety















Key findings



- Breadth and Depth scoring was able to visually represent potential differences in rigor between standards.
- Groupings highlighted differences between national and international standards. National schemes can have a broad coverage of issues but also ignore whole issues (e.g., feed).
- Scoring reflected the key differences in the approaches used by standards.
- Comparisons on individual criteria are more descriptive than summary statistics.
- More advanced statistics can be used to tease apart differences (but that is the purpose of the statistical methods).

Thank you!





Contents lists available at ScienceDirect

Fisheries Research





Statistical tools to assess the breadth and depth of shrimp aquaculture certification schemes

Michael F. Tlusty a.b.*, Matthew Thompson a, Heather Tausig a

Michael Tlusty, PhD
mtlusty@neaq.org
@TlustyM
www.sustainabilitysci.org



^a New England Aquarium, Boston, MA 02110, USA

b University of Massachusetts at Boston, Boston, MA 02125, USA