



FIRMS Steering Committee Meeting
Eighth Session
Rome, Italy, 4 - 5, and 8 February 2013
Science & Sustainability Forum (Ocean Trusts) Forum 2012 summary Report, and Forum 2013 Agenda
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SCIENCE & SUSTAINABILITY FORUM

Advancing Science and Management for Sustainable Ocean Resources



SUSTAINABILITY: CRITICAL REVIEW OF ISSUES & OPPORTUNITIES

Location/Dates: Key Bridge Marriott, Arlington, VA February 29 – March 2, 2012

Forum Invitees: FAO, NOAA, Canada DFO, Icelandic Ministry Fisheries, Norwegian Ministry of Fisheries, New Zealand Ministry of Fisheries, ICES, ICCAT, NAFO, CCAMLR, UMass Dartmouth, University of Washington School of Fisheries, Sea Grant, Bonefish Grill, H-E-B Grocery, Publix, AIFRB, Ocean Trust, and other retail and restaurant seafood buyers.

Rationale: Seafood purchases by major institutional buyers are being driven by public perceptions on the status and management of fisheries. However, the tools (i.e., benchmarks, reference points) used to measure global stock/fishery sustainability vary among species and management authorities, and are poorly understood in key sectors of the seafood industry. The issue is further complicated by NGO sustainability proxies and guidance. One key conclusion from Ocean Trust's 2010 Science and Sustainability Workshop was to support competent science authorities. Our challenge is that even science-based benchmarks vary and data from competent science authorities are not readily available to the public. Tools to evaluate the sustainability of global fisheries online or in the marketplace are limited and overshadowed by a predominance third party eco-labeling or web-based initiatives which influence public acceptance of national management systems in assuring sustainable resources and do lead to buying decisions based on perceptions rather than management coverage or science assessments on the status of fisheries.

Forum Objectives:

1. Provide science-based guidance on stock status and fisheries management/sustainability
2. Enhance public recognition/acceptance of management by management authorities

3. Establish public tools access competent science authorities: web portal/national labels

Discussion Topics:

I. How do we measure the health of stocks? What does overfishing mean relative to fishery sustainability and how it is defined and used by different groups.

This issue has been raised in several recent publications: “The overfishing metaphor” by Brian Rothschild in AIFRB Briefs; “Has overfishing ended? Top US scientist says yes” in same AIFRB issue referencing Steve Murawski; “The end of overfishing: what does it mean?” by Ray Hilborn in SeafoodNews.com; and from Ocean Trust’s 2010 Science & Sustainability Workshop a statement from New Zealand Ministry of Fisheries scientist Kevin Sullivan suggesting that “we should not be fixed on stock status, where it is on plot, but the fish management system because over time stock status will fluctuate...overfishing may occur in one year status, but if the fishery is under a framework and plan that makes it sustainable.” This view is consistent with NOAA administrator’s statements who have stated that “if it’s managed under MSFCMA, it’s sustainable.” This raises the question in measuring the health of stocks: what is important abundance, fishing effort or management?

II. How are we doing? What are global, regional, national trends in fisheries management and status? What are the successes or challenges we face?

Globally, the FAO SOFIA report is used to track trends in fisheries, but it has limitations and challenges especially in integrating stock status and fishing effort data into a global perspective especially when definitions might differ among reporting RFMOs and nations. The complexity of the issue is discussed in the Trevor Branch et al. 2011 paper in *Conservation Biology* on “Contrasting global trends in marine fishery status obtained from catches and from stock assessments.” NOAA’s Fish Stock Sustainability Index shows positive trends and FAO most recent SOFIA report illustrates the paradox between public perceptions and global trends. “*Since the mid 1990’s and through the 2000’s several studies have predicted the rapid decline of marine fisheries worldwide...paradoxically, a glance at the total global capture statistics prompts a word that has very rarely been used to describe catch trends: stability*” (FAO 2010). What can be said about the status of fisheries from global, regional and national perspectives as the US sources its seafood from all corners of the world?

III. Science and Sustainability: Has the connection been lost in public debates?

Certain fisheries continue to be singled out by NGOs as unsustainable. Species like such orange roughy, farmed salmon, and Atlantic cod have been dropped by major buyers. Is there a management issue or just a misunderstanding of how fisheries are managed? Is Atlantic cod at risk from poor management or does it illustrate public confusion on stock fluctuations under changing ocean conditions? Are “red” listed fish endangered or just misunderstood? Is aquaculture managed to sustain production, environmental quality and market acceptance?

IV. Conclusions: Public Education, Communication & Outreach

Ocean Trust’s Science & Sustainability workshop noted the need for venues for competent science authorities to speak more publically on these issues and a gateway for public access to science and management authorities’ data on the status of fisheries. Does FAO/FIRMS database offer a tool for expansion to national partners (e.g., NOAA, DFO, etc) to link public interest to competent science authorities? Are there other data bases that should be considered such as the meta-analysis of fish assessments by Jensen et al? What options are available to integrate different measures of sustainability into a publically accessible database? Do FAO’s benchmarking guidelines provide an opportunity to test their application to national management programs to support nation-wide ecolabeling or to substantiate the sustainability of national management programs? Do RFMO performance reviews provide a model for third-party assessments of management systems to address public interest in sustainably managed fisheries?

Meeting agenda

Forum Welcome & Introductions: Thor Lassen Ocean Trust/Steve Cadrin, AIFRB

Wednesday February 29 (1:00 – 1:20 pm)

I. Defining Sustainability (1:20 – 3:00 pm) Thor Lassen Moderator

Sustainability: A Science Perspective – Brian Rothschild, UMASSD/AIFRB

Sustainability: A Market Perspective – Robert Novotny, Bonefish Grill

Sustainability: A Management Perspective – Sam Rauch, Asst. Administrator NOAA Fisheries

Questions and Forum Objectives on Sustainability – Moderated Forum Discussion

I. Global Sustainability: Status & Trends (3:15 – 5:00 pm) Steve Cadrin, Moderator

Global Trends Stock Status: Catch vs. Stock Assessments – Ray Hilborn, UWA

ICES Assessments and Stock Status – Poul Degnbol, ICES

Standards for sustainability: Overfishing vs. Management – Moderated Forum Discussion

Thursday, March 1

III. International Fisheries: Status (8:30 – 10:15 am) Rebecca Lent, NOAA, Moderator

FAO's Global Assessment: Balancing Global Overfishing Standards – Yimin Ye, FAO

MetaAnalysis of Fishery Stock Assessments: A Global Analysis – Olaf Jensen, Rutgers

How are we doing: Is the system broke or are we making progress–Moderated Forum Discussion

IV. Sustainability Studies Red Listed Fish (10:30 – 12:30 pm) George Clement, NZ Moderator

O. Roughy, etc: Does IUCN/CITES Endangered Criteria Apply? – Pamela Mace, New Zealand

Farmed Salmon: Sustaining Production & Market Reputation - Yngve Torgersen, MoF Norway

Atlantic Cod: Sustainability & Management of Recovering Stocks – Steve Cadrin, SMAST

Chilean Sea Bass: Antarctic Fisheries Status and Management Standards, Keith Reid, CCAMLR

How do we overcome public perceptions on sustainably managed fisheries – Forum Discussion

V. Ensuring Sustainability of Management: Tools At Hand (1:15 – 2:45 pm)

NOAA Science & Management Review Process/FishWatch – Laurel Bryant, NOAA Fisheries

Performance Reviews: RFMO Approach – Fabio Hazin, ICCAT Chairman

FAO Benchmarking: Application to National Management Systems – Thor Lassen, Ocean Trust

Integrating Sustainability Tools into Management Plan Process – Forum Discussion

VI. Tools to Recognize Management Organizations (3:00 – 4:45 pm)

Sustainability in Regional and State Fisheries – Mark Schexnayder, LA DWLF

Expanding FAO/FIRMS Database as a Global Portal – Barbara Marshall, NAFO/FIRMS

National Labels: Iceland Responsible Fisheries – Grimur Valdimarsson, Iceland MoF

Conveying Sustainability to Public Audience: Web Portals/Labels: – Forum Discussion

Friday, March 2

VII. Conclusions, Recommendations & Planning – Open Forum Discussion & Planning

(9:00 – 12:00) Next Steps: Initiatives, Research, Projects, Future Forums – Dick Beamish, DFO

Sponsorship: Ocean Trust and AIFRB are seeking additional sponsorships from fish producing nations and the private sector to continue an ongoing forum between scientists and seafood users.

PRESS RELEASE

MAKING SENSE OUT OF SUSTAINABILITY

*Ocean Trust and the American Institute of Fishery Research Biologists pull together
Key scientists from around the world to more clearly define sustainability.*

Reston, Virginia – March 9, 2012 – Senior science and management representatives from leading fishing nations gathered together to discuss the state of fisheries and the sustainability of seafood at the second annual Science and Sustainability Forum (SSF).

Major findings from the SSF were that many so-called NGO (Non-Governmental Organizations) “red listed” species are from well-managed sustainable fisheries, that scientific data and terminology are being misinterpreted to incorrectly describe the state of fisheries, and that contrary to public perception, most fish stocks where we have data are sustainably managed.

Trends in fish abundance show that since 1980 global fish stocks have been stable, not in decline. Previous work depicting the collapse of fish stocks based on catch trends has been refuted by the scientific community. Declines in catch often are the result of fisheries management decisions to restrict fishing for stock rebuilding. Abundance data indicate managed stocks are performing well.

SSF presentations by senior managers and scientists brought forward several observations:

- In its simplest form, sustainability is about “meeting the needs of current generations without compromising the needs of future generations.”
- In fisheries, sustainability is best defined by the management system, not a quick snapshot of the stock status or fishing level at any point in time.
- Stocks fluctuate naturally in response to changes in the ocean environment and so will catches in sustainably managed fisheries.
- The terminology used to describe sustainable food production from fisheries is confusing and sometimes misused which makes effective communication challenging.
- “Fully-exploited” is a term that describes stocks fished at levels to maximize long-term sustainable food production which is a common fisheries management objective, not a poor outcome.
- Leading fishing nations have introduced conservative management policies to support sustainable fisheries and aquaculture operations that will provide for current and future generations.
- Regional Fishery Management Organizations (RFMOs) have undergone independent third-party performance reviews to strengthen the management of highly migratory and regional fisheries.
- Globally, governmental fisheries management agencies have reduced fishing pressure on 2/3 of global assessed stocks to levels that will allow fisheries to thrive.

For Example:

- The New England Groundfish stocks have increased six fold since the mid-1990s as a result rebuilding programs.
- Orange roughy is being managed sustainably with major populations responding to reductions in fishing quotas which are limited to no more than 4-5% of the available biomass.

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- In Norway, sustainable strategies have been introduced into salmon aquaculture to enhance food production while managing its ecological footprint.

The SSF will hold its 2013 Forum prior to the International Boston Seafood Show.

Boston Seafood Show (Booth 186): Information on the SSF will be available at the Boston Seafood Show from the Ocean Trust booth. Representatives from the AIFRB will be present Monday, March 10 to discuss their partnership in the SSF and planned research projects for 2012.

About the Science & Sustainability Forum

The Science & Sustainability Forum is a network of professional fishery scientists and government fishery management organizations established to promote effective management of fisheries. The Forum is tasked to provide factual guidance to seafood consumers and retailers based on the best scientific and unbiased information available.

Participants included AIFRB, United Nations Food and Agriculture Organization, National Oceanic and Atmospheric Administration, Fisheries and Oceans Canada, Northwest Atlantic Fisheries Organization, Iceland Ministry of Fisheries, Ministry of Fisheries and Coastal Affairs Norway, New Zealand Ministry of Fisheries, International Council for the Exploration of the Seas, Commission for the Conservation of Antarctic Marine Living Resources, Louisiana Department of Wildlife and Fisheries, University of Massachusetts Dartmouth, Rutgers University, University of Washington, University of Florida Gainesville, Universidade Federal Rural de Pernambuco Brazil, International Seafood Sustainability Foundation and Ocean Trust.

The forum allowed industry participants to interact with the Ocean Trust panel. Participants included: Bonefish Grill, Mazzetta Company, Sealord, Sea Watch International, Profish, Inland Seafood, Save on Seafood, Bluefin Seafood, Deepwater Group and Norwegian Seafood Council.

About Ocean Trust

Ocean Trust is an award-winning ocean conservation foundation building science, conservation and industry partnerships for the sustainability of the oceans. Its program focus includes fisheries sustainability, wildlife protection and environmental restoration in partnership with coastal communities dependent on the sea. Ocean Trust serves as secretariat for SSF. www.oceantrust.org

About American Institute of Fishery Research Biologists

AIFRB is a professional organization established to promote conservation and proper utilization of fishery resources through the use of fishery and related sciences. The role of the Institute is the professional development and performance of its members, and the recognition of their achievements. AIFRB is a cosponsor of the Science and Sustainability Forum.

www.aifrb.org

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SCIENCE & SUSTAINABILITY FORUM 2013

Advancing Science and Management for Sustainable Ocean Resources

GLOBAL REVIEW: STATUS & SUSTAINABILITY OF FISHERIES

MARCH 7-9, 2013 - BOSTON SEAPORT HOTEL & WORLD TRADE CENTER



Key scientists gather at Science & Sustainability Forum to provide global review on status of stocks and address misconceptions on seafood sustainability for seafood and public audience.

Ocean Trust's third Science & Sustainability Forum will bring top fishery scientists from major fish producing nations and management organizations for direct dialog with seafood buyers and a global review on the sustainability of the fishery and seafood products from around the world.

Forum Objectives:

1. Provide global science review on stock status and fisheries management/sustainability
2. Enhance public access to competent science on the sustainable management of seafood
3. Address misconceptions on the sustainability and management of seafood species

Thursday, March 7th Making Sense of Sustainability: Workshop at Boston Seaport Hotel

Ocean Trust presents conclusions from its 2012 Science & Sustainability Forum and research initiatives that offer new concepts on managing fisheries, the role of environment on stock sustainability, and certifying fisheries management systems instead of individual stock assessments.

Join us as leading scientists and managers discuss how climate affects fish stocks, whether overfishing is the best measure for sustainability, and how future sustainability programs could support national labels that certify management systems.



Thursday Evening: Cooking for Sustainable Seafood Ocean Trust Members, VIP Guests & Sponsors Reception Seaport Action Kitchen. Join us for an exclusive evening cooking sustainable seafood from around the world and take advantage of one-on-one dialog with top scientists and managers. Have questions on sustainability? Become a forum sponsor or Ocean Trust member and get answers here from competent science authorities.



Friday, March 8th Global Review Fisheries Sustainability: World Trade Center Amphitheater

A major, public global review covering fishery and seafood products with presentations from FAO, Regional Fishery Management Organizations, leading fishing nations and top fishery scientists. How are we doing? Are fisheries and aquaculture sustainable? What you should know about and where to go for reliable sustainability information?



Friday Evening: Sustainable Seafood Networking Reception – Scientists, buyers & the public

Saturday, March 9th Planning Workshop: Meeting Sustainability Needs, Boston Seaport Hotel

An opportunity to discuss your priorities with participating scientists and managers, and help shape the Science & Sustainability Forum's focus and program priorities for 2013 in an intimate workshop setting back at the Boston Seaport Hotel.



SCIENCE & SUSTAINABILITY WORKSHOP/FORUM SCHEDULE

Thursday, March 7th Making Sense of Sustainability Workshop Seaport Hotel (1:00 – 5:00)

Making Sense of Sustainability Update, Thor Lassen, Ocean Trust (1:00 – 1:30)

We begin in a workshop setting to allow for open discussion on new concepts that may advance our understanding and management of sustainable fisheries with a review of conclusions, findings and projects associated with the Science & Sustainability Forum.

Assessing Sustainability, Grimur Valdimarsson, MFA Iceland (1:00 – 2:00)

Post-management fishery assessments conducted on a fishery-by-fishery basis has led to an inefficient, duplicative and expensive process for seafood certification. We explore a systems approach applying FAO benchmarking criteria for sustainable fisheries to fisheries management programs at the national fisheries and state fisheries management level.

Sustainability & Overfishing, Brian Rothschild, UMass Dartmouth (2:00 – 3:00)

Traditionally, overfishing and sustainability, core concepts in the management of renewable resources, were directly linked so that overfishing was truly unsustainable. We examine the changes and linkage to maximum sustainable yield (MSY) versus annual surplus production and recruitment within a stock as the guiding principles for sustainable fisheries management.

Break (3:00 – 3:15)

Fish & Environment, Dick Beamish, DFO Canada (3:15 – 4:15)

Not understanding the causes of natural variation in fish abundance is one of the fundamental problems in fisheries science. Surprisingly very few people are making the measurements that are needed to solve the problem. We discuss measurements needed to account for natural stock fluctuations and its application in sustainable fisheries management.

New England Groundfish, Steve Cadrin, AIFRB (4:15 – 5:00)

With cod quotas facing severe reductions, questions persist on rebuilding targets, timelines and stock abundance. We discuss the ecosystem, climate and coastal changes relative to definitions of sustainable stock levels and explore options for the sustainability of New England stocks.

VIP Reception, Seaport Demo Kitchen (5:00 – 7:30) Workshop participants, sponsors, VIP guests.

Friday, March 8th Global Review Fisheries & Aquaculture: World Trade Center (8:30 – 5:00)

Welcome, Thor Lassen, Ocean Trust/Steve Cadrin, AIFRB (8:30–9:00)

Global Trends in Sustainability Keynote (9:00 – 10:00) (Invited/Confirmed)

Árni M Mathiesen, Assistant Director-General, FAO Fisheries and Aquaculture, *A Global Review*
Ray Hilborn, University of Washington & Author of *Overfishing: What Everyone Needs To Know*

Moderated Forum/Audience Discussion (10:00 – 10:30)

Break (10:30 – 10:40)

Regional Fisheries & Sustainability (10:40 – 12:00) Johan Williams, FAO/COFI Moderator

Moderator Preface, *Global Nation's Views of Sustainability (Invited)*

Yemin Ye/Kevern Cockrane FAO Fisheries & Aquaculture, *Regional Review (Invited)*

Jacek Majkowski, FAO, *Oceanic Tunas & Swordfish (Invited)*

Lunch (12:00 – 1:00)

Overfishing, Management & Certification (1:00 – 2:20) Brian Rothschild, Moderator

Moderator Preface, *The Overfishing Metaphor*

Michael Sissenwine, *Management Frameworks to Prevent Overfishing*

Bill Fox, World Wildlife Fund, *Science, Sustainability & Certification*

Kristjan Thoranrinsson, Iceland Responsible Fisheries, *Criteria for Sustainable Fisheries*

Sustainability & Environment (2:20 – 3:00) Dick Beamish, DFO CanadaModerator Preface, *The Cost of Not Understanding Natural Variation in Fish Abundance***Steve Cadrin**, UMASS Dartmouth/AIFRB, *Stock Status & Overfishing in Changing Environment***Svein Sundby**, Institute of Marine Research, *Cod and Climate***Break (3:00 – 3:15)****Science & Sustainability of Selected Fish (3:15 – 4:15) Michael Crispino, ISSF Moderator**Moderator Preface, *Public Perceptions on Sustainability***Kevin Sullivan**, New Zealand Ministry of Fisheries, *Chilean Sea Bass, Orange Roughy**TBD Norway*, Cultured and Wild Fisheries: *Atlantic Salmon, Cod & King Crab***Randall Brummett**, World Bank, Sustainable Aquaculture, *Shrimp, Feed & Coastal Impacts***US & New England Stocks (4:15 – 5:00) Galen Tromble, NOAA Domestic Fisheries Moderator**Moderator Preface, *Sustainability of US & New England Fisheries***Brian Rothschild**, UMASS Dartmouth, *Cod Stock Dynamics in Northwest Atlantic***George Rose**, Memorial University, *Cod: The Ecological History of the North Atlantic Fisheries***Reception (5:00 – 7:00)****Saturday, March 9th Meeting Sustainability Needs & Priorities Workshop Seaport Hotel****Workshop & Forum Summary, Discussion & Recommendations (9:00 – 12:00)**

Sustainability & Overfishing, Brian Rothschild/Ray Hilborn (9:00 – 10:00)

Fish & Environment, Dick Beamish/Steve Cadrin DFO Canada (10:00 – 11:00)

Sustainability Certification, Thor Lassen/Grimur Valdimarsson (11:00 – 12:00)

Accommodations: Seaport Hotel & World Trade Center located on the Boston waterfront with walking access to the International Boston Seafood Show (ISSB). Room block is available for Science & Sustainability Forum participants through March 9th. Assistance with the Boston Show registration and room accommodations during the Boston Show is available through Ocean Trust.

Registration: ___ Workshop/Forum Only ___ Hotel Accommodations ___ ISSB
Attendance

Name: _____ Dates: _____

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