



ISSF 2016

BEST PRACTICES Better Solutions

ANNUAL REPORT

photo: Fabien Forget, © ISSF

TABLE OF CONTENTS

BEST PRACTICES
Better Solutions

3

5

7

9

12

15

18

19

21

24

29

photo: David Itano, © ISSF

BOARD & GOVERNANCE

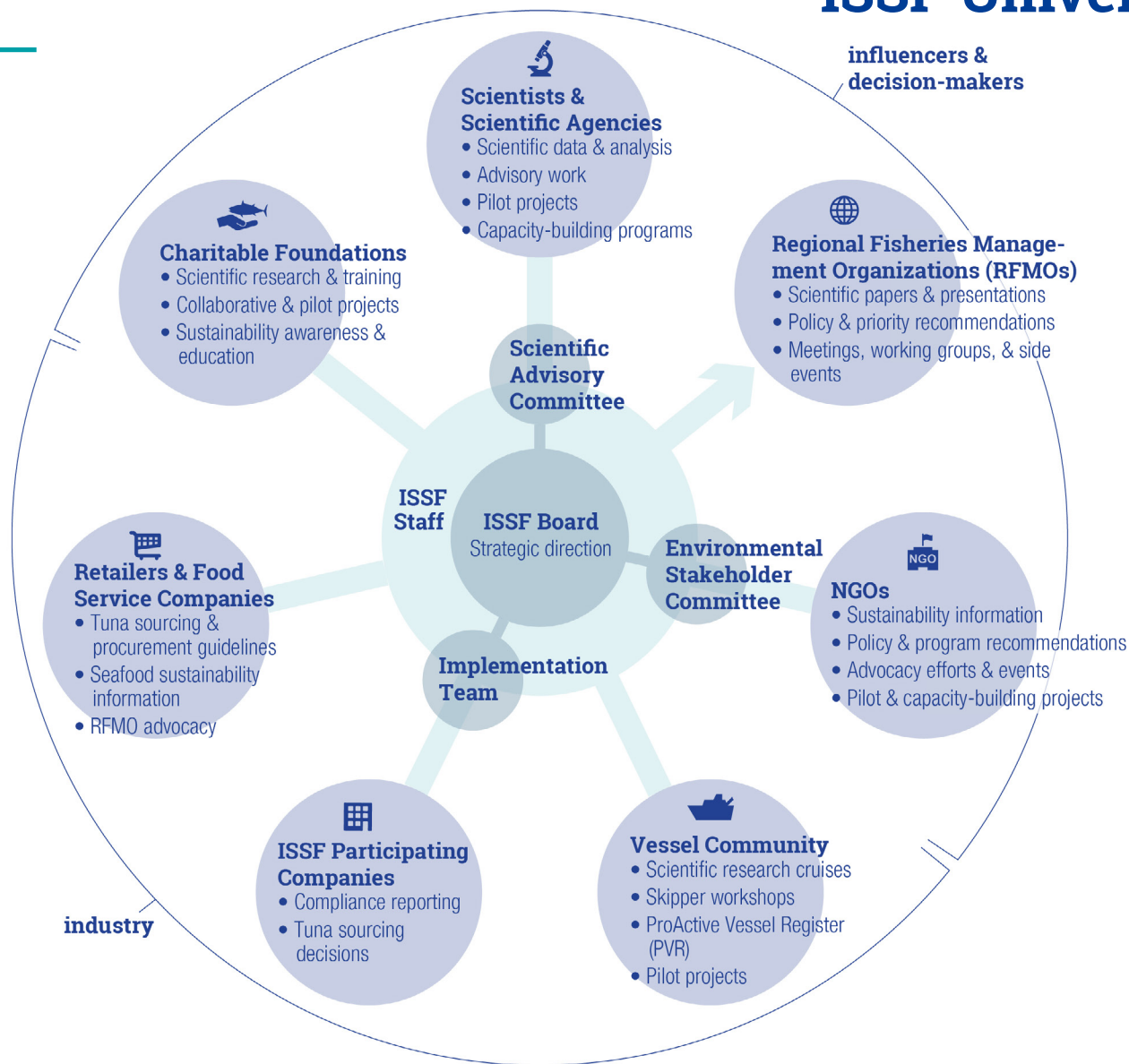
BEST PRACTICES
Better Solutions

COLLABORATION INTO ACTION

Our Mission

The International Seafood Sustainability Foundation (ISSF) is committed to improving the sustainability of global tuna stocks by developing and implementing verifiable, science-based practices, commitments and international management measures that result in tuna fisheries meeting the Marine Stewardship Council (MSC) standard without conditions, and becoming the industry standard for vessel owners, traders, processors and marketers.

ISSF Universe



BOARD & GOVERNANCE

BEST PRACTICES
Better Solutions

BOARD OF DIRECTORS

The ISSF Board of Directors reflects our collaborative approach by bringing together stakeholders with differing perspectives and approaches who are committed to a shared goal: the long-term sustainability of global tuna fisheries.



Juan Corrales
CHAIR, ISSF
CEO, Grupo Conservas Garavilla



Dr. William Fox
VICE CHAIR, ISSF
Vice President,
Fisheries, WWF-U.S.



Dr. David James Agnew
Standards Director, Marine
Stewardship Council



Dr. Transform Aqorau
Pacific Fisheries Expert & former
Chief Executive Officer, Parties
to the Nauru Agreement (PNA)



John Connolly
President, National
Fisheries Institute



Javier Garat
Secretary General, Cepesca



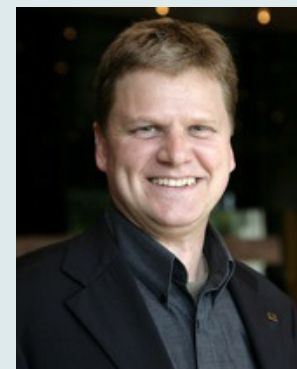
Susan Jackson
PRESIDENT, ISSF



Ichiro Nomura
Fisheries Policy Advisor, Ministry
of Marine Affairs and Fisheries,
Republic of Indonesia



Dr. Victor Restrepo
Chair, ISSF Scientific Advisory
Committee



Alfred Schumm
Director, WWF Global Fisheries
Program (Smart Fishing
Initiative), WWF International

CHAIR'S LETTER

BEST PRACTICES
Better Solutions

The Art & Science of Getting Better at Sustainability

Technology, health care, and other consumer-facing companies talk a great deal about innovation as crucial for survival, let alone for success, in their fields. Even well-established companies like Grupo Conservas Garavilla, the 130-year-old canned-seafood company where I am Chief Executive Officer, need to stay alert for new opportunities.

But an innovative mindset and creative capability are no less important for an organization like ISSF – or for the scientists and skippers in its circle. Consider how much is at stake in finding “best practices” and “better solutions” when you’re in the “business” of seafood sustainability.

Seeing New Possibilities

Getting innovation right means ensuring food, employment, and healthy oceans for generations to come. It requires considering many different perspectives and achieving agreement on how best to proceed, which is demanding and often unsung work.

Chat with a member of the ISSF team at the next RFMO meeting, sustainability conference, or retailer forum, though, and you’ll hear how our community is becoming more connected and more proficient at collaboration. Any conversation can inspire new possibilities for future partnerships, projects, and processes. The good-better-best cycle continues.

Passing the Baton

Speaking of cycles, by the time you read this, my tenure as board chair will have come to an end. I am proud to have served this special organization – and honored to introduce Luciano Pirovano, International Marketing and CSR Director at Bolton Alimentari, as the new ISSF Board chair.



Juan Corrales
CHAIR, ISSF

There are many people I want to thank for their help and support during my time as Board chair – including the ISSF staff, participating companies, the Scientific Advisory Committee and Environmental Stakeholder Committee, retailers, and the vessel community.

Serving as ISSF Board chair for the past four years has been an incredible experience, especially watching the number of participating companies committing to ISSF’s vision nearly double, from 17 to 28.

Celebrating Our Successes

As a chief executive officer as well as chair, I’ve naturally been most interested in how the tuna industry and other business stakeholders have interacted with ISSF – and how that engagement has been transformational for all

“Much is at stake in finding ‘best practices’ and ‘better solutions’ in seafood sustainability.”

photo: Fabien Forget, © ISSF

CHAIR'S LETTER

BEST PRACTICES Better Solutions

NEW PARTICIPATING COMPANIES IN 2016



Lovering Foods
Leading ambient food specialist



PT. ANEKA TUNA INDONESIA



CELEBES CANNING CORPORATION



THUNNUS OVERSEAS GROUP

parties. Here are a few previews of the industry-ISSF collaborations in 2016 we're spotlighting in this report:

- Five new tuna companies joined ISSF and committed to following our conservation measures. Together, 28 ISSF participating companies achieved 97.5% conformance with 21 conservation measures then in effect – a 10.3% improvement over 2015.
- ISSF's ProActive Vessel Register (PVR) gained 400 additional vessels and evolved to separately list longline, pole & line, and handline vessels. 900 vessels worldwide have agreed to be audited on their compliance with ISSF-defined sustainable practices.

- Tuna skippers from Vietnam and China participated in ISSF skipper workshops for the first time, sharing knowledge in bycatch handling and release techniques and giving input to scientists working with us to improve our research. ISSF reached a record-high 343 skippers and introduced a pioneering train-the-trainer program in Indonesia.
- ISSF held more than 60 meetings with supermarkets and other retailers. In the U.S. and Europe, 32 buyers now include ISSF conservation measures and/or the PVR in their tuna sustainability and sourcing considerations.

Learning from ISSF Collaborations

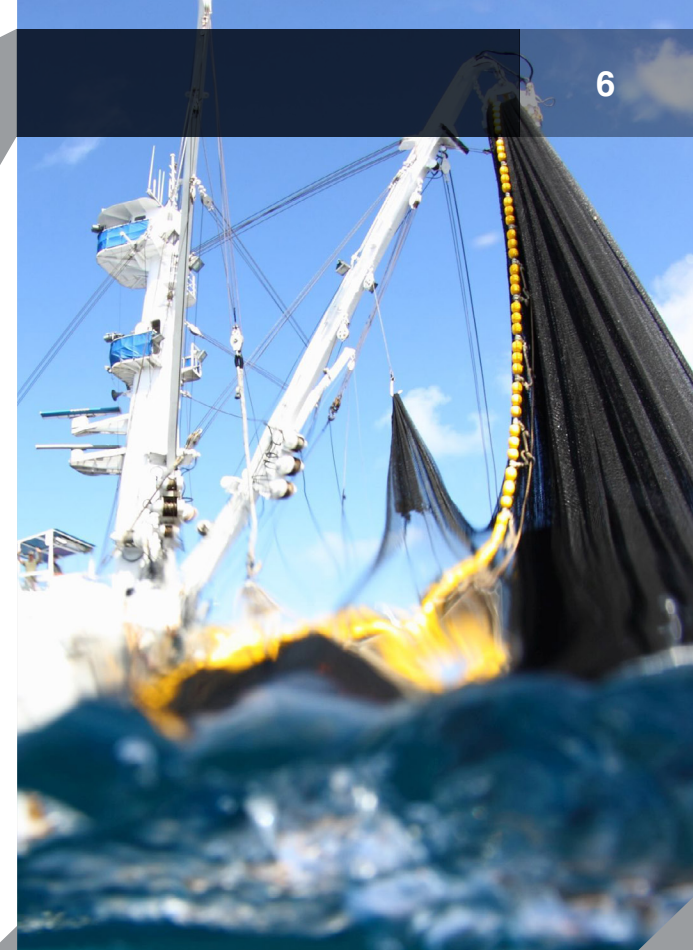
In particular, I want to mention one 2016 innovation that, for me, embodied the art and science of ISSF's strategic vision in practice: the biodegradable FAD workshop.

Scientists and fishers worked side by side to brainstorm a better FAD – gaining from each other's expertise and experience to sketch and model biodegradable FAD prototypes, which are being tested at sea now. Many commercial ventures have something to learn from the bench-and-field collaboration that ISSF fosters.

Yet there is still a long way forward to achieve sustainability, and it does not diminish ISSF's accomplishments to admit that.

We need each other more than ever. Thank you for your trust and partnership.

Juan Corrales | Chairman, ISSF



OUR GOAL IS CLEAR:
A future of conservation of,
and sustainable use for,
the world's tuna stocks.

[Click here to view the video online](#)

photo: Fabien Forget, © ISSF

PRESIDENT'S LETTER

BEST PRACTICES
Better Solutions

Best Practices Become Standards, Asks Become Wins

It's a pleasure to have an opportunity every year to officially reflect on the latest "wins" in tuna and ocean conservation.

Marking Our Seventh Year

I hope you'll enjoy discovering what our small-but-mighty team has learned, facilitated, and shared in 2016 — in far-flung locations — to make tuna fishing better by many sustainable measures. ISSF presented at the [SeaWeb Seafood Summit](#) in Malta; departed on a [research cruise from Abidjan, Ivory Coast](#); held a [skippers workshop in Shanghai, China](#); discussed tuna harvest control rules in Sapporo, Japan; participated in WCPFC meetings in Pohnpei; and met with retailers in Germany and Scandinavia — to give you a small taste of our pace and variety of activities during the year.

ISSF marked its seventh anniversary in 2016, and I'm proud to have been part of this unique organization from the beginning. Through our many activities and partnerships over the years — made possible by progressive tuna companies and other funders — we have deepened our understanding about what it takes to "be" sustainable, and to advance the cause.

Making Lasting Contributions

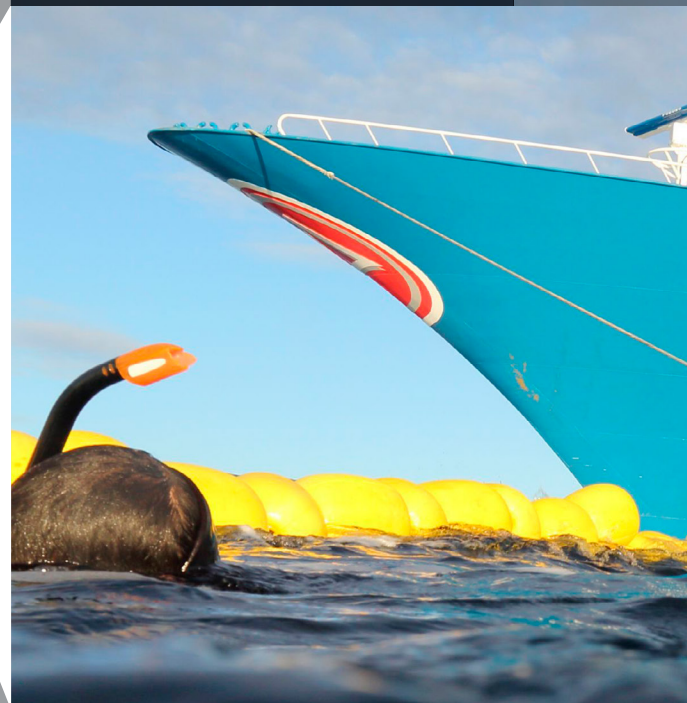
What have we learned — and communicated to our stakeholders — so far? Here are a few of the best practices that ISSF and our partners have identified, pioneered, or promoted since 2009:

- For FAD fishers, using non-entangling FAD designs and materials
- Knowledge-sharing workshops with tuna vessel skippers and marine scientists
- Shark, turtle, and seabird handling and release techniques
- Independent audits of tuna company compliance with conservation measures
- Tuna vessel registration on ProActive Vessel Register database to show a commitment to follow sustainable fishing practices
- Human observers and/or electronic observation systems on vessels for data collection and reporting



Susan Jackson
PRESIDENT, ISSF

These best practices are the sum of countless ISSF efforts: testing bycatch release methods alongside fishers on their boats, talking with tuna and retail/food service companies about sourcing policies, consulting with NGOs and government agencies for input, petitioning RFMOs with concerns and recommendations, and much, much more.



“We have deepened our understanding about what it takes to ‘be’ sustainable.”

photo: Fabien Forget, © ISSF

PRESIDENT'S LETTER

BEST PRACTICES Better Solutions



May 2016: Susan Jackson in Vanuatu to sign the [ISSF-PNA Memorandum of Understanding](#), a partnership for working together to promote the sustainability of tuna fisheries as well as ecologically healthy and productive marine ecosystems in the Western and Central Pacific Ocean.

In the big picture, though, what do a bunch of best practices add up to? I'm not alone in believing that ISSF is making lasting contributions, including these:

- Each time RFMO science providers use ISSF research when developing their recommendations, we're helping to set the science standard.
- Our work increasingly informs the proposals that other NGOs make — and factors into RFMO member states' proposals.
- ISSF compliance reporting is taking the tuna industry to a higher level of transparency.
- Our conservation measures and ProActive Vessel Register shape how leading retailers worldwide source seafood — and advocate for sustainability.

That's undeniable and collective progress — dependent on goodwill, foresight, and a willingness to collaborate for the common good.

Offering a Framework

In emphasizing best practices in this year's annual report, we want to do more than take stock of improvements in FAD management, harvest control rules, and electronic monitoring and reporting — as significant as we think they are. We also want to offer a framework to guide future efforts — to challenge ourselves and you, our partners and supporters, to evolve these practices ... or replace them with superior ones.

While we're justifiably proud of the advancements we've made together, we serve the oceans best when we believe that better is just around the corner, if only we look a little closer, spend more time, think harder.

If today's best practices seem inadequate for fully managing tuna and other marine life given current economic and environmental realities, that's because they are. Only dissatisfaction with the status quo can drive the improvements — one insight, policy, and operational change at a time — that are still needed.

Day in and day out, ISSF will continue to do the foundational, often behind-the-scenes work that leads to the next generation of best practices and better solutions. It's our passion and privilege to do so.

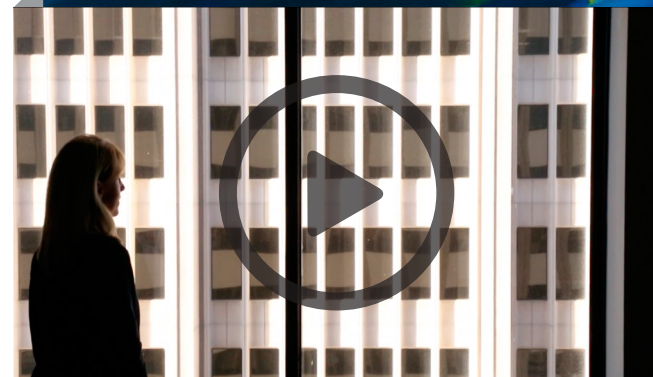
No matter what your interest or involvement in tuna sustainability and ocean conservation, thank you for supporting our efforts. I hope our annual report encourages and inspires you.

Sincerely,

Susan Jackson | President, ISSF



Progress toward Sustainable Tuna



[Click here to view the video online](#)

photo: Fabien Forget, © ISSF

SPOTLIGHT ON: FADs

BEST PRACTICES
Better Solutions

Understanding & Managing Fish Aggregating Devices (FADs)

Identifying, Refining and Promoting Best Practices for Better Design & Management Solutions

More than 40% of the annual global tuna catch is caught using fish aggregating devices (FADs). Like all fishing methods, FADs need to be understood and managed.

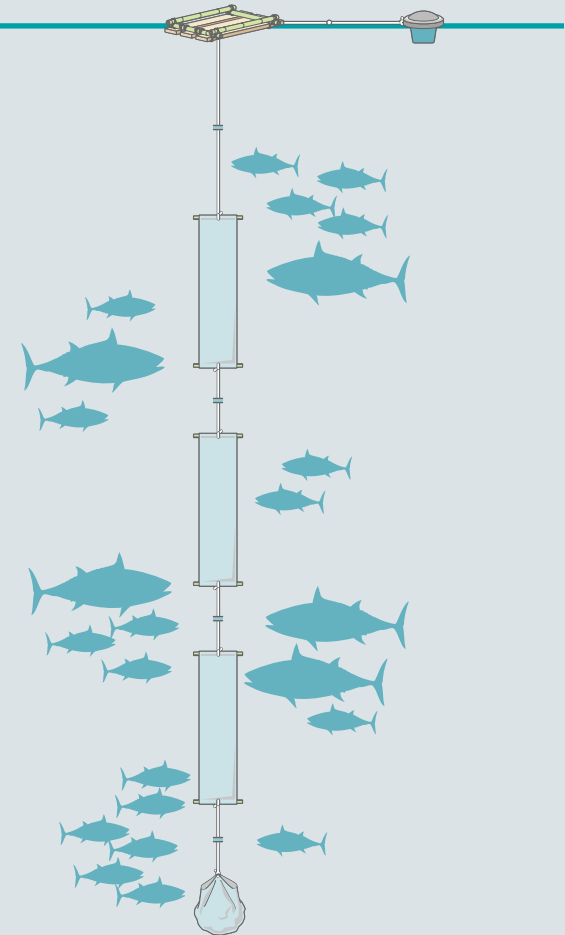
Evaluating fleets' FAD strategies, enhancing FAD monitoring, and identifying potential FAD impacts are critical for sustainably managing global tropical tuna fisheries, especially regarding efforts to mitigate bycatch and protect tuna stocks.



Identifying FADs' potential impacts is critical for sustainable fisheries management.

ISSF's goal is to improve the sustainability of global tuna stocks by developing and implementing verifiable, science-based practices, commitments and international management measures that result in tuna fisheries meeting the Marine Stewardship Council (MSC) certification standard without conditions.

FAD management can factor into the MSC assessment of tuna fisheries against each of its three Principles: Sustainable Fish Stocks (P1), Minimizing Environmental Impact (P2) and Effective Management (P3). To learn more, read ISSF reports on MSC [Principles 1 & 3](#) and [Principle 2](#).







SPOTLIGHT ON: FADs

BEST PRACTICES
Better Solutions

Understanding & Managing FADs Timeline

2016 Highlights:

-  ISSF adopts Conservation Measure 3.5 Transactions with Vessels that Use Only Non-entangling FADs
-  All four tuna RFMOs have established FAD working groups (WG) now; ISSF attends all WG meetings that are scheduled in 2016
-  ISSF hosts 14 skippers workshops in 2016; to date, workshops have attracted 2,200 attendees
-  ISSF-authored or -funded publications on FADs to date reach nearly 70 papers



2016

| Jan


| Feb


| March


| April

| May


| June

-  ISSF submits *Progress on the Adoption of Non-entangling Drifting Fish Aggregating Devices in Tuna Purse Seine Fleets* at ICCAT meeting

-  ISSF Atlantic Ocean research cruise tests acoustic technology & net-release techniques for sharks

-  ISSF attends first meeting of IATTC FAD working group

-  ISSF conducts biodegradable FAD experiments in the Maldives with the Marine Research Centre; future experiments will take place with International Pole & Line Federation

-  ISSF side event at IATTC includes presentations on FAD ecosystem impacts & drifting FADs/bigeye tuna


| July

| Aug

| Sept


| Oct


| Nov

-  At IATTC lab in Panama, ISSF researches the acoustic target strength of yellowfin tuna

-  ISSF joins Pacific Community (SPC) research cruise to study species at drifting FADs

-  ISSF presents shark mitigation & FAD research at WCPFC meetings & working groups

-  ISSF's Dr. Gala Moreno appointed chair of IATTC FAD research group

-  ISSF hosts fisher-scientific workshop on biodegradable FAD design

KEY:

-  Working groups/workshops
-  Certification
-  Global gatherings
-  Decision points
-  Science/technical work
-  Publication/papers

ABBREVIATIONS

IOTC	Indian Ocean Tuna Commission	AO	Atlantic Ocean
WCPFC	Western and Central Pacific Fisheries Commission	IO	Indian Ocean
IATTC	Inter-American Tropical Tuna Commission	WCPO	Western & Central Pacific Ocean
ICCAT	International Commission for the Conservation of Atlantic Tunas	PO	Pacific Ocean
		CPO	Central Pacific Ocean
		EPO	Eastern Pacific Ocean
		WPO	Western Pacific Ocean

SPOTLIGHT ON: FADs

BEST PRACTICES Better Solutions

2015 2014 2013 2012 2011 2010 2009

📖 ISSF's updated *Guide to Non-entangling FADs* available in 7 languages

👤 IOTC & IATTC establish FAD working groups

🔬 In Hawaii, with the University of Hawaii and ORTHONGEL, ISSF tests biodegradable materials for FAD use

📖 At IOTC side event, ISSF presents on using FAD data in stock assessments

📖 ISSF submits *Options for Managing FAD Impacts on Target Tuna Stocks* to ICCAT working group

🔬 In EPO research project, ISSF deploys FADs of different depths to compare species composition

🔬 ISSF AO research cruise tests shark release panel

📖 ISSF presents FADs as *Scientific Platforms* at ICCAT meeting

🔬 ISSF CPO research cruise tags & tracks fish to study species behavior at FADs

🔬 ISSF AO research cruise studies fish behavior, entanglement, & species diversity at FADs

👤 WCPFC & ICCAT create special FAD working groups

📖 *ISSF 2014-03: Report of the ISSF Workshop on FADs as Ecological Traps*

🔬 ISSF research cruise studies acoustic technology, species discrimination, & shark release

🔬 ISSF research cruises studies tuna behavior around FADs

👤 ISSF side event at WCPFC meeting includes FAD data & monitoring presentations

👤 ISSF side event at WCPFC meeting includes *FAD Tracking from the PNA Office* presentation

👤 ISSF hosts non-entangling FAD workshop in San Diego for purse seine tuna fishers

📖 *ISSF 2015-12: Report of the 2015 ISSF Workshop on Non-Entangling FADs*

👤 IOTC, ICCAT & IATTC adopt measures on FAD data and non-entangling FADs

🌐 ISSF establishes non-entangling FAD designs as global priority for RFMO advocacy

🔬 ISSF WPO research cruise studies tuna behavior around FADs

📖 ISSF publishes *Guide to Non-entangling FADs*

🌐 ISSF includes science-based management & best-practice construction of FADs in all RFMO position statements

🔬 ISSF IO research cruise studies shark bycatch mitigation, FAD towing techniques, & more

🔬 ISSF EPO research cruise studies drifting FADs and shark release/mortality

🔬 ISSF WPO research cruise tests shark release panel, fish behavior at FADs, & more

🔬 ISSF research cruise in Indian Ocean studies bycatch species and FADs

🔬 ISSF EPO research cruise studies FAD design and fish behavior at FADs

👤 ISSF convenes fishers & scientists from 3 oceans to examine FAD use

★ ISSF launches

👤 ISSF offers first skippers workshop on bycatch mitigation in tuna fisheries

A Deeper Dive on FADs

- Tuna fleets' bycatch mitigation activity, including **non-entangling FADs**
- RFMO progress on **FAD proposals**

SPOTLIGHT ON: EM/ER

BEST PRACTICES Better Solutions

Electronic Monitoring & Reporting (EM/ER)

Piloting Promising Technology & Reporting on Results

To manage tuna fisheries sustainably, commercial fishing activities and their marine ecosystem impacts must be well documented to be better understood. Vessel owners and management authorities — such as RFMOs and flag states — need to have continuous, meaningful data to analyze and act on.



Better fishery data can transform how scientists research and advise, how fishers operate, and how RFMOs make policy.

Human observers on vessels gather valuable information about fishing operations. But information gaps exist. On boats that are smaller or at sea for long periods, for example, human observation has been challenging. For vessels of certain gear types and sizes, having human observers may not be feasible at all.

Emerging electronic monitoring and reporting (EM/ER) technologies can complement or substitute for human observation, providing greater vessel coverage and data collection. Electronic monitoring systems (EMS) use vessel-wide cameras, GPS, and gear sensors to capture real-time data around the clock — not only on catch composition, fishing effort, bycatch, and discards but also on vessel course, location, and environment. The fishery data are then stored to be analyzed by independent experts after the trip; some data can also be transmitted in real time via satellite.

EM/ER systems are powerful tools for remotely monitoring vessel activity, collecting essential scientific data, and assessing their compliance with national or international laws, RFMO guidelines, and conservation measures. They also can help to detect illegal, unreported, or unregulated (IUU) fishing.

Before any equipment is installed, however, EM/ER systems must be designed with the data-analysis needs of independent authorities in mind — the RFMO, the flag State, the licensing authority, or another accredited institution.

For years, ISSF has helped governments and RFMOs to develop minimum standards for EM/ER systems on tuna vessels, including:

- Standardizing installations of systems from different manufacturers
- Advising on data formats and integrations into existing databases and data flows
- Ensuring that useful, comparable fisheries data are being collected

ISSF also has promoted EM/ER possibilities for fishery management by:

- Convening workshops on EM/ER recommendations and publishing results
- Participating in field tests of EM/ER systems in purse seine and longline fishing vessels

- Adopting participating company conservation measures requiring monitoring through observer coverage or equivalent electronic means

In 2016, ISSF published two technical reports on EM/ER best practices, organized related workshops and side events, and attended key meetings. We continue to collaborate with RFMOs to help develop thoughtful standards and protocols for member nations and fleets.



ISSF's goal is to improve the sustainability of global tuna stocks by developing and implementing verifiable, science-based practices, commitments and international management measures that result in tuna fisheries meeting the Marine Stewardship Council (MSC) certification standard without conditions.



Electronic monitoring and reporting can factor into the MSC assessment of tuna fisheries against each of its three Principles: Sustainable Fish Stocks (P1), Minimizing Environmental Impact (P2) and Effective Management (P3). To learn more, read ISSF reports on MSC [Principles 1 & 3](#) and [Principle 2](#).

SPOTLIGHT ON: EM/ER

BEST PRACTICES
Better Solutions

Electronic Monitoring & Reporting (EM/ER) Timeline

2016 Highlights:

-  ISSF publishes technical report on EM/ER best practices
-  ISSF hosts two side events at WCPFC and IOTC annual meetings on EM/ER



2016

| Jan


| Feb


| March

| April

| May

| June

 ISSF presents on EMS at Eighth GEF Biennial International Waters Conference

 ISSF presents at IOTC side event on EM/ER systems in Ghana & Fiji

 ISSF and SPC host workshop on EM standards development for longline fleets

| July

| Aug


| Sept


| Oct


| Nov


| Dec

 ISSF research represented at WCPFC EM/ER working group meeting


 ISSF reports at International Fisheries Observer & Monitoring Conference on Ghana EM trials

 ISSF paper on EMS standards informs ICCAT guidelines

 ICCAT endorses proposed EM/ER standards for purse seine fisheries

 ISSF hosts side event with EM/ER presentations at WCPFC meeting

 ISSF paper on EMS standards informs IOTC's work

 27 of 28 ISSF participating companies are fully compliant with ISSF Conservation Measure 4.3(a) Observer Coverage; some vessels use EMS to comply with the measure

KEY:

 Working groups/workshops

 Global gatherings

 Science/technical work

 Certification

 Decision points

 Publication/papers

SPOTLIGHT ON: EM/ER

BEST PRACTICES
Better Solutions

2015

2014

2013

2012

2011

2010

2009

🌐 All ISSF RFMO position statements urge EM/ER adoption as top priority

👤 ISSF presents EMS technology side event at IATTC meeting

🚤 Ghanaian vessels field-test EMS in Common Oceans/ABNJ Tuna Project

👤 ISSF hosts EM/ER side event at WCPFC meeting

🚤 ISSF participates in longline EMS pilot near Solomon Islands

🌐 ISSF begins advocating EM/ER technologies in RFMO position statements

🚤 ISSF funds ER pilots in WCPO, world's largest tuna fishing region

📖 ISSF 2014-08: Updated Guidance on Electronic Monitoring Systems for Tropical Tuna Purse Seine Fisheries

👤 ISSF presents on EM/ER systems at ICCAT special meeting

🌐 WCPFC establishes working group for EMS standards development

🚤 Common Oceans/ABNJ Tuna Project launches; ISSF is project partner from the beginning

🔍 ISSF ProActive Vessel Register launches to publicly track vessel best practices

📖 ISSF 2012-13: Guidance on Electronic Monitoring Systems for Tropical Purse Seine Fisheries

🚤 First ISSF test of an EMS, onboard purse seine vessel in AO

🚤 Second ISSF research cruise test of EMS on purse seiner in IO

🚤 Third ISSF research cruise test of EMS on purse seiner in WCPO

🌐 ISSF Position Statements for ICCAT call for 100% observer coverage on large-scale purse seines

🌐 ISSF calls for 100% observer coverage in IOTC and ICCAT, along with EMS exploration and guidelines for IOTC

🔍 ISSF adopts Conservation Measure (CM) 4.3(a) Observer Coverage

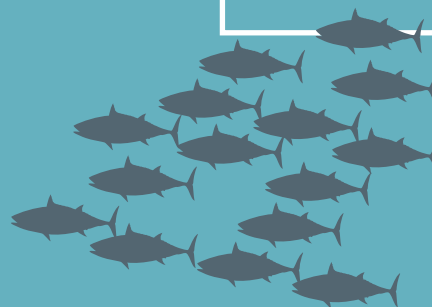
👤 KOBE III workshop lays foundation for EM/ER standards development

🌐 ISSF advocates 100% large-scale purse-seine observer coverage to ICCAT

★ ISSF launches

A Deeper Dive on EM/ER

- RFMO progress on EM/ER proposals
- ISSF Participating Companies' compliance results on 4.3(a) and other conservation measures



SPOTLIGHT ON: HCRs

BEST PRACTICES Better Solutions

Harvest Control Rules (HCRs)

Articulating Urgent Needs & Advocating for Scientific Perspectives

Tuna RFMOs are responsible for defining and implementing harvest control rules (HCRs) for their member nations and fleets to follow.

HCRs are a set of well-defined management actions to be taken in response to changes in tuna stock status with respect to target and limit reference points. By establishing HCRs, fisheries managers have a pre-agreed upon action plan to avoid overfishing — thereby avoiding long negotiations at the RFMO level that lead to delayed action or inaction.

Without HCRs, such delayed action or inaction can lead to further damage to a tuna stock, requiring that fishing of it must be aggressively curtailed. Adopting HCRs is essential for effective fisheries management and required by seafood eco-label certification programs.



Well-defined HCRs can prevent overfishing and restore depleted stocks.

Yet developing and overseeing HCRs is not straightforward work for RFMOs — it requires clear objectives, timely and reliable data, consensus among member nations, and rigorous compliance and monitoring.

ISSF assists RFMOs in their important HCR work in several ways:

- Convenes workshops and other forums for stakeholder discussion
- Serves as technical expert in RFMO scientific meetings and workshops
- Tracks RFMO activities against scientific recommendations and implementation timelines
- Enacts supporting conservation measures on catch traceability and documentation
- Educates and builds capacity on the value of HCRs in ensuring tuna sustainability

In 2016, we intensified our efforts to offer scientific guidance and other capacity-building assistance — including for RFMO member nations — through workshops, technical meetings and reports.

Our NGO and industry partners also helped to amplify our call for HCR recommendations, agreeing to co-sign individual letters to ICCAT, IOTC, IATTC and WCPFC — twice as many as we sent in 2015.



ISSF's goal is to improve the sustainability of global tuna stocks by developing and implementing verifiable, science-based practices, commitments and international management measures that result in tuna fisheries meeting the Marine Stewardship Council (MSC) certification standard without conditions.

MSC considers harvest control rules when assessing tuna fisheries against each of its three Principles: Sustainable Fish Stocks (P1), Minimizing Environmental Impact (P2) and Effective Management (P3). To learn more, read ISSF reports on [MSC Principles 1 & 3](#) and [Principle 2](#).

SPOTLIGHT ON: HCRs

BEST PRACTICES
Better Solutions

Harvest Control Rules (HCRs) Timeline

2016 Highlights:

- 📄 ISSF activated its multi-sector partners for joint letters to each tuna RFMO on HCRs
- 👤 ISSF hosted a side event at the ICCAT annual meeting on Harvest Strategies in Action
- 🌐 ISSF continued global technical and capacity-building outreach on HCRs and harvest strategies



2016

Jan

ISSF shares HCR expertise at [Bluefin Futures Symposium](#)

Feb

📄 Updated *Status of the World Fisheries for Tuna* is published

👤 ISSF attends workshop on HCRs for tuna stocks within IOTC purview

March

👤 ISSF assists Maldives Advisory Committee for 3rd IOTC Management Procedures meeting

April

🌐 In joint letter to IOTC, ISSF stresses need for yellowfin HCRs

May

🌐 IOTC adopts HCRs for skipjack tuna consistent with scientific advice

→ 👤 ISSF participates in [Pacific Community \(SPC\)](#) workshops on MSE & e-monitoring standards for longline fisheries

June

🌐 In joint letter & position statement, ISSF asks IOTC to consider scientific advice on HCRs for yellowfin, bigeye, & Pacific bluefin

🌐 IATTC adopts more complete interim HCR for yellowfin, skipjack, & bigeye tuna

July

Aug

👤 ISSF contributes to Common Oceans Atlantic Ocean HCR capacity-building workshop in Ghana

👤 ISSF's Dr. Restrepo is invited expert at WCPFC workshop on harvest strategy recommendations

Sept

📄 Updated *Status of the World Fisheries for Tuna* is published

Oct

Nov

📄 Updated *Status of the World Fisheries for Tuna* is published

👤 ISSF attends joint RFMO Management Strategy Evaluation (MSE) Technical Working Group meeting

👤 ISSF hosts ICCAT side event on *Harvest Strategies in Action*

🌐 ISSF position statement & joint letter to ICCAT stress HCR timelines for priority stocks

🌐 ICCAT agrees to test HCR elements for Northern Atlantic albacore tuna

Dec

🌐 WCPFC adopts interim risk levels for tuna species, for use in HCR evaluations

📄 *ISSF 2016-09: An Evaluation of the Sustainability of Global Tuna Stocks Relative to Marine Stewardship Council Criteria*

KEY:

👤 Working groups/workshops

🌐 Global gatherings

🔬 Science/technical work

🏆 Certification

🔑 Decision points

📄 Publication/papers

SPOTLIGHT ON: HCRs

BEST PRACTICES
Better Solutions

2015 2014 2013 2012 2011 2010 2009

📅 *ISSF 2015-06: Report of the 2015 Stock Assessment Workshop. Characterizing Uncertainty in Stock Assessment*

👤 ISSF contributes to Common Oceans Pacific Ocean HCR Capacity Building Workshop

📅 Updated *Status of the World Fisheries for Tuna* is published

👤 ISSF assists Maldives Advisory Committee for 2nd IOTC Management Procedures Dialogue meeting

👤 ISSF participates in 2nd IOTC Management Procedures Dialogue meeting, which addresses HCRs for four tuna species

👤 ISSF contributes to 2nd meeting of ICCAT's Standing Working Group on Science Management Dialogue

🌐 ISSF issues joint letter to WCPFC urging HCR adoption for several tuna species

🌐 ISSF's joint letter to ICCAT notes lack of HCRs for priority tuna stocks

👤 ISSF assists Maldives Advisory Committee for 1st IOTC Management Procedures Dialogue meeting

📅 Updated *Status of the World Fisheries for Tuna* is published

👤 ISSF contributes to Common Oceans Indian Ocean HCR workshop

👤 ISSF contributes to ICCAT's Standing Working Group on Science Management Dialogue, including on HCR development

🌐 ISSF contributes to IOTC's Management Procedures Dialogue, which covers HCRs

📅 *ISSF 2014-14: Report of the 2014 Meeting of the Indian Ocean Skipjack MSE Advisory Committee*

📅 Updated *Status of the World Fisheries for Tuna* is published

👤 *ISSF 2013-03: Report of the 2013 Stock Assessment Workshop. Harvest Control Rules and Reference Points for Tuna RFMOs*

🌐 ISSF establishes developing harvest strategies as global priority for RFMO outreach

📅 Updated *Status of the World Fisheries for Tuna* is published

👤 ISSF establishes advisory committee for the Maldives on meeting HCR requirements

🌐 ISSF position statements begin to advocate harvest strategies to all tuna RFMOs

📅 Updated *Status of the World Fisheries for Tuna* is published

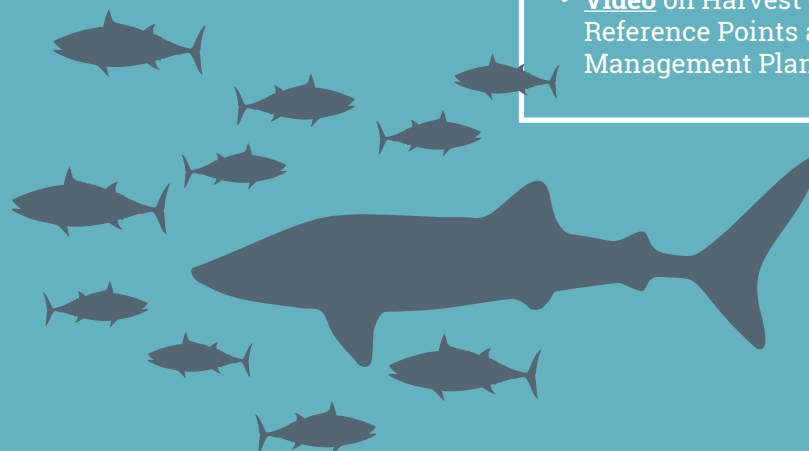
ISSF publishes first *Status of the World Fisheries for Tuna* to document stock health & fishing effort

ISSF publishes second, updated *Status of the World Fisheries for Tuna* report

★ ISSF launches

A Deeper Dive on HCRs

- Harvest Control Rule average scores based on the Marine Stewardship Council (MSC) **Principle 1**
- RFMO progress on **HCR proposals**
- **Video** on Harvest Control Rules, Reference Points and Harvest Management Plans



PROACTIVE VESSEL REGISTER

BEST PRACTICES
Better Solutions

A tool for *all* tuna vessels & sustainability stakeholders

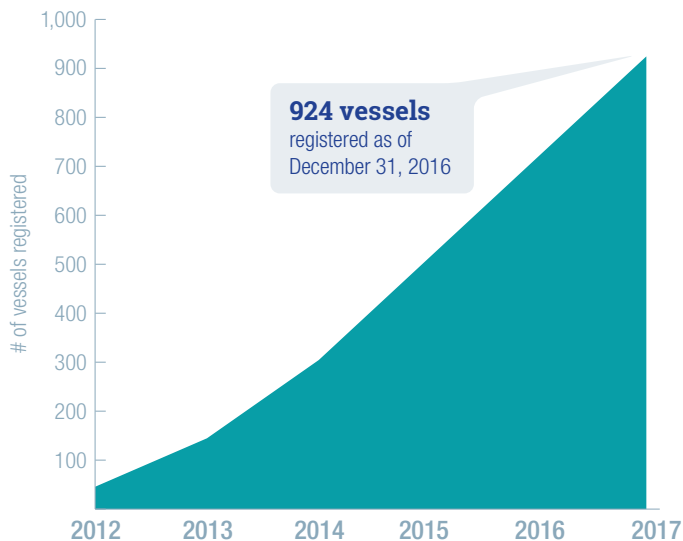


First launched in 2012, ISSF's ProActive Vessel Register (PVR) is an easy-to-use public database that tracks if vessels are implementing science-based, sustainable tuna fishing practices – practices often identified via ISSF's collaborative research efforts.

By tracking compliance by individual vessel – validated through third-party auditing – the PVR provides the credible information stakeholders seek to inform their programs and procurement decisions.

[>> View the ProActive Vessel Register](#)

PVR GROWTH SINCE 2012



PVR 2.0: Gaining Traction with Vessels & Markets

The PVR continues to gain momentum among the global tuna fleet – growing from fewer than 50 participants in 2012 to more than 900 vessels at the end of 2016.

New in 2016 was the PVR's more formal inclusion of all gear types – dedicated tabs for each vessel type and customized audit protocols to improve functionality for all users. Verified transparency of the fishing practices of these vessels – which in 2016 included more than 70% of the world's large-scale purse seine vessels – coupled with the PVR's broader reach, engaged vessel owners and seafood buyers like never before.

The PVR grew by nearly **400 vessels in 2016** – with the addition of 119 purse seiners, 36 longliners, 29 pole and line and 213 handline vessels.

Auditing Compliance

Third-party auditor MRAG Americas implements PVR auditing to ensure accuracy. Using the PVR Audit Protocol, MRAG conducted 96 Level 2 audits in 2016, as well as 6 Level 3 audits. Level 1 audits are also conducted annually on all listed vessels.

Download the PVR Public Audit Manual by gear type:
Purse Seine; Longline; Pole & Line, Handline, & Troll



**North & 4 American retailers
10 European retailers**
have incorporated a PVR requirement in their sourcing policies.

photo: Fabien Forget, © ISSF

Participating Company Commitment

All participating companies commit to comply with the ISSF conservation measure requiring all purse seine tuna fishing vessels they control to be registered on the PVR.

In addition, participating companies that purchase skipjack, yellowfin and bigeye from large-scale purse seine vessels also commit to comply with the ISSF conservation measure requiring they source 100% of that tuna from PVR-listed vessels.

SKIPPERS WORKSHOPS

BEST PRACTICES
Better Solutions

Facilitating Best Practices

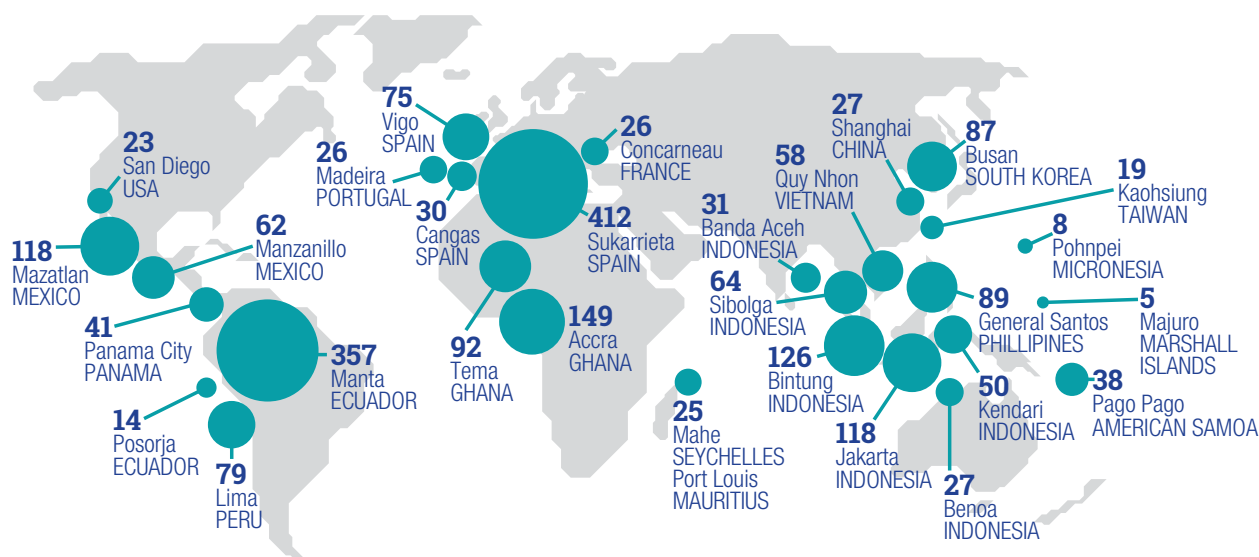
ISSF sponsored Skippers Workshops for the seventh consecutive year in 2016, convening fishers from around the world and marine scientists to listen and learn from each other about sustainable fishing.

We continued to broaden our horizons in 2016, welcoming new fleets to the initiative. Half of the workshops we offered last year were conducted with tuna fishing fleets and ports never visited before, including China, Vietnam and Portugal.

In its seven years, the ISSF Skippers Workshop program has reached 1,200 skippers and 1,000 additional relevant industry stakeholders – such as fishing crews, ship owners, fleet managers and cannery managers.

The program is helping to ensure that those players on the front lines of tuna fishing are contributing to and adopting best practices on the path to better solutions for sustainable tuna fisheries.

SKIPPER WORKSHOP ATTENDANCE (2009-2016)



In 2016, **23 of 28**
ISSF participating companies
were fully compliant with
Conservation Measure 3.4
Skipper Best Practices.

photo: Fabien Forget, © ISSF

SKIPPERS WORKSHOPS

BEST PRACTICES
Better Solutions

Acceptance of Bycatch Mitigation Activity

During ISSF Skippers Workshops, bycatch mitigation options are discussed with fishers, and, based on their positive or negative comments, an average acceptance level is recorded.

Workshops have reached nearly all major tuna purse seine fleets and cover many bycatch mitigation practices. For brevity, two best practices and four fleets

are shown below – where the most workshops were consistently done.

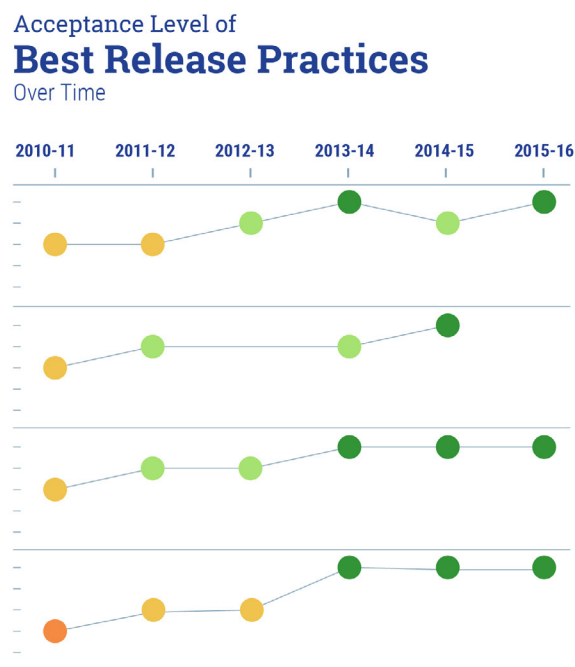
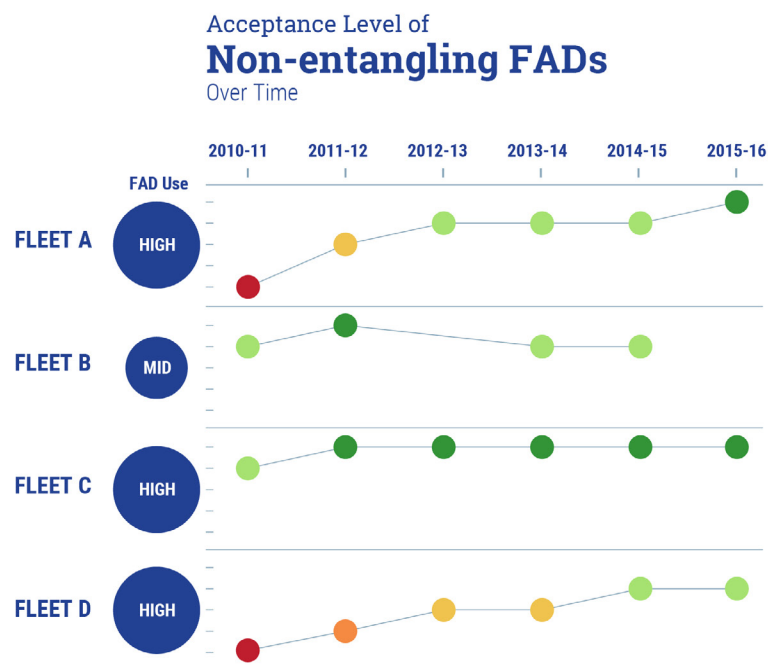
Non-entangling FADs

Traditional FADs with open netting and large mesh hanging structures entangle non-target species – for example, sharks. To avoid capturing sharks in the first place, ISSF recommends use of non-entangling FADs.

Best Release Practices from Deck

Studies show that following simple practices to release live bycatch species can greatly improve survival rates. For example, ISSF and partner research has proven that following simple best practices onboard to release live sharks from the vessel deck can reduce the direct mortality of silky sharks by 15-20%.

ACCEPTANCE LEVEL OVER TIME (2010-2016)



TUNA STOCK HEALTH

BEST PRACTICES
Better Solutions

Assessing the Health of Global Tuna Stocks

Effective tracking and measurement underpins all efforts to improve global tuna stocks. ISSF produces two reports on an annual basis to highlight the current health of commercial tuna stocks around the world – and serves as a measuring stick for progress made and the work still ahead.

ISSF Status of the Stocks Report

This report measures the status of all major commercial tuna stocks against three key factors:

- Stock Abundance
- Exploitation/Management
- Environmental Impact (Bycatch)

[>> Download the ISSF Status of the Stocks Report](#)

BASED ON OUR LATEST ASSESSMENT

Distribution of Stocks of Major Commercial Tunas (As reported 2011-2017)

According to abundance ratings and fishing mortality ratings

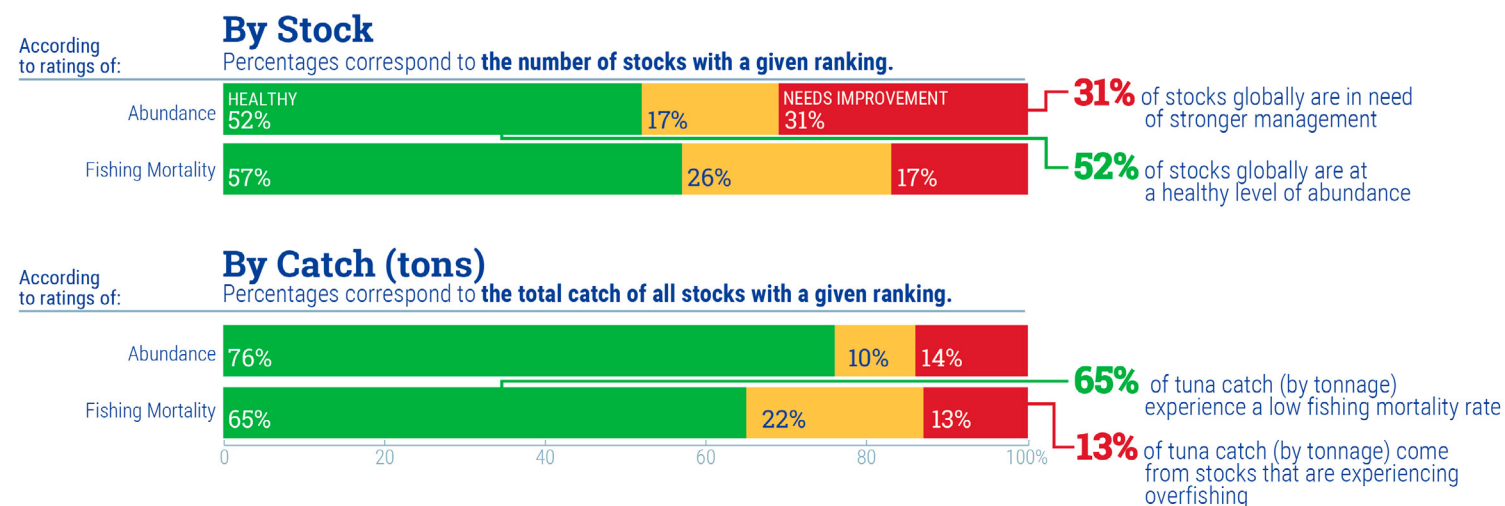


photo: Fabien Forget, © ISSF

TUNA STOCK HEALTH

BEST PRACTICES
Better Solutions

STATUS OF THE STOCKS OVER TIME

Distribution of Stocks of Major commercial tunas (As reported 2011-2017)

By Catch (Tons), According to Abundance Ratings

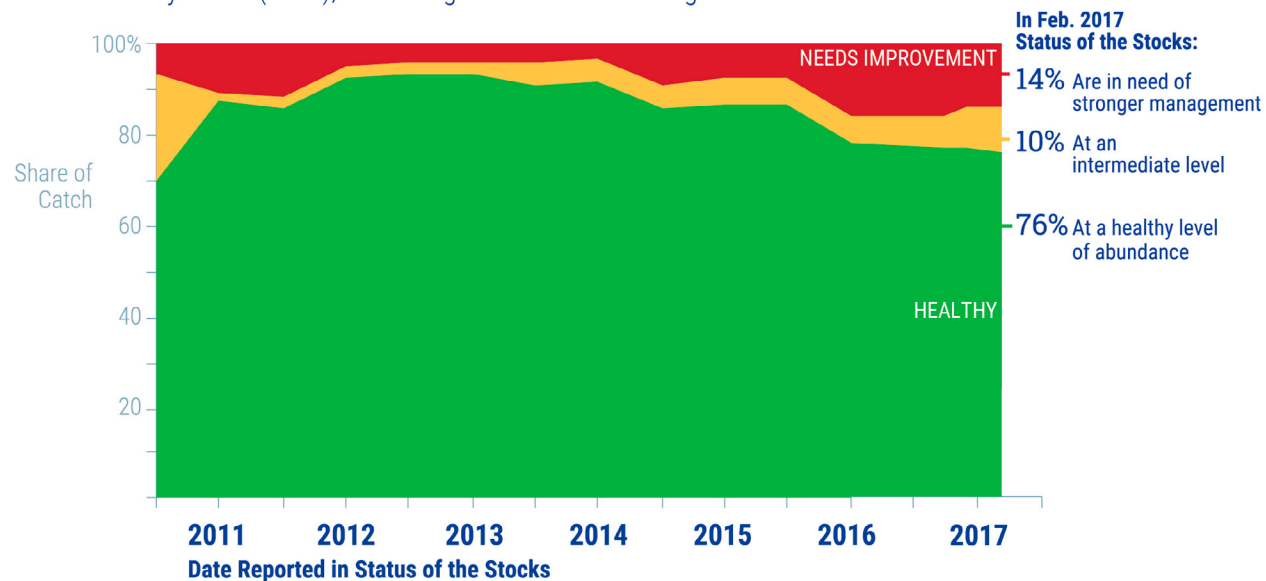


photo: Jeff Muir, © ISSF

TUNA STOCK HEALTH

BEST PRACTICES
Better Solutions

ISSF Analysis of Tuna Fisheries against MSC Performance Indicators (PIs)

Produced annually, this analysis provides a snapshot of the health of tuna fisheries by region, as defined by Marine Stewardship Council (MSC) Principles.

[>> Download the ISSF 2016-19 report](#)

Summary of P1 Averages*

P1: Sustainable Fish Stocks	PI # 2013	PI # 2015	Feb. 2013	Dec. 2013	Mar. 2015	Dec. 2016 (from 2016-19 report)
Stock Status	1.1.1	1.1.1	83	82.6	80	81.6
Reference Points	1.1.2	NA*	74	74.5	NA*	NA*
Stock Rebuilding	1.1.3	1.1.2	77	73.3	64	70
Harvest Strategy	1.2.1	1.2.1	75	74.7	73.7	71.6
Harvest Control Rules/Tools	1.2.2	1.2.2	59	59.5	59.5	62.9
Information and Monitoring	1.2.3	1.2.3	77	76.3	77.1	78.2
Assessment of Stock Status	1.2.4	1.2.4	84	84	85.3	89.5

*Some changes are due to consolidation and adjustments to the MSC Standards

Summary of P3 Averages

RFMOs	Dec. 2013	Mar. 2015	Dec. 2016 (from 2016-19 report)
ICCAT	77.3	73.8	84.2
WCPFC	85	84.6	84.6
IATTC	83.6	83.5	82.7
IOTC	76.4	78.5	81

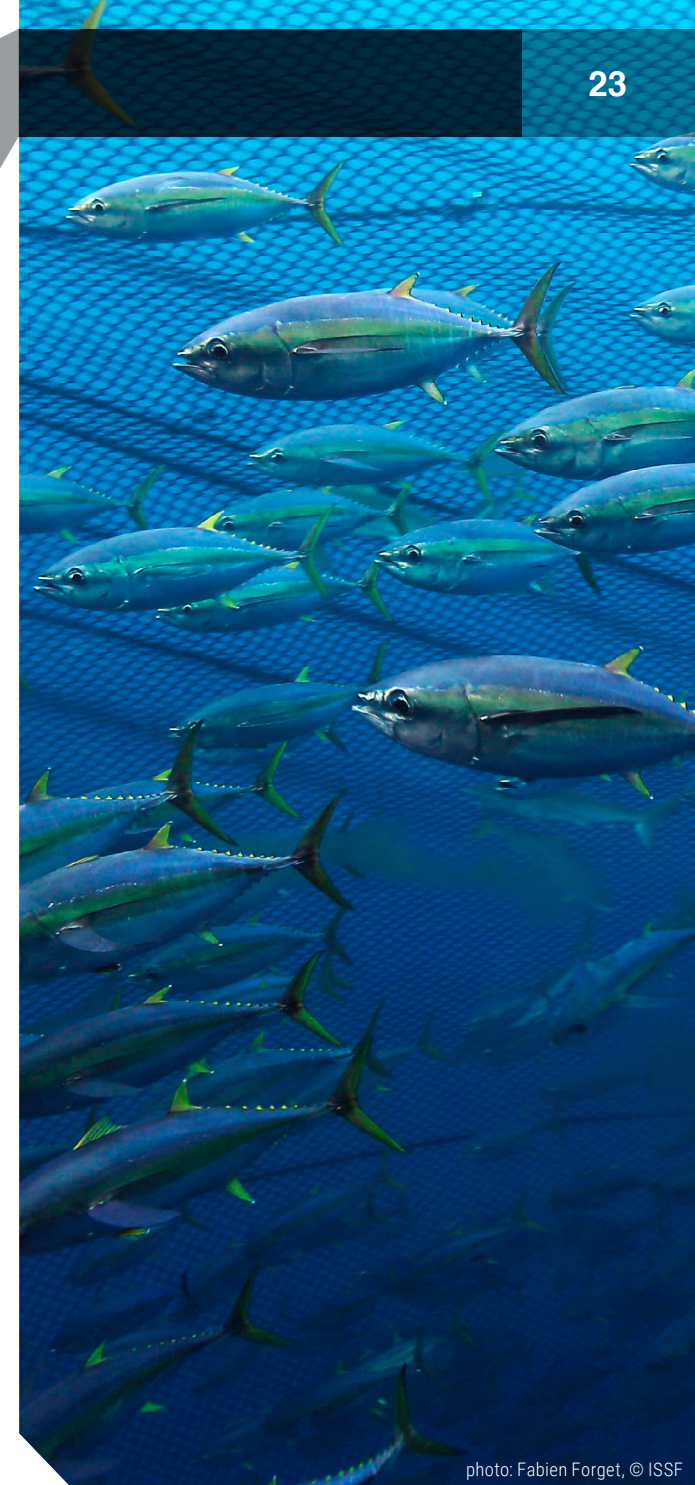


photo: Fabien Forget, © ISSF







ADVOCACY

BEST PRACTICES
Better Solutions

Priorities & Outcomes

ISSF's advocacy outreach is firmly rooted in facts – findings, studies and best practices often identified by our collaborative research. Backed by the latest tuna science and analyses, our efforts reach three oceans, four tuna RFMOs, many of the world's major food retailers and foodservice groups, Marine Stewardship Council (MSC) client fisheries, global tuna fishing fleets, regional organizations, national governments, and we collaborate with the world's leading ocean non-governmental organizations (NGOs).

2016 ADVOCACY BY THE NUMBERS

- 220**  **Letters** from ISSF participating companies advocating for specific priorities
- 13**  **Blogs written** in advance of and/or after RFMO meetings to further advocate for ISSF-supported positions
- 10**  **Retail and foodservice** companies, working with ISSF & Environmental Stakeholder Committee members, sent more than 180 letters advocating for progress on harvest strategies and other priority issues
- 4**  **Side events** in which ISSF participated in conjunction with RFMO meetings to address specific tuna issues
- 4**  **Joint RFMO advocacy letters** and statements in which ISSF participated, along with as many as 20 supportive NGOs & stakeholders, as well as 7 joint statements made during RFMO meetings
- 4**  **Formal position statements** – one for each RFMO meeting – developed by ISSF in 2016

And the impacts of our collaborative work are equally as broad – since tuna fisheries sustainability is complex and multifaceted, so too is our approach.

ISSF
Priorities
Reflected in

= **45**

**adopted RFMO
Conservation Measures
or Policies**

A Closer Look

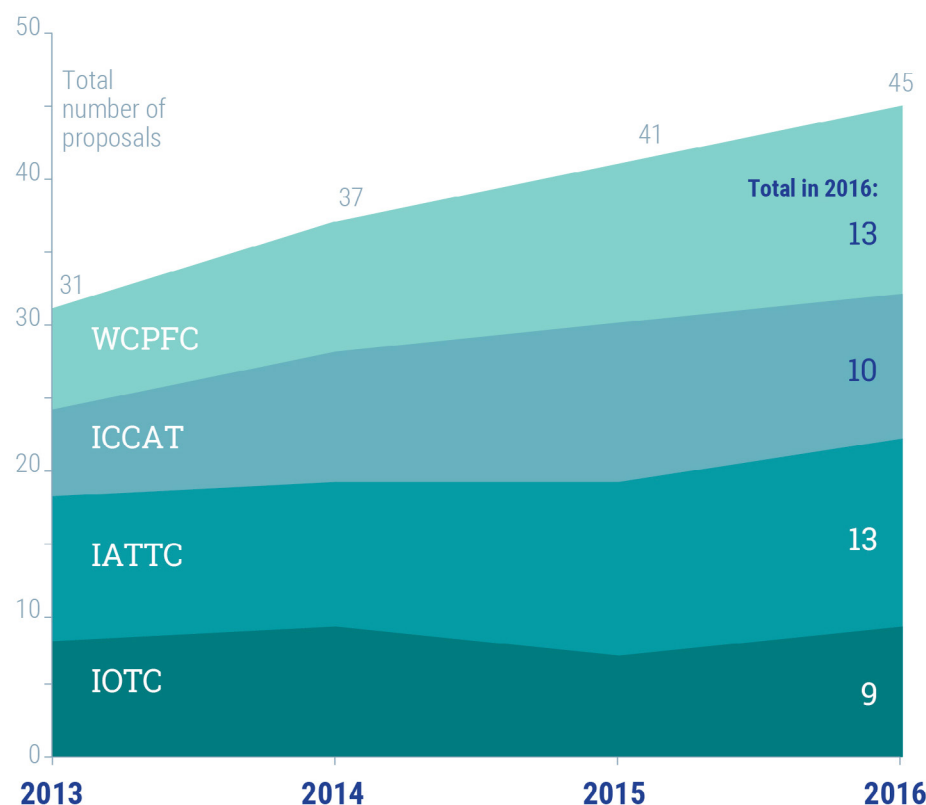
How are Regional Fisheries Management Organization (RFMO) conservation measures or policies progressing in key tuna conservation categories identified by ISSF?

ISSF and its partners cooperate with and support Regional Fisheries Management Organizations (RFMOs), and vigorously advocate to RFMO members, for the adoption and implementation of science-based management measures – so that tuna stocks and their ecosystem are managed comprehensively and sustainably.

Our advocacy priorities include:

- Implementation of rigorous harvest strategies, including harvest control rules (HCRs) and reference points
- Effective management of fleet capacity, including developing mechanisms that support developing coastal state engagement in the fishery
- Science-based FAD management & non-entangling FAD designs
- Increased member compliance with all measures adopted, and greater transparency of processes reviewing member compliance with measures
- Strengthened Monitoring, Control and Surveillance (MCS) measures and increased observer coverage, including through modern technologies such as electronic monitoring and e-reporting (EM/ER)
- Adoption of best-practice bycatch mitigation and shark conservation and management measures

RFMO Proposals Tabled/Adopted Consistent with ISSF Priorities (2013-2016)



ADVOCACY

BEST PRACTICES
Better Solutions

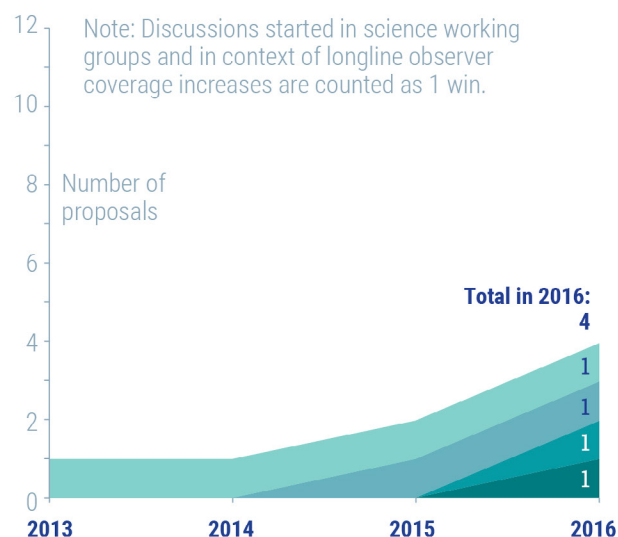
A Closer Look / part 2

How are Regional Fisheries Management Organization (RFMO) conservation measures or policies progressing in key tuna conservation categories identified by ISSF?

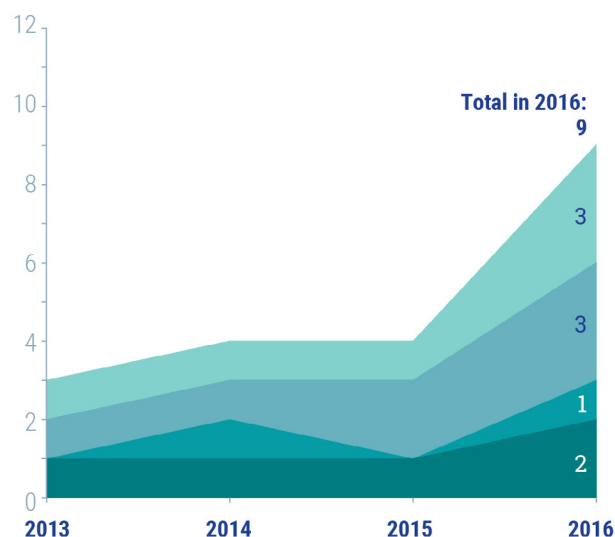
Key:

- WCPFC
- ICCAT
- IATTC
- IOTC

RFMO Progress on Electronic Reporting and Electronic Monitoring (EM/ER) Proposals (2013-2016)

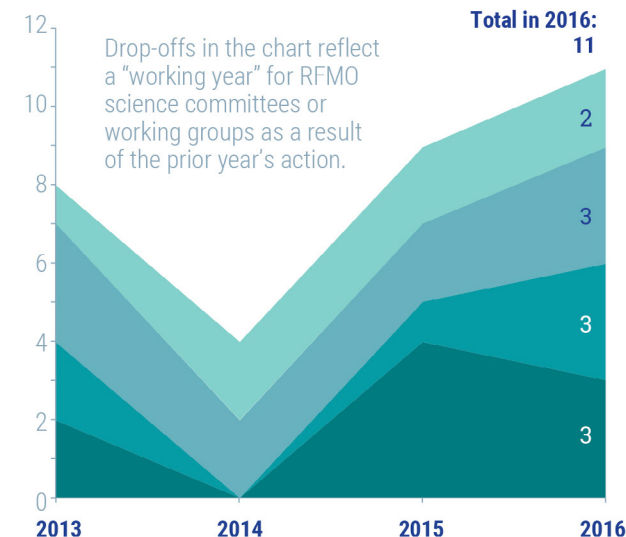


RFMO Progress on Harvest Control Rule (HCR) Proposals (2013-2016)



RFMO Progress on FAD Proposals (2013-2016)

Note: FAD data collection, FAD management, the FAD working groups, supply vessels, and non-entangling FADs are counted as separate wins.



ADVOCACY

BEST PRACTICES Better Solutions

Activating the Market

ISSF recognizes the vital role the market plays in our efforts toward sustainable tuna fisheries. ISSF continued growing our outreach among retailers in Europe, North America and Africa in 2016, including more than 60 direct meetings, with encouraging results – leading companies are engaging with their supply chains to encourage implementation of best practices to advance tuna sustainability.

Importantly, 2016 marked an uptick in market support for and engagement with ISSF's advocacy work – demonstrating ISSF's growing success at activating the power of the market. In addition to the 10 retailers/

buyers that sent 182 ISSF advocacy letters and position statements to RFMOs, five new U.S. retailers used the ISSF model letter to appeal to the Western and Central Pacific Fisheries Commission on action toward harvest strategies.

In Europe ...

- 3 new buyers incorporated ISSF conservation measures and/or the PVR in their tuna sustainability and sourcing considerations, bringing the total number of retailers doing so to 16
- Meetings with most major retail and foodservice operators through direct meetings, including jointly with major NGOs
- Conducted two Sustainability Forums with retailers in the United Kingdom and France, as well as four sustainability workshops with three European retailers

In North America ...

- 16 buyers incorporated ISSF conservation measures and/or the PVR in their tuna sustainability and sourcing considerations – representing more than 75% of the U.S. private label tuna business
- Meetings with most major retail and foodservice operators through direct meetings, forums and workshops

In 2016, ISSF hosted 2 retailer forums in London & Paris



ISSF is pleased that **6 of the top 10** and **12 of the top 25 global retailers** are incorporating ISSF [conservation measures](#) and/or the [ProActive Vessel Register](#) in their seafood sourcing guidelines or policies.

More than 30 retailers

have now incorporated ISSF conservation measures and/or the PVR in their sourcing considerations.



* Casino and Tous Les Jours brands

ADVOCACY

BEST PRACTICES Better Solutions

Collaborating with NGOs

ISSF continues to strengthen engagement with environmental non-governmental organizations (NGOs) focused on tuna.

We worked collaboratively to promote awareness of science-based approaches to sustainable tuna fisheries as well as to advance coordinated market outreach efforts and harmonized advice on tuna. Among initiatives in 2016, ISSF:

- Hosted 4 successful industry and NGO Roundtables in Asia, which helped a key segment of the industry that are not yet participants in ISSF, and an important geography, better understand ISSF, RFMOs, the value of working with us, and the bigger picture of sustainable tuna
- Participated in 2 meetings of environmental NGOs — supported by the Gordon and Betty Moore Foundation — focused on tuna sponsored by Monterey Bay

Aquarium to develop harmonized tuna asks of the foodservice sector

- Hosted 2 in-person meetings of the [ISSF Environmental Stakeholder Committee \(ESC\)](#)
- Hosted coordination calls with members of the ESC and other NGOs in advance of each of the four tuna RFMO meetings

Engaging the Vessel Community

Outreach to tuna fishing fleets and the associations that represent them marked continued progress toward our goal of growing implementation of science-based sustainability practices on the water.

To this end:

- ISSF met more than 70 times in 2016 with members of the vessel community.
- Vessel community representatives were presenters at ISSF-hosted/supported side events at RFMOs.
- Four vessel associations signed onto one or more of joint advocacy letters sent to RFMOs.
- Outreach fleets in South America and China resulted in new fleets attending ISSF Skippers Workshops held in these locations for the first time.
- 3 fleets participated in ISSF research cruises.

In 2016, ISSF further strengthened engagement with tuna fleets via outreach to longline fishing vessels, increasing awareness of our tools and initiatives and encouraging best practices on the water by this important gear type. Importantly, 36 new longline vessels joined the [ProActive Vessel Register](#) in 2016.

COMMON GROUND



In 2016, **RFMO Statements**
from **13+ NGOs** showed alignment on
80% of Topics
for which ISSF also advocates

80%



photo: Jeff Muir, © ISSF

TRANSPARENCY & COMPLIANCE

BEST PRACTICES
Better Solutions

Raising the Bar

Transparency underpins all of the initiatives we tackle, and all of the collaborative efforts we undertake – we are not only committed to making a difference but also to clearly demonstrating ongoing improvement in meeting that commitment.

Conservation Measures & Compliance

ISSF Participating Companies commit to conform to a series of conservation measures designed to facilitate continuous improvement across global tuna fisheries, and to reflect each company's commitment to driving positive change.

>> View ISSF Conservation Measures

In 2016, companies made continued progress in conformance with ISSF Conservation Measures.

MRAG Americas conducts independent third-party auditing to assess and report compliance based on a rigorous compliance [audit protocol](#).

■ Conformance

Company can provide evidence of full compliance

■ Minor Non-Conformance

Company does not fully comply with a particular conservation measure or commitment, but this does not compromise the integrity of ISSF initiatives

Example: Participating Company submitted RFMO data beyond the stated deadline

■ Major Non-Conformance

Company does not comply with a particular conservation measure or commitment and this compromises the integrity of ISSF initiatives

Example: Participating Company did not submit RFMO data

2016 COMPLIANCE RESULTS (28 COMPANIES AUDITED)

AUDIT RESULTS

All companies; across all measures

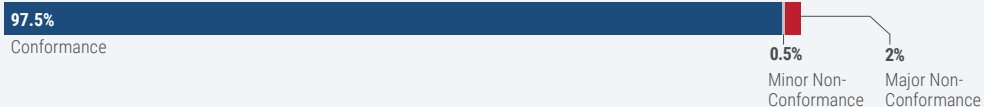


photo: Fabien Forget, © ISSF

TRANSPARENCY & COMPLIANCE

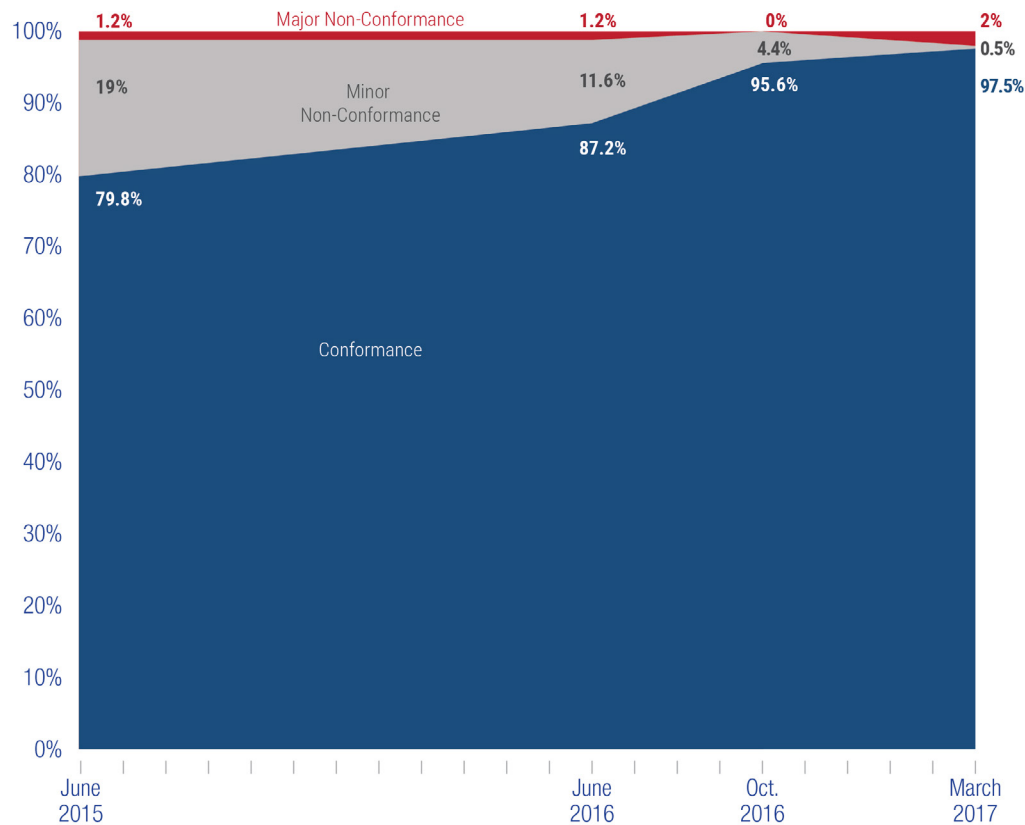
BEST PRACTICES
Better Solutions

Compliance by Company

In response to requests for deeper information, ISSF is publishing individual compliance reports for each participating company.

[>> Download Full Individual Company Compliance Audit Reports](#)

CHANGE OVER TIME: AGGREGATE COMPLIANCE ALL COMPANIES



Date Data Reported



photo: Fabien Forget, © ISSF

TRANSPARENCY & COMPLIANCE

BEST PRACTICES Better Solutions

Compliance by Conservation Measure

The following chart shows aggregate company compliance by individual conservation measure:

[>> Download the full 2016 Audit Results](#)

[>> ISSA Compliance Policy](#)

COMPLIANCE BY MEASURE, 28 Companies

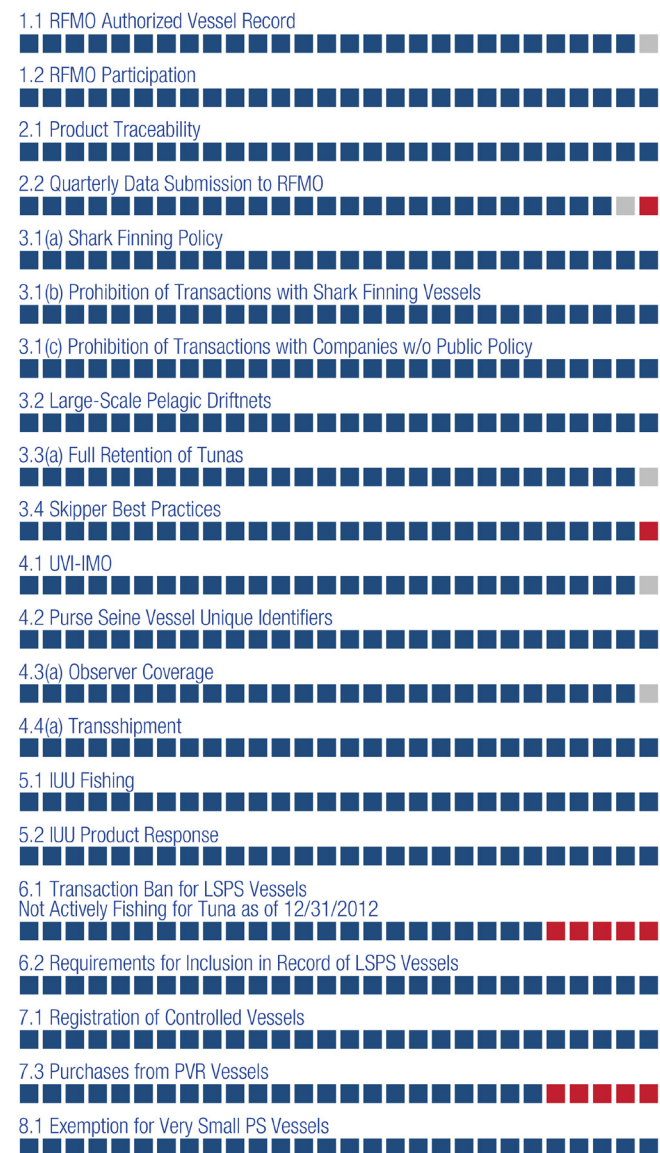


photo: David Itano © ISSF

ISSF 2016



www.iss-foundation.org

601 New Jersey Avenue NW
Suite 220
Washington, D.C. 20001
United States

Phone: + 1 703 226 8101
info@iss-foundation.org

