

Workshop Summary

June 30th and July 1st, 2021

Purpose: Amplify the impacts of illegal, unreported and unregulated fishing (IUU-F), identify networks, and create a better understanding of resources provided by Global Fishing Watch (GFW) to address IUU fishing.

Executive Summary: From June 30th - July 1st, 2021 Florida International University (FIU) Jack Gordon Institute for Public Policy (JGI) alongside Global Fishing Watch (GFW) hosted a virtual IUUF workshop over two half days. The event's sessions can be viewed below:

<https://www.youtube.com/playlist?list=PLb0XJybOSgVgIZeKmXqRLwEst4ZgFSID6>,

The workshop included moderators and panelists from FIU, GFW, and the International Monitoring, Control, and Surveillance (IMCS) Network with two and a half sessions done in Spanish to accommodate for Latin American attendees. Conducted over two days, the workshop highlighted many of the gaps in international maritime law, policy and enforcement, and resources, as well as resources that are available to address challenges in the IUU fishing environment. The conference also emphasized the need for international cooperation, collaboration, leveraging emerging technology, and data transparency in order to successfully address the issue of IUU fishing. Over the course of both days the workshop had over 300 attendees from 39 countries across the Caribbean, Central America, South America, Asia, and East Asia. This workshop also comes as part of a growing partnership FIU is cultivating with Global Fishing Watch and the IMCS Network.

Background: By undermining international agreements and fisheries conservation measures, IUUF jeopardizes global food security, with pronounced destabilizing effects on vulnerable coastal states. IUU-F robs legal fisheries of their livelihoods and costs the region about \$2.7 billion annually, endangering the economic security of all nations with maritime boundaries. Distant Water Fishing (DWF) Fleets often carry out industrial-scale fishing in irresponsible and aggressive ways that undermine the rights of nations to exercise their sovereignty and economically undermine their marine resources. These and other illegal fishing fleets are minimally held to account for their irresponsible/illicit maritime behaviors and violations of the international rules-based order. This erosion of the rule of law also opens the door for transnational criminal organizations to profit from IUUF and associated illegal activity such as human rights implications (e.g. forced labor, sea slavery, illicit smuggling, murder) implications. IUUF and associated criminal activity impact U.S. national security interests and those of countries throughout the Western Hemisphere.

DAY 1

Session 1: “Fishing for Security”

Session Participants: [Daniel Schaeffer](#) (PEW Charitable Trusts), [Bruce Vitor](#) (FIU Jack D. Gordon Institute for Public Policy)

Key Points

- Challenges with IUU Fishing begin with the need for an agreed definition of IUU fishing by Latin American Nations in order to enforce laws and hold malign actors accountable.
- Capacity challenges also exist to policy nation's exclusive economic zones (EEZs) and the enormous maritime areas of interest, requiring greater cooperation, engagement, and sharing of information between countries, such as implementation of ship rider programs and joint military exercises.
- Data takes many forms and the ability to collect data through traditional intelligence, surveillance, and reconnaissance continue to improve
- The ability to analyze and interpret large amounts of data must also improve as well as the ability to share information more freely to take action
- Legal frameworks exist at the international and regional level, but implementation and enforcement require increased monitoring and political will
- Cooperative enforcement activities across national boundaries are limited by existing or absence of cooperative agreements
- Lessons learned from other regions, such as the east African regional task force Fish-I Africa offers examples of operational partnerships that can overcome such challenges
- In the Pacific, the Niue Treaty Subsidiary Agreement is also an example of a comprehensive framework to address maritime threats
- IUU fishing requires increased dialogue between law enforcement agencies, academia, and think tanks.

To view this presentation from June 30th, 2021 in its entirety, please click below:

 [Fishing For Security by Daniel Schaeffer - IUU Fishing Informational Workshop](#)

Session 2: GFW Transparency and Government Affairs Program (Spanish Session)

Session Participants: [Monica Espinoza Miralles](#) (Global Fishing Watch)

Key Points:

- Transparency is crucial for good stewardship of our global ocean – to fight illegal fishing, to protect fish stocks and livelihoods, and to increase the safety and well-being of fishers.
- By 2022, GFW would like to:
 - obtain commitments from 20 countries to publish vessel tracking data in the GFW fishing vessel portal.
 - Track large-scale, industrial vessels responsible for 75% of the global marine catch.
 - Extend our tracking and analysis capabilities to cover:
 - Small-scale fisheries;
 - Identification of labor abuse risks.

- Benefits to countries who become “Transparency Partners” with GFW:
 - Sovereignty and confirmation of Maritime Border Integrity: track foreign fleets;
 - Export revenue: avoid yellow card;
 - Budget savings: reduce enforcement cost;
 - Port capacity: faster inspections;
 - Maritime security: quickly narrow search for IUU vessels;
 - Environment and tourism: more effective protection of marine resources;
 - Political support: protect domestic fish and jobs.
 - Partnering with GFW allows governments to prioritize the use of their patrol vessels and port inspections and maximise the efficiency of their resources.
 - Our analysis can be provided to governments and enforcement agencies to enhance their monitoring, control and surveillance (MCS) efforts of their flagged vessels and waters (including fisheries and marine protected areas).
 - This is especially helpful to governments that have limited MCS and enforcement capacity themselves (e.g. developing States), or large exclusive economic zones (e.g. small island developing States).
 - By sharing their data on the GFW public map, countries demonstrate international leadership on ocean governance.
 - Create a private and personalized workspace
 - Ship geolocation data published on the GFW public map is delayed 72 hours and redacted
 - Provide analysis and reports on vessel tracking data
 - Training on how to interpret vessel tracking data using our online tools

Bottom Line:

Transparency drives better compliance.

Transparency is a cost effective way of achieving global monitoring and control.

Every country benefits from transparency because compliance as a whole is improved.

Enforcement through traditional means is not affordable and is therefore not ubiquitous.

To view this presentation from June 30th, 2021 in its entirety, please click below:

 [Programa de Transparencia y Asuntos de Gobierno de Global Fishing Watch](#)

Session 3: A Discussion with the Thought Leads from GFW, IMCS Network, and FIU on Maritime Security and IUU Fishing

Session Participants: [Vincent Nguyen](#) (Global Fishing Watch), [Tony Long](#) (Global Fishing Watch), [Mark Young](#) (IMCS Network), [Bruce Vitor](#) (FIU Jack D. Gordon Institute for Public Policy)

- A lively and honest moderated panel session between Vincent Nguyen, GFW U.S. Government Liaison Officer with: Tony Long (CEO of GFW); Bruce Vitor (Director of Research and Innovation FIU JGI); and Mark Young (Executive Director IMCS Network) regarding emerging issues and critiques in the IUUF space.

Questions & Answer (*Script abbreviated to the first three questions):

- **Question 1:** *We heard from Dan Schaeffer (FIU JGI Non-Resident Scholar) as to the issue of “Fishing for Security”.... Mark - how is the IMCS Network helping to combat IUU fishing?*

- **Answer 1 (Mark Young):** The IMCS Network directs its efforts to help combat IUU fishing towards addressing “the four C’s:”

Communication:

Maintaining a website to support members with sharing information on IUU fishing by disseminating information related to efforts of the Network and successes of its members in combating IUU fishing
Coordinating Global Fisheries Enforcement Training Workshop – only international conference focused on fisheries MCS that brings together MCS practitioners from around the world to share knowledge and experiences and solve challenges in their work – in fact, we have a virtual workshop happening in just two weeks – I encourage everyone go to our website and register to participate.

Coordination:

Expanding our membership and offering or developing opportunities for members to work more closely together – such as supporting a regional Strategic Risk Assessment on IUU fishing for Costa Rica, Panama and Ecuador who are looking to work together to combat IUU fishing.

Collaboration:

Expand Network relationships, especially with non-governmental organizations such as Global Fishing Watch, Vulcan and Trygg Mat Tracking and work with them to provide greater access to resources to address illegal fishing, especially in developing countries where there are limited resources or capacity to respond to illicit activity

Capacity-Building:

Not that the Network conducts all manner of MCS capacity-building – but more facilitating opportunities for members to receive MCS training – especially in areas of limited capacity. We also coordinate MCS Equipment Exchange Program and maintain a Register of Vetted MCS Experts that can assist members in all forms of MCS needs.

- o **Question 2:** Public data - this is something that can often be challenging to countries - how is GFW leveraging public data to combat IUU fishing? Who are your new partners?

- **Answer 2 (Tony Long):** Public data is perceived to be a challenge in many fora, but it is also clear that there is a realisation that shared data, especially in the public domain can have very beneficial impacts. There are groupings within the military community that are working to use unclassified and public data for the benefits of maritime security collaboration and I can touch on that later - until recently we have focused on shining a light on the activities of fishing vessels globally.

We are doing that in two ways - encouraging data sharing and encouraging the use of that data.

We are gaining momentum - Indonesia was the first country to share proprietary data with GFW to be published to our map, and Minister Susi did this because she wanted to be clear that transparency of activity is the healthy way to fight corruption and illicit activity while being clear as to the sustainable fishing of their resources. Since that point, Peru, Chile, Costa Rica, Panama, Ecuador, Belize and Brazil have committed or shared. We are now seeing our first wave of African countries seeking MOUs and we are steadily building key partnership in SE Asia and the Western Pacific. The real value of public data is the 'crowd source' effect - that this data is driving powerful research to drive better policies or uncover illegal activity not just by our analysts but all the authorities that can access our free to use map and data.

Traditionally we have worked with the fisheries department within government and research agencies but we are seeing increasing opportunities with new partners like the US Coastguard, the Ecuador Navy, and the Ghana Navy.

- o **Question 3:** Bruce, you were at US SOUTHCOM prior to coming over to FIU to help support innovation at the FIU Jack Gordon Institute. FIU is a validated academic partner with US SOUTHCOM and your team was just engaged with Florida's highest politicians that have a say on what happens with the DoD. During your talks about your SRH, your relationship with SOUTHCOM, and your current position at FIU JGI: What can DoD and USG do to get more involved with IUUF?

- **Answer 3 (Bruce Vitor):** USG as a whole recognizes the global impacts of IUUF. Here are the different pillars that make up their participation thus far and ongoing:

Security: IUUF is one of the top three threats communicated consistently by all coastal nations in the region (along with cyber and fighting transnational criminal organization (TCO) networks)

Global Impacts: IUUF is a global issue with significant regional impacts: human rights, environment, sovereignty, economic development, security, cybersecurity, and TCOs

Economic Impacts: 2/3 of the planet is underwater; 56 million people work at sea; 50% of world's oxygen produced from ocean, 50% of protein in diets comes from ocean; IUUF is 6th largest illicit activity (\$15-36 billion annually)

Environmental Impacts: estimated that 1 in 5 fish Americans eat is illegally caught (Urbina congressional testimony); every 3 years the equivalent of the BP and Exxon Valdez oil spills are intentionally dumped into the oceans

Criminal Activity and Corruption: murder, sea slavery, instability caused by maritime thievery, illegal whaling, seafarer abandonment, tax evasion, and document fraud

Information: public opinion can pressure the industry to do the right thing
Actions being taken to improve visibility and transparency of IUUF, as well as big data collection/analysis, and greater understanding of the onshore network of IUUF not just the vessels on the water:

Governance/Enforcement: monitor vessels while in international waters; hold flag states accountable for enforcing regulations; close port access to entities/agencies that cannot provide responsible practices (UN FAO PMSA).

Cooperation: data should be constantly shared and published across sectors; requires a network-based approach

Technology and Training: technology exists for greater visibility and transparency; Technology is not silver bullet though, and underdeveloped countries need training, resources and technology to assist in broader issue

Private Industry: greater need for transparency and accountability in the 360 degree industry (from bait to plate); what happened with the “sweatshop” industry needs to happen with the fishing industry

Some examples of “Next Steps” being taken by USG in cooperation with partner nations, as well as non-profits and private industry (USCGC Stone is a very visible effort by USCG/USG but many other efforts to improve cooperation and understanding):

Maritime Information Sharing – South Atlantic (MIS-SA) Ocean: Beginning in FY21, MIS-SA will compliment current Monitor, Control, and Surveillance (MCS) data sharing as a more formalized process to improve regional maritime domain awareness (MDA) to counter IUUF (e.g. Chinese Distant Water Fishing Fleet) and Transnational Organized Crime illicit activity in the Maritime Domain and associated infrastructure.

Pilot participants: USA (NMIO, Navy, USCG, NOAA), BRA (Maritime Fusion Center, Naval Center of Operations), URY (Naval Intelligence Chief of Staff), ARG (Prefectura Naval Intelligence Center), and INTERPOL (2 analysts from the Regional Offices in ARG).

FIU Security Research Hub SRH / SOUTHCOM Enhanced Domain Awareness (EDA) Initiative: FIU’s SRH/EDA is an unclassified, open-source, virtual community and platform focused on the security challenges most critical to Latin America and the Caribbean.

Challenges Identified during the IUUF Conference that SRH will address: 1) analysis of big data; 2) need for greater collaboration, information sharing, visibility, and transparency; and 3) enhancement of domain awareness


DOS Regional Environment Hub IUUF Lecture Series: (Mar, Apr, May)
The San Jose Regional Environment Hub is organizing a three-part virtual U.S. Speaker series on IUUF to identify and discuss current barriers and challenges target countries face for improved fisheries management (licensing, permitting, marine spatial planning); highlight opportunities, best practices and lessons learned along the entire law enforcement chain, including examples of successful investigation and prosecution of IUUF offenders; and, identify concrete opportunities to establish or strengthen mechanisms and platforms for regional cooperation in Latin America in order to improve monitoring, control and surveillance measures. The three virtual events will be spread out over three months with the first event taking place in March.

FIU IUUF Workshops: Along with launch of SRH/EDA in Jun, FIU will run a series of workshops this summer (Jun-Sep) on certain security challenges, to include IUUF, in order to increase understanding and action on the challenges, as well as improve understanding of data, imagery, and analytic tools available on the SRH/EDA.

South American Strategic Intelligence Congress: SOUTHCOM J2 participates in an annual congress to discuss regional intelligence concerns with 10 South American partner nation military intelligence directors. The 2021 congress will include IUUF as a topic for discussion and collaboration to increase regional information sharing.

SOUTHCOM IUUF Working Groups: SOUTHCOM J2 (Intelligence) runs IUUF WG every 2-4 weeks to collaborate and share information among within SOUTHCOM directorates and service components, as well as other DOD entities (e.g. GCCs and NMIO) and U.S. government (USG) agencies (e.g. USCG).

To view this presentation from June 30th, 2021 in its entirety, please click below:

 [Discussion with Thought Leads on Maritime Security and IUUF - IUU Fishing Informationa...](#)

Session 4: GFW and Open-Source Maritime Domain Awareness

Session Participants: [Paul Woods](#) (Global Fishing Watch)

Key Points

What We Do:

- Make maritime data more accessible and shareable
- Support scientific research, ground all our public data in peer-reviewed papers
- Make scalable, cost-effective solutions using AI/Machine Learning
- Establish a common (public) set of “Facts on the Water”
- Bring more data into the public domain
- Open-source intellectual property (code and algorithms)
- High level of collaboration with government, academia, NGOs and industryGF

How do we apply Open Source MDA:

- Distant water fleet monitoring
- Transshipment and encounters at sea
- Marine Protected Area (MPA) monitoring
- Enforcement and patrol planning
- Data-driven communications
- Understanding activities of “dark”/ non-compliant vessels

- Forced Labor Risk Models

To view this presentation from June 30th, 2021 in its entirety, please click below:

 **Global Fishing Watch and Open Source Maritime Domain Awareness**

Day 2

Session 1: GFW Big Data & Analysis: Resources for the Global Maritime Security Community

Session Participants: [Tyler Clavelle](#) (Global Fishing Watch), [Gunther Errhalt](#) (Global Fishing Watch)

Key Points

- What are the Data Sources GFW wrangles: GFW fuses, queries, wrangles, cleans, and tells stories from Big Data emitting ocean activity at sea sources through: VMS, Radar, Optical, Infrared, and emerging collection of new signals and data such as RF.
- What are GFW's methodologies: GFW creates core datasets. These datasets are classified as follows: Fishing Effort, Vessel Database, Port Visits and Voyages, Transshipment, and Non-Transmitting Vessels aka Dark Targets.
- What are GFW's Applications: The primary goal of the GFW research & analysis team is to provide IUU fishing risk analysis to government agencies in the form of actionable reports and data products
 - GFW analysis and data support risk based tasking of fisheries patrols with live operational updates inline with intelligence cycles
 - Assist government agency to meet goals in implementing flag, coastal, port and market State responsibilities
 - New opportunities to support RFMO member States anti IUU efforts and State to State IUU cooperation (HSBI)
 - Training and capacity building in the use of GFW open source data in MCS operations
 - Create bespoke and tailored MDA platforms and/or feeds that are IUUF focused that speak to Intel and Operation analysts.

To view this presentation from July 1st, 2021 in its entirety, please click below:

 **Global Fishing Watch Big Data and Analysis**

Session 2: GFW's Public Maps and Tools

Session Participants: [Anna Sanders](#) (Global Fishing Watch), [Gisela Morinigo](#) (Global Fishing Watch)

Key Points

- Global Fishing Watch has a portfolio of free products including:
 - Map;
 - Marine Manager Portal;
 - Carrier Vessel Portal;
 - Private partner workspaces;
 - Data download portal here: <https://globalfishingwatch.org/datasets-and-code/>

We are constantly working to make our data more accessible through different functionality and formats to enable informed decision-making and unlock new possibilities.

To view this presentation from July 1st, 2021 in its entirety, please click below:

 [Global Fishing Watch Maps and Tools](#)

Session 3: New Analysis of the High Seas Squid Fleet

Session Participants: [Edaysi Bucio Bustos](#) (Global Fishing Watch)

Key Points

- In July 2021, Global Fishing Watch released an analysis of the High Seas Squid Fleet on and around the Galapagos using open data and SPRFMO reports. They have made 11 key findings that warrant action in order to improve the monitoring and control of this fleet and demonstrates that open data provides a level of understanding for the activity of the distant water squid fleet that is not otherwise available publicly through flag State or SPRFMO reported data. To see these key findings please read the reports in their entirety here:

English

<https://globalfishingwatch.org/wp-content/uploads/GFW-2021-FA-SQUID2020-EN.pdf>

Spanish

https://globalfishingwatch.org/wp-content/uploads/GFW-2021-FA-SQUID2020-EN1-3_es.pdf

To view this presentation from July 1st, 2021 in its entirety, please click below:

 [Análisis de la flota de calamar en el Pacífico Sureste](#)

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