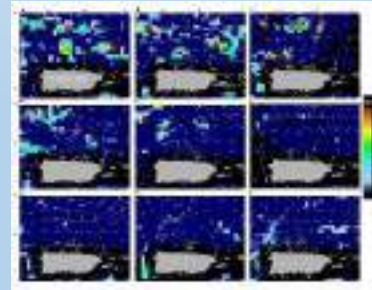
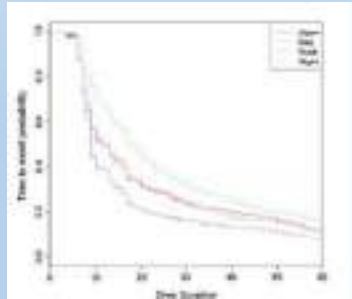
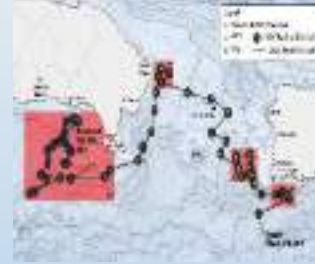


Dolphinfish Research Program



Dr. Wessley Merten

CFMC 12.5.2023

Beyond Our Shores Foundation

Dolphinfish Research Program

Newport, Rhode Island

BEYOND OUR SHORES.ORG

DOLPHINTAGGING.COM





- International citizen science mark and recapture program for dolphinfish
- Designed to collect data on movements, life history patterns, and population dynamics
- Started in 2002 – Finishing 22nd year

35,247
Tagged

97 — 91 DOL, 6 WAH
Satellite tags deployed



808
Recaptured



14
Publications

41

Total de FAD
Desplegados

20

FADs Activo

2996

Informes

1171

Fish Tagged en FADs en
el Carib

24 Surface / 17 Subsurface

2,996 trips up to
Nov 30th, 2023

As of 12.5.2023

2 Published
1 in prep

35 Satellite Tag Deployments
28 DOL, 6 WAH, 1 FAL

26 Acoustic Tag Deployments
16 DOL, 5 YFT, 3 WAH, 1 BLK, 1 FAL

51 Vessels Involved

FAD Research Program



Presentation Outline

Presentation Objective:

**Provide an update of specific data collected through the DRP
in the Caribbean Sea and WCA**

Outline:

1. Case Study 1a: Commercial Catch DR (8 min)
2. Case Study 2: Dolphinfish Movements WCA Recap (7 min)





Case Study 1a:

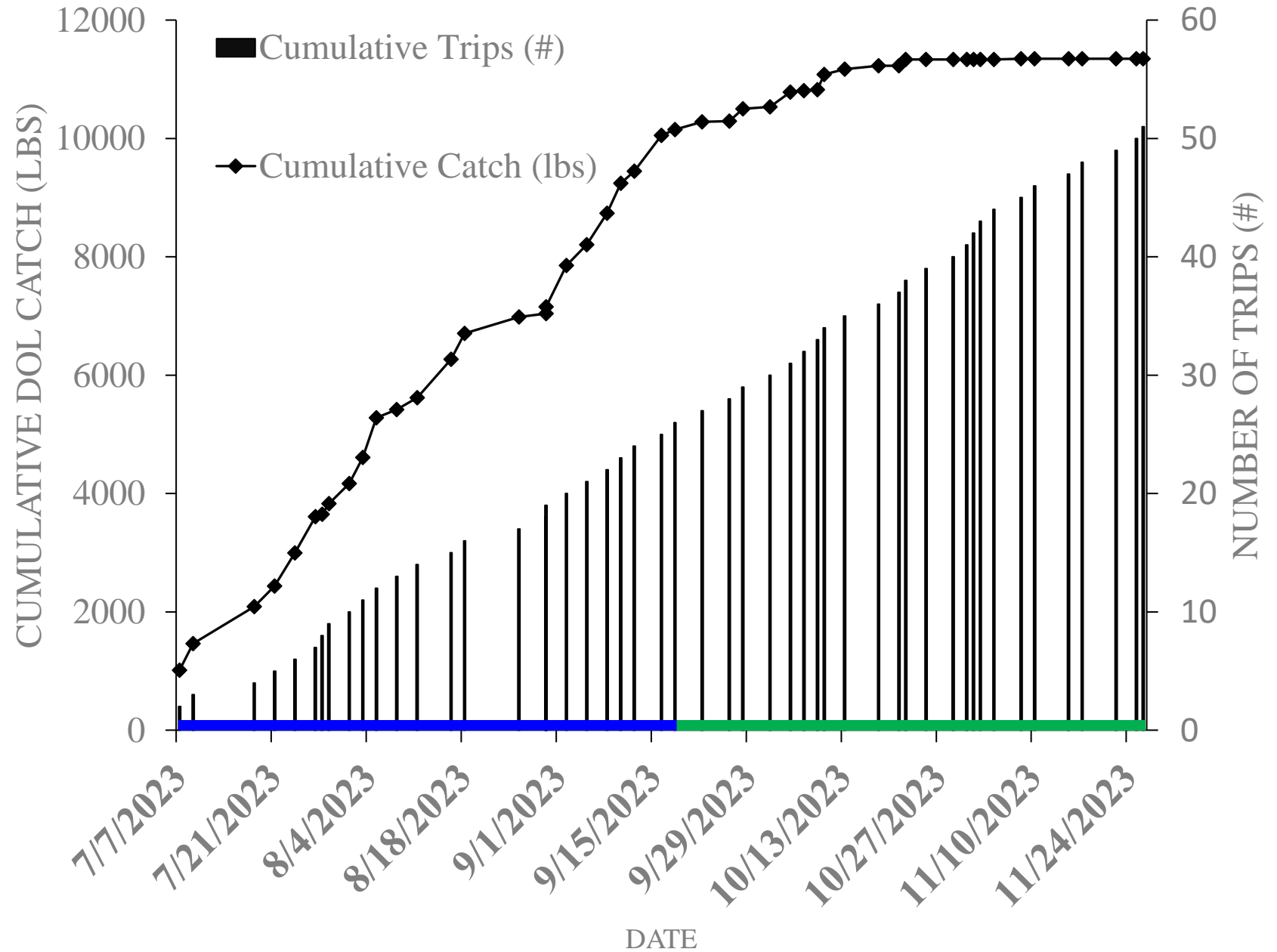
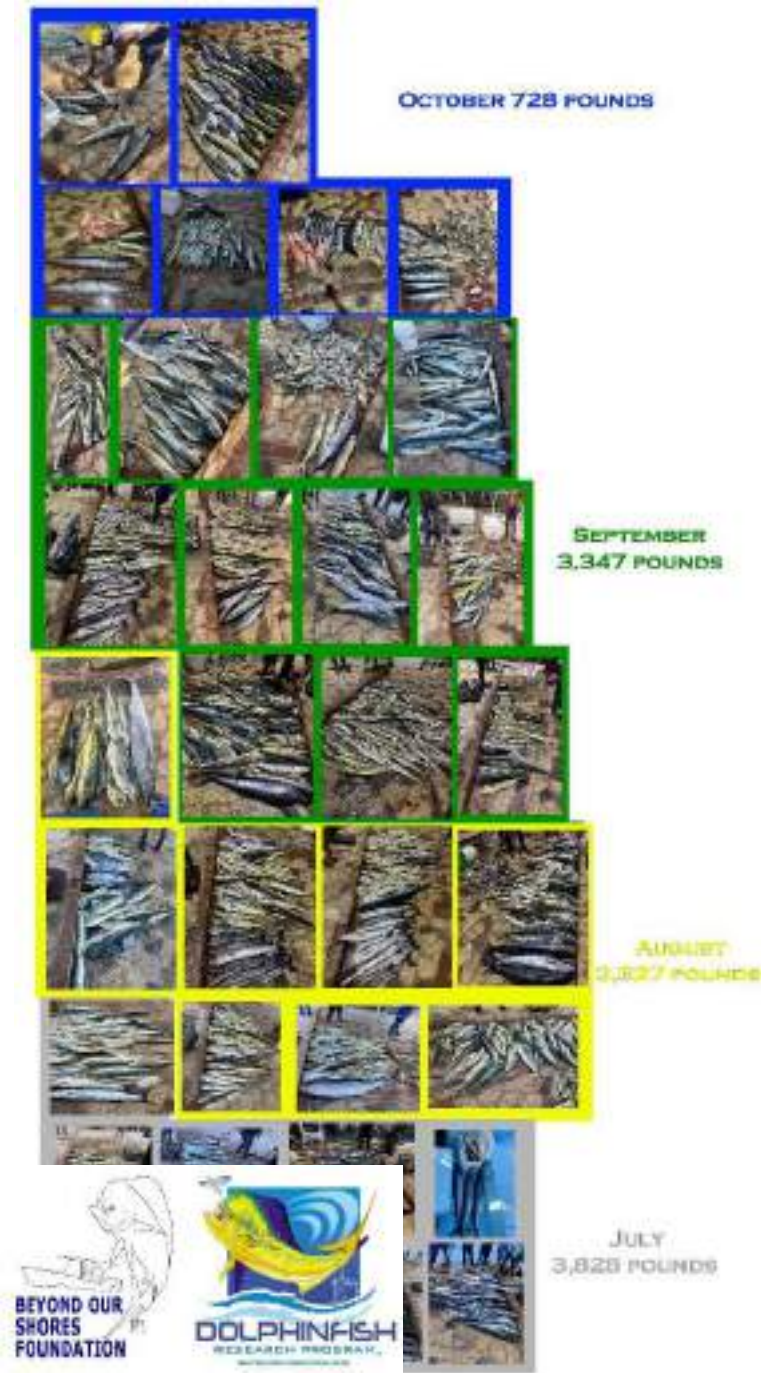
Commercial Catch:
Southern DR

July 23' to Nov 23'





Average of 416 pounds per outing for last 16 (Max: 670; Min: 40)
 5,430 pounds in 16 outings – 1 boat – southern DR



Average of 298 pounds per outing over 38 (Max: 700; Min: 12)

11,348 pounds in 38 outings – 1 boat – southern DR

10/10/2023 – 260 lbs DOL offshore

11/2/2023 – 132 lbs BUM, 120 lbs barracuda
50 lbs WAH, 30 lbs BLK coastal

11/26/2023 – 620 lbs BUM, 57 lbs WAH
6 lbs barracuda coastal





Food and Agriculture
Organization of the
United Nations

FISH4ACP

Unlocking the potential
of sustainable fisheries and aquaculture
in Africa, the Caribbean and the Pacific

Dominican Republic

FISH4ACP aims to make the mahi-mahi fishery in the Dominican Republic stronger to improve the livelihoods and working conditions for artisanal fisher folk, ensuring that growth goes hand in hand with environmental sustainability to preserve mahi-mahi for future generations of local fishers.

VALUE CHAIN AT A GLANCE

Mahi-mahi

(*Coryphaena hippurus*)



PRODUCTION METHOD

Wild caught,
artisanal

VOLUMES*

610
tonnes

VALUE*

USD
6.6 million

* estimated primary production

WHAT WE focus on

- Value chain analysis and upgrading strategy to make the mahi-mahi value chain more productive and sustainable.
- Improving mahi-mahi production, handling and marketing to increase benefits and reduce dependence on imports.
- Helping fisher associations to improve business environment and social security benefits for artisanal fishers.
- Strengthen governance and management to make mahi-mahi fishing more efficient, safer and environmentally sustainable.



Facts & figures

Mahi-mahi is fished along the southern coast of the Dominican Republic. Captures **increased** from **255 tonnes** in **2000** to an estimated **612 tonnes** in **2023**.

Mahi-mahi is a fish that grows and matures rapidly. It can be **harvested more frequently** than other species.

Fish consumption of around **8 kg** per person **per year** in the Dominican Republic is low compared to other Caribbean countries.

Mahi-mahi exports are low and go mainly to the United States, around **10.5 tonnes per year on average** between **2016 – 2021**.

FISH4ACP is an initiative of the Organisation of African, Caribbean and Pacific States (OACPS) aimed at making fisheries more sustainable.

Also known as dolphinfish, mahi-mahi is a highly appreciated food fish common to most of the world's warm and temperate seas. It is one of the principal catches of artisanal fishers in the Dominican Republic.

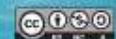
The fishery provides local fishermen with an income and is an important source of food that sells well on local markets and in the capital of Santo Domingo. Improvements to the cold chain and post-harvest handling could increase economic returns, but they require investments in human capital and the processing facilities.

FISH4ACP is supporting the Dominican Republic in making the mahi-mahi value chain, an important artisanal fishery, more productive and sustainable, making sure that benefits are shared equitably and growth does not increase the burden on the environment.

FISH4ACP is fostering social integration by working with local fisher associations and organized groups of women fish vendors. Activities seek to promote participation of artisanal fisherfolk in the value chain by improving access to loans, social security and education, and through capacity building.



This document was produced with the financial assistance of the European Union (EU) and the German Ministry for Economic Cooperation and Development (BMZ). The views expressed herein can in no way reflect the official opinion of the EU, the Organisation of African, Caribbean and Pacific States and/or the German Government.



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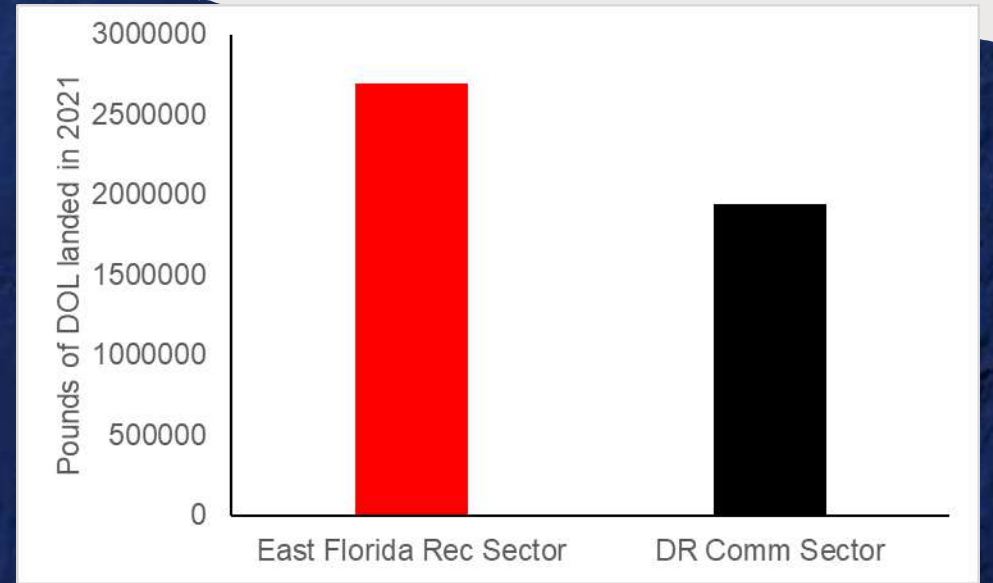
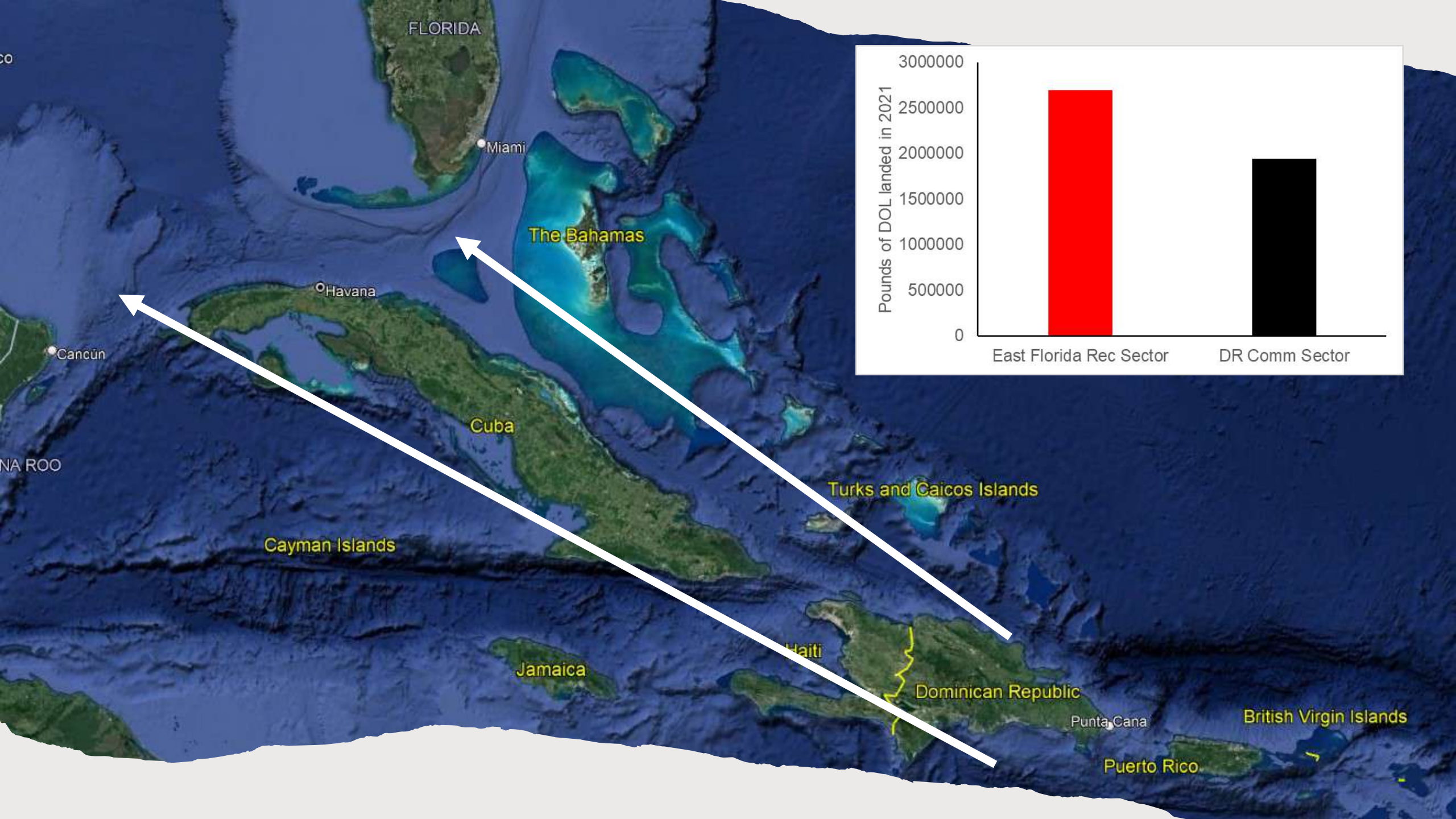
Pescadores de dorado N= 2369 (860 asociados y 1509 independientes)

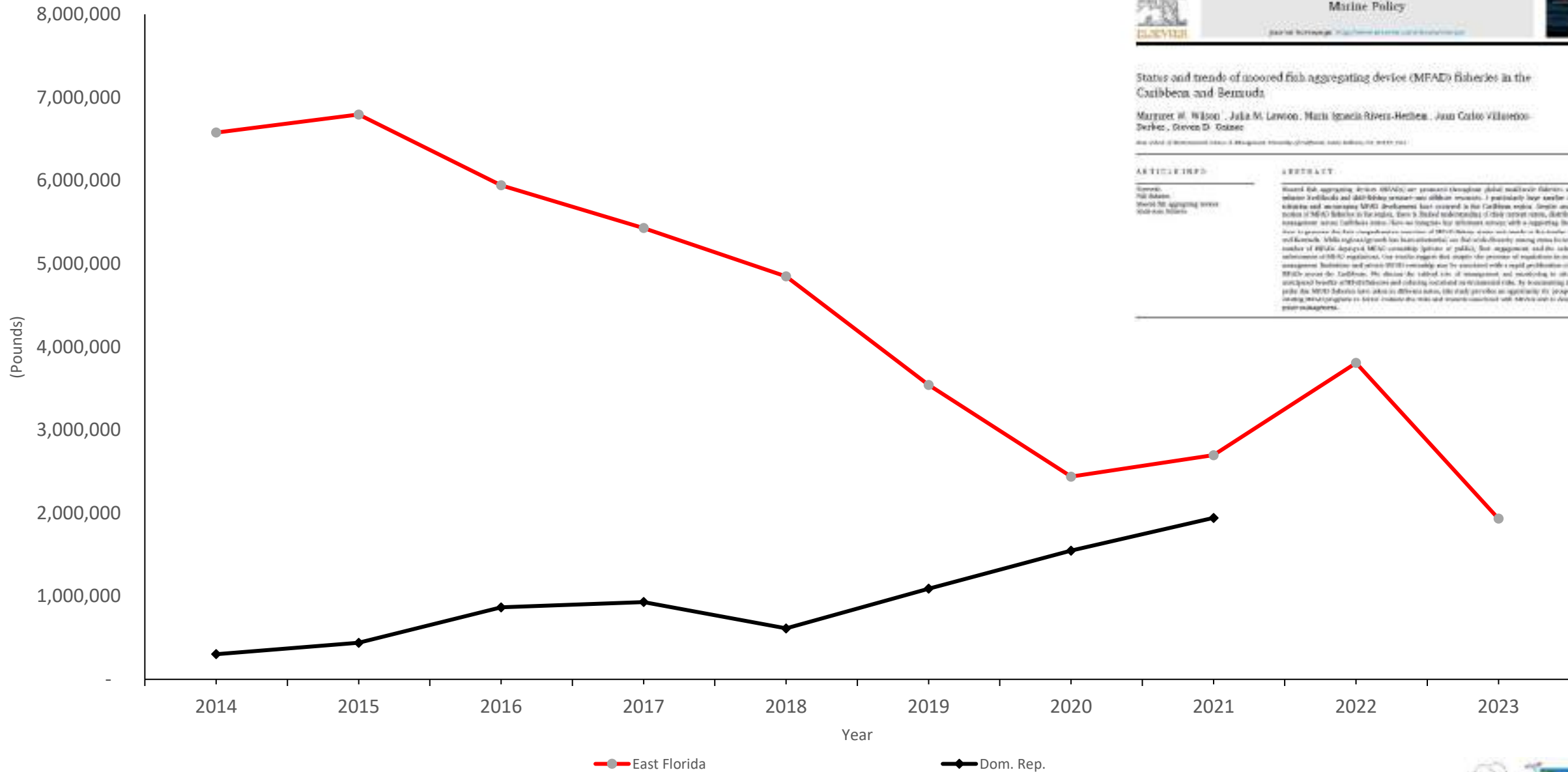
FISH4ACP@fao.org

Food and Agriculture Organization of the United Nations

BP AG, 2023
CS001261









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Marine Policy

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States and trends of moored fish aggregating device (MFAD) fisheries in the Caribbean and Bermuda

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ARTICLE INFO

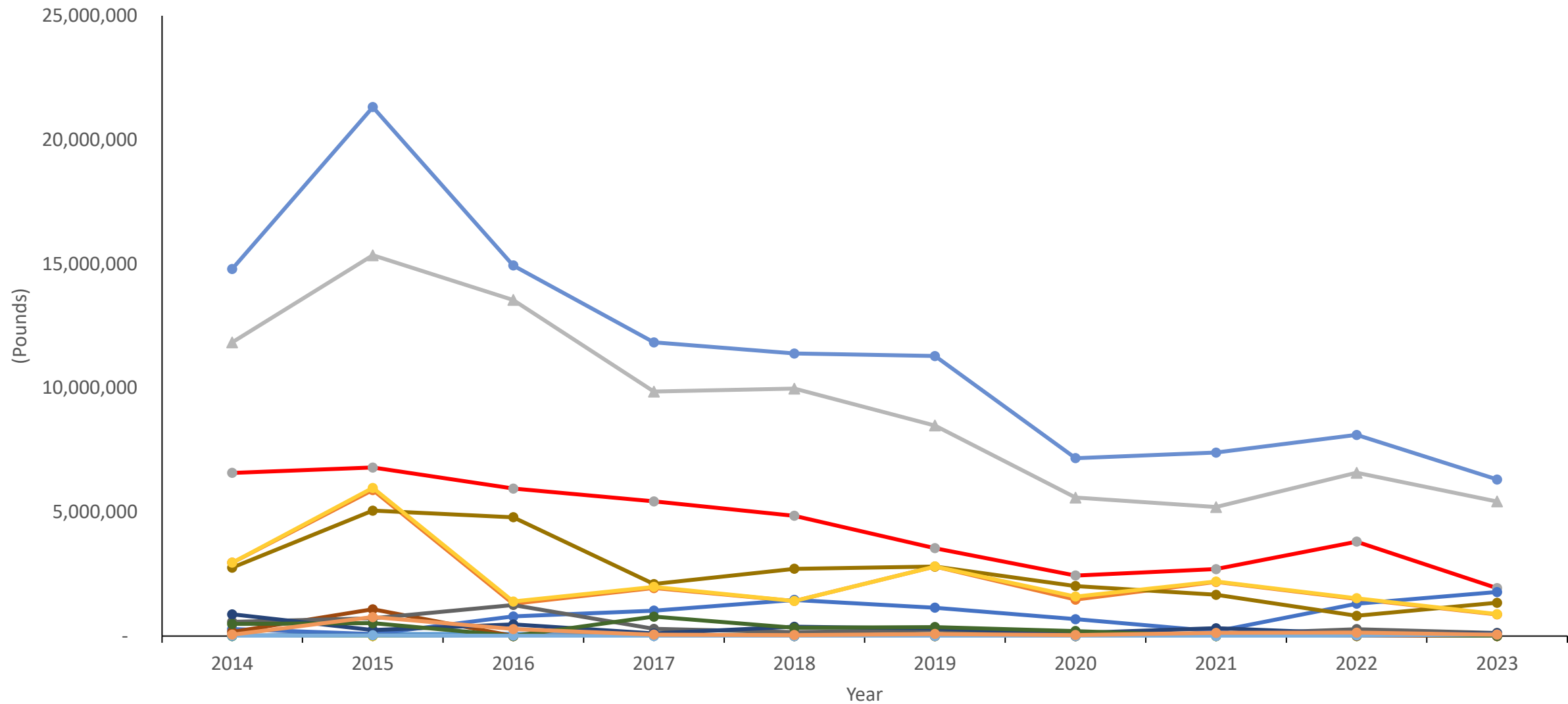
Keywords:
Fish fisheries
Moored fish aggregating device
Small-scale fisheries

ABSTRACT

Moored fish aggregating devices (MFADs) are prominent throughout global small-scale fisheries, as tools to enhance livelihoods and food-fishing services into difficult scenarios. I particularly focus on the use of moored fish aggregating devices and mooring MFAD development have occurred in the Caribbean region. Despite growing recognition of MFAD fisheries in the region, there is limited understanding of their current status, distribution, and management across Caribbean nations. Here we compile key information across with a reporting framework to assess the status and management of MFAD fisheries across small-scale fisheries in the Caribbean, Caribbean and Bermuda. While regional growth has been substantial, use has not been evenly among small-scale fisheries of the number of MFADs deployed, MFAD community (private or public), fish engagement, and the intensity and sustainability of MFAD operations. Our results suggest that despite the presence of regulations to some extent, management institutions and policies for MFAD community may be associated with a rapid proliferation of MFADs across the Caribbean. We discuss the critical role of management and monitoring in sustaining the ecological benefits of MFAD fisheries and reducing associated environmental risks. By documenting the status of the MFAD fisheries across small-scale fisheries, this study provides an opportunity to improve the management and sustainability of MFAD fisheries in the Caribbean and beyond.

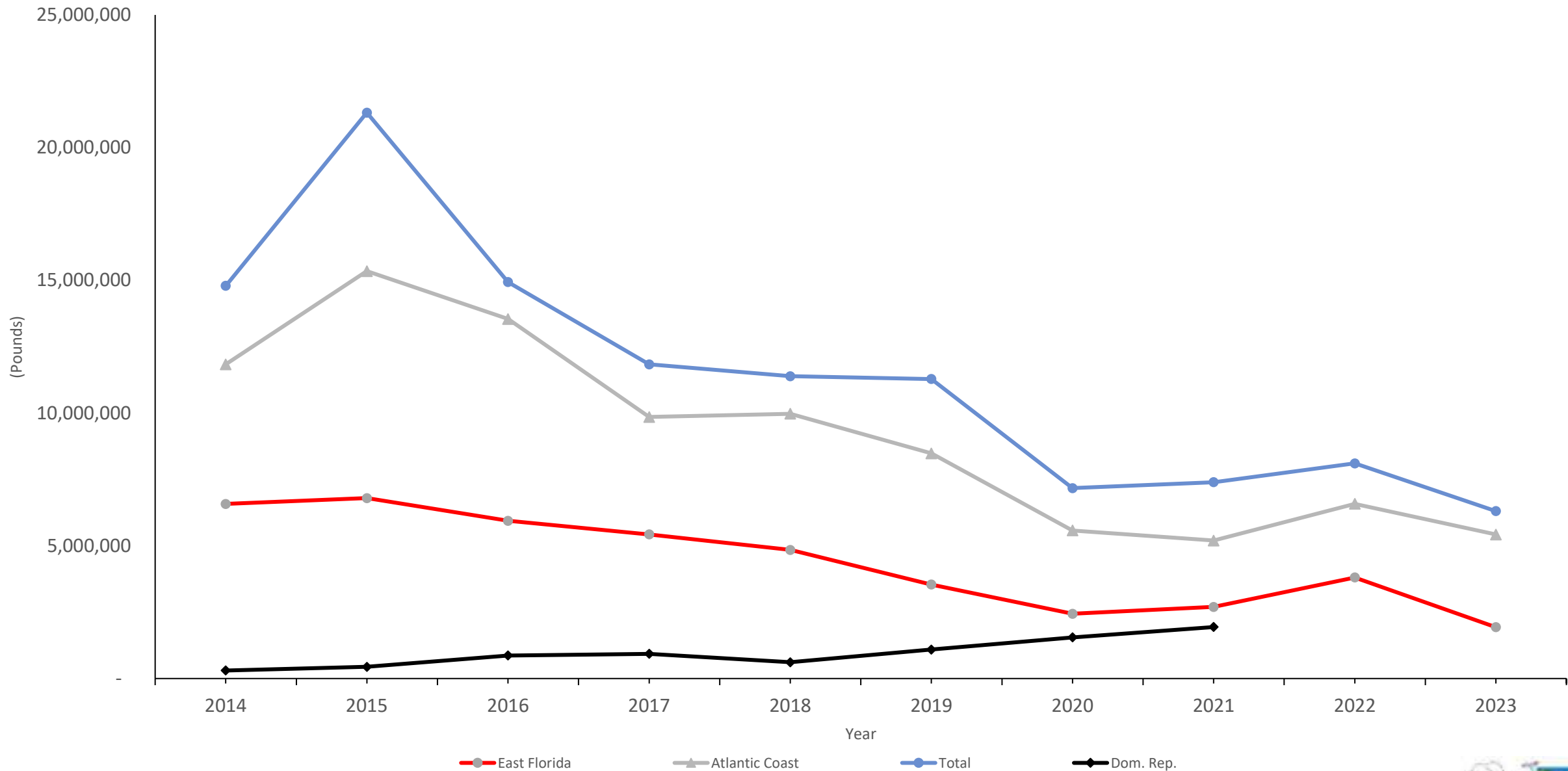
U.S. MRIP Data for East Florida Rec through Wave 3 2023 + FAO DR Commercial Landings to 2021





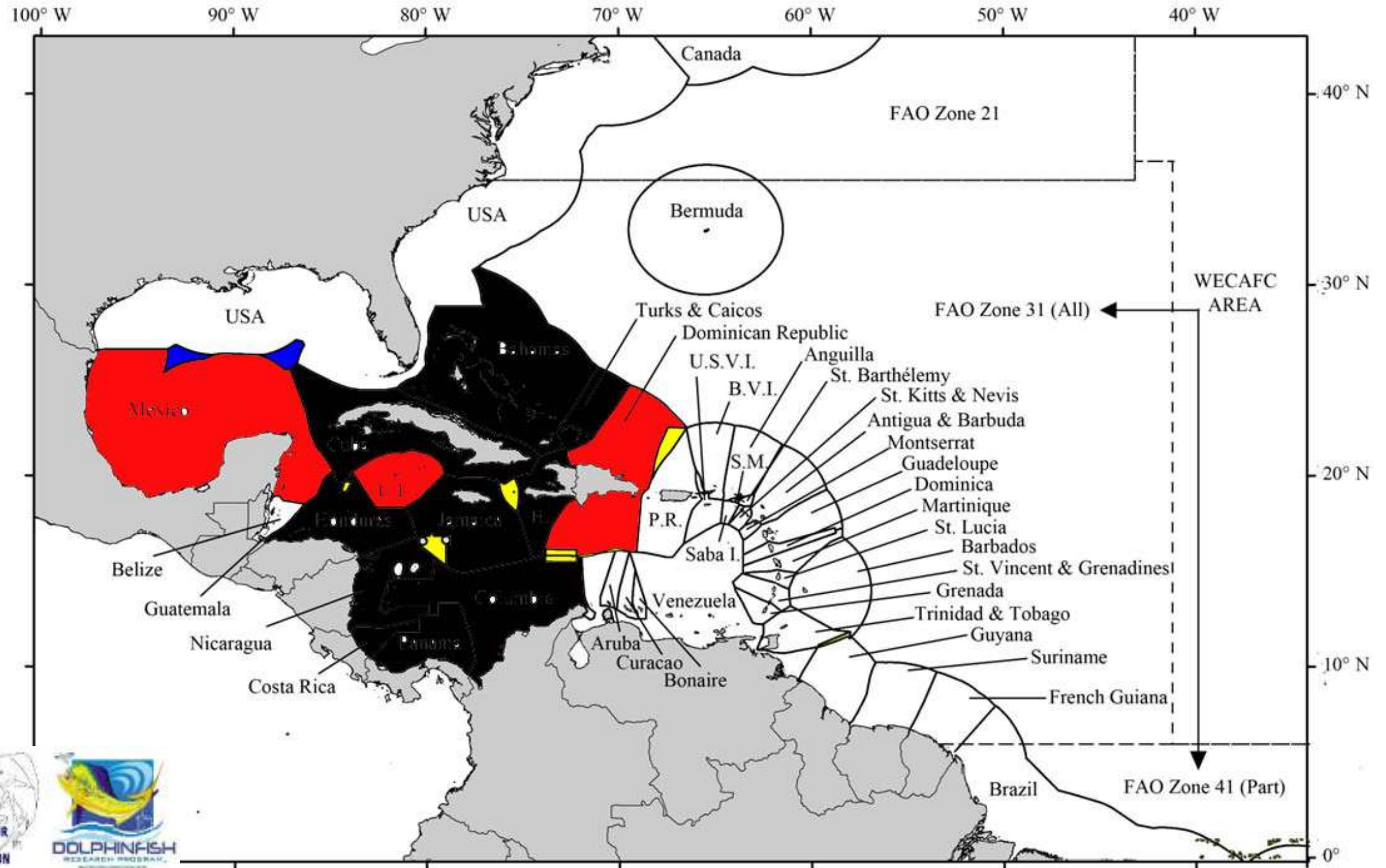
U.S. MRIP Data for GOM and Atlantic Coast by State/Group through Wave 3 of 2023






U.S. MRIP Data for through Wave 3 of 2023 + FAO DR Commercial Landings to 2021

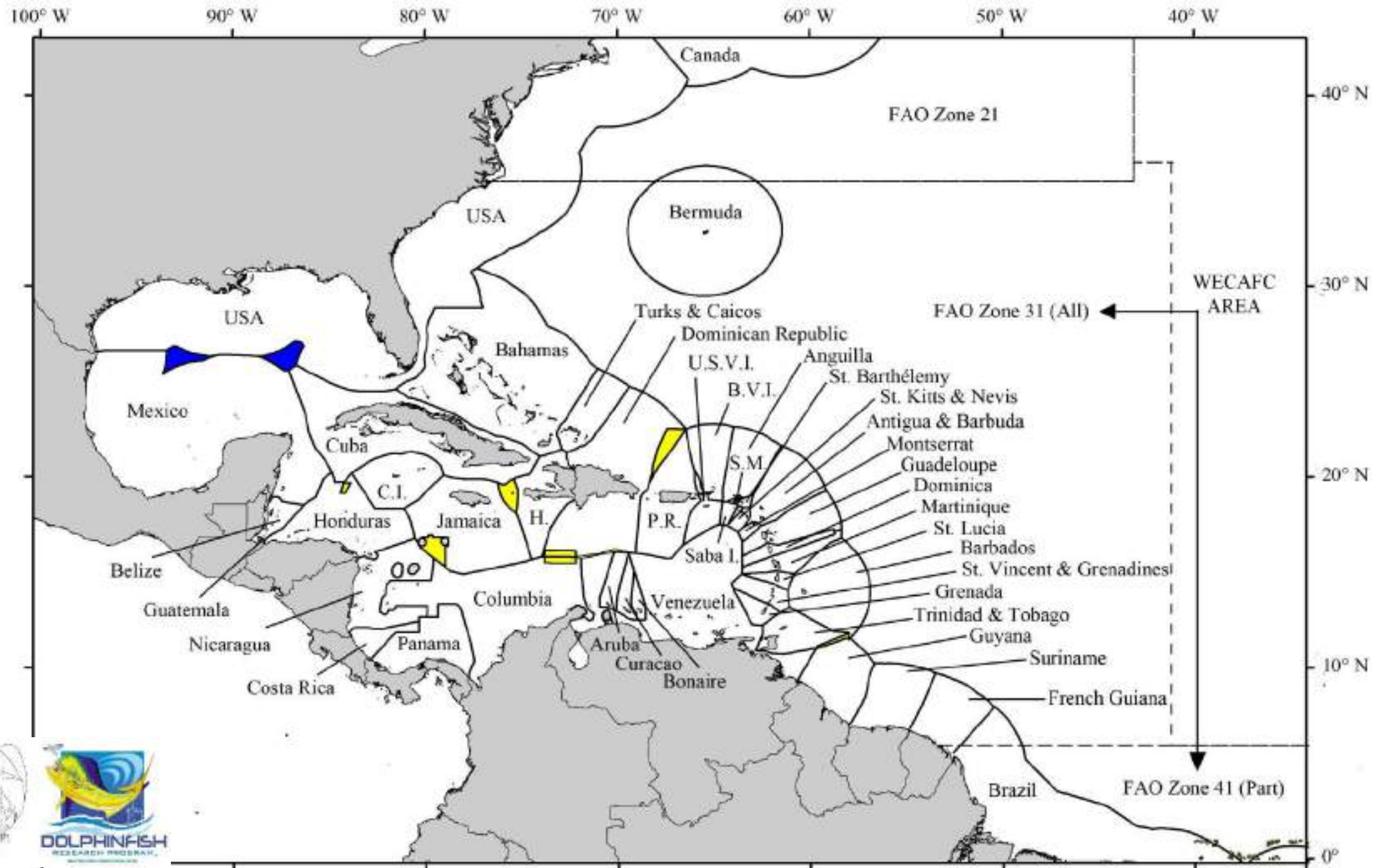




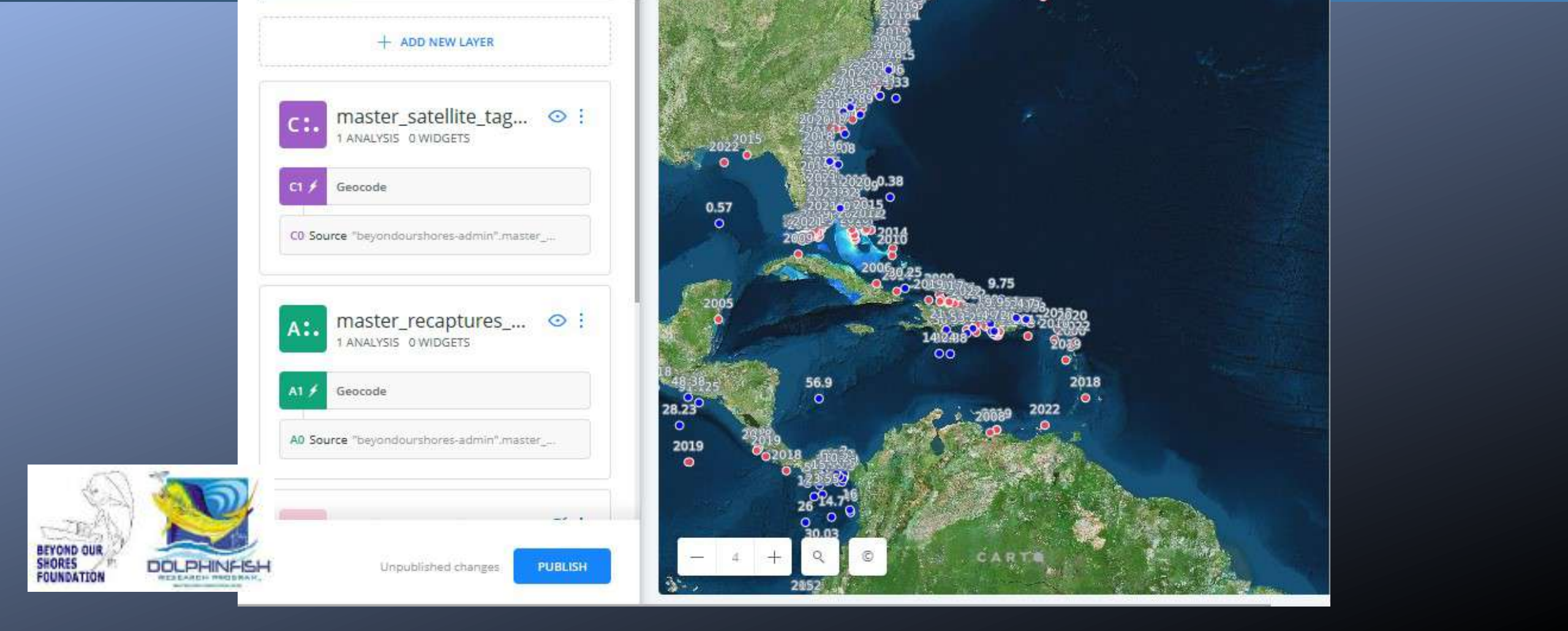
A close-up photograph of a dolphinfish (Coryphaena hippurus) leaping out of the water. The fish is captured mid-air, with its mouth wide open, revealing its tongue and teeth. Its body is silvery with dark spots and a prominent dark stripe along its back. Water droplets are frozen in the air around the fish, emphasizing its rapid movement. The background shows the surface of the water with gentle ripples.

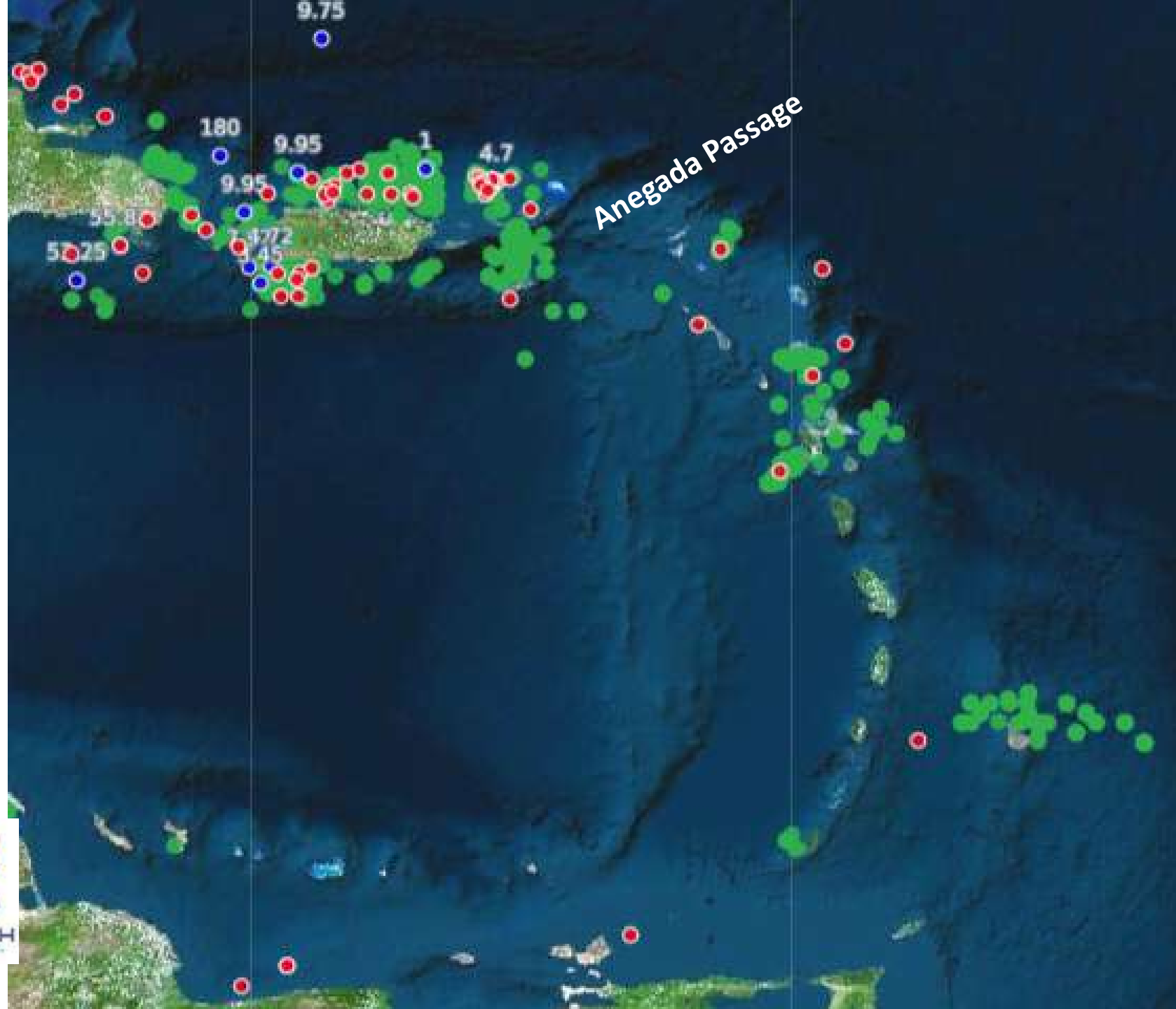
Case Study 2: Dolphinfish WCA Movements Recap

Picture: W. Merten

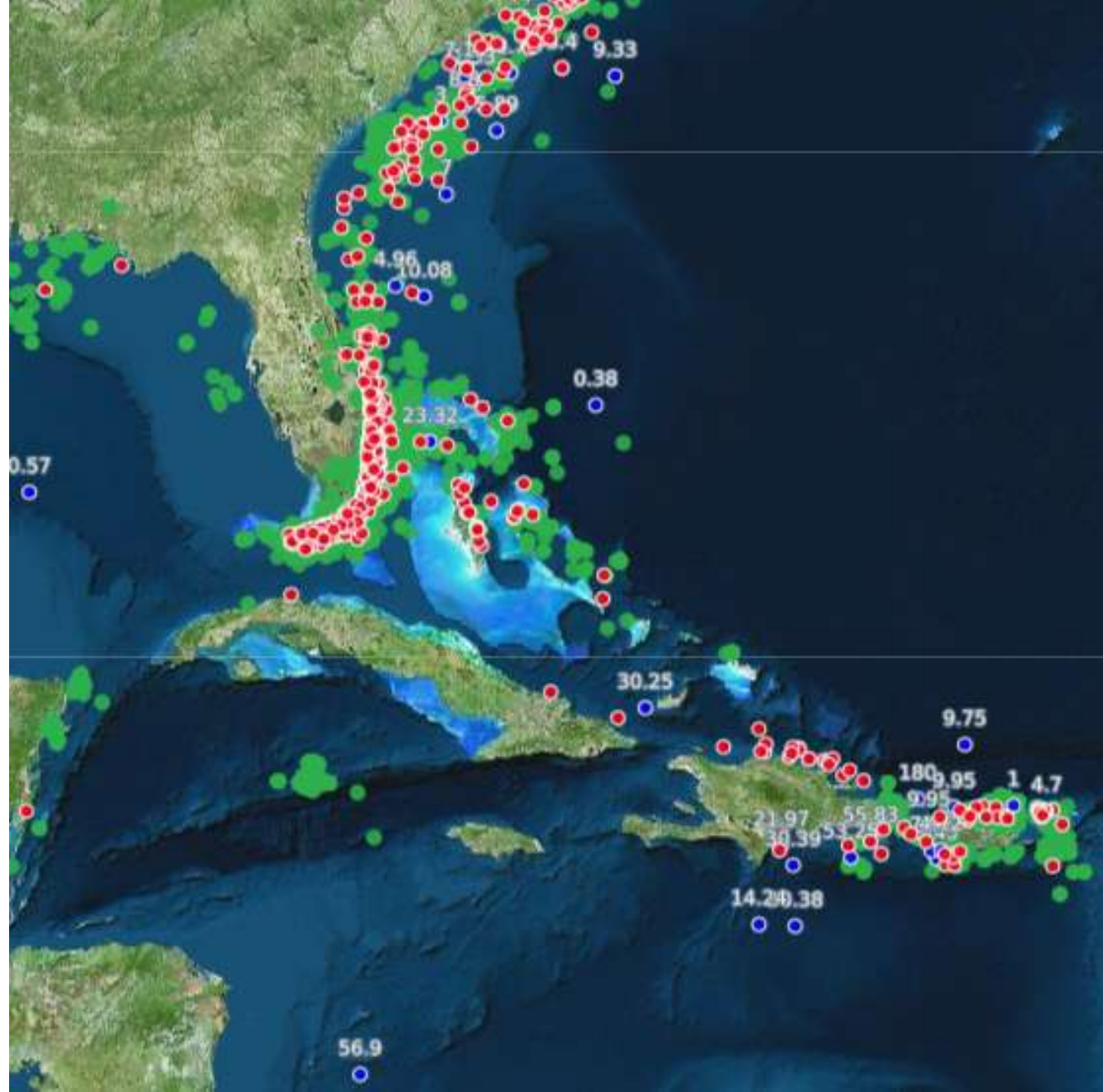


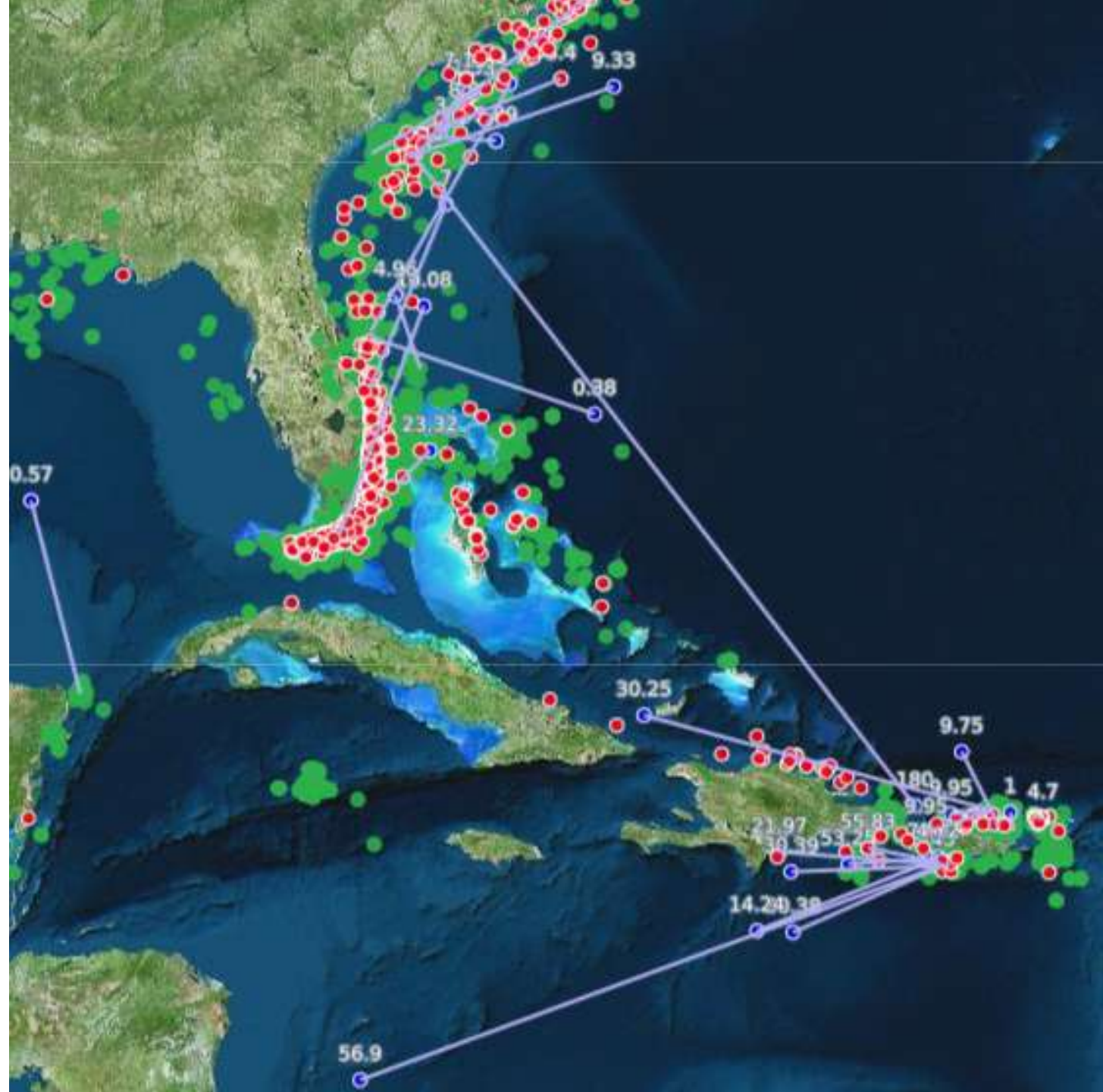
Demo of DRP Database

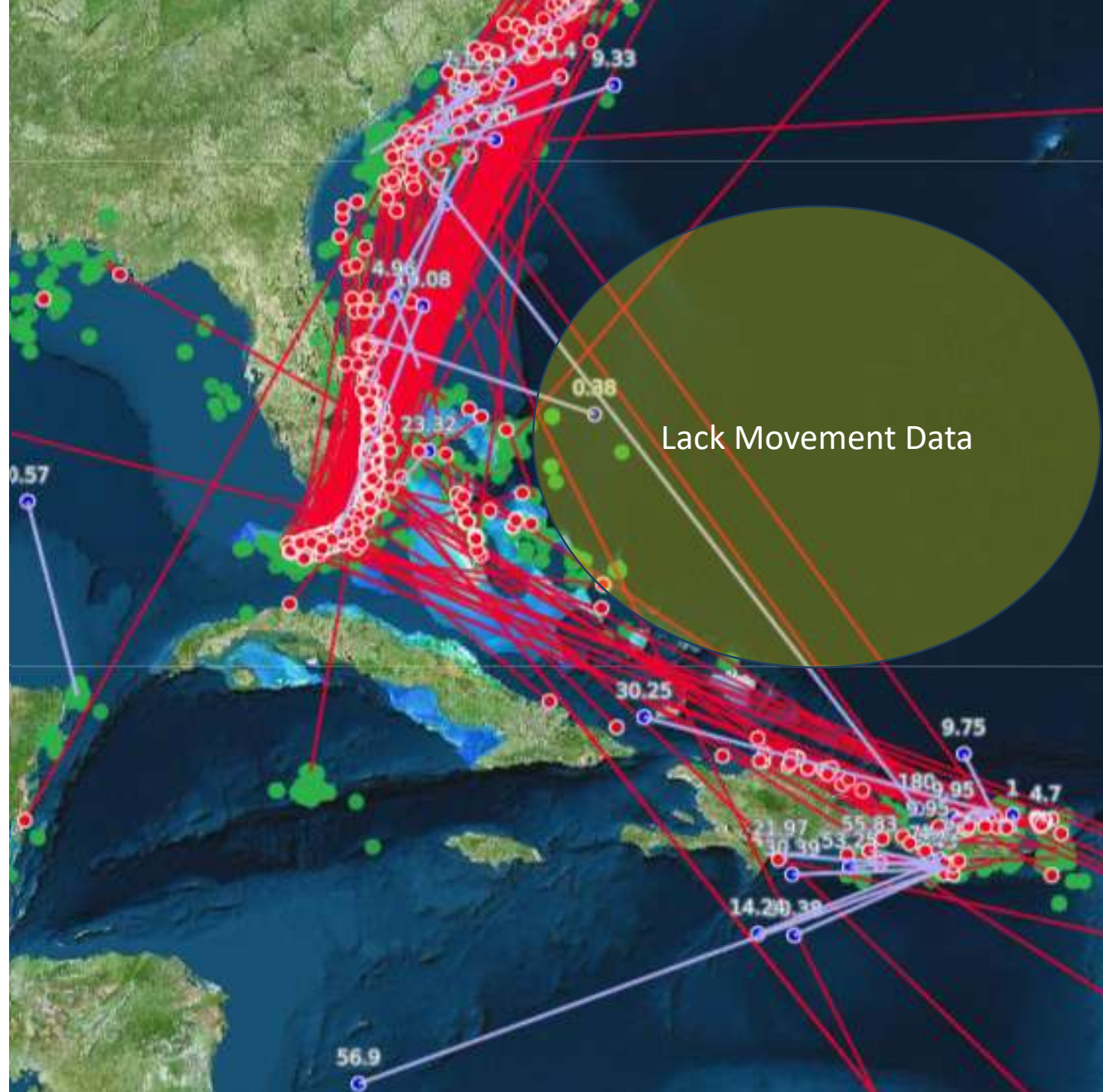


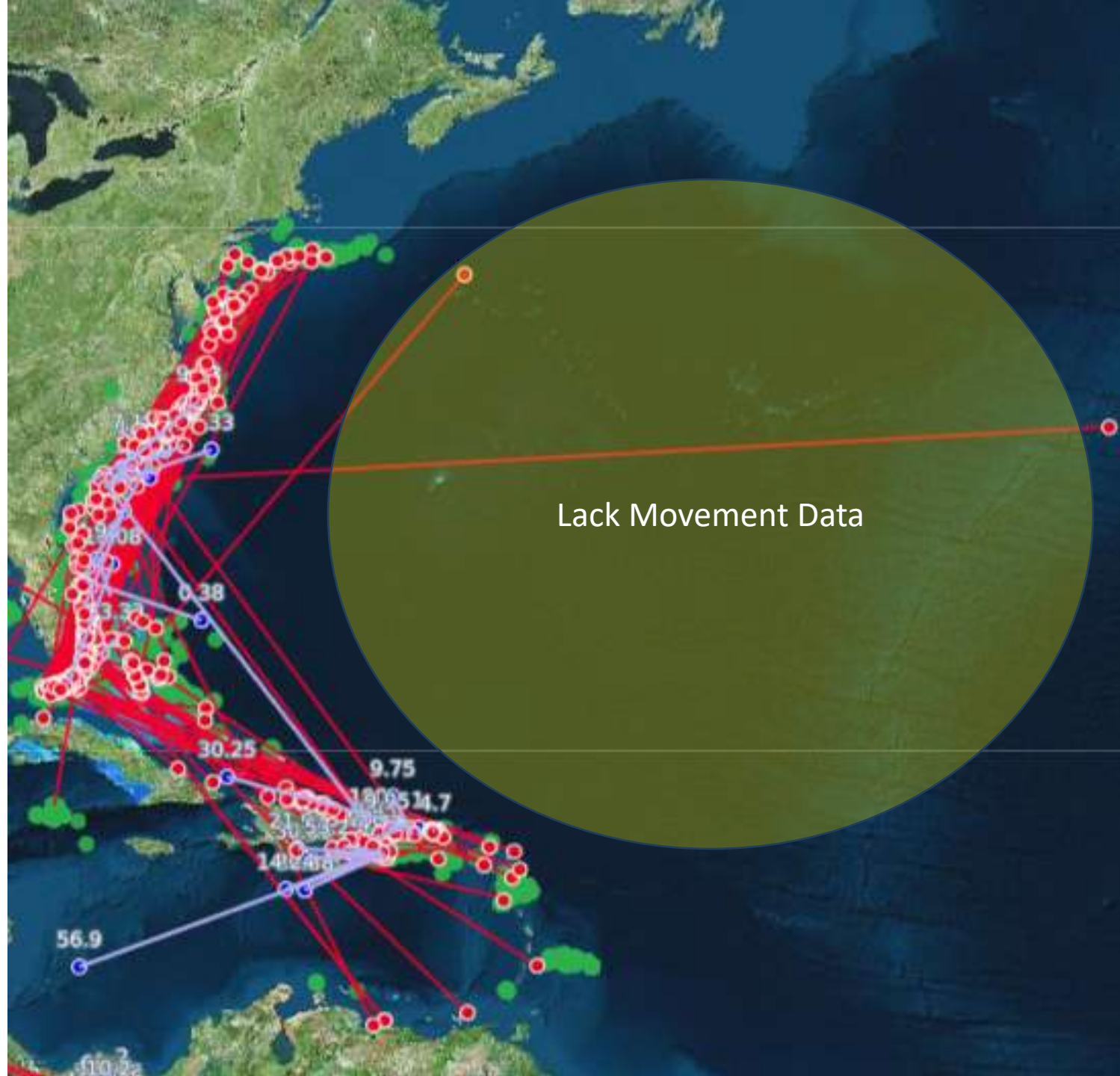










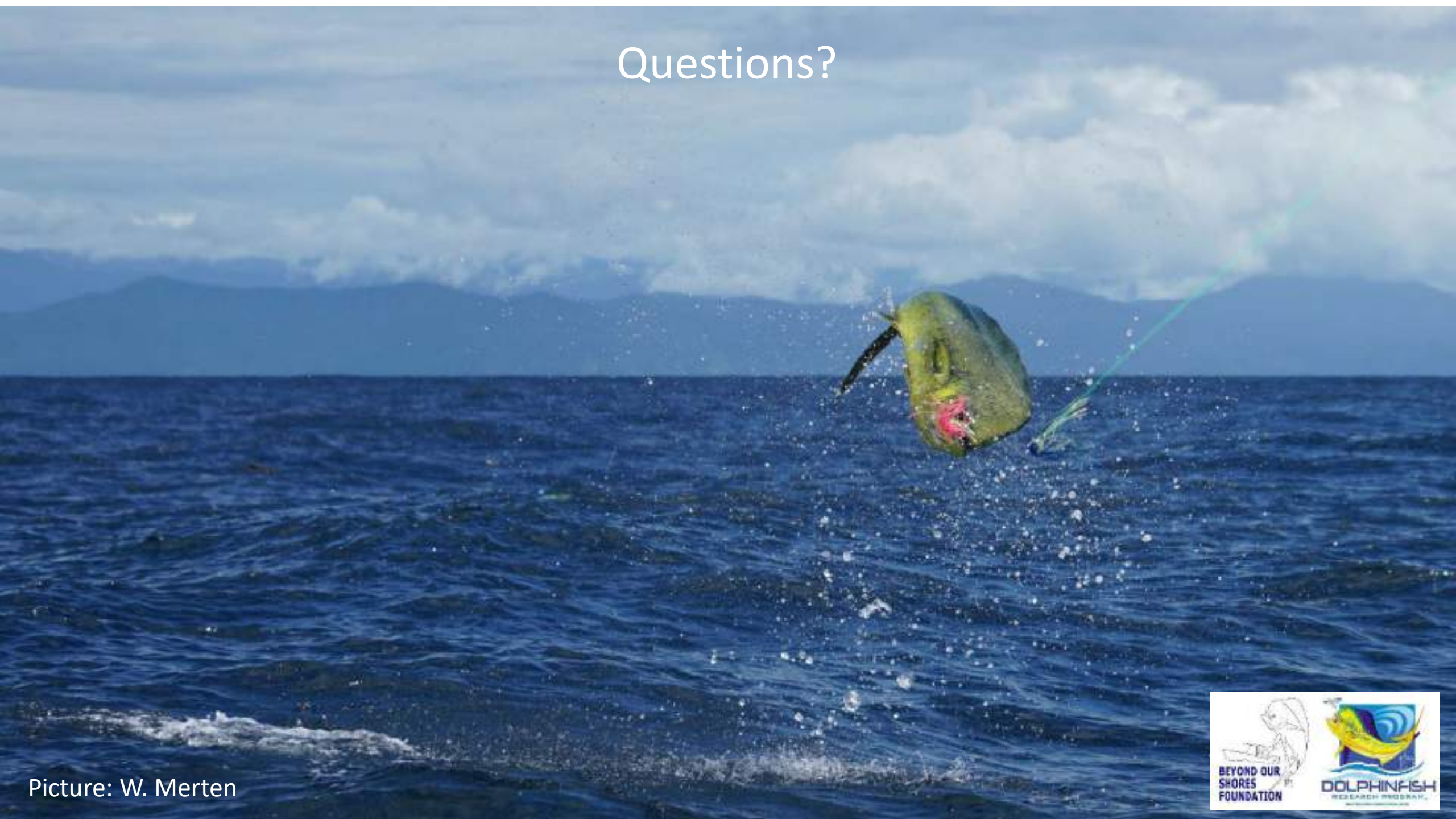


Conclusion: Issues Facing WCA Dolphin Stock

- Lack of data on/at FADs in Caribbean Sea and Sargassum events
- Inconsistent regulations on same stock despite transitory evidence
- Generally, small subadult fish (<24" FL) are being caught at FADs but frequency varies seasonally
- Lack of quality data on the recreational fishery yet increase in the fishery (Freire et al. 2020)
- Unknown Indirect harvest in longline fisheries (Lynch 2018; Merten et al. 2022b)
- Lack of landings data from 23 nations in WCA
- Under reporting of landings is likely in some major FAO dolphin reporting nations in the WCA
- Increasing demand in major seafood markets (MSA 2016)
- High discard mortality (Rudershausen et al. 2019) – Need to promote use of nonoffset circle hooks
- Perception of resistance to overfishing
- Underappreciate of multinational distribution which fragments data collection and management
- Size truncation and diminished stock productivity?



Questions?



Picture: W. Merten

