

The Status the American Eel, *Anguilla rostrata* (Leseueur, 1817), in Jamaica



Presented by Stacy-Ann Gray,
National Fisheries Authority
Ministry of Agriculture & Fisheries
Kingston, Jamaica



Virtual American Eel Range States Workshop

May 18 – 19, 2021

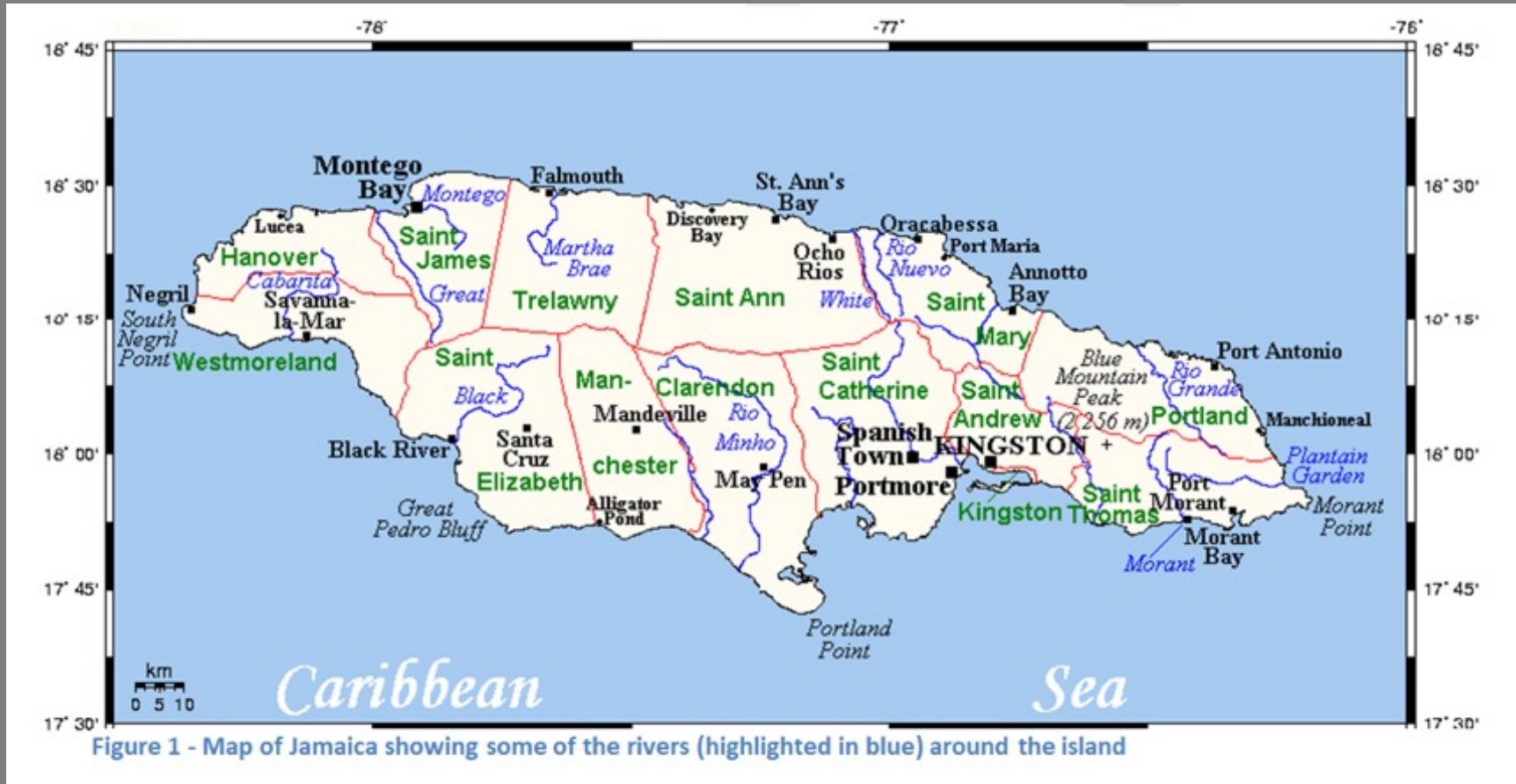
Presentation Outline

- Background on Jamaica's Eel Fishery
- Current Status
- Management
- Challenges
- Recommendation/Conclusion

BACKGROUND

- Started in 2013 with an exploratory licence
 - Species: *Anguilla rostrata*
 - Stage: Juvenile – Glass eel
 - Approximately 61 Rivers
 - Approximately 45 Kgs of Glass eel were caught
 - Season runs from October – March each year
- Two other companies were granted an exploratory licence
 - 2015 & 2018

RIVERS ALLOCATED FOR FISHING



- Eighteen (18) rivers spanning eight (8) parishes have been identified and approved for Exploratory Glass Eel fishing.

RIVERS OF JAMAICA



Martha Brae



Rio Minho



Black River

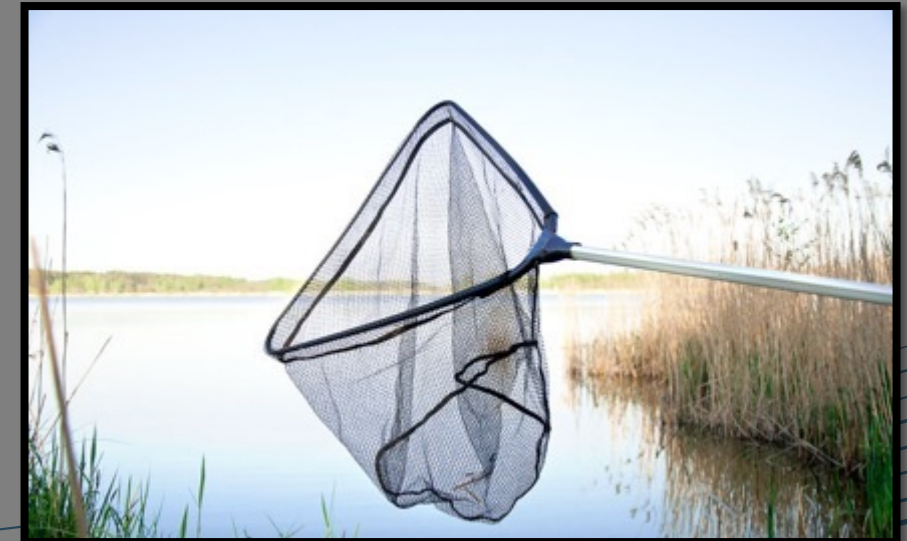


Wag Water

APPROVED FISHING GEAR



FYKE NETS



Morris 2017, Marsden, 2018

CATCH RATES & TRADE OF GLASS EEL 2013-2020

YEAR	MONTH	CATCH (KG)	EXPORT ED (KG)
2013 - 2014	Oct - Mar	45.5	23.5
2014-2015	Jan - Mar	39.0	0
2015-2016	Oct - Mar	114.0	
2016-2017	Oct - Mar	127.0	30
2017 - 2018	Oct - Mar	3	3
2018 - 2019	Jan - Mar	30.5	21.5
2019 - 2020	Dec - Feb	14.0	8

SOURCE: NATIONAL FISHERIES AUTHORITY

**EXPORTED THROUGH CANADA TO ASIA,
MAINLY HONG KONG**

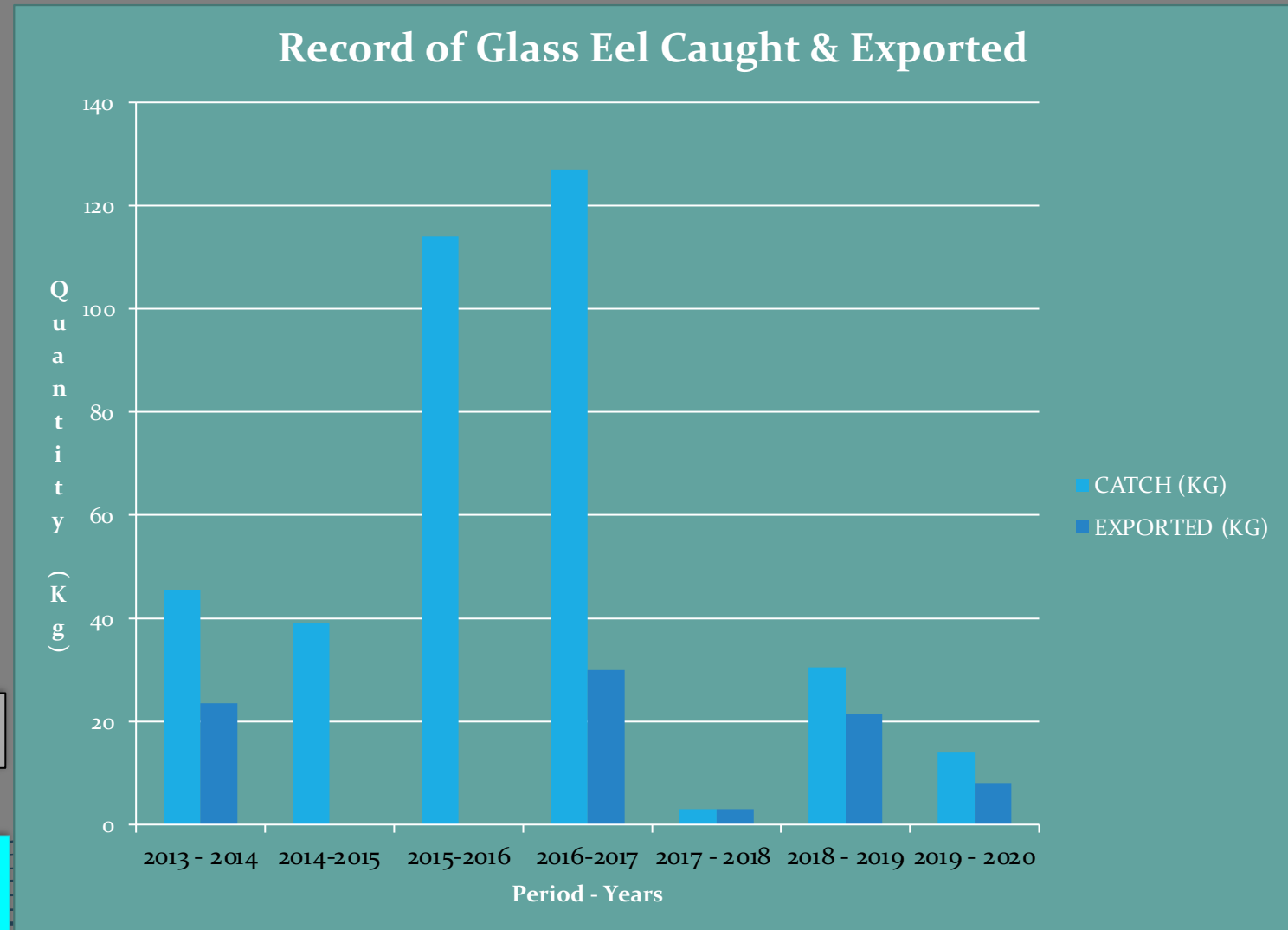
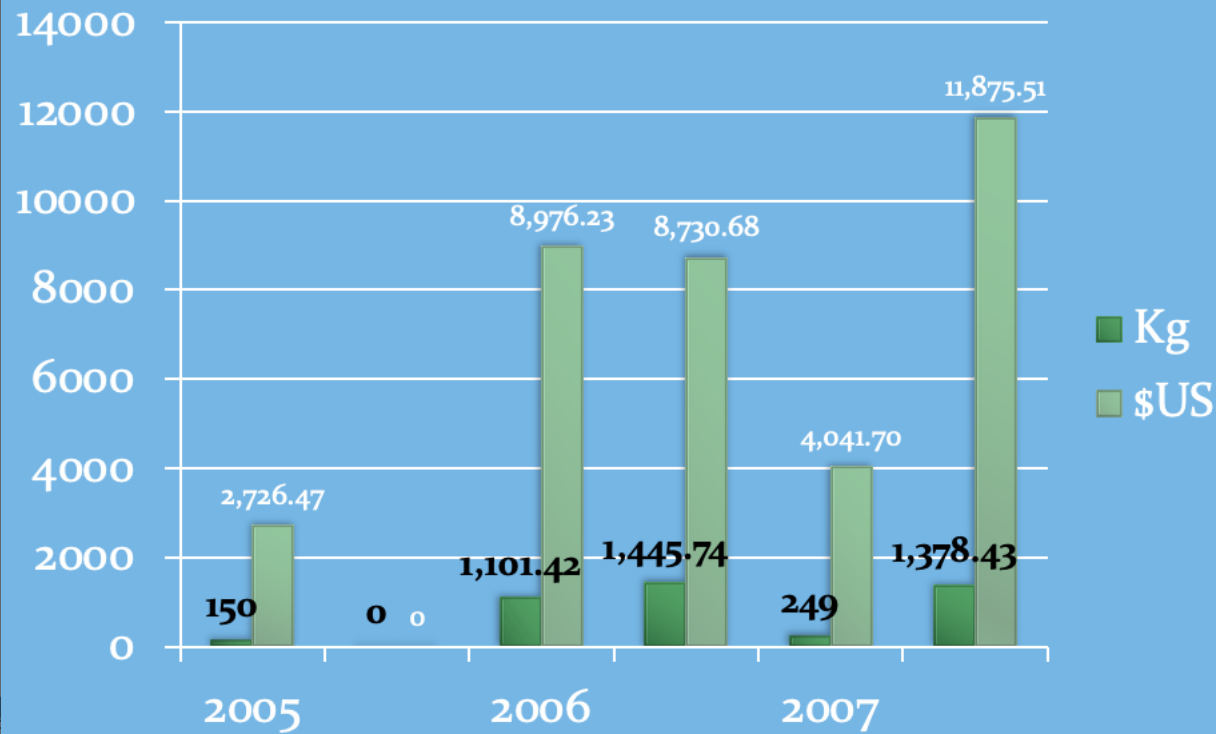


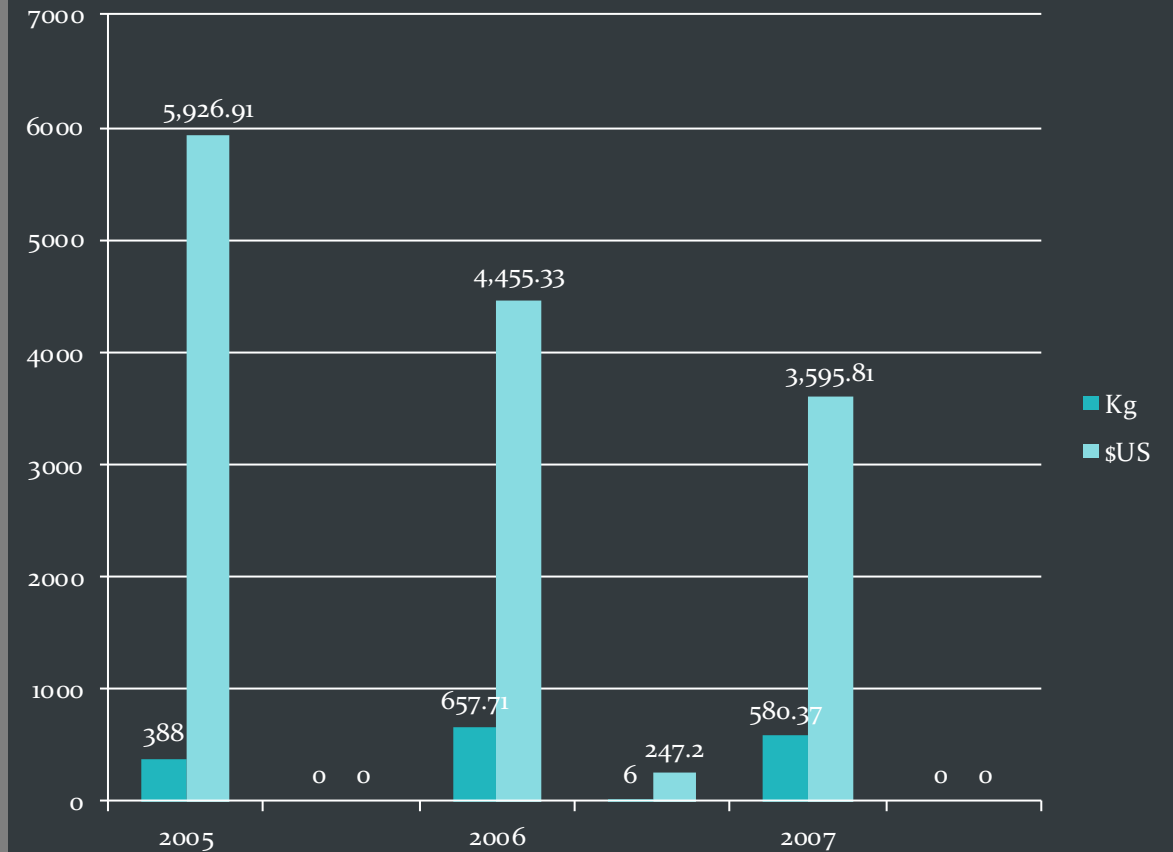
Table showing Quantity and Value of *Imports* of *Anguilla* Species into Jamaica between 2005 and 2010.

Source: Statistical Institute of Jamaica (STATIN)

Import of Fresh/Chilled Eel (*Anguilla* Spp.)



Import of Frozen Eel (*Anguilla* spp.)



Summary Total for 2005-2010
 Total Quantity (Kg): 5,956.67
 Total Value (\$US): 50,575.84

CURRENT STATUS

- The American eel (*Anguilla rostrata*) can be found in rivers and streams, however, there still exist a knowledge gap in its current status.
- **Information Gap** such as
 - Population size,
 - Population trends,
 - Geographic distribution,
 - Threats to the species.

SYSTEM OF MANAGEMENT

Lead Agencies

- The National Fisheries Authority
- VSD for export and import permits

- Application of a fishing licences from the NFA
- Application of Catch Certificate from the NFA
- Application of Export Permit from the VSD
- Submit end of season report to the NFA

- Specific rivers are allocated to each licence holder
- The report include a data table that reference quantity caught in relation to specific rivers, physical and environmental conditions

CHALLENGES

- **The last 7 years suggests that there is a very small recruitment of glass eel....Might not be sufficient to maintain an economically viable and sustainable fishery.**
- **Reduction in water flow in many rivers and stream across the country**
- **Monitoring of Catch data**
- **Climate change: Drought, flooding, rise in temperature and impact on the fishing season.**

RECOMMENDATIONS/CONCLUSION

- We support the application of the precautionary approach to this fishery.
- The NFA continues to monitor the site specific catch rate with a view to understand the differences and/or correlations.
- Given the how and where the American eel spawn, how the juvenile recruitment is dispersed, we know that it is difficult to accurately determine the spawning biomass, the abundance level of recruitment and optimal harvest levels.
- Hence a framework that supports sharing of catch data as well as indices of recruitment within the region could be useful.
- Investigation into the economic impact of this fishery should also be conducted.
- There is a need for also training and research into how our river systems, barriers/dams impact on recruitment.
- What about opportunities for Aquaculture???

THANK YOU FOR YOUR ATTENTION

ANY QUESTIONS ?



Presented by Stacy-Ann Gray,

National Fisheries Authority

Ministry of Agriculture & Fisheries

Kingston, Jamaica

Contact: stacyann.gray@moa.gov.jm

Tel: +1876-984-9343

+1876-388-6439