



Updates to the Country Web Pages

Tuna Data Workshop 2024
Noumea
8-12 April 2024

https://ofpmembercountries.spc.int

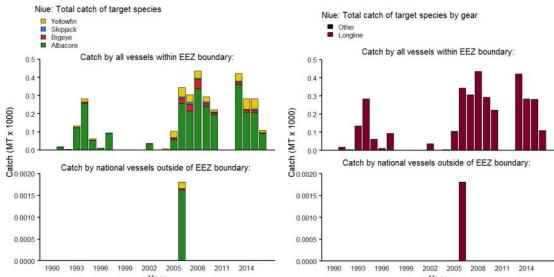
Challenges with NTFSRs:



- •National Tuna Fisheries Status Reports (NTFSRs) required up to 6 person-months of work, leading to delays in updates.
- •OFP was unable to keep up with the demand for more frequent updates from countries.
- •This new modality included Issue-Specific National Reports (ISNRs) and the OFP country webpages.
- •OFP country webpages have served as a window into tuna fishery-related data held at SPC for the past decade.
- •They were introduced to provide a summary of catch, effort, CPUE across fleets and other relevant data.
- •Hosted by SPC, each member is assigned a password protected portal accessible to their country data and plots.

Catch and Effort Summaries	Purse seine	
All Gear types	Effort (28)	
Catch (5)	Catch (3)	
Catch Per Unit of Effort (1)	Catch Per Unit of Effort (5)	
Size (1)	Size (6)	
Longline	Pole-and-line	
Effort (24)	Effort (5)	
Catch (11)	Catch (2)	
Catch Per Unit of Effort (23)	Catch Per Unit of Effort (2)	
Size (6)	Size (5)	

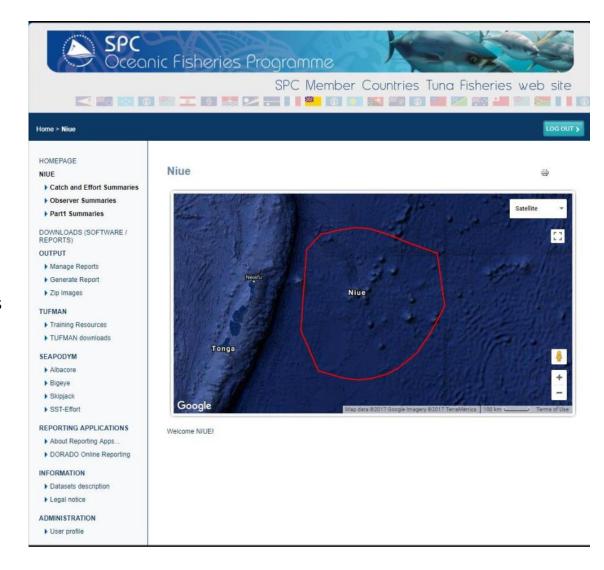
All Gear Types - Catch



Overview of CWP data summaries



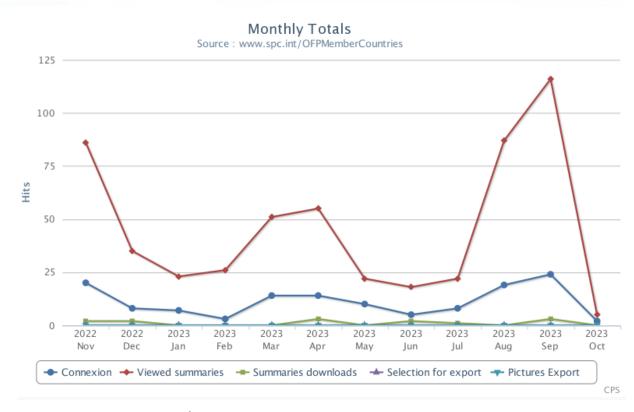
- 1. Catch by species (of target tuna)
 - a. Summarized by gear type and by flag
 - b. National fleet catch summarized inside and outside EEZ
- 2. Catch by gear type
 - a. Summarized by species and by flag
 - b. National fleet catch summarized inside and outside EEZ
- 3. Catch per unit effort
 - a. Summarized by gear type and flag
 - b. Purse seine catch summarized by FAD association
 - c. Spatial plots of effort and catch by 5° and 1° lat/lon squares
- 4. Biological data for target tuna species (just length frequencies currently)
- 5. Gear characteristics (e.g., hooks per set for longlines, set start times for purse seines)
- 6. Observer collected data longline vessels only
 - a. Observer coverage
 - b. Observed CPUE of target and bycatch species
 - c. List of all bycatch species and fate of key species



Current Usage and Review:



- In 2022, OFP commissioned a review of the CWP usage and review. The review aimed to understand why and recommend improvements to make OFP data more accessible and useful.
- OFP Country Pages: Provide coarse-grained summary data and print-ready visualizations, refreshed irregularly but usually more than once per year. The underlying database is not directly accessible, and visualizations are "hard-wired" without user amendment. Data visualizations are confidential and based on the "best" available data and official ACE tables, adjusted for data gaps and errors.
- CES2: An online replacement for the CES "transportable" database catch/effort query system. It includes "best" and operational data, daily VMS effort, and SEAPODYM model output data. CES2 provides access to "live" data but does not yet include VMS and SEAPODYM data. It offers a simplified SQL query system for tailored output summaries.
- Power BI Data Cube Approach: Under development, it might replace the functionality of the OFP country pages. It could provide pre-programmed outputs with options for users to fine-tune parameters and update data on a daily basis, rather than two or three times a year.



Recommendation: Adapting the most useful visualisations for the PowerBI data cube, either using PowerBI's built-in functionality, or adapting existing R code for embedding into PowerBI, as appropriate.

CWP Upgrades



Project Overview: Under the GEF OFMP3 project, SPC has sought external assistance to enhance data-driven decision-making within its FAME division. The focus is on simplifying reporting procedures and fostering an analytical culture through user-friendly **Power BI** & **R-Shiny** visualization tools.

Technological Solutions: SPC plans to achieve this by creating Power BI embedded web applications and cloudbased R-Shiny dashboards. These tools will empower SPC members to personalize and analyze their country-specific data more independently in the long term.

Data Management Approach: SPC prioritizes keeping its raw data on-premises within its current ICT environment. This approach allows for tight control over infrastructure, ensuring ease and speed in customizing data models, as well as managing registration and authentication processes for member portals.

Training: Training for members is anticipated once the new webpages are live, with the launch expected in the second half of 2024.

Milestones/deliverables	Deadlines
Signature of contract	March 2024
Initial scoping phase + agreed architecture	14 April
Project setup + setup authenication provider (Entra ID or SPC own?)	21 April
Settup up web application, authentication service and roles	28 April
Settup up user administration and roles/user rights	5 May
Setup Power BI web app & R-Shiny web service + authentication	12 May
Setting up admin for maintaining visualisation dashboards	19 May
Setting up up deployment + production	26 May
Testing and Acceptance	2 June
Small bugfixes + re-test	9 June
Deployment to production and roll-out	16 June
Discussions/Meetings/Training	23 June
Closing of Project	30 June

Demo



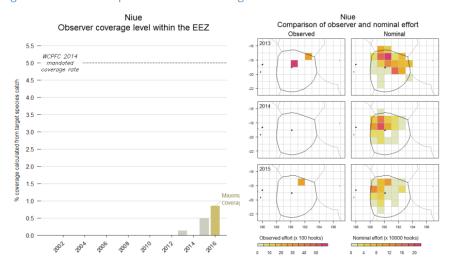
Power BI- data Exploration & Data Quality on Wednesday @0900

- Technical issues:
 - Registration
 - Password Reset

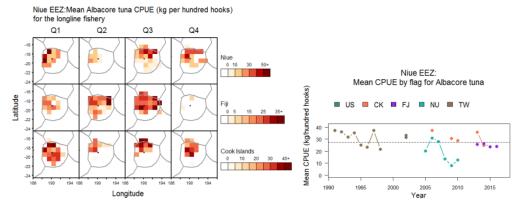
Contact: Fabrice Bouye- <u>FabriceB@spc.int</u> or Emmanuel Schneiter- <u>EmmanuelS@spc.int</u>

Random plots that might be good to show Community Commun

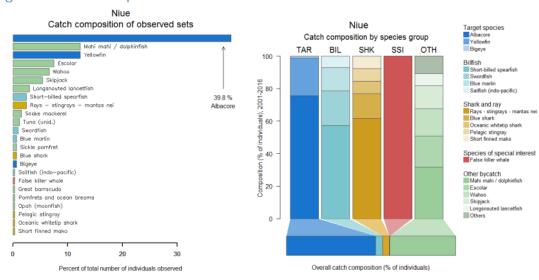
Longline – Annual and spatial observer coverage



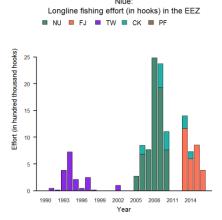
Longline – Catch Per Unit Effort

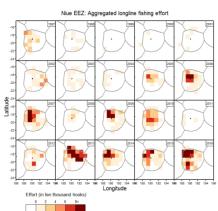


Longline – Catch Composition



Longline – Effort





Pacific