

Building Capacity for Coral Reef Monitoring: Updates on MERMAID as a global platform and putting the 'AI' into MERMAID



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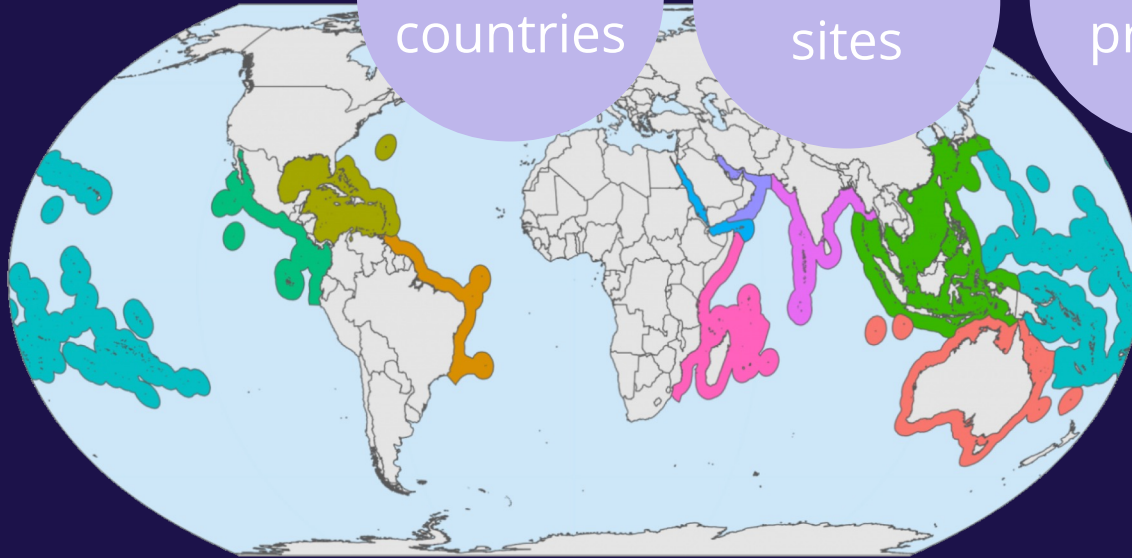


How to streamline regional and global reporting of coral reefs?

73
countries

12,000
sites

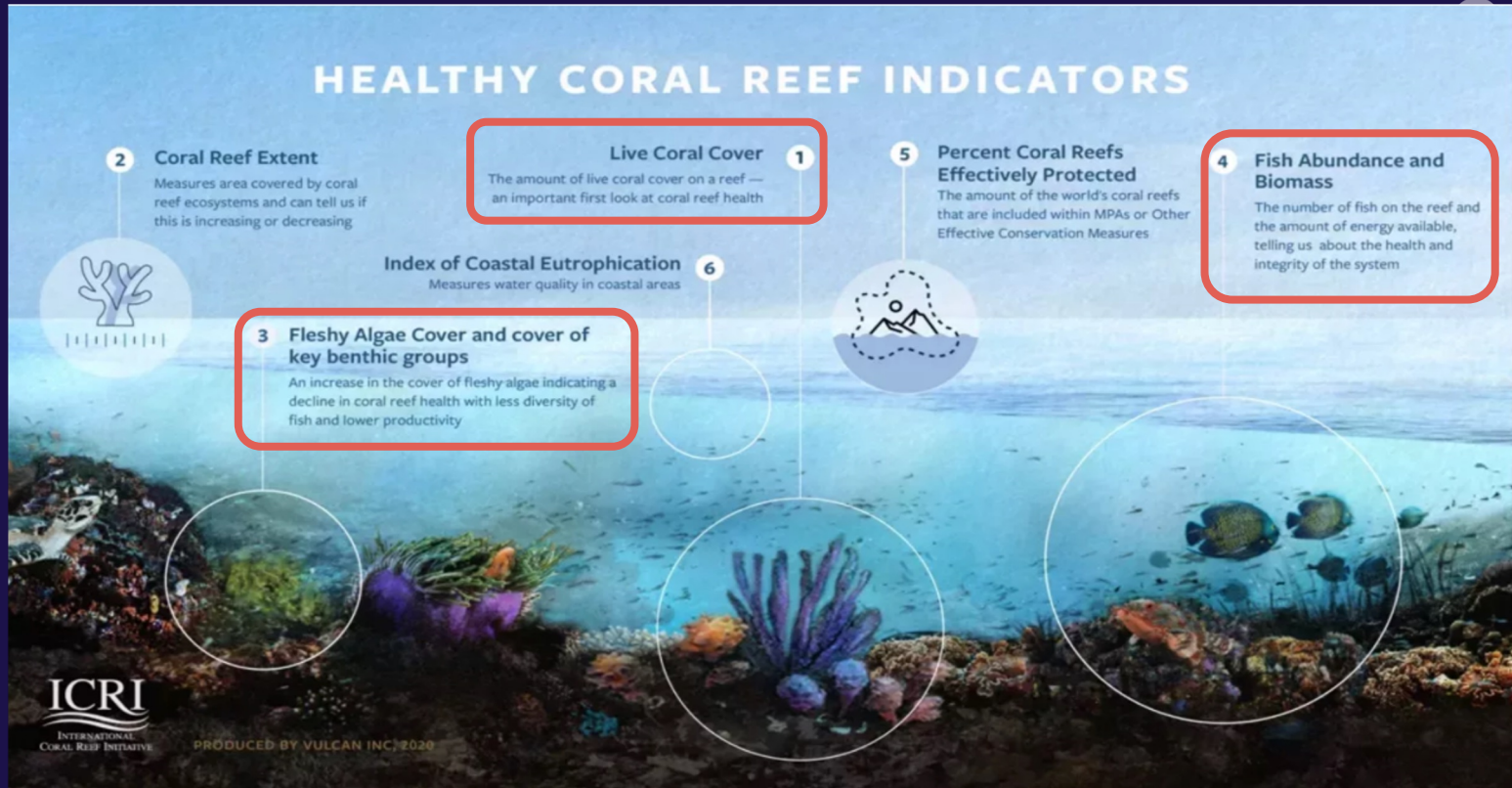
Multi-year
process



2020 GCRMN Status of Coral Reefs of the World



We need to monitor and report on these key indicators in a consistent way



Coral reef data platforms support data standardization

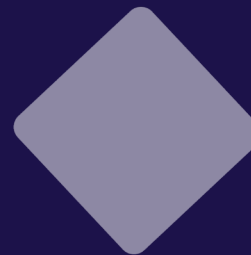


+ Data standardization means:

- + Less time & effort for integration
- + More comparability and accuracy of results

"Instead of spending ~90 minutes standardizing one dataset for the global report, I spend less than 15 minutes with data downloaded from MERMAID."

Jérémy Wicquart, PhD
Technical Coordinator, GCRMN



And increase efficiency in the GCRMN report production



+ 21 out of 75 datasets added so far to the GCRMN global synthetic benthic dataset were from MERMAID projects

+ That's nearly one third of datasets standardized with complete metadata, clean data, and easily accessible

+ More users and organizations easily recognized as data contributors



Also enable regional monitoring networks as the ROPME Sea Area

+ For decades, data was scattered in different files and with different organizations

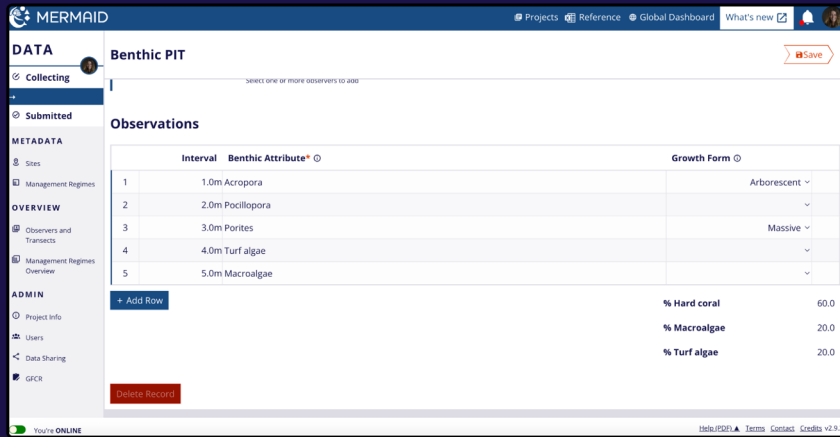
+ Now, data from 5 out of 9 countries in one regional data platform

+ Regional stakeholders can quickly access all data and share with GCRMN

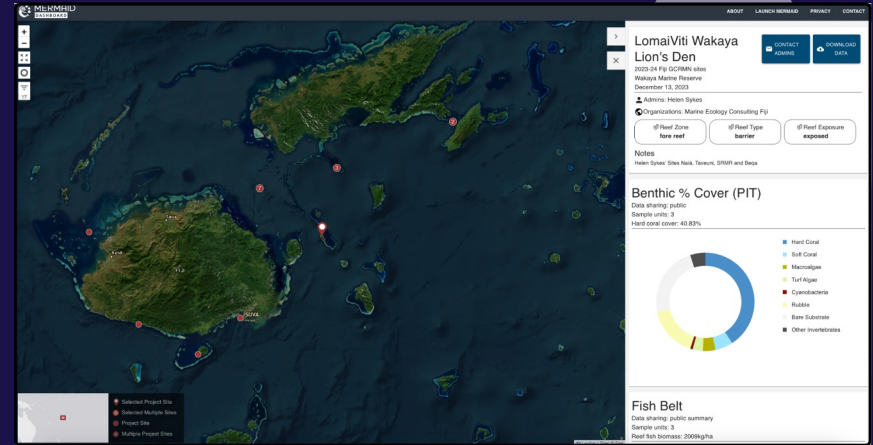


What is MERMAID?

A secure online/offline web platform to help collect, manage, analyze and share coral reef data



Collect benthic, reef fish, bleaching and habitat data in the MERMAID Collect App



Visualize and download reef health indicator charts from the MERMAID Dashboard



A growing community since 2016

2K+ Users 100+ Organizations

CONSERVATION
INTERNATIONAL



CORAL
TRIANGLE
CENTER



AI-based automated image classification by CoralNet




4.4K+ sources
3.7M+ images
141M+ annotations



AI-based automated image classification by CoralNet

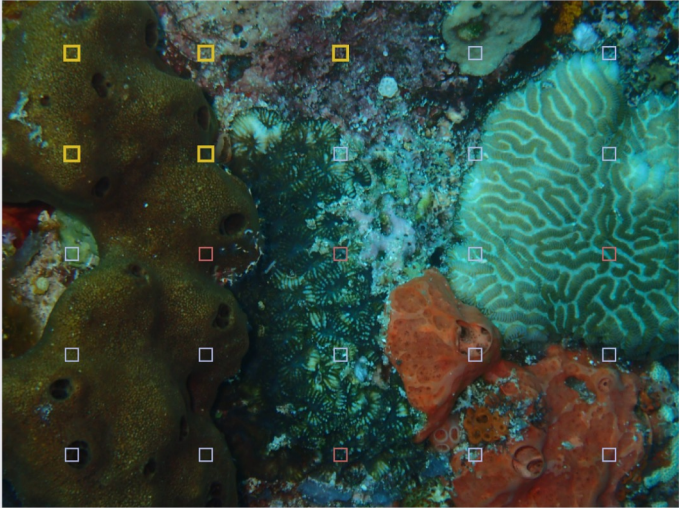
- + Drag-and-drop images to MERMAID projects
- + One universal classifier (no training required)
- + 80% and higher precision of common attributes

img_8394.jpg  MERMAID ×

Quadrat: 4

Benthic Attribute	Growth Form	Number of Points		
<input type="text" value="Dictyota"/>	<input type="text" value="Arborescent"/>	5	<input type="button" value="Confirm"/>	<input type="button" value="x"/>
<input type="text" value="Galaxaura"/>	<input type="text" value="Branching"/>	5		
<input type="text" value="Sponge"/>	<input type="text" value="Digitate"/>	3		
<input type="text" value="Gorgonian"/>	<input type="text" value="Branching"/>	4		
<input type="text" value="Halimeda"/>	<input type="text" value="Branching"/>	2		
<input type="text" value="Undaria"/>	<input type="text" value="Arborescent"/>	2		

+ Add Row

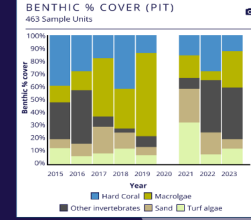
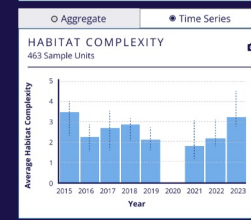
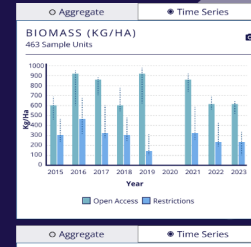
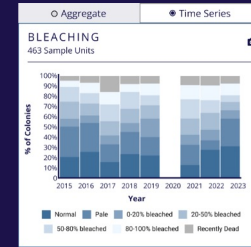
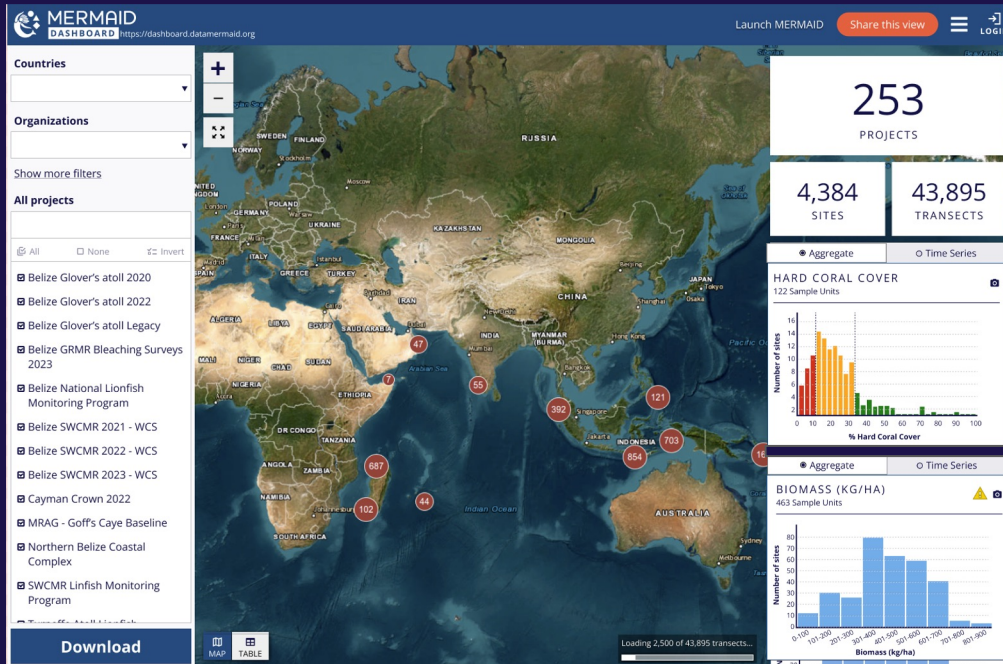


Current Unconfirmed Confirmed Unclassified close



New MERMAID Dashboard

- + More charts and plots, including time series
- + Download images for reports
- + Login to view your private data



M&E tool for GFCR programs



GLOBAL FUND FOR
CORAL REEFS

+ New webforms for GFCR Fund Indicators (incl. social and financial) added to the platform for M&E of GFCR programs



We look forward to supporting ICRI members

Join our community

Request a demo

Use photo quadrats?
Be an AI beta tester



Thank you!



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