Ocean Acidification Monitoring

MEOPAR

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ocean acidification COLLABORATION

across organizations, countries, departments

U.S. FOCUS on monitoring, research into ocean acidification

- MONITORING
- SYNTHESIS
- FORECASTING
- ASSESSMENT
- MANAGE DATA
- ENGAGEMENT
- IMPROVE TECH! METHODS!

OBSERVATION CRUISES

some places only visited every 3rd year!

GOAL: 20 GLOBAL monitoring stations

GOAL: 26 in the U.S.

RESOURCES AND FUNDING is needed!

CORAL monitoring

Ship-time for observations are limited

Takes time to set up ship systems!

Partner with Hatcheries & Fisheries...

share data!

...and how to gather data from citizen groups!

but acidification is tricky to monitor!

Expand to GREAT LAKES & RIVERS?

Identify priority areas for monitoring!

PUBLIC EDUCATION & ENGAGEMENT

hard to get Baseline data

2015

1850

GAPS in observation means we have to estimate.

Department of Fisheries & Oceans

Nation-Wide ocean monitoring

1930s!

Have to do Averages based on what we have in some coastal areas

There are GAPS in observations.

BUT

Observations of multiple locations, at different times

Observations over many years

Need RESOURCES to expand Acidification monitoring!

Monitoring:

- Aragonite
- CO_2
- pH → limited

Arctic is acidifying faster than other oceans!

Limited knowledge of variations in arctic pH: lets PRIORITIZE monitoring locations!

Observations of St. Lawrence and river run-offs

it can be tricky to disseminate the DFO data due to volume

June

one-time observations make it Difficult...

...need to have on-going OBSERVATIONS

2020 2018 2016 2015

RESULTS IN QUALITY RESEARCH

Graphic Recording: Tanya Gadsby
drawingoutideas.ca