

CalCOFI Conference 2022

Innovative techniques & novel applications of time series data to marine resource management

December 5th - 7th , 2022

Southwest Fisheries Science Center (SWFSC) La Jolla, CA

in person with a hybrid option available

Hosted by: Scripps Institution of Oceanography

In association with: Southwest Fisheries Science Center California Department of Fish and Wildlife



SCRIPPS INSTITUTION OF OCEANOGRAPHY



For conference inquiries please contact the CalCOFI Coordinator Erin Satterthwaite (esatterthwaite@ucsd.edu) CalCOFI Conference Agenda

Innovative techniques and novel applications of time series data to marine resource management

December 4th & 5th, 2022

Sunday, Dec 4th, 2022: Arrival

7:00pm - 8:30pm Pre-conference casual meetup (No Host) at the La Jolla Shores Hotel Restaurant

Monday, Dec 5th, 2022: State of the California Current Ecosystem

7:45 am - 8:30 am Registration (SWFSC - Foyer)

8:30am - 9:00am Welcome Ceremony & Opening of the Conference (SWFSC – Pacific Room) Margaret Leinen, Scripps Institution of Oceanography, UCSD Moderator: Brice Semmens, Scripps Institution of Oceanography, UCSD

9:00 am - 10:00 am State of the California Current Ecosystem & State of the Fisheries Report (SWFSC - Pacific Room)

Andrew Thompson, NOAA Southwest Fisheries Science Center (SWFSC) Rasmus Swalethorp, Scripps Institution of Oceanography, UCSD Julia Coates, CDFW

Moderator: Ed Weber, NOAA Southwest Fisheries Science Center (SWFSC)

10:00 am - 10:30 am Morning Coffee/Tea Break (SWFSC - Foyer)

10:30 am - 11:30 am Ocean Observations from the Field: Panel & Discussion (SWFSC – Pacific Room) Moderator: Rasmus Swalethorp, Scripps Institution of Oceanography, UCSD

11:30am - 12:00pm Lunch (SWFSC – Foyer) **on-site lunch will be provided**

12:00pm - 1:00pm Pier & Pelagic Invertebrate Collection (PIC) Tours (meet at SWFSC – Foyer) For the tour we will meet in the Foyer of SWFSC @ 12:00pm and then walk to the SIO Pier or Pelagic Invertebrate Collection (PIC) which is located in Vaughan Hall, Room 125

Moderator: Trung Nguyen, California Department of Fish & Wildlife (CDFW)

4:45 pm - 5:00 pm Closing remarks (SWFSC – Pacific Room) Ed Weber, NOAA Southwest Fisheries Science Center (SWFSC)

5:00 pm - 8:30 pm Welcome reception & CASG Early Career Professional Meet-up (Martin Johnson House) **Food & refreshments will be provided** We recommend that you wear warm attire as the evening reception will be outdoors, so will be cold



Innovative techniques and novel applications of time series data to marine resource management December 6th, 2022

7:30 am - 8:30 am Registration (SWFSC - Foyer)

- 8:30am 9:00am Symposium Opening Remarks (SWFSC Pacific Room) Brice Semmens, Scripps Institution of Oceanography, UCSD
- 9:00am 10:00am Innovations in Fisheries Management: Keynotes (SWFSC Pacific Room) Eric Ward, NOAA Northwest Fisheries Science Center (NWFSC) Katie Grady, California Department of Fish & Wildlife (CDFW) Julia Coates, California Department of Fish & Wildlife (CDFW) Moderator: Brice Semmens, Scripps Institution of Oceanography, UCSD

10:00am - 10:30am Morning Coffee & Tea Break (SWFSC - Foyer)

10:30am - 11:30am Innovations in Water Quality Assessments: Keynotes (SWFSC – Pacific Room) Susanna Theroux, Southern California Coastal Water Research Project (SCCWRP) Clarissa Anderson, Southern California Coastal Ocean Observing System (SCCOOS) Moderator: Zachary Gold, NOAA Pacific Marine Environmental Laboratory (PMEL)

11:30am - 12:00pm Lunch (SWFSC - Foyer)

on-site lunch will be provided

12:00pm - 1:00pm Pelagic Invertebrate Collection (PIC) Tour (meet at SWFSC – Foyer) For the tour we will meet in the Foyer of SWFSC @ 12:00pm and then walk to the Pelagic Invertebrate Collection (PIC) which is located in Vaughan Hall, Room 125

1:00 pm - 2:30 pm Contributed talks: Session III (SWFSC - Pacific Room)

see website for list of talks Moderator: Andrew Thompson, NOAA Southwest Fisheries Science Center (SWFSC)

2:30 pm – 2:45 pm Conference photo 2:45 pm - 3:15 pm Afternoon Coffee & Tea Break (SWFSC – Foyer)

3:15 pm - 4:30 pm Contributed talks: Session IV (SWFSC – Pacific Room) **see website for list of talks** Moderator: Rasmus Swalethorp, Scripps Institution of Oceanography, UCSD

4:30 pm - 5:00pm Closing remarks (SWFSC – Pacific Room) Noelle Bowlin, NOAA Southwest Fisheries Science Center (SWFSC)

5:00 pm - 8:30 pm Poster/Interactive Session & Pizza Party (Martin Johnson House)

Food & refreshments provided

6:00pm – 7:00pm Poster Session I 7:00pm – 8:00pm Poster Session II

see website for list of posters

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December 7th, 2022

Wednesday, Dec 7, 2022: Workshops

8:30 am - 12:00 pm Concurrent Workshops (Scripps Seaside Forum- Conference Rooms)

1. Southern CA Ocean Biomolecular Observing Network Workshop: Coordination & Integration Strategy (Buzzelli/Loeb Room 160)

Corresponding convener: Zachary Gold, PMEL Co-conveners: Susanna Theroux, SCCWRP ; Andrew Thompson, NOAA- SWFSC

The Southern California Ocean Biomolecular Observing Network's (SoCal-OBON) objective is to provide an unprecedented resolution of key ecological indicators across space, time, and biodiversity relevant to marine management. To achieve this, the Network will integrate the suite of existing ocean observing platforms bridging nearshore and offshore biomonitoring efforts and apply standardized molecular approaches to best characterize biological communities and their response to environmental change across the Southern California Bight. This leveraged effort will combine physical and chemical measurements, advanced ocean imaging technologies, and molecular biomonitoring approaches to provide the ecological resolution needed to 1) understand the interplay of water quality and climate driven ocean acidification/hypoxia impacts on biological communities, 2) allow for the identification and forecasting of HABs, 3) better inform fisheries management through the identification of trophic and oceanographic drivers of assemblage dynamics, and 4) map spatio-temporal distributions of protected species.

2. Incorporating & coordinating pollutant time series into a California pollutant monitoring program (Charles Scripps Room 150)

Corresponding convener: Matthew Savoca, Stanford Co-conveners: Erin Satterthwaite (CalCOFI); Karen McLaughlin (SCCWRP); Amalia Almada (USC Sea Grant)

The environment is contaminated by hundreds of thousands of legacy, emerging, and novel synthetic compounds that are persistent in the environment on scales of decades to centuries. Long-term datasets are essential to uncover patterns over time as synthetic chemicals are introduced, regulated, and phased out of production. At the same time there are numerous compounds of unknown origin, use, effects, and fates that have permeated marine systems. Long term monitoring datasets, such as CalCOFI, SCCWRP Bight Monitoring Program, and SWAMP, provide unparalleled temporal resolution of planktonic organisms in the Southern California Bight to delve into questions related to the chronology of contaminants in this ecosystem. The purpose of this roundtable is to explore current efforts to understand pollutant monitoring in CA (e.g., DDT+, PFAS, microplastics), understand what samples exist for contaminant analyses, understand opportunities for longer term/consistent sample collection, and how to develop a collaborative, statewide sampling paradigm moving forward that leverages existing pollutant monitoring efforts and incorporates pollutants into existing time series programs. We will also allot time to discuss possible mechanisms to fund this work, exploring the potential for a future proposal.

3. Integrating ecosystem observations and recruitment forecasting into fisheries assessment and management (Edward W. "Ted" Scripps II Room 165)

Corresponding convener: Brice Semmens, CalCOFI & SIO Co-conveners: Eric Ward, Northwest Fisheries Science Center, NMFS

Understanding the environmental drivers of fish recruitment has been a major area of research for more than a century. In an era of non-stationary ocean conditions, quantifying these relationships is essential for robust management of fish populations. At the same time, new modes of observation, combined with robust long-term monitoring programs, continue to generate increasingly complex fisheries and ecosystem data streams.

10:00 am - 10:30 am Morning Coffee/Tea Break

12:00 pm Conference ends

