
CAPTURE International Year of the Reef Colloquium

Capturing Europe's Respect of Tropical Coral Reefs



Anemone fish on the coral reefs of Raja Ampat, Indonesia.

November 1-2, 2018

Leibniz Centre for Tropical Marine Research (ZMT) GmbH
Haus der Wissenschaft, Sandstraße 4/5 28195 Bremen, Germany

Thursday 1 • Scientific talks

8:45 – 9:15

Registration and morning coffee

9:15 – 9:30

Colloquium opening by Dr. Georg Heiss (Project Manager – International Year of the Reef - IYOR, Freie Universität Berlin, and Dr. Sonia Bejarano (Head of the Reef Systems Research Group, ZMT)

THE BENEFITS WE DERIVE FROM CORAL REEFS

9:30 – 10:00

Morning plenary: Taking the pulse of the tropical oceans through the coral's lens • Professor Jens Zinke, University of Leicester, United Kingdom

10:05 – 10:20

The contribution of coral reef fisheries to food security in the tropical developing world • Ravi Maharaj, University of British Columbia, Canada

10:25 – 10:40

Coral reef structural complexity protects shorelines from waves under rising sea levels • Dr. Daniel Harris, University of Queensland, Australia

10:45 – 11:00

The importance of coral reefs for global tourism and economy • Laretta Burke, World Resources Institute, Germany

10:05 – 11:35

Coffee break

11:35 – 11:50

Pharmaceuticals from the sea - coral reef biodiversity as a source of inspirational molecules • Christopher Leber, Scripps Institution of Oceanography, USA

11:55 – 12:10

The global flood protection savings provided by coral reefs • Dr. Michael Beck, The Nature Conservancy & University of California Santa Cruz, USA

12:15 – 12:30

Linking international ecosystem services research to perspectives and preferences of coral reef resource users • Marleen Schutter, Lancaster University, UK.

12:35 – 13:50

Lunch Buffet

CHANGES IN ECOSYSTEM SERVICE SUPPLY AND CONSEQUENCES OF THEIR LOSS

13:50 – 14:05

Climatic and oceanographic drivers of coral reef ecosystem state • Dr. Gareth Williams, Bangor University, UK.

14:10 – 14:25

Poleward migration of coral reef species and their functions: how will this impact ecosystem services? • Associate Professor Adriana Verges, University of New South Wales, Australia.

14:30 – 14:45

Linking terrigenous sediment delivery to declines in coral reef ecosystem services • Dr. Susan Harrell Yee, US Environmental Protection Agency, USA.

14:50 – 15:05

Climate change effects on Mediterranean coralligenous benthic assemblages • Professor Carlo Cerrano, Reef Check Italy and Università Politecnica delle Marche, Italy.

15:10 – 15:40

Coffee break

15:40 – 16:40

ROUND TABLE: COMUNICATING THE VALUE OF CORAL REEFS TO EUROPE

Participants join a round table discussion in which the following questions will be addressed:

- 1) What are the main facts and figures that Europeans should know about the coral reef crisis and why/how these concern them?
- 2) What actions can Europe take to mitigate the impacts of losing coral reef ecosystem services?
- 3) Species range shifts and tropicalisation: Are there winners and losers of ecosystem services?

Wrap-up and conclusions • The main conclusions of the discussion will be compiled and presented visually in a large animated screen at the CAPTURE immersion room.

16:40 – 19:00

ARTISTIC EXHIBITION AND THE CAPTURE IMMERSION ROOM

Colloquium participants and the general public will be invited to visit the **photographic exhibition** titled *Animals in coral reefs - artworks of nature* (*Tiere im Korallenriff – Kunstwerke der Natur*) and the CAPTURE immersion room which will feature three interactive spaces:

An exhibition of coral reef-inspired sculptures made by school kids on the topic • Dangerous interactions between coral reefs and ocean plastics. Sculptures will be hosted by their creators.

A space to immerse yourself in a virtual coral reef • Using virtual reality headsets colloquium participants and the general public will be able to choose whether to dive in Indonesia and witness an innovative coral reef restoration project or learn everything about coral bleaching.

A visual projection of the facts and figures of coral reef degradation concerning Europe • The main conclusions reached during the scientific roundtables will be exhibited in a large screen together with impactful photographs.

19:00

Dinner reservation for colloquium presenters

Friday 2 • Scientific talks

8:45 – 9:15

Morning coffee

CAN WE PROTECT REEF SERVICES WITH CONVENTIONAL AND NOVEL TOOLS AT HAND?

9:15 – 9:45

Morning Plenary: The search for coral reef management solutions in the Anthropocene • Professor Nick Graham, Lancaster University, UK

9:50 – 10:05

The future of coral reefs subject to rapid climate change: Lessons from natural extreme environments • Dr. Emma Camp, University of Technology Sydney, Australia

10:10 – 10:25

Will we achieve true resilience or just resistance? Evidence from a reef under marginal conditions • Associate Professor Mateo Lopez-Victoria, Javeriana University (Cali), Colombia

10:30 – 11:00

Coffee break

11:00 – 11:15

Making decisions for managing ecosystem services • Dr. Maria Jose Martinez-Harms, Pontifical Catholic University of Chile

11:20 – 11:35

Building coral reef resilience through assisted evolution • Dr. Patrick Buerger, CSIRO, University of Melbourne, Australian Institute of Marine Science

11:40 – 11:55

Can assisted evolution help protect heat-wave damaged coral reefs? • Dr. Marlene Wall, Helmholtz Centre for Ocean Research, Germany

12:00 – 13:15

Lunch Buffet

FUTURE RESEARCH AND ACTION PATHWAYS IN TIMES OF RAPID CORAL REEF DECLINE

13:15 – 13:45

Afternoon Plenary: Restoring coral reefs in the 21st century • Dr. Sebastian Ferse University of Bremen

13:50 – 14:50

Round table discussion: 1) Which scientific approaches likely lag behind in effectiveness given the fast pace at which coral reefs are changing? 2) Which novel approaches may be most effective at prolonging the lifetime of reef biodiversity and ecosystem services?

14:50 – 17:10

Coffee and Panel for future collaborations • Space for participants to meet in small working groups and outline potential collaborative papers on future research directions identified.

17:00 – 18:00

How best to communicate all these facts to the public? the power of filmmaking • Claudia and Hendrik Schmitt, The Jetlagged, Germany. Following a questions-and-answers session, the filmmakers, who have won several awards at national and international film festivals, will screen their feature-length documentary about citizen science and manta rays titled "The Patterns of the Oceans". Their 360° virtual reality film on coral reefs will also be available for screening via VR headsets throughout the colloquium.

19:00

Dinner reservation for colloquium presenters

Round table and more

This colloquium was made possible through the generous financial support of