



## BREN SEMINAR

# DETECTING ECOSYSTEM RESPONSES TO OCEAN WARMING



## MIKE BURROWS

Professor, Scottish Association for Marine Science  
Scottish Marine Institute

**Monday, January 22, 2018 11:00 – 12:00**  
**Bren Hall 1414**

Watch online at <https://ucsb.zoom.us/j/232769584>

**“Mike Burrows was among the first scientists to link past and predicted climate change to species distributions at the global scale. His work is highly relevant to anyone interested in the impacts of climate change on ecosystems.”**

— Alexa Fredston-Hermann, PhD Candidate, Bren School

**ABSTRACT** Warming seas are producing noticeable changes in ecological communities. In this talk, I give examples of such changes, starting from barnacle abundance and distribution on UK rocky shores and ending with fish and plankton communities across the globe. Expected shifts in distributions can be derived from physical changes in temperature using the “velocity of climate change”. Simple methods based on the temperature preferences of individual species show the magnitude of response to changes in temperature, and offer easily applied metrics for tracking current trends in biodiversity.

**BIO** Mike Burrows is a Professor at the Scottish Association for Marine Science in Oban, and has been working on long-term changes in coastal areas since the 1980s. Working with an NCEAS group in Santa Barbara has led to his increasingly global perspective on ecological changes in relation to climate change.

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