



Contribution ID : 77

Type : **Oral**

Interactive Effects of Temperature and Low Oxygen on the Vertical Distribution of Copepod Eggs and Nauplii in Coastal Seas

Monday, 3 September 2018 15:45 (15)

As a result of cultural eutrophication, bottom water hypoxia has been increasing globally in estuarine and shelf waters. Coastal hypoxia has the potential to adversely impact pelagic zooplankton communities by increasing the mortality of copepod eggs which can sink into low oxygen bottom waters. Using depth-specific sampling we examined the vertical distribution of copepod eggs and nauplii over different seasons in a coastal plain estuary of the eastern United States, the Chesapeake Bay. We compare the vertical distribution of copepod eggs and nauplii to the results of a mechanistic model which takes into account the sinking rate of copepod eggs; the temperature-driven hatching rate of copepod eggs in the water column; and the effects of low oxygen on egg hatching.

Position

Professor

Affiliation

University of Maryland Center for Environmental Science

Email Address

roman@umces.edu

Are you a SFB 754 / Future Ocean member?

No

Primary author(s) : Prof. ROMAN, Michael (University of Maryland Center for Environmental Science); Prof. PIERSON, Jamie (University of Maryland Center for Environmental Science); Ms FITZGERALD, Catherine (University of Maryland Center for Environmental Science)

Presenter(s) : Prof. ROMAN, Michael (University of Maryland Center for Environmental Science)

Session Classification : 02 Ecosystem Impacts

Track Classification : 02 Ecosystem Impacts