

Interactive comment on “Distributions and assemblages of larval fish in the East China Sea in the northeasterly and southwesterly monsoon seasons 2008” by W. Y. Chen et al.

E. Daly

elizabeth.daly@noaa.gov

Received and published: 27 July 2013

“Distribution and assemblages of larval fish in the East China Sea in the northeasterly and southwesterly monsoon seasons 2008”

The authors showed how abundance and community of fish larvae changed between two monsoon seasons in the East China Sea and related these changes to physical conditions. The manuscript is well written but I believe before acceptance, major revisions need to occur General comments: Critical to this study is the zooplankton data and with no mention of zooplankton collections or methodology I am left to interpret the data as it is written: Zooplankton Wt (g). Which may mean that there was no

C3776

standardization for volume towed of the zooplankton data. This needs to be corrected and figure 6 and figure 7 reanalyzed. The authors state in the abstract that the food availability are affecting the larval abundance in the southwesterly monsoon season: not according to Fig 6 which shows a possible but weak relationship to zooplankton and the winter monsoon season, not summer, but looking at the ordination diagram in figure 7b it does look like only the summer coastal community is affected by both zooplankton wet weight and primary production. This would be interesting to explore once the zooplankton data is standardized between stations. Figure 8 would be improved by adding circles encompassing the assemblages and possibly adding labels to the assemblages. The inshore assemblage in winter extends the entire sampling region coinciding with the China coastal current and there is also a minor offshore assemblage in winter. For the summer monsoon season, there is a summer coastal assemblage in a strip along the coast that has a higher abundance of larvae than any other assemblage. There is also a larger offshore community than in winter and a much spatially reduced inshore community pressed into the NE area of the sampling grid. I would recommend that figure 8 preceed the CCA, and that the CCA include as a factor the assemblages identified in the dendograms for both monsoon seasons to help understand what environmental variable are affecting the various community in each monsoon season. Additionally, I believe the Mann-Whitney u-test should be based on monsoon/assemblage differences and should come after the community analysis. Lastly, as there was no difference between CPUE in the day/night samples that this is dropped and possible added to the methods... we tested for night/day differences for each monsoon season and did not find significant differences and as such we combined all samples together... Specific comments: Last paragraph of the introductions: the hypothesis of this study needs to be more clearly stated Materials and methods: line 10, “were picked up” should be changed to “sorted... from the collections... Zooplankton methods need to be added Data analysis: Line 26 -Adding a statement prior to Cluster analysis... such as: To examine community structure of the larvae for each monsoon season, we used cluster analysis... 4.2 of Discussion: last paragraph just

C3777

before 4.3 this statement contradicts statements made in abstract 4.3 of discussion: was there a test on the difference between the species composition of the three assemblages? the authors state that there was a significance difference, yet I am not sure what this is based upon Last paragraph of 4.3: "The summer coastal assemblage was biggest among the three assemblages" this infers that largest spatially, but I believe you mean highest CPUE. This point should be tested by the Mann-Whitney test by including assemblage.

Interactive comment on Biogeosciences Discuss., 10, 7075, 2013.

C3778