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Dr. Dina Lika, Ph.D.

Guest Editor, Special Issue

*Ecological Modelling*

Dear Dr. Lika:

I am writing to resubmit our manuscript entitled “Attributing hypoxia responses of early life *Menidia menidia* to energetic mechanisms with Dynamic Energy Budget theory” (ECOMOD-24-322) after completing revisions. Thank you for taking the time to personally review the manuscript to provide timely reviews in light of the delayed reviewer. We are grateful for the constructive and insightful feedback provided by you and the first reviewer, and for the opportunity to resubmit our manuscript. After taking the time to carefully implement and respond to the suggestions and concerns, we believe the manuscript is substantially improved.

Specifically, we have created a Supplemental Methods section and moved the details about the parameter estimation procedure from Section 2.3 there, along with the bulk of Section 2.4 explaining the physiological connections between hypoxia responses in fishes, synthesizing units, and DEB parameters. We also added a section to the Supplemental Methods explaining how we calculated the specific maintenance cost using data on weight loss during starvation.

We also addressed concerns about our assumption that birth occurs at hatching by adding information and references about how *M. menidia* have little to no yolk sac larval period and begin hatching immediately, as well as reexamining and responding to questions about our values for *δM* and *dV*. The detailed responses to all comments with line numbers are listed below.

Thank you for your time and consideration in reviewing our revised manuscript. We look forward to hearing from you.

Sincerely,

Teresa G. Schwemmer, Ph.D.

Corresponding Author