21 February 2015

Dear Fisheries Research Editorial Board,

**RE: Variation in growth among individuals and over time: a case study and simulation experiment involving tagged Antarctic toothfish**

Please find attached our paper for consideration in the special issue on Growth Modeling in Fisheries Research. In our paper we develop growth models in which we decompose variation in growth among individuals into persistent or transient components. We apply the model to a wild marine population of Antarctic toothfish and validate using a simulation study. We find that transient variation accounts for up to half of the total variability in Antarctic toothfish and the simulation study suggests that these models are approximately unbiased given the available sample sizes. While variation in growth rates is also an active area of research, our study is the first to our knowledge to apply these methods to a wild marine population.

We make the code publically available on GitHub as an R package *TagGrowth* in an attempt to encourage future research comparing the magnitude of persistent and transient variation in growth among marine populations in different taxa and environments.

All data used within this paper are owned by CCAMLR and the New Zealand Ministry for Primary Industries (MPI). The rights to use these data in our paper, and make the data publically available, were granted by MPI.

Thank you for your consideration. We look forward to hearing from you.

Yours faithfully,

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