19 June 2016

Dear Editor,

I am pleased to resubmit the manuscript “An Algorithm for the von Bertalanffy Seasonal Cessation in Growth Function of Pauly et al. (1992)” as a Technical Note to *Fisheries Research*. The original submission was rejected by editor Dr. Punt because he felt that the coding therein was “pretty standard.” In subsequent correspondence, I explained that …

*I was approached nearly a year ago by an individual asking me to help code this function in R.  I agreed to help because I had previously coded approximately ten other parameterizations of the von Bertalanffy growth function (VBGF) in R and assumed that this would be straightforward exercise.  However, I immediately ran into the problem of how the NGT parameter in the Pauly function "rescales" the age variable.  I did not think that this would be a problem because the t0 parameter in the typical VBGF can also be thought of as a "rescaling" the age variable.  The difference, though, is that the t0 parameter simply shifts the age data left (usually) or right along the age axis.  The NGT parameter in Pauly's model, however, both shifts AND compresses the age data, and more importantly, the amount of shifting and compressing depends on the "annual age."  So, while the NGT and t0 parameters are both estimated as one value, the shifting and compressing effect of the NGT parameter, but not the t0 parameter, in the Pauly function is complicated by a dependency on the annual age of the fish.  Further complications in the Pauly function arise due to an additional shift from t0 and whether the "no growth period" contains the "birthday" of the fish (e.g., extends across Jan. 1).*

*Facing these problems, I turned to the literature for help.  As described in my manuscript, Pauly's original paper did not describe how to deal with these issues and his original program was no longer available (in compiled format or as source code).  Apparently there is a closed source implementation of the function in the LFDA software, but that is used primarily for length frequency data (to the best of my knowledge).  I found one paper (Beguer et al. (2011)) that claimed to have fit Pauly's model, but when I received the source code from the authors it was evident that they had both fit a different model and fixed the Linf parameter.  In other words, I could not find anything in the literature to help with how to code this function relative to these issues.*

*Other parameterizations of the VBGF require only a few minutes for me (and others) to code in R; thus, I consider those codings as "pretty standard" and would never consider writing a technical note for them.  However, the Pauly function took tens of hours to formulate the algorithm described in my manuscript.  Perhaps this is related to my skills as a coder, but, if not, I felt that the description contained in the manuscript would be useful to others in the field (and would save them the considerable time I put into considering how to code the function).*

*I hope that you will see, assuming that you did not on first review, that the implementation of this function is not as straightforward as other parameterizations of the VBGF.*

Dr. Punt agreed to reconsider the manuscript based on this argument. Furthermore, he requested that the manuscript be reorganized and submitted as a “Technical Note” and that the appendices be removed and put in the Supplementary Information. I have made those changes, along with some minor grammatical corrections, in the newly submitted manuscript.

The code underlying the analyses in this manuscript is available at

<https://raw.githubusercontent.com/droglenc/SeasonalGrowth/master/code/SeasonalGrowth_Analysis.R>

This code requires the development versions (will be released to CRAN in August) of the FSA and FSAdata packages. Descriptions for installing these versions of these packages are at

<https://github.com/droglenc/FSA#installation>

<https://github.com/droglenc/FSAdata#installation>

Thus, reviewers should be able to install the package and run the code to recreate the analyses of this manuscript, including my implementation of the Pauly et al. growth function.

I do not have any conflicts of interest or financial or material benefit interests related to the publication of this manuscript. I have followed the Guide to Authors and Submission Checklist found on your website.

**Thank you for your consideration. I look forward to your response about the suitability of this note for publication in *Fisheries Research*. Please feel free to contact me if you have any questions or concerns related to this manuscript.**

**Respectfully,**

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Dr. Derek H. Ogle

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