Kia ora MSSANZers - welcome to your Friday digest.

There are a couple of notices below. As you will have seen the handling of the digest bounces around a little so the best way to get your news into the digest is to send it to mssanz@iemss.org and the person taking point will handle it from there.

Ngā mihi o te rā, Val

- Beth Fulton is seeking input regarding the representation of fishing in ecological models. See
 more information below and attached <u>but this link</u> will take you to a survey that will take
 approx. 20 minutes to complete.
- Sondoss Elsawah and Tony Jakeman advise that a Special Issue on Good Modelling Practices is now available via the journal of Mathematics and Computers in Simulation: https://doi.org/10.1016/j.matcom.2020.01.007. The SI is based on papers submitted to Modsim2017.
- The deadline for submission to iEMSs2020 has been extended to 15 February there are some really interesting sessions see https://iemss2020.com/ for more information.

We are researchers at the Centre for Marine Socioecology (Hobart, Australia) and the Institute of Environmental Science and Technology (Barcelona, Spain). We would like to invite you to assist us with a research project regarding the representation of fishing in ecosystem models. You are being invited based on your involvement, expertise and interest in social science and/or fishing behaviour and decision making and/or ecosystem modelling.

Participation in this project would involve undertaking an online survey, which will last up to 20 minutes. For further information, please see the attached information sheet. The link to the online survey is: https://www.surveymonkey.com/r/YNHMXZR

For questions, or to indicate interest in the results of this survey, please contact Camilla Novaglio at camilla.novaglio@csiro.au

Regards,

- Dr. Camilla Novaglio, postdoctoral fellow at CSIRO and CMS
- Dr. Karen Alexander, research fellow IMAS and CMS
- Dr. Asta Audzijonyte, research fellow IMAS and CMS
- Dr. Beth Fulton, research group leader CSIRO and CMS
- Dr. Sara Minarro, postdoctoral fellow at IEST
- Dr. Ingrid van Putten, research scientist CSIRO and CMS



Research Participant Information Sheet

Representation of fishing in ecosystem models

Project overview

Models are widely used to represent marine socio-ecological systems, and to answer questions on the role of fishing in shaping ecological communities and its contribution to societal benefits. The outcome of these studies largely depends on the structure and assumptions underlying the model, including the representation of fishing. For instance, a range of economic and social factors (e.g. profits, traditions and cultural norms) can drive fishing in the real world, and hence can be used to represent dynamics in models. But overwhelmingly the emphasis has been on economic factors (and economic theories), whereas social factors are not often considered.

Limited consideration of social factors is due to several challenges. Among these are the modelers' partial knowledge of social processes and the perceived mathematical complexity to accurately describe social processes. More complex models have larger uncertainty and may be hard to interpret. Despite such challenges, improved representation of fishing through consideration of social factors in models is needed to advance our understanding of fishing and implications for the socio-ecological systems.

This survey aims at advancing our understanding by way of two questions i) what are the key social factors that drive fishing that should be included in the models? And, ii) which factors can be included given the constraints of currently available models and data? Results will inform future developments of the human dimension in socio-ecological models.

What does participation involve?

Participation in this study will involve partaking in an on-line survey of approximately 20 minutes. The survey has been developed by CSIRO, UTAS (Hobart, Australia) and the Institute of Environmental Science and Technology (Barcelona, Spain) researchers. The survey focusses on the following questions:

- Some brief demographic information about you (e.g. discipline)
- Your perception of the drivers of fishing
- Your involvement in the creation of ecosystem models, with particular focus on the representation of fishing
- Your satisfaction with the way fishing is represented in these models
- Your opinion on whether and how the representation of fishing in these models can be improved

Risk and benefits

Aside from giving up your time, there are no foreseeable risks associated with participating in this study.

Withdrawal from the research project

Participation in this study is completely voluntary and you do not have to take part. Your decision whether to participate will not affect your current or future relationship with the researchers. You are free to stop your participation in the survey at any time.

Confidentiality

All information provided by you will be treated confidentially and no participant will be attributed to any statement or finding. Your name, workplace or any other personal information will not be included in any publications resulting from the study. All data collected in this study will be coded in a deidentified manner and subsequently analysed and reported in such a way that responses will not be able to be linked to any individuals. The information will only be available to our research team. Any data collected as part of this study will be securely stored as per CSIRO's Recordkeeping Procedure.

How will my information be used?

It is anticipated that the de-identified information obtained through the interviews will be published and/or presented in a variety of forums. This includes the production of a scientific journal publications and conference presentations.

Ethical clearance and contacts

This study has been approved by CSIRO's Social Science Human Research Ethics Committee in accordance with the *National Statement on Ethical Conduct in Human Research (2007)*. Ethical clearance for this project is valid for the period 06-09-2019 to 31-01-2020. If you have any questions concerning your participation in the study, please contact the researchers via their contact details below. Alternatively, any concerns or complaints about the conduct of this study can be raised with the Manager of Social Responsibility and Ethics on (07) 3833 5693 or by email at csshrec@csiro.au.

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Please keep this sheet for your information.