List of Publications*

February 13, 2017

Axel G. Rossberg

Monographs

1. Rossberg, A. G. (2013). *Food Webs and Biodiversity: Foundations, Models, Data*. Wiley. ISBN 9-780470973-55-4, winner of PROSE award 2013 in Biological Sciences category.

Refereed Journal Articles

2. Rossberg, A. G., Uusitalo, L., Berg, T., Zaiko, A., Chenuil, A., Uyarra, M. C., Borja, A., and Lynam, C. P. (2017). Quantitative criteria for choosing targets and indicators for sustainable use of ecosystems. *Ecological Indicators*, *72*, 215–224.

3. Schipper, A. M., Belmaker, J., de Miranda, M. D., Navarro, L. M., Böhning-Gaese, K., Costello, M. J., Dornelas, M., Foppen, R., Hortal, J., Huijbregts, M. A. J., Martín-López, B., Pettorelli, N., Queiroz, C., Rossberg, A. G., Santini, L., Schiffers, K., Steinmann, Z. J. N., Visconti, P., Rondinini, C., and Pereira, H. M. (2016). Contrasting changes in the abundance and diversity of North American bird assemblages from 1971 to 2010. *Glob Change Biol*, pp. n/a–n/a.

4. Santini, L., Belmaker, J., Costello, M. J., Pereira, H. M., Rossberg, A. G., Schipper, A. M., Ceauşu, S., Dornelas, M., Hilbers, J. P., Hortal, J., Huijbregts, M. A. J., Navarro, L. M., Schiffers, K. H., Visconti, P., and Rondinini, C. (2016). Assessing the suitability of diversity metrics to detect biodiversity change. *Biological Conservation*.

5. Lynam, C. P., Uusitalo, L., Patrício, J., Piroddi, C., Queirós, A. M., Teixeira, H., Rossberg, A. G., Sagarminaga, Y., Hyder, K., Niquil, N., Möllmann, C., Wilson, C., Chust, G., Galparsoro, I., Forster, R., Veríssimo, H., Tedesco, L., Revilla, M., and Neville, S. (2016). Uses of Innovative Modeling Tools within the Implementation of the Marine Strategy Framework Directive. *Front. Mar. Sci*, p. 182.

6. Heiskanen, A.-S., Berg, T., Uusitalo, L., Teixeira, H., Bruhn, A., Krause-Jensen, D., Lynam, C. P., Rossberg, A. G., Korpinen, S., Uyarra, M. C., and Borja, A. (2016). Biodiversity in marine ecosys-

*The PDF file of this document contains hyperlinks to preprints. See `http://axel.rossberg.net/paper/Publications.pdf` for updates.

tems—European developments toward robust assessments. *Front. Mar. Sci*, p. 184.

7. Farcas, A. and Rossberg, A. G. (2016). Maximum sustainable yield from interacting fish stocks in an uncertain world: Two policy choices and underlying trade-offs. *ICES J. Mar. Sci.*, *73*(10), 2499–2508.

8. Piroddi, C., Teixeira, H., Lynam, C. P., Smith, C., Alvarez, M. C., Mazik, K., Andonegi, E., Churilova, T., Tedesco, L., Chifflet, M., Chust, G., Galparsoro, I., Garcia, A. C., Kämäri, M., Kryvenko, O., Lassalle, G., Neville, S., Niquil, N., Papadopoulou, N., Rossberg, A. G., Suslin, V., and Uyarra, M. C. (2015). Using ecological models to assess ecosystem status in support of the European Marine Strategy Framework Directive. *Ecological Indicators*, *58*, 175–191.

9. James, A., Plank, M. J., Rossberg, A. G., Beecham, J., Emmerson, M., and Pitchford, J. W. (2015). Constructing random matrices to represent real ecosystems. *The American Naturalist*, *185*(5), 680–692.

10. Hyder, K., Rossberg, A. G., Allen, J. I., Austen, M. C., Barciela, R. M., Bannister, H. J., Blackwell, P. G., Blanchard, J. L., Burrows, M. T., Defriez, E., Dorrington, T., Edwards, K. P., Garcia-Carreras, B., Heath, M. R., Hembury, D. J., Heymans, J. J., Holt, J., Houle, J. E., Jennings, S., Mackinson, S., Malcolm, S. J., McPike, R., Mee, L., Mills, D. K., Montgomery, C., Pearson, D., Pinnegar, J. K., Pollicino, M., Popova, E. E., Rae, L., Rogers, S. I., Speirs, D., Spence, M. A., Thorpe, R., Turner, R. K., van der Molen, J., Yool, A., and Paterson, D. M. (2015). Making modelling count - increasing the contribution of shelf-seas community and ecosystem models to policy development and management. *Marine Policy*, *61*, 291–302.

11. Fung, T., Farnsworth, K. D., Reid, D. G., and Rossberg, A. G. (2015). Impact of biodiversity loss on production in complex marine food webs mitigated by prey-release. *Nature Communications*, *6*, 6657.

12. Borrelli, J. J., Allesina, S., Amarasekare, P., Arditi, R., Chase, I., Damuth, J., Holt, R. D., Logofet, D. O., Novak, M., Rohr, R. P., Rossberg, A. G., Spencer, M., Tran, J. K., and Ginzburg, L. R. (2015). Selection on stability across ecological scales. *Trends in Ecology & Evolution*, *30*(7), 417–425.

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15. van Leeuwen, E., Brännström, Å., Jansen, V. A. A., Dieckmann, U., and Rossberg, A. G. (2013). A generalized functional response for predators that switch between multiple prey species. *Journal of Theoretical Biology*, *328*, 89–98. doi:10.1016/j.jtbi.2013.02.003.

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19. Rombouts, I., Beaugrand, G., Fizzala, X., Gaill, F., Greenstreet, S. P. R., Lamare, S., Le Loc'h, F., McQuatters-Gollop, A., Mialet, B., Niquil, N., Renaud, F., Rossberg, A. G., and Féral, J. P. (2013). Food web indicators under the marine strategy framework directive: From complexity to simplicity? *Ecological Indicators*, *29*, 246–254.

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21. Shephard, S., Fung, T., Houle, J. E., Farnsworth, K. D., Reid, D. G., and Rossberg, A. G. (2012). Size-selective fishing drives species composition in the Celtic Sea. *ICES Journal of Marine Science*, *69*(2), 223–234.

22. Rossberg, A. G. (2012). A complete analytic theory for structure and dynamics of populations and communities spanning wide ranges in body size. *Advances in Ecological Research*, *46*, 429–522.

23. Rogers, T., McKane, A. J., and Rossberg, A. G. (2012). Spontaneous genetic clustering in populations of competing organisms. *Phys. Biol.*, *9*, 066002. Chosen as one of Physical Biology's highlights of 2012.

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