

List of Publications*

September 7, 2019

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., GAEDKE, U., AND KRATINA, P. (2019). Dome patterns in pelagic size spectra reveal strong trophic cascades. *Nature Communications*.
3. ROSSBERG, A. G., BARABÁS, G., POSSINGHAM, H. P., PASCUAL, M., MARQUET, P. A., HUI, C., EVANS, M. R., AND MESZÉNA, G. (2019). Let's Train More Theoretical Ecologists – Here Is Why. *Trends in Ecology & Evolution*.
4. ROSSBERG, A. G. AND BARABÁS, G. (2019). How carefully executed network theory informs invasion ecology. *Trends in Ecology & Evolution*, 0(0).
5. SPENCE, M. A., BLANCHARD, J. L., ROSSBERG, A. G., HEATH, M. R., HEYMANS, J. J., MACKINSON, S., SERPETTI, N., SPEIRS, D. C., THORPE, R. B., AND BLACKWELL, P. G. (2018). A general framework for combining ecosystem models. *Fish Fish.*, 19(6), 1031–1042.
6. O'SULLIVAN, J. L. D., KNELL, R. J., AND ROSSBERG, A. G. (2018). Metacommunity-scale biodiversity regulation and the self-organized emergence of macroecological patterns. *bioRxiv*, p. 489336. In press with Ecology Letters.
7. TAM, J. C., LINK, J. S., ROSSBERG, A. G., ROGERS, S. I., LEVIN, P. S., ROCHET, M.-J., BUNDY, A., BELGRANO, A., LIBRALATO, S., TOMCZAK, M., VAN DE WOLFSHAAR, K., PRANOVI, F., GOROKHOVA, E., LARGE, S. I., NIQUIL, N., GREENSTREET, S. P. R., DRUON, J.-N., LESUTIENE, J., JOHANSEN, M., PRECIADO, I., PATRICIO, J., PALIALEXIS, A., TETT, P., JOHANSEN, G. O., HOULE, J., AND RINDORF, A. (2017). Towards ecosystem-based management: Identifying operational food-web indicators for marine ecosystems. *ICES J Mar Sci*, 74(7), 2040–2052.
8. ROSSBERG, A. G., UUSITALO, L., BERG, T., ZAIKO, A., CHENUIL, A., UYARRA, M. C., BORJA, A., AND LYNAM, C. P. (2017). Quantitative

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- criteria for choosing targets and indicators for sustainable use of ecosystems. *Ecological Indicators*, 72, 215–224.
9. BROSZEIT, S., BEAUMONT, N. J., UYARRA, M. C., HEISKANEN, A.-S., FROST, M., SOMERFIELD, P. J., ROSSBERG, A. G., TEIXEIRA, H., AND AUSTEN, M. C. (2017). What can indicators of good environmental status tell us about ecosystem services?: Reducing efforts and increasing cost-effectiveness by reapplying biodiversity indicator data. *Ecological Indicators*, 81, 409–442.
 10. SCHIPPER, A. M., BELMAKER, J., DE MIRANDA, M. D., NAVARRO, L. M., BÖHNING-GAESE, K., COSTELLO, M. J., DORNELAS, M., FOPEN, 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. 3948–3959.
 11. SANTINI, L., BELMAKER, J., COSTELLO, M. J., PEREIRA, H. M., ROSSBERG, A. G., SCHIPPER, A. M., CEAUȘU, 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*.
 12. 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 ecosystems—European developments toward robust assessments. *Front. Mar. Sci*, p. 184.
 13. 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.
 14. 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., PAPPADOPOULOU, 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.
 15. 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.
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17. 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.
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 19. ROSSBERG, A. G., ROGERS, T., AND MCKANE, A. J. (2014). Current noise-removal methods can create false signals in ecogenomic data. *Proceedings of the Royal Society B: Biological Sciences*, *281*(1783), 20140191.
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 21. 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.
 22. SHEPHARD, S., FUNG, T., ROSSBERG, A. G., FARNSWORTH, K. D., REID, D. G., GREENSTREET, S. P. R., AND WARNES, S. (2013). Modelling recovery of Celtic Sea demersal fish community size-structure. *Fisheries Research*, *140*, 91–95.
 23. ROSSBERG, A. G., ROGERS, T., AND MCKANE, A. J. (2013). Are there species smaller than 1 mm? *Proceedings of the Royal Society B*, *280*, 20131248.
 24. ROSSBERG, A. G., HOULE, J. E., AND HYDER, K. (2013). Stock-recruitment relations controlled by feeding interactions alone. *Canadian Journal of Fisheries and Aquatic Sciences*, *70*(10), 1447–1455.
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26. FUNG, T., FARNSWORTH, K. D., SHEPHARD, S., REID, D. G., AND ROSSBERG, A. G. (2013). Why the size structure of marine communities can require decades to recover from fishing. *Marine Ecology Progress Series*, *484*, 155–171. doi:10.3354/meps10305.
27. 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.
28. 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.
29. 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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Editorials, Reports, Conference Papers, Book Chapters

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