

Appendix. Ecological applications of multivariate autoregressive models to the analysis of community time-series data.

| Citation                   | System              | Overview  |
|----------------------------|---------------------|---|
| Beisner et al 2003         | Freshwater plankton | Direct and indirect effects of invasive fish on lake plankton   |
| Carpenter et al 2005       | Freshwater plankton | Carbon flow in lake experiments   |
| Duffy 2007                 | Freshwater plankton | Experimental manipulation of bluegill predator to elucidate disease control pathways in lake zooplankton                      |
| Fischer et al 2001         | Freshwater plankton | Compensatory dynamics of plankton in experimental pH manipulations  |
| Hall et al 2009            | Freshwater plankton | Dynamics of fungal disease in lake zooplankton  |
| Hampton and Schindler 2006 | Freshwater plankton | Comparing MAR results given alternative sampling scenarios for Lake Washington plankton                                       |
| Hampton et al 2006         | Freshwater plankton | Comparing Lake Washington plankton food webs derived from historical lab and field studies to those derived from MAR analysis |
| Hampton et al 2008         | Freshwater plankton | Comparing strength of biotic and abiotic drivers on Lake Baikal plankton  |
| Huber and Gaedke 2006      | Freshwater plankton | Direct and indirect drivers of Bodensee phytoplankton and ciliates  |
| Ives 1995                  | Theoretical         | Explorations of MAR for identifying external and biotic drivers of population dynamics  |
| Ives et al 1999            | Freshwater plankton | Direct and indirect effects of experimental fish manipulations on lake plankton   |
| Ives et al 2003            | Freshwater plankton | Explorations of MAR applications in ecology, illustrated with plankton community data in experimental fish manipulations      |
| Klug and Cottingham 2001   | Freshwater plankton | Trophic pathways for phytoplankton response to experimental lake carbon and nutrient manipulations                            |

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|----------------------|---|--|
| Klug et al 2000      | Freshwater plankton                       | Identifying interactions that lead to compensatory dynamics in experimental pH manipulations                           |
| Lindegren et al 2009 | Fisheries                                 | State-space MAR used to analyze Baltic cod drivers, and explore alternative management scenarios                       |
| Mutshinda et al 2009 | Marine crustaceans, moths, birds, rodents | Comparing strength of biotic and abiotic drivers across ecosystems   |
| Neubert et al 2009   | Experimental flour beetle                 | Detecting reactivity is illustrated using experimental flour beetle data   |
| Ripa and Ranta 2007  | Theoretical                               | Theoretical examination of the roles of environment and species interactions in producing population synchronies       |
| Vik et al 2008       | Lynx-hare                                 | Comparing interspecific to intraspecific interaction strengths for predator-prey system                                |
| Ward et al. 2010     | Sea lions                                 | Inference of sub-population structure in the Gulf of California from time series at multiple sites                     |
| Yamamura et al 2006  | Insect                                    | Environmental drivers of rice paddy insect abundance, exploration of future dynamics based on climate change scenarios |

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