

Appendix A. Supplementary table and figures.

TABLE A1: Coefficients (mean and upper and lower limits of the 95% credibility interval) of models for size-adjusted epibiont burden as a function of the treatments refuge (presence or absence) and fish (present or absent) and depth (surface or bottom), for *Ceriodaphnia* and *Diaphanosoma* in deep enclosures at week 2.

Ceriodaphnia

Model term	Mean	UppCI	LowCI
log_e(length)	1.321	0.516	2.094
depth	0.024	-0.159	0.201
refuge	0.878	0.119	1.624
fish	-0.078	-0.893	0.779
depth × refuge	-0.016	-0.290	0.250
depth × fish	-0.173	-0.434	0.074

Diaphanosoma

Model term	Mean	UppCI	LowCI
log_e(length)	1.676	0.838	2.457
depth	0.239	0.048	0.431
refuge	0.737	-0.871	2.225
fish	-0.118	-1.511	1.344
depth × refuge	-0.022	-0.308	0.245
depth × fish	-0.007	-0.238	0.213

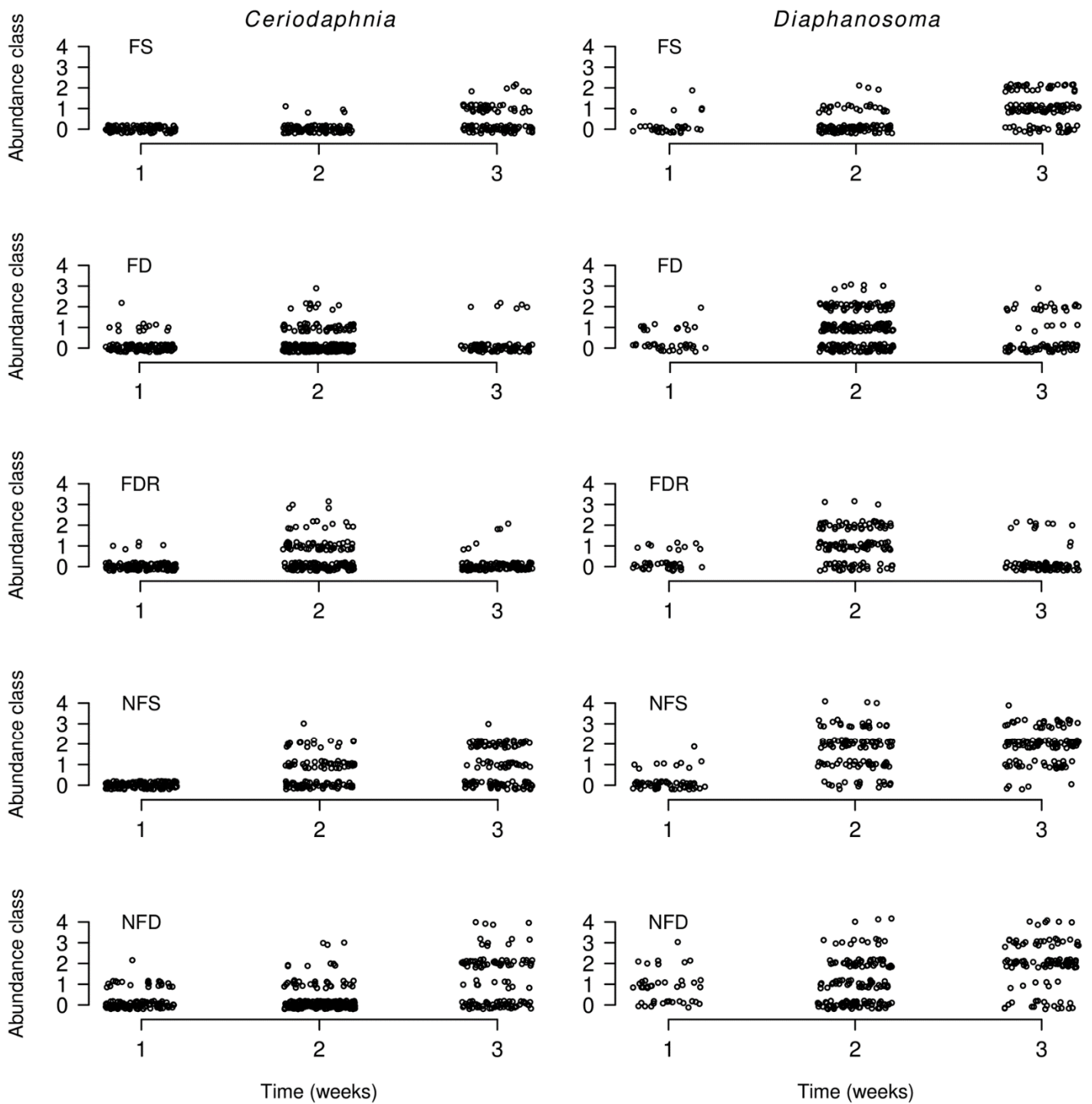


FIG. A1: Raw data on epibiont burden (0-4 classes) over time (weeks 1-3) on *Ceriodaphnia* and *Diaphanosoma* for the different treatments. FS: fish in shallow enclosures; FD: fish in deep enclosures; FDR: fish in deep enclosures with a physical refuge for zooplankton; NFS: fishless shallow enclosures; NFD: fishless deep enclosures. Random jitter was added to both the horizontal and vertical axes to improve visibility. Data are not adjusted for body length.

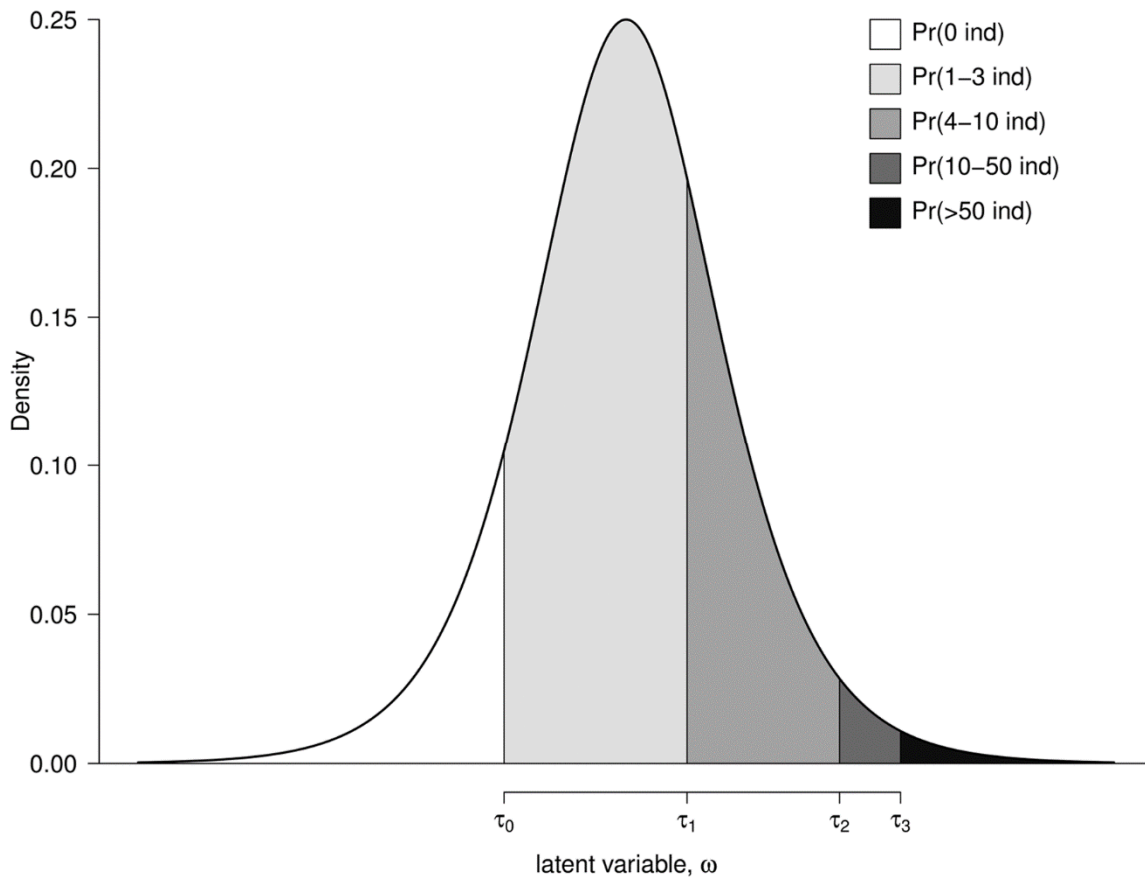


FIG. A2: Graphical representation of cutoff or threshold points (τ_i) separating the outcomes (categories of abundance) in an ordered categorical logistic model. In the example there are four cutoff points separating five abundance categories. The areas of the shaded regions under the logistic density curve correspond to probabilities of different outcomes for individual i in enclosure k given the value of the latent variable $\omega_i = x_i \beta + \psi_k$.

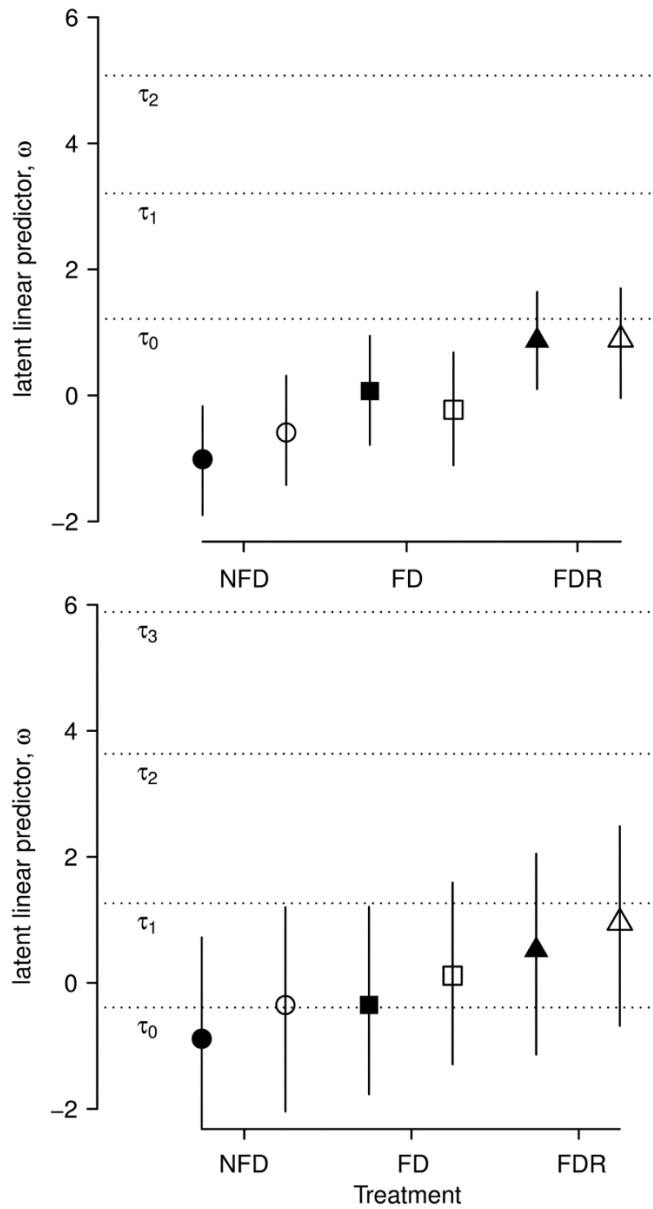


FIG. A3: Vertical distribution of zooplankton vs. epibiont burden (week two only). NFD: fishless deep enclosures; FD: fish in deep enclosures; FDR: fish in deep enclosures with a physical refuge for zooplankton. Open symbols represent surface samples (0-2 m deep) and dark symbols represent bottom samples (2-4 m deep). See Fig. 2 for additional detail.