

SUPPLEMENTARY MATERIAL S3

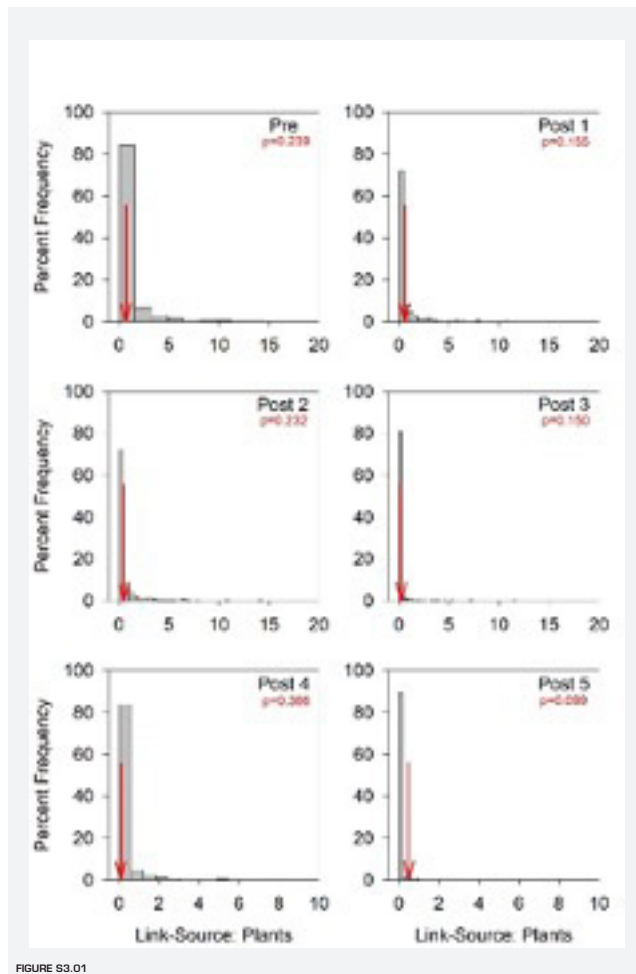


FIGURE S3.01

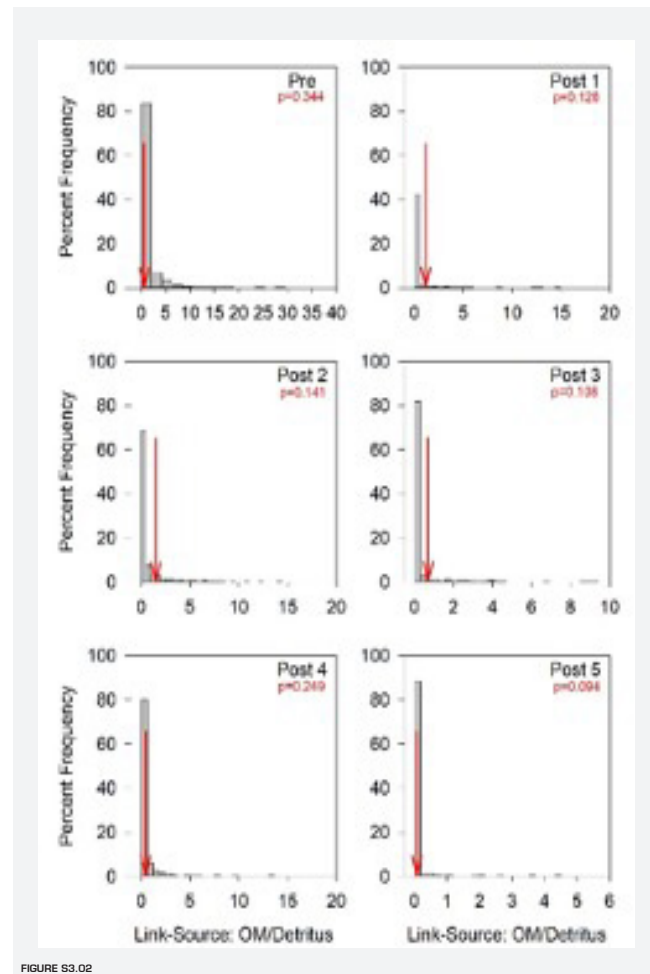


FIGURE S3.02

FIGURE S3 | Results of the null modeling analysis conducted to test whether the observed ecosystem functions were different than expected based on chance given the number of species and relative biomass in the assemblages. This analysis distinguishes whether the pattern of change in estimated trait-states is due to species richness and biomass alone or whether the identities of species plays an important role in determining ecosystem functioning. We ran 1,000 permutations for each sample in each time-period, and trait-states were calculated for each random assemblage based on the species identity (*i.e.*, trait states or values) assigned to each biomass in the sample. Significance was assessed with a one-tailed distribution at $p < 0.05$. Note that the x-axis scale differs among plots within each figure.



FIGURE S3 | (Continued)

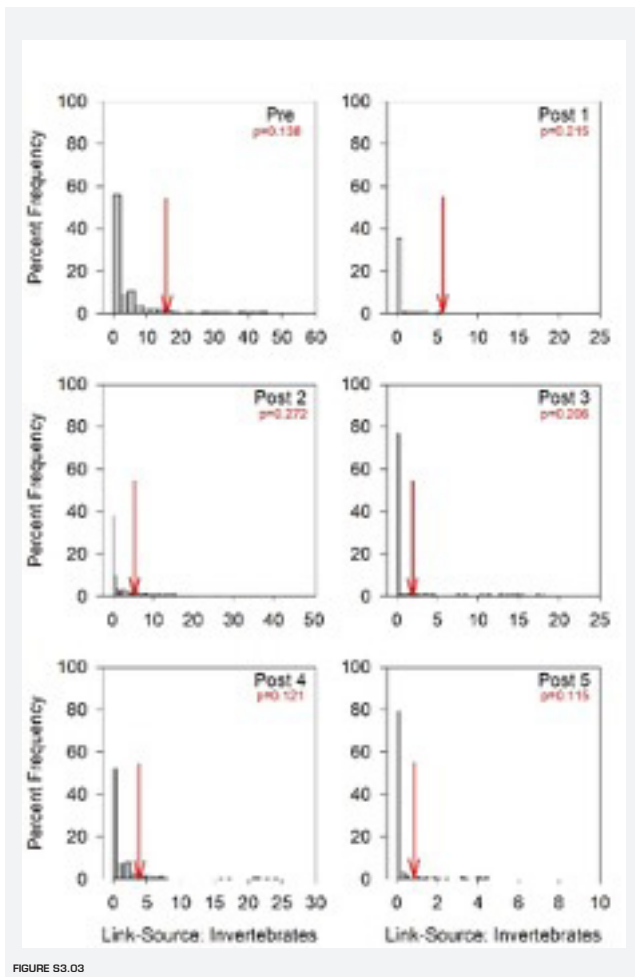


FIGURE S3.03

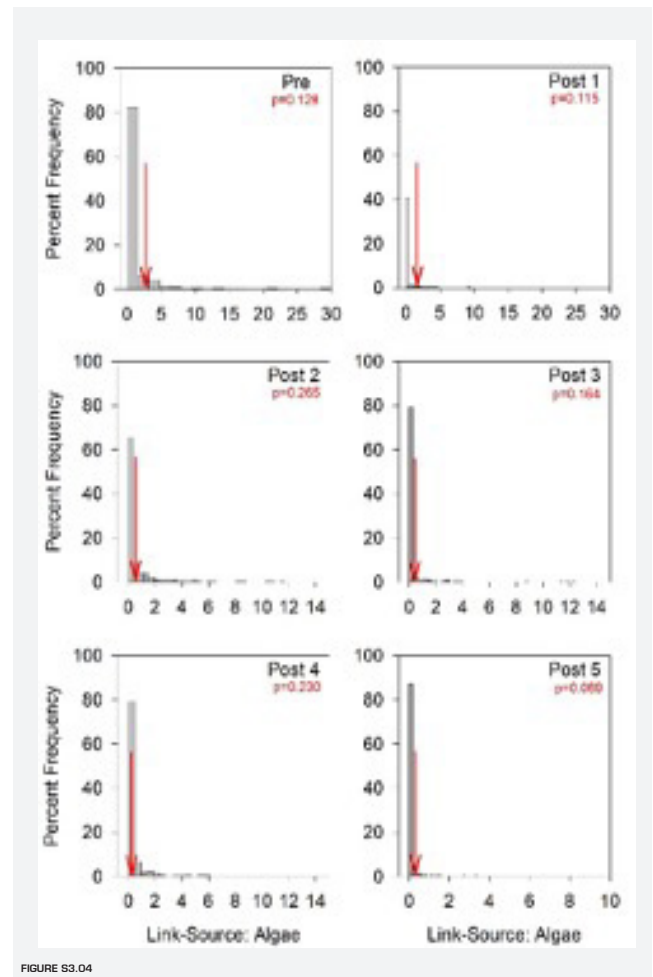


FIGURE S3.04



FIGURE S3 | (Continued)

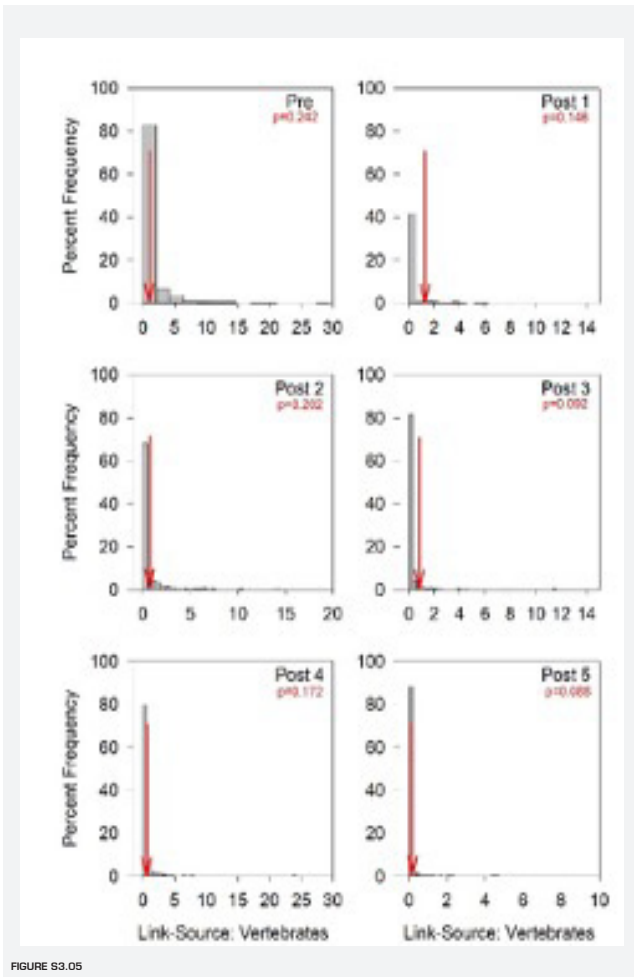


FIGURE S3.05

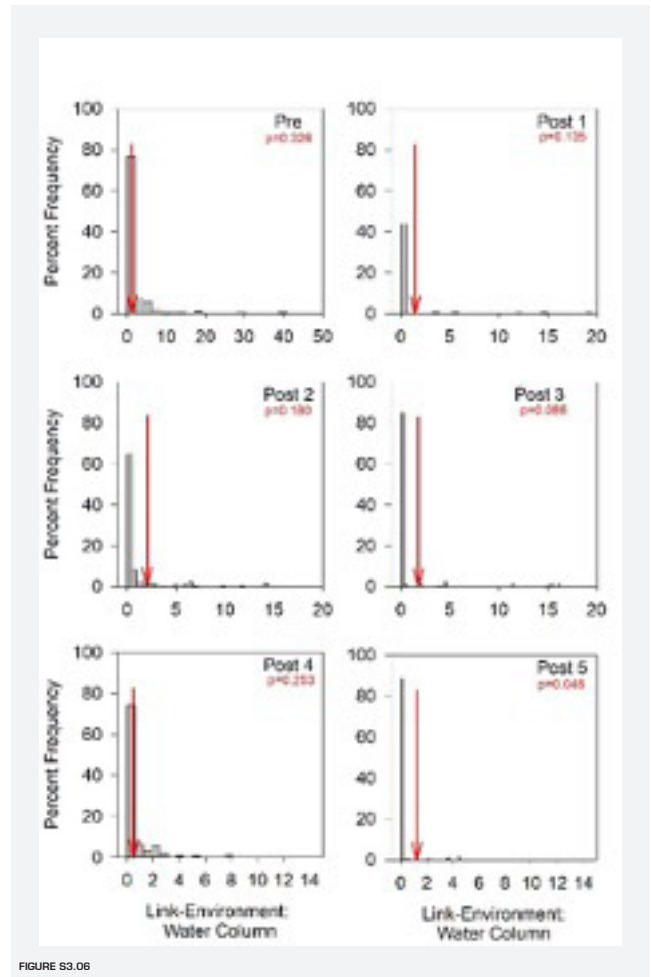


FIGURE S3.06



FIGURE S3 | (Continued)

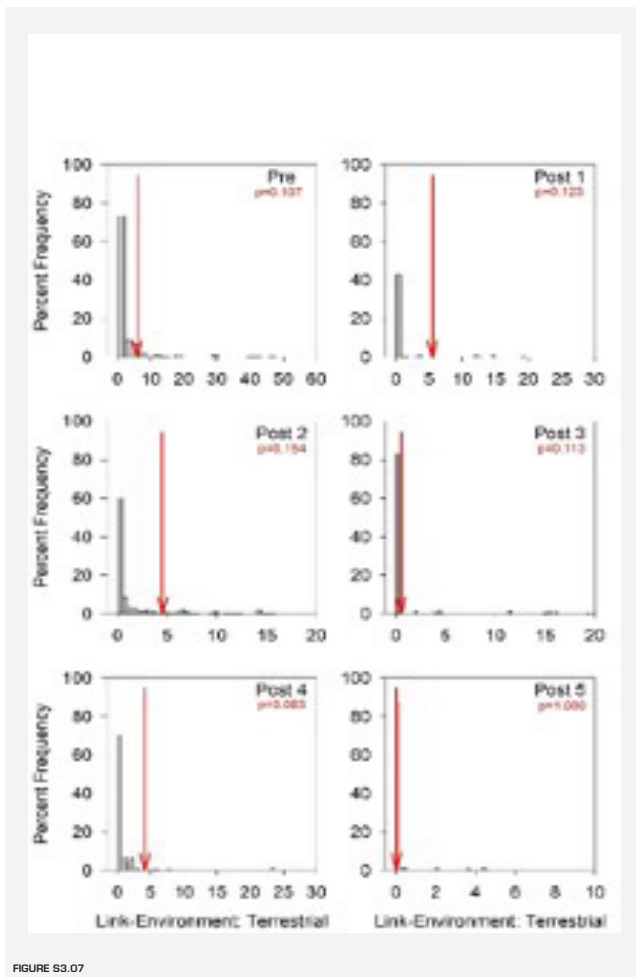


FIGURE S3.07

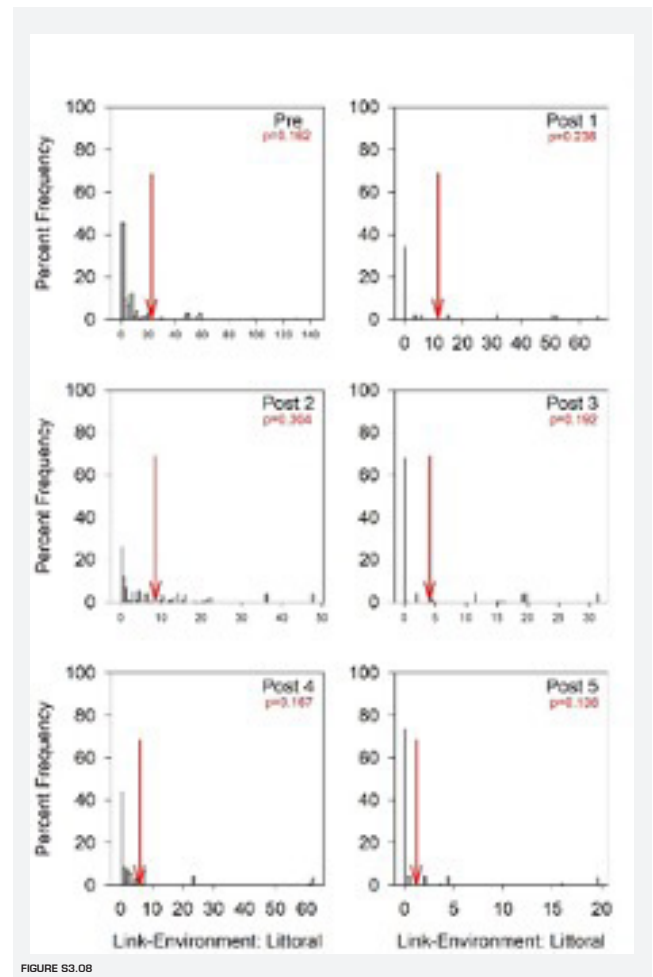


FIGURE S3.08



FIGURE S3 | (Continued)

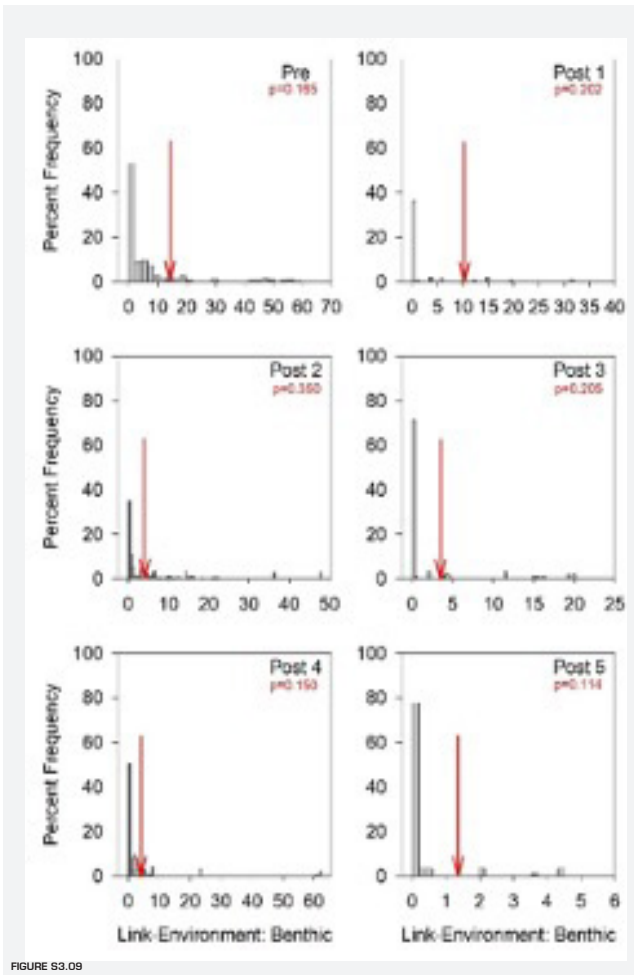


FIGURE S3.09

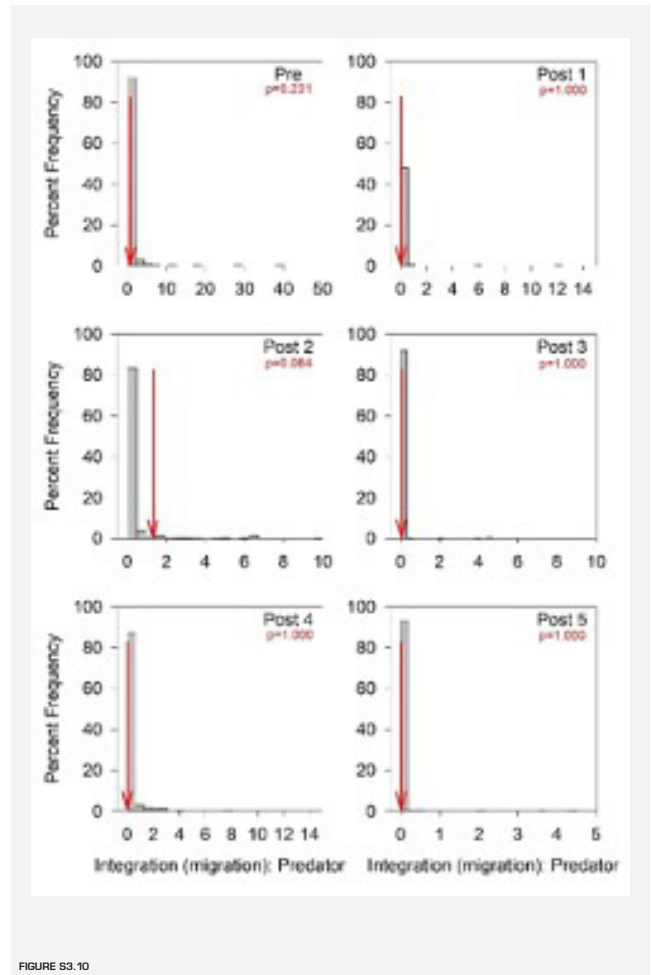


FIGURE S3.10



FIGURE S3 | (Continued)

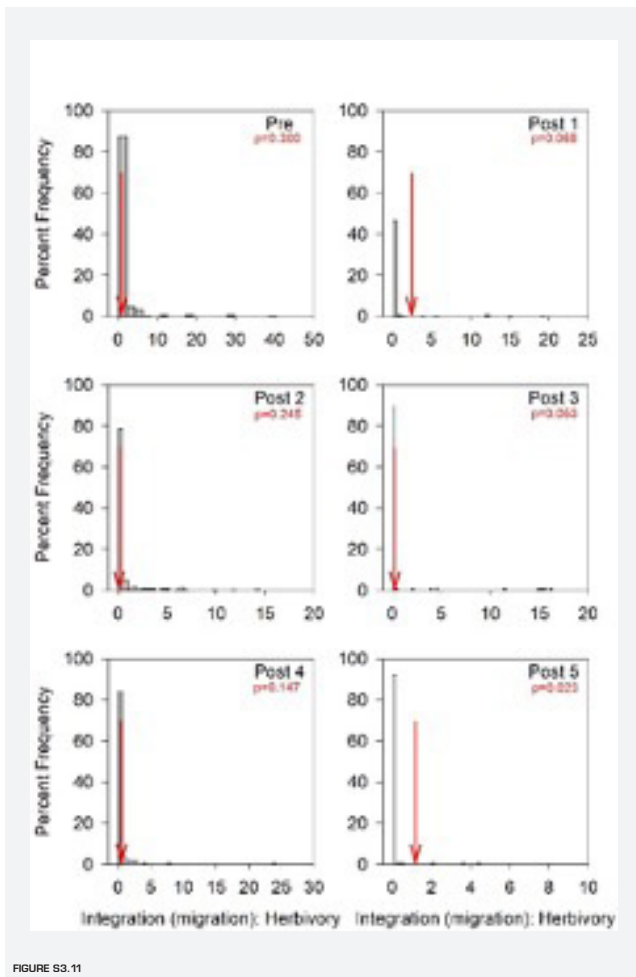


FIGURE S3.11

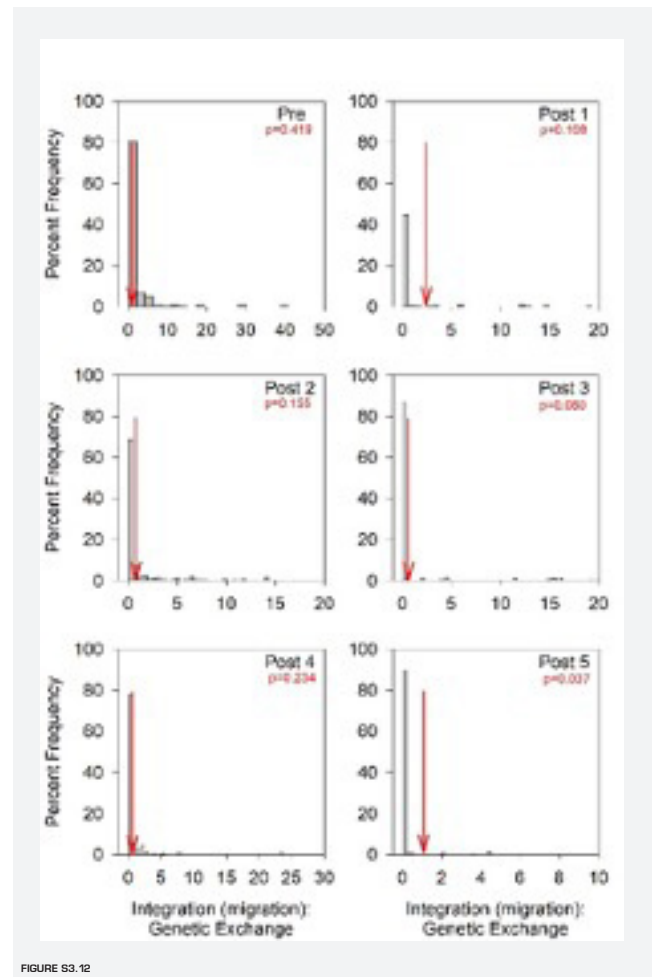


FIGURE S3.12



FIGURE S3 | (Continued)

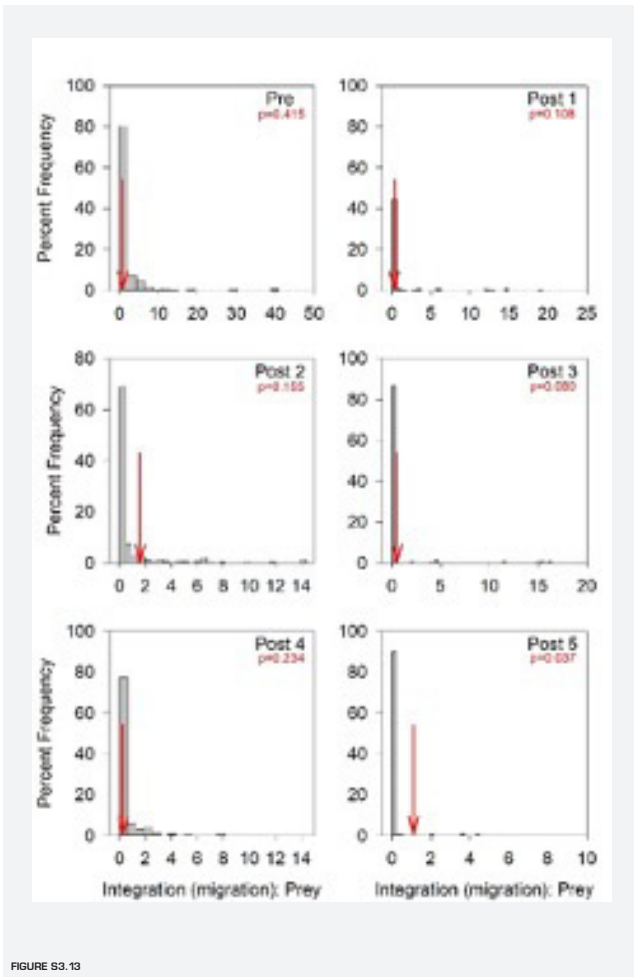


FIGURE S3.13

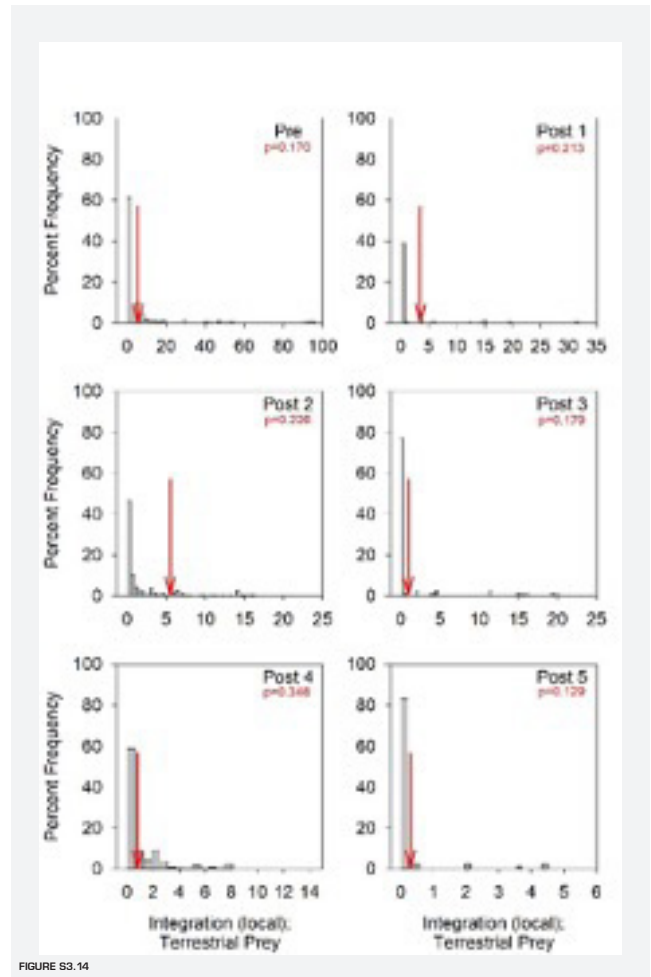


FIGURE S3.14

FIGURE S3 | (Continued)

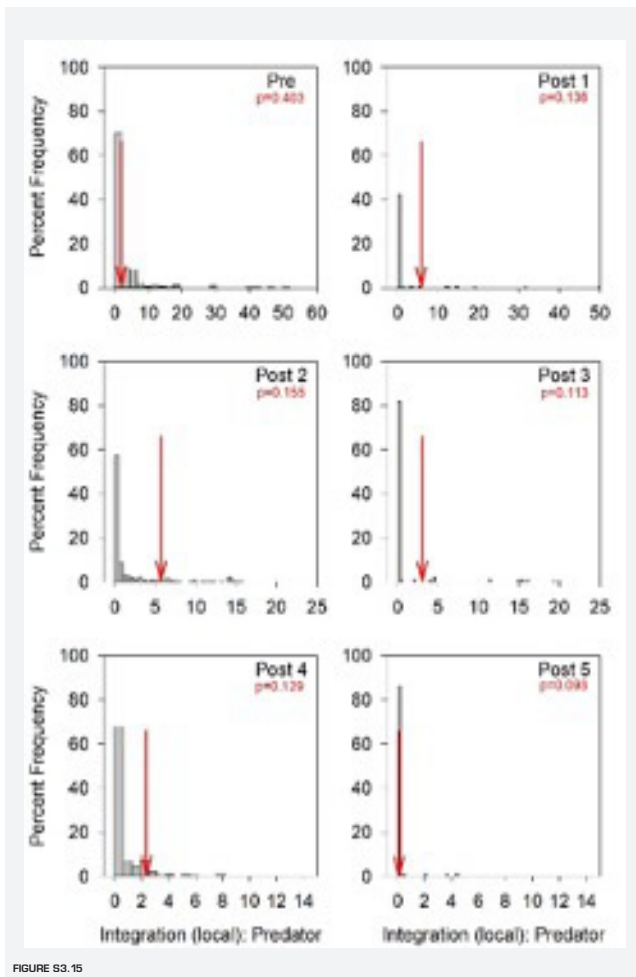


FIGURE S3.15

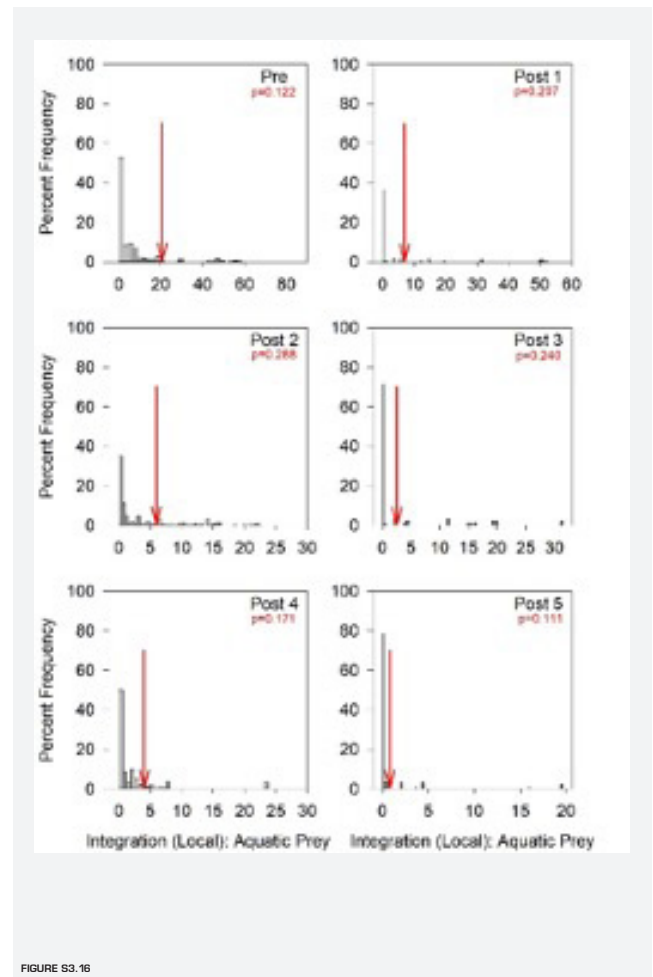


FIGURE S3.16



FIGURE S3 | (Continued)

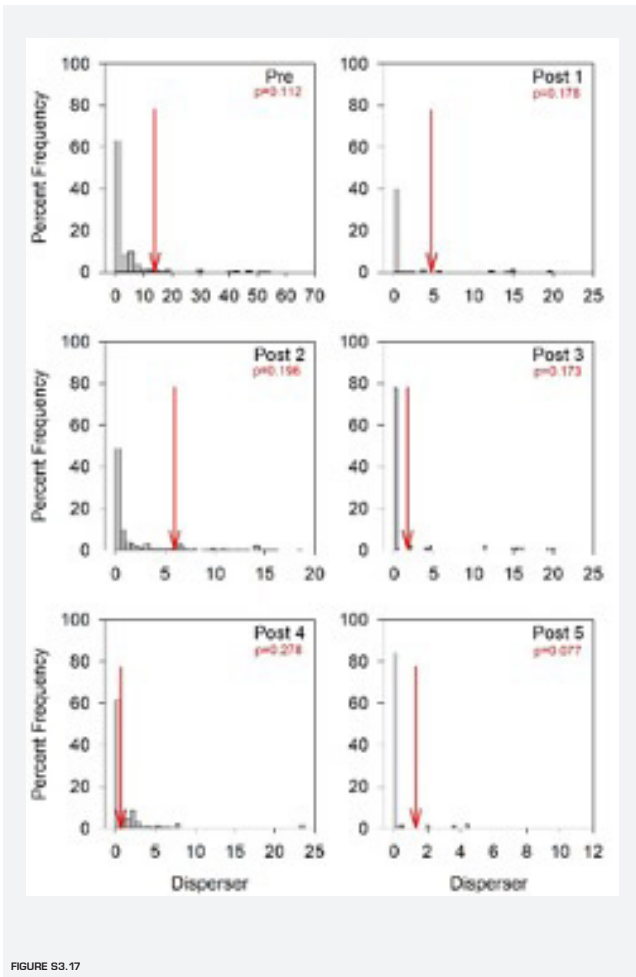


FIGURE S3.17

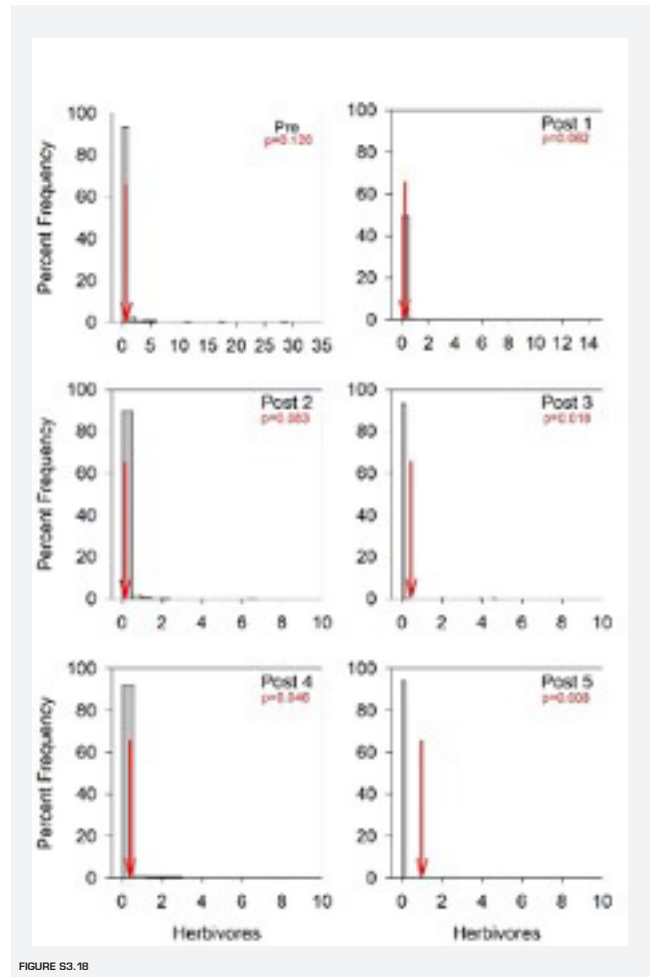


FIGURE S3.18



FIGURE S3 | (Continued)

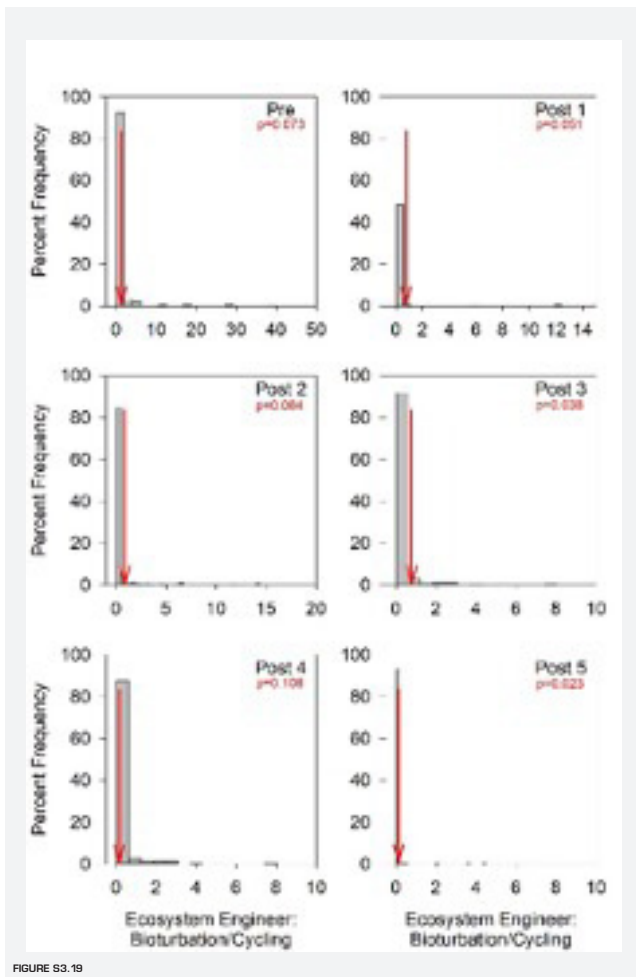


FIGURE S3.19

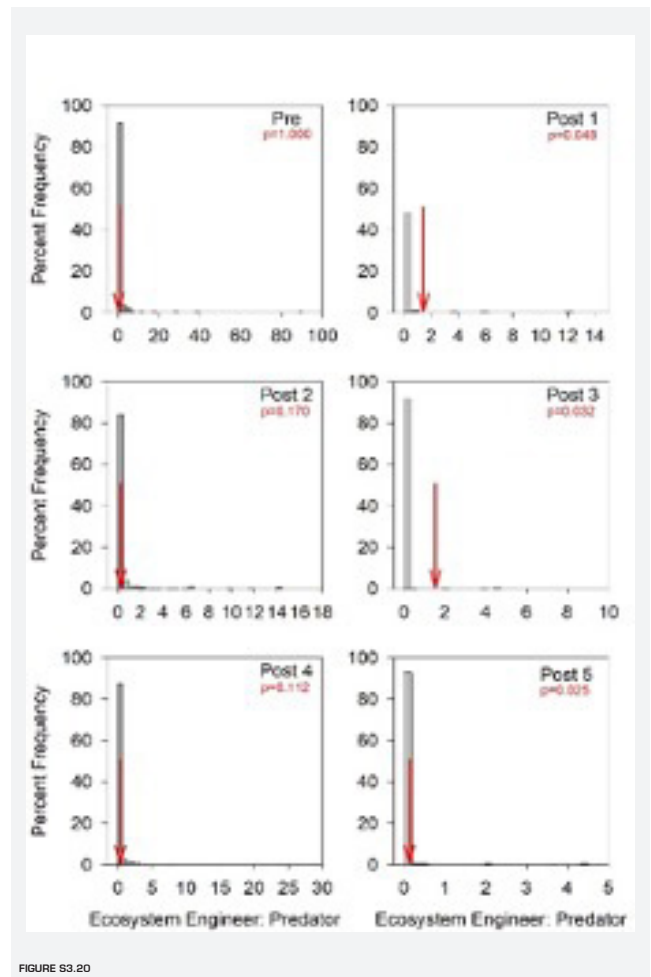


FIGURE S3.20



FIGURE S3 | (Continued)

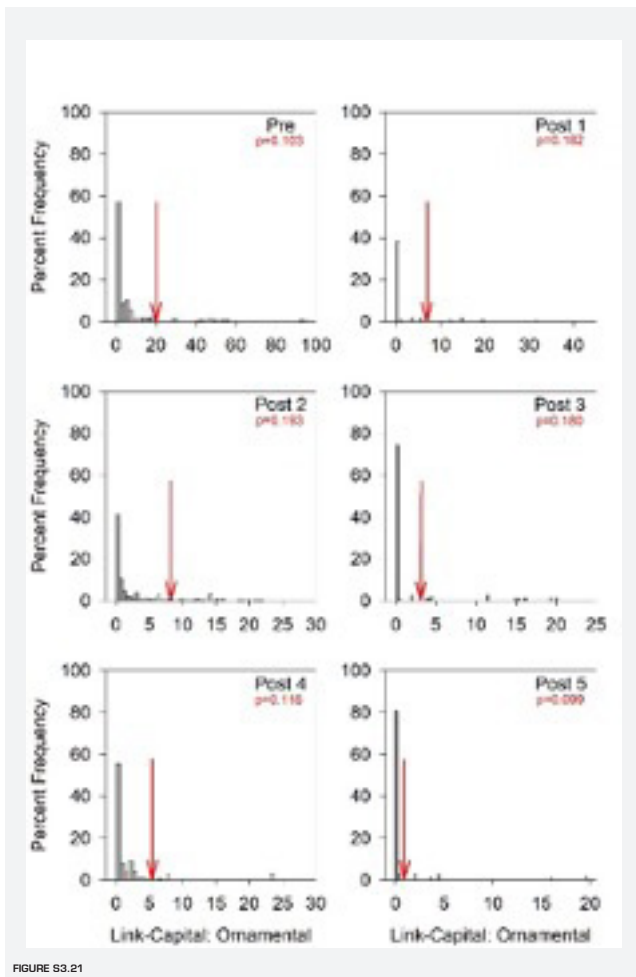


FIGURE S3.21

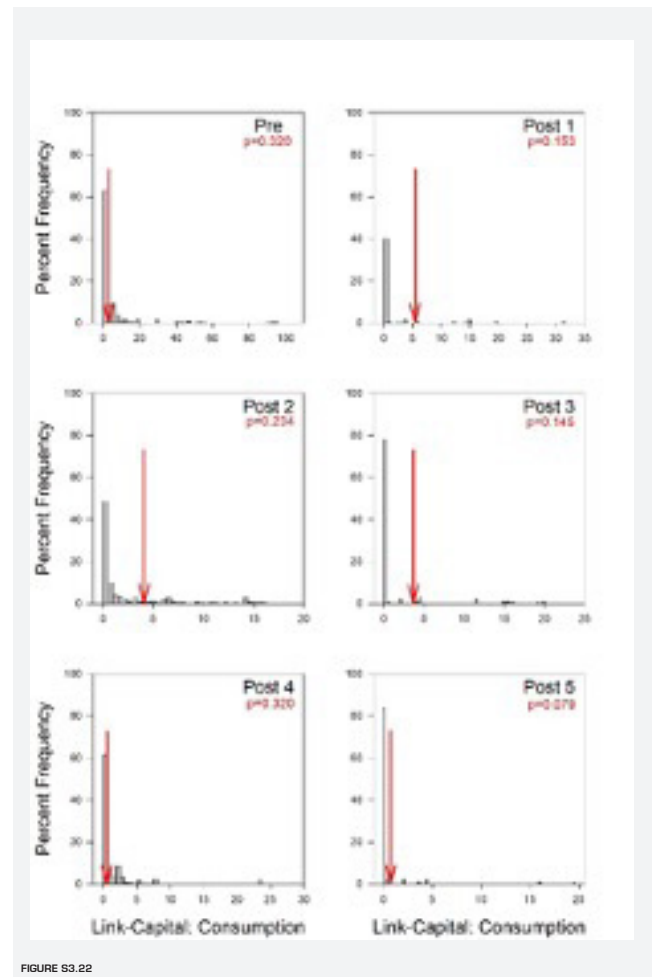


FIGURE S3.22



FIGURE S3 | (Continued)

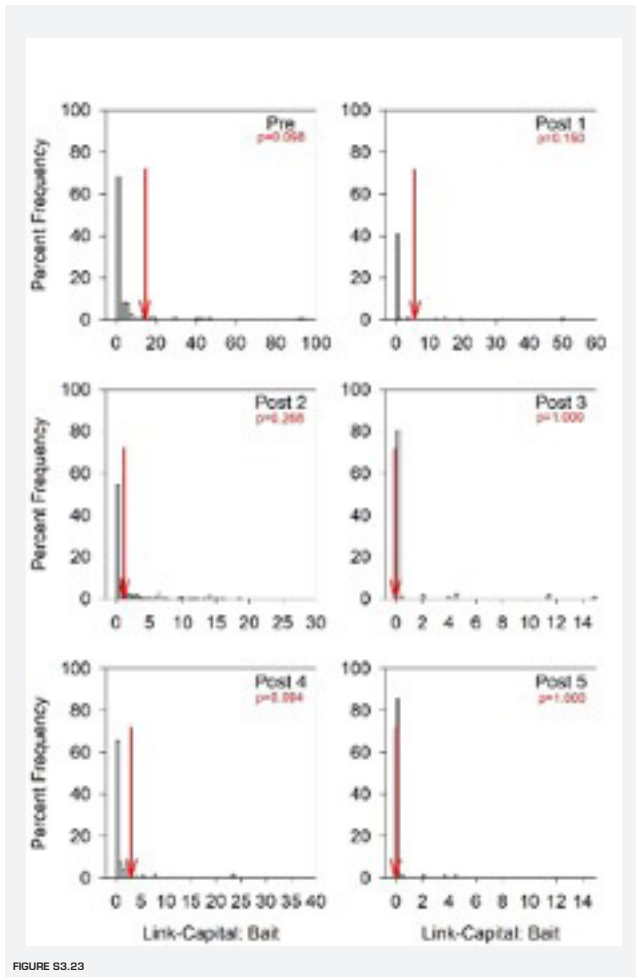


FIGURE S3.23

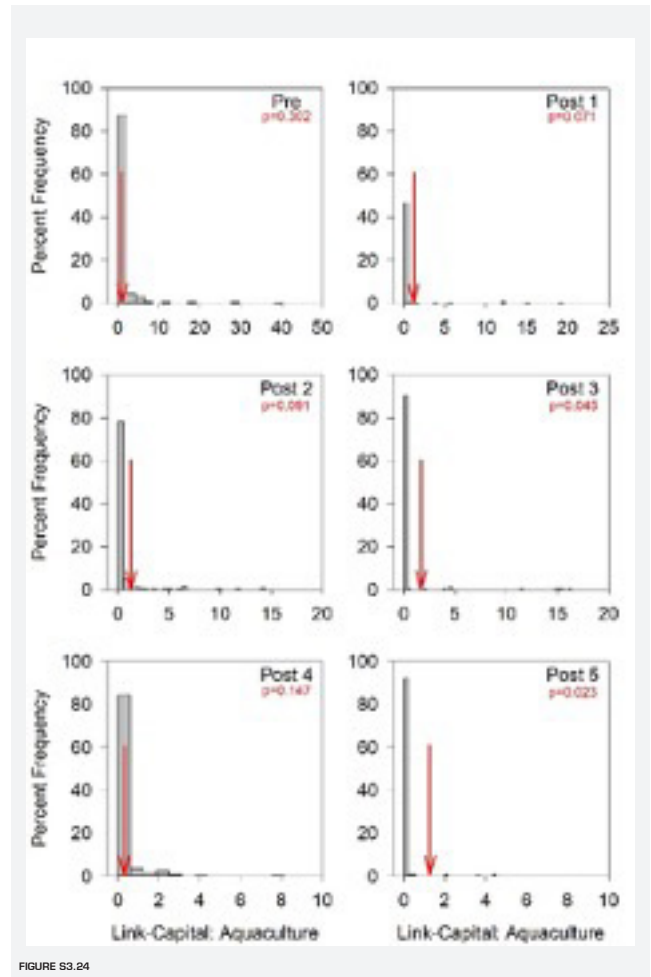


FIGURE S3.24



FIGURE S3 | (Continued)

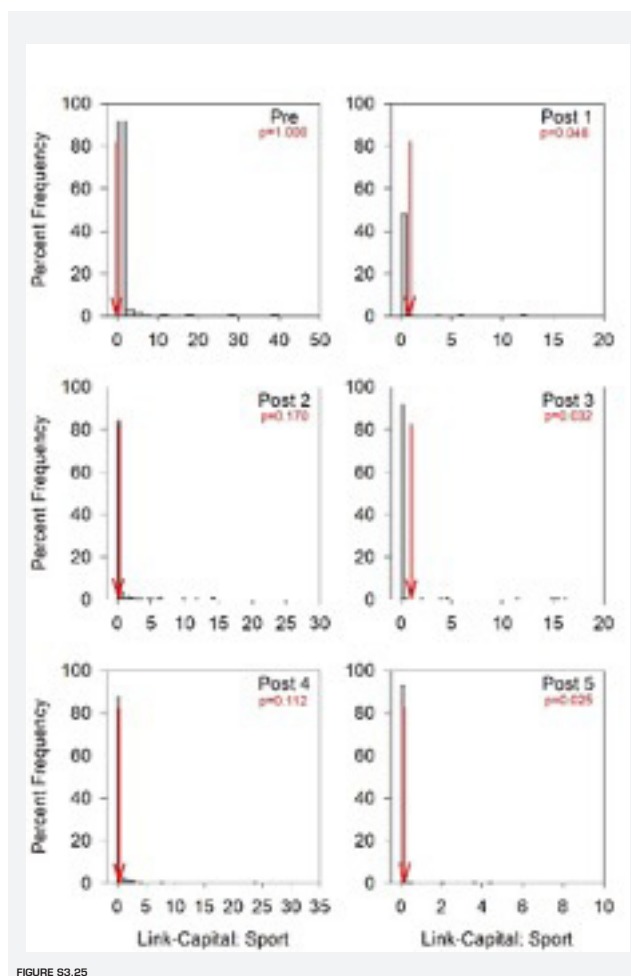


FIGURE S3.25

Neotropical Ichthyology



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