Author Correction: Fluctuating interaction network and time-varying stability of a natural fish community

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Check for updates

Masayuki Ushio, Chih-hao Hsieh, Reiji Masuda, Ethan R. Deyle, Hao Ye, Chun-Wei Chang, George Sugihara & Michio Kondoh

In this Letter, we analysed time series of a natural fish community. Using empirical dynamic modelling (EDM), we quantified time-varying interspecific interactions in the community and reconstructed fluctuating interaction networks. Then, time-varying community stability, named dynamic stability, was evaluated by computing the dominant eigenvalue of the time-varying interaction matrix, but an amendment is needed in the calculation of dynamic stability. In the original Letter, dynamic stability, or the local Lyapunov stability, was calculated as 'the absolute value of the real part of the dominant eigenvalue of the interaction matrix A, as described in the Methods, but this should have been 'the absolute value of the dominant eigenvalue of the interaction matrix A.' In addition, 'the absolute value of the real part of the dominant eigenvalue of the interaction matrix' in the Fig. 3 legend should have read 'the absolute value of the dominant eigenvalue of the interaction matrix.' The original version of dynamic stability covers a point equilibrium with no imaginary part, whereas the corrected version covers a broader situation with a non-zero imaginary part.

We have re-calculated the dynamic stability and re-run all analyses that involved the dynamic stability. The reanalysis affects Figs 3a, 4 and Extended Data Figs 4, 5b and 6g–j of the original Article. We have found almost identical results, as shown in the corrected figures (see Supplementary Information to this Amendment). The insignificant results in the original Extended Data Fig. 6e, f are now significant, but these do not influence our discussion or conclusions. The original Letter has not been corrected online.

Supplementary information is available in the online version of this Amendment.

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