

Erratum

Bjørnstad, O.N. (2000) Cycles and synchrony: two historical 'experiments' and one experience. *Journal of Animal Ecology*, **69**, 869–873.

The following figure rectifies an error in Fig. 1 of Bjørnstad (2000). While all the qualitative results remain, errors in the x - and y -axes scale are corrected.

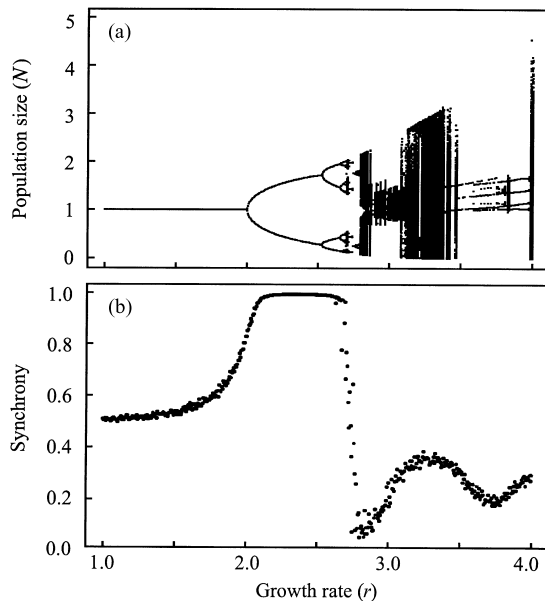


Fig. 1. Simulation of 10 populations on a linear coupled lattice map. The local populations are coupled by nearest-neighbour dispersal (50% of the population are allowed to disperse evenly to the two neighbouring populations; the map is assumed circular to avoid boundary effects). Local dynamics are assumed to follow Ricker dynamics: $N_{t+1} = N_t \exp[r(1 - N_t) + u]$, where N is population size, r is growth rate, and u is normal random variate with zero mean and standard deviation, σ , representing environmental stochasticity. (a) Bifurcation diagram for the deterministic system ($\sigma = 0$) as the growth rate is changed. The population size represents the average population size across the 10 local populations (after allowing for a 500-generation transient period). (b) Average level of synchrony among the 10 local populations (after allowing for a transient period) when the populations are further affected by correlated environmental stochasticity ($\sigma = 0.1$, spatial correlation = 0.3) as the growth rate is tuned to change the dynamics. The near perfect correlation for the cyclic dynamics is due to non-linear phase locking. Locally stable populations are slightly higher than the regional synchrony (due to the added effect of dispersal), as predicted by linear theory. Chaotic populations exhibit very little synchrony; neither dispersal nor regional correlation synchronize the dynamics.