

reassigning species to islands randomly and independently of one another. Thus the null communities were formed without the structuring influence of interspecific competition. The surprising result was that many of the patterns predicted by Diamond's rules could also be generated by a null model that, on the face of it, was competition-free.

Similar null models turn up in other areas of biology (3). Population geneticists will recognize the Hardy-Weinberg equilibrium as a null model for expected genotype frequencies in the absence of selection and other evolutionary forces. Similarly, the molecular clock is a null model for the accumulation of neutral genetic variation in an evolving lineage. Null models had been used previously in community ecology, notably by European plant ecologists in the 1920s (4) and by the animal ecologist C. B. Williams in the 1940s (5). But Connor and Simberloff's paper popularized the

6. N. J. Gotelli and G. R. Graves, *Null Models in Ecology* (Smithsonian Institution Press, Washington, DC, 1996).
7. P. H. Harvey, R. K. Colwell, J. W. Silvertown, R. M. May, *Annu. Rev. Ecol. Syst.* **14**, 189 (1983); D. R. Strong Jr., D. Simberloff, L. G. Abele, A. B. Thistle, *Ecological Communities: Conceptual Issues and the Evidence* (Princeton Univ. Press, Princeton, NJ, 1984).

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