Appendix D

TABLE D1. Definition of states for the null model (Eqs. 1 and 2).

States	Description
ϕ	uninhabitable
[0,0]	habitable, empty
[1,0]	only species 1 present
[0,1]	only species 2 present
[1,1]	both species present

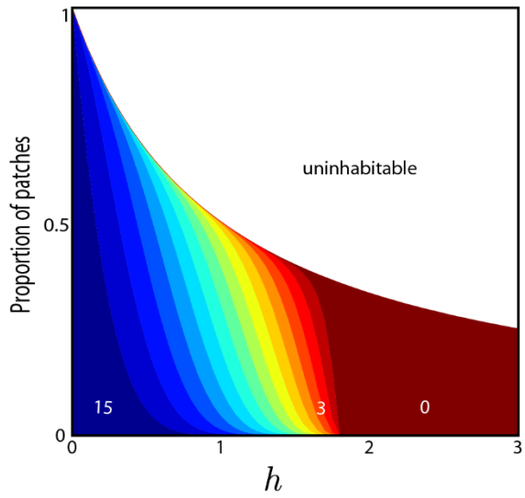

FIG. D1. Proportion of patches with differing numbers (labelled) of coexisting species (z_i) for a fifteen-species version of the null model (Eqs. 10 and 11). '0' includes only empty, habitable patches. $S = 15$, $c = 5$ and $r = 1$. At very low harvest levels, there are some patches in all states, just as at higher harvest levels, there are still some patches with all fifteen species.

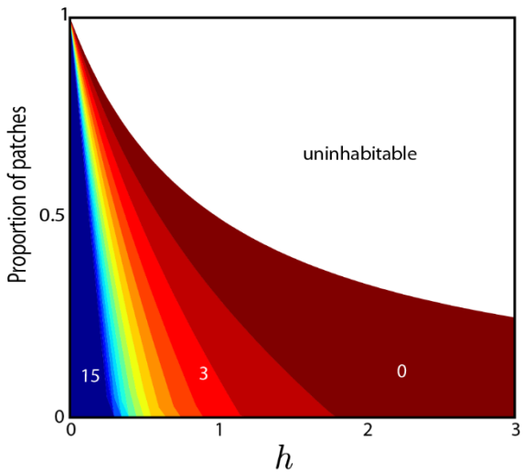

FIG. D2. Proportion of patches with differing numbers (labelled) of coexisting species in the facilitation model (Eqs. 25–28) with parameter values $S = 15$, $c = 5$, and $r = 1$. Unlike in the null model, the number of species also uniquely identifies the patch type.

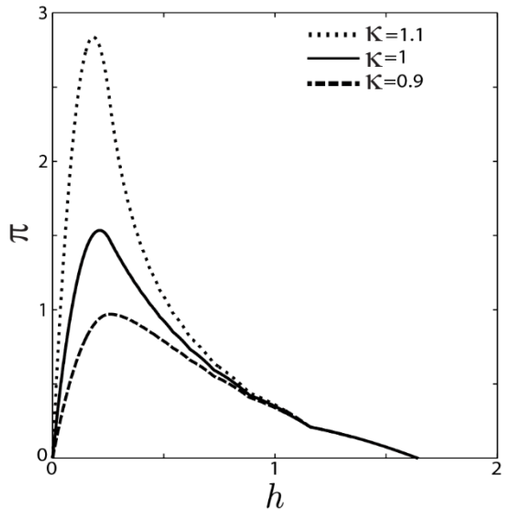

FIG. D3. Harvest rate versus profit for the facilitation model (Eqs. 25–28) with $S = 15$, $r = 1$, $\varepsilon = 1$, $w = 0.05$, $\rho_1 = 1$, and $c = 5$. Three different pricing schemes are shown (legend). The 'kinks' in the profit curve occur when species are extirpated from the community.