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Cang Hui and Melodie A. McGeoch. 2008. Does the self-similar species distribution model lead to unrealistic predictions? *Ecology* 89:2946–2952.

Appendix A: Notation from Maddux (2004) used in the context

Consistent with the description in Maddux (2004), the letter x in a cell means that the species does not occur in that cell, the letter o means that the species is present in the cell, while the letter n signifies that the species may or may not be present in the cell. If each of p , q , r , and s denote one of x , o , or n , then $H(p, q)$ is the fraction of species with a (p, q) state of the two halves (bisected rectangle in figure 1A), where p indicates the state of the left half and q the right half. For example, $H(o, o)$ is the fraction of species present in both halves.

$L(p, q, r)$ is the fraction of species with a (p, q, r) state of the three parts (bisected rectangle in figure 1B), where p indicates the state of left-top quarter, q the left-bottom quarter, and r the right half. For example, $L(o, x, o)$ is the fraction of species shared by the left-top quarter and right half, but absent from the left-bottom quarter. $F(p, q, r, s)$ is the fraction of species with a (p, q, r, s) state of the four parts (bisected rectangle in figure 1C), where p indicates the state of left-top-left eighth, q the left-top-right eighth, r the left-bottom quarter, and s the right half. For example, $F(o, x, o, x)$ is the species shared by the left-top-left eighth and left-bottom quarter, but absent from the left-top-right eighth and the right half.

LITERATURE CITED

Maddux, R. D. 2004. Self-similarity and the species-area relationship. *American Naturalist* 163:616-626.