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We crossed this spatial and guild classi

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each site. The species is assigned a score of 1 if it is present at a site and 0 if it is absent. The species is assigned a score of 1 if it is present at a site and 0 if it is absent.

**Quantification of Species Co-Occurrence Patterns.** We used the C-score (59) as a measure of species co-occurrence. The C-score is defined as  $(R - S) \times (R - S) / (R \times R)$ , where  $R$  is the number of species and  $S$  is the number of sites. The C-score is calculated as  $(R - S) \times (R - S) / (R \times R)$ , where  $R$  is the number of species and  $S$  is the number of sites. The C-score is calculated as  $(R - S) \times (R - S) / (R \times R)$ , where  $R$  is the number of species and  $S$  is the number of sites.

**Randomization Tests.** We compared the C-score of observed data to the C-score of randomized data. For each site, we randomly assigned species to sites. We compared the C-score of observed data to the C-score of randomized data. We compared the C-score of observed data to the C-score of randomized data.

40. Borsari OV, Friesen W (2000) Does the efficiency of afferent adaptation to feedbacks? A systems-dynamic approach. *PLoS Biol* 8: 341-350.
41. Hübner T, Damm J (1991) The relationship of efficiency and speed of feed-back. *Oecologia* 87:443-448.
42. Reed TM (1982) The efficiency of afferent feedback in the Geometric Algebra. *Biological Cybernetics* 30: 171-181.
43. Geisler J (1917) The efficiency of afferent feedback. *Annals of the New York Academy of Sciences* 51: 115-128.
44. Lakoff G (1933) Habitual feedback. *Journal of the American Psychological Association* 2:239-262.
45. James FC, Janssen RF, Warren NG, Newman GJ, Bickel WJ (1984) The effect of afferent feedback. *Annals of the New York Academy of Sciences* 424:17-30.
46. Hesse SA, Beaman PE, Nelson I, Saks TH (1995) Habitual feedback in the efficiency of afferent feedback. *Biological Cybernetics* 73:1-10.