Appendix S1. Supporting statistical analysis

The statistical tests reported in the main text used the single patch as a case in the analyses, for a total of 120 cases (30 patches x 4 seasons). We also carried out an analysis in which we considered the patches in groups of three to reduce the background noise, as explained below.

As we surveyed replicates of three kinds of habitats in each area (Cornfields, Hedgerows, and Meadows), we grouped patches in groups of three by randomly selecting one of each habitat so that each habitat was represented in each case. The selection was blocked by season and by area, so that we grouped only cases within a given season and a given area to retain the variability for these two variables. We ended up with 16 cases in Area 1 and Area 3 (48 cases / 3 habitats) and 8 cases in Area 2 (24 cases / 3 habitats). In Area 3, there were two cases where the number of trap nights was much lower than in the other cases (3 and 13 trap nights compared to a range of 45 – 142) so these two cases were eliminated from the analyses reducing the sample size in Area 3 to 14 cases. This new sample of 38 cases (16 + 14 + 8) did not have any zero values and on this sample we carried out the same analyses as in the main paper. We analyzed differences in the index of relative abundance (T), Shannon Index (H') and Pielou Index (J) first amongst the three Areas simultaneously using the Kruskal-Wallis test, and then with Mann-Whitney tests for a post-hoc analysis comparing two areas at the time. We accepted a result as significant when $p < 0.05$.

Results

There was a trend of increasing relative abundance of small mammals and decreasing species diversity, as measured with the Shannon index, and evenness, as measured with the Pielou index, going from the most natural (Area 1) to the least natural area (Area 3) (*Figure A1*).

All three indexes were always significantly different when comparing Area 1 with Area 3, while they were always not significantly different when comparing Area 2 with Area 3 (*Table A1*). The comparison of these indexes between Area 1 and Area 2 yielded intermediate results, showing some

differences but not enough to be statistically significant for a probability level of $p < 0.05$ (*Table A1*).

Figure A1. Boxplots reporting the median, range, and quartiles of the data used in the supplementary analyses. Sample sizes are: 16 cases for Area 1, 8 cases for Area 2, and 14 cases for Area 3.

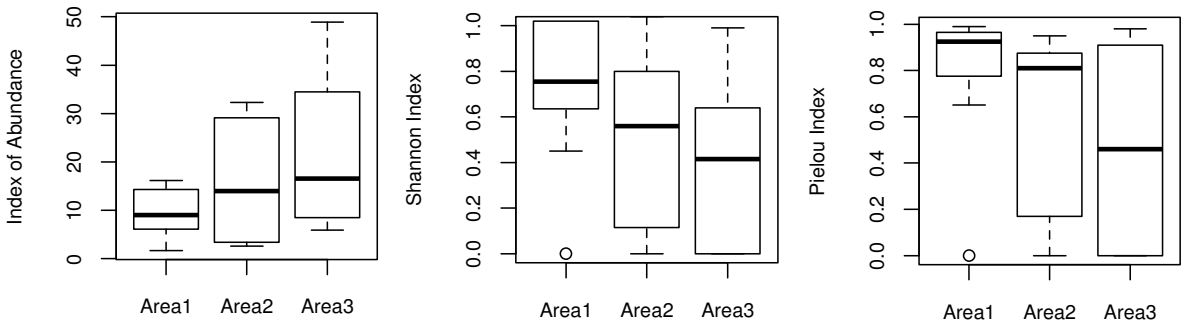

Table A1. Results of the statistical tests used to compare the Index of Relative Abundance (T), the Shannon Index (H'), and the Pielou Index (J) in the three study areas. Both the test statistic and the p-values are reported.

	Kruskal-Wallis	**Mann - Whitney**		
		Area 1 vs Area 3	*Area 1 vs Area 2*	*Area 2 vs Area 3*
Index of Relative Abundance	H = 4.76 p = 0.09	W = 59 p = 0.03	W = 60 p = 0.83	W = 74 p = 0.24
Shannon Index	H = 9.34 p = 0.01	W = 185.5 p < 0.01	W = 92 p = 0.09	W = 52 p = 0.81
Pielou Index	H = 6.56 p = 0.04	W = 169 p = 0.02	W = 93 p = 0.08	W = 53 p = 0.86

The variability of all three indexes increased between Area 1 and Areas 2 and 3, as it can be seen in *Figure A1* by considering both the difference between the quartiles and the range of the values. This increase was due to the fact that in Areas 2 and 3 there was a much greater variability in the seasonal abundances of small mammals compared to Area 1, a variability that was reflected in all three indexes.