William E Kunin, John Harte, Fangliang He, Cang Hui, R. Todd Jobe, Annette Ostling, Chiara Polce, Arnošt Šizling, Adam B. Smith, Krister Smith, Simon M. Smart, David Storch, Even Tjørve, Karl-Inne Ugland, Werner Ulrich, and Varun Varma. Upscaling biodiversity: estimating the Species-Area Relationship from small samples. *Ecological Monographs.*

Data S1

Upscaling model outputs and performance scores.

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File list (files found within DataS1.zip)

`DataS1.csv`

Description

`DataS1.csv` contains several distinct sections.

The first section (Columns A-K) provides the SAR values (mean species richness) at multiple scales and modeled estimates for the full British dataset (top) and for statistical subsets (bottom).

Rows 3-5 provide the estimated Vascular plant richness (row 3), that of the selected bryophytes and lichens included in the CS surveys (row 4), and the total of these two: the "True SAR" against which the various models would be tested.

Rows 9-36 provide estimates of species richness at these scales from the various models covered in the paper (rows 9-27) and in combinations of multiple models (rows 29-36), all parameterized on "X-Only" data (see text for explanation)

Rows 38-61 provide estimates from those models using the "X+Linear" samples (see text for explanation).

Rows 70-173 provide parallel estimates of British species richness based on statistical subsamples of the survey plots: "Wide-shallow" samples (comprised of 1 sample from each surveyed 1 km^2 cell) in rows 70-94 and 128-148, and "Narrow-deep" samples (comprised of all 5 samples, but from only 1/5 of the sampled 1 km^2 sites).

The next set of columns (N – Z) cover the results for the 5 regional subsamples ("South", "East", "West", "Centre" and "North". Note that the regions differ in size: species richness estimates are given for scales 100 – 40,000 km^2 for all regions, but the coarsest scale differs between regions, with South being 46,100 km^2, East and West both being 51,700 km^2, Centre being 51,800 km^2, and North being largest at 77200 km^2. Estimates are provided for all models and model combinations, and for both X-Only and X+Linear samples, as in the full British estimates.

The final set of columns (AD-CD) provide various measures of SAR fit for the models considered, across the range of datasets and subsets (rows 3-39) and for the Total Species Richness estimate (rows 41-52).