

Table S1: Morphometric and socio-ecological results of sampled charcoal kilns (n = 48) in the study area. Morphometric variables (area and charcoal layer depth) were measured during fieldwork and the remaining variables were retrieved using geographic information databases. Values between brackets refer to the relative frequency among each of the categories.

|   |                  | <b>n (%)</b> |
|---|------------------|--------------|
| <b>Charcoal platform area<br/>(m<sup>2</sup>)</b> | [25-50[          | 12 (25.0)    |
|   | [50-75[          | 28 (58.3)    |
|   | [75-100[         | 5 (10.4)     |
|   | [100-125]        | 3 (6.3)      |
| <b>Charcoal Layer thickness (cm)</b>              | [5-10[           | 1 (2.1)      |
|   | [10-15[          | 3 (6.3)      |
|   | [15-20[          | 14 (29.2)    |
|   | [20-25[          | 19 (39.6)    |
|   | [25-30[          | 9 (18.8)     |
|   | [30-35]          | 2 (4.2)      |
| <b>Elevation<br/>(m a.s.l.)</b>                   | [320-335[        | 7 (14.6)     |
|   | [335-350[        | 18 (37.5)    |
|   | [350-365[        | 15 (31.3)    |
|   | [365-380[        | 8 (16.7)     |
| <b>Slope<br/>(%)</b>                              | Flat ( < 5%)     | 16 (33.3)    |
|   | Steep (> 5%)     | 32 (66.7)    |
| <b>Aspect / Exposure</b>                          | Northeast        | 9 (18.8)     |
|   | East             | 5 (10.4)     |
|   | Southeast        | 11 (22.9)    |
|   | South            | 3 (6.3)      |
|   | Southwest        | 8 (16.7)     |
|   | West             | 12 (25.0)    |
| <b>Present-day dominant forest<br/>species</b>    | Fagus            | 26 (54.2)    |
|   | Broad-leaved     | 21 (43.8)    |
|   | Picea/Abies      | 1 (2.1)      |
| <b>Forest property</b>                            | State            | 14 (29.2)    |
|   | Municipal        | 26 (54.2)    |
|   | Private          | 8 (16.7)     |
| <b>Geochemistry</b>                               | Carbonate        | 40 (83.3)    |
|   | Silico-aluminium | 8 (16.7)     |

Table S2: Complete results of charcoal taxonomic identification by charcoal kiln.

| Charcoal kiln / Taxa | Acer | Betula | Carpinus | Cornus | Corylus | Fagus | Prunus | Quercus | Salix | Populus | Salix/Populus | Rosaceae | Viburnum | Undetermined | Total | cf. Alnus | cf. Carpinus | cf. Cornus | cf. Corylus | cf. Prunus | cf. Salix/Populus | Total (cf. included) |
|----------------------|------|--------|----------|--------|---------|-------|--------|---------|-------|---------|---------------|----------|----------|--------------|-------|-----------|--------------|------------|-------------|------------|-------------------|----------------------|
| 579/P10              | 5    |        | 87       |        |         | 44    |        | 6       |       | 3       |               | 5        |          |              | 150   |           |              |            |             |            |                   | 150                  |
| 579/P13              | 6    |        | 67       |        | 4       | 55    | 1      | 4       | 3     |         |               | 2        |          | 5            | 147   |           |              |            |             |            | 3                 | 150                  |
| 579/P17              | 1    |        | 87       |        | 7       | 46    |        | 2       | 1     |         |               | 0        |          | 2            | 146   |           | 2            |            |             | 1          | 1                 | 150                  |
| 580/P11              | 2    |        | 117      |        | 2       | 5     | 2      | 0       |       |         | 7             | 3        |          | 4            | 142   |           | 2            |            |             | 1          | 2                 | 147                  |
| 580/P22              | 7    |        | 114      | 2      | 2       | 18    |        | 1       |       |         |               | 1        |          | 5            | 150   |           |              |            |             |            |                   | 150                  |
| 580/P6               | 2    |        | 120      |        | 2       | 17    |        | 2       |       | 2       |               | 5        |          |              | 150   |           |              |            |             |            |                   | 150                  |
| 581/P18              | 8    |        | 96       |        |         | 24    |        | 4       |       | 1       |               | 7        |          |              | 140   |           |              |            |             |            |                   | 140                  |
| 581/P22              | 0    |        | 94       |        | 1       | 25    |        | 2       | 4     |         | 4             | 7        |          | 5            | 142   |           | 3            |            |             |            | 1                 | 146                  |
| 581/P27              | 5    |        | 81       |        | 1       | 53    |        | 4       |       |         |               | 6        |          |              | 150   |           |              |            |             |            |                   | 150                  |
| 581/P8               | 7    |        | 108      |        | 1       | 19    |        | 6       |       | 6       |               | 3        |          |              | 150   |           |              |            |             |            |                   | 150                  |
| 592/P11              | 6    |        | 67       |        | 16      | 2     | 1      | 0       | 25    |         | 20            | 2        |          | 4            | 143   |           | 1            |            |             |            | 1                 | 145                  |
| 592/P15              | 4    |        | 120      | 2      | 11      | 3     |        | 6       |       | 1       | 1             | 2        |          |              | 150   |           |              |            |             |            |                   | 150                  |
| 592/P22              | 7    |        | 100      |        | 15      | 4     |        | 6       | 3     |         |               | 7        |          | 2            | 144   |           | 3            |            |             |            | 3                 | 150                  |
| 592/P28              | 6    |        | 99       |        | 9       | 10    | 2      | 1       | 1     |         | 3             | 2        |          | 1            | 134   | 1         | 6            |            |             |            | 3                 | 144                  |
| 593/P10              | 2    |        | 111      |        | 8       | 4     |        | 5       | 5     |         |               | 2        |          | 7            | 144   |           | 4            |            |             |            | 2                 | 150                  |
| 593/P20              | 4    |        | 88       |        | 18      | 5     | 1      | 15      | 1     |         |               | 8        |          | 3            | 143   |           | 1            | 1          |             |            | 5                 | 150                  |
| 593/P26              | 5    |        | 113      |        | 9       | 6     | 2      | 7       | 3     |         |               | 1        |          | 1            | 147   |           | 3            |            |             |            |                   | 150                  |
| 593/P4               | 7    |        | 98       |        | 15      | 4     |        | 7       |       |         | 1             | 2        |          | 3            | 137   |           | 1            |            |             |            | 10                | 148                  |
| 593/P9               | 6    |        | 118      |        | 10      | 3     |        | 9       |       | 3       |               | 1        |          |              | 150   |           |              |            |             |            |                   | 150                  |
| 594/P10              | 9    |        | 89       | 1      | 12      | 14    | 1      | 4       |       |         |               | 10       | 1        | 2            | 143   |           | 4            | 1          |             | 1          | 1                 | 150                  |
| 594/P13              | 8    |        | 87       |        | 21      | 12    | 1      | 11      | 1     |         |               | 4        |          | 1            | 146   |           |              |            |             |            | 2                 | 148                  |
| 594/P24              | 12   |        | 67       |        | 24      |       | 1      | 15      | 7     |         |               | 11       | 1        | 5            | 143   |           | 3            |            | 1           |            | 2                 | 149                  |
| 594/P3               | 15   |        | 96       | 1      | 15      | 15    |        | 1       |       |         |               | 6        |          |              | 149   |           |              |            |             |            |                   | 149                  |
| 595/P11              | 7    |        | 72       |        | 7       | 38    | 3      | 5       |       |         | 2             | 4        |          | 3            | 141   |           | 1            |            |             |            | 1                 | 143                  |
| 595/P13              | 6    |        | 80       |        | 15      | 35    |        | 6       |       |         |               | 0        |          | 6            | 148   |           | 2            |            |             |            |                   | 150                  |
| 612/P15              | 8    |        | 94       |        | 19      | 7     | 1      | 2       |       |         | 1             | 14       | 2        |              | 148   |           | 2            |            |             |            |                   | 150                  |
| 612/P20              | 3    |        | 67       | 1      | 25      | 19    | 1      | 4       | 8     |         |               | 6        | 2        | 4            | 140   |           | 2            |            |             | 1          | 7                 | 150                  |
| 612/P24              | 3    |        | 96       |        | 6       | 31    |        | 7       |       | 2       |               | 5        |          |              | 150   |           |              |            |             |            |                   | 150                  |
| 612/P26              | 11   |        | 76       |        | 16      | 7     | 2      | 3       | 16    |         | 1             | 0        |          | 5            | 137   |           | 3            |            |             |            | 3                 | 143                  |
| 612/P29              | 11   |        | 101      |        | 11      | 15    | 1      | 2       |       | 1       | 1             | 2        |          |              | 145   |           |              |            |             |            |                   | 145                  |
| 612/P34              | 10   |        | 93       | 1      | 8       | 18    | 2      | 0       |       | 3       |               | 2        |          |              | 137   |           |              |            |             |            |                   | 137                  |
| 612/P7               | 4    |        | 71       |        | 35      | 17    | 1      | 3       | 3     |         |               | 8        | 1        | 3            | 146   |           | 3            |            |             |            | 1                 | 150                  |
| 614/P15              | 1    |        | 82       |        | 19      | 22    |        | 1       | 2     |         | 2             | 0        |          | 7            | 136   |           | 7            |            | 1           |            | 1                 | 145                  |
| 614/P8               | 11   |        | 108      |        |         | 20    |        | 1       |       |         | 2             | 8        |          |              | 150   |           |              |            |             |            |                   | 150                  |
| 625/P15              | 15   |        | 72       |        | 35      | 7     | 1      | 4       | 2     |         | 2             | 0        |          | 3            | 141   |           | 8            |            |             |            | 1                 | 150                  |
| 625/P21              | 7    |        | 110      |        | 7       | 4     |        | 5       | 1     |         |               | 7        |          | 5            | 146   |           | 2            |            | 1           |            | 1                 | 150                  |
| 625/P3               | 13   |        | 93       |        | 23      |       |        | 5       |       |         | 1             | 2        |          | 3            | 140   |           | 5            |            |             |            | 5                 | 150                  |
| 625/P5               | 11   |        | 95       |        | 9       |       |        | 21      | 2     |         |               | 2        |          | 6            | 146   |           | 1            |            |             | 1          | 2                 | 150                  |
| 625/P7               | 6    |        | 109      |        | 19      | 1     |        | 5       |       |         |               | 0        |          | 2            | 142   |           | 7            |            |             |            | 1                 | 150                  |
| 626/P11              | 1    |        | 59       |        | 7       | 6     | 1      | 1       |       |         |               | 7        |          | 3            | 85    |           | 1            |            |             |            | 4                 | 90                   |
| 626/P5               | 6    |        | 102      |        | 8       | 12    | 2      | 3       | 1     |         |               | 4        | 1        | 6            | 145   |           | 2            |            |             |            | 3                 | 150                  |
| 627/P4               | 15   |        | 96       |        | 19      | 13    |        | 4       |       |         |               | 2        |          |              | 149   |           |              |            |             |            |                   | 149                  |
| C1                   | 2    | 5      | 94       |        | 6       | 31    |        | 0       |       |         |               | 0        |          | 12           | 150   |           |              |            |             |            |                   | 150                  |
| C2                   | 3    |        | 83       |        | 3       | 29    |        | 2       | 12    |         |               | 0        |          | 10           | 142   |           |              |            |             |            |                   | 142                  |
| C3                   | 10   | 5      | 79       |        | 10      | 12    |        | 0       |       |         |               | 0        |          | 4            | 120   |           |              |            |             |            |                   | 120                  |
| C4                   | 25   | 4      | 70       | 1      | 23      | 7     |        | 1       |       |         | 1             | 0        |          | 15           | 147   |           |              |            |             |            |                   | 147                  |
| C5                   | 9    |        | 103      | 1      | 25      | 4     |        | 4       |       |         |               | 0        |          | 3            | 149   |           |              |            |             |            |                   | 149                  |
| F023                 | 6    |        | 103      |        | 1       | 29    | 2      | 5       |       |         | 2             | 2        |          |              | 150   |           |              |            |             |            |                   | 150                  |
| Total                | 338  | 14     | 4432     | 10     | 559     | 772   | 29     | 212     | 101   | 22      | 51            | 172      | 8        | 150          | 6870  | 1         | 79           | 2          | 3           | 5          | 66                | 7026                 |

Table S3: Complete results of the diameter estimates (in absolute frequency), in decreasing order. For poorly identified taxa, i.e. assigned as “cf.” or “undetermined”, the diameter was not calculated.

| Taxon                    | Total identified | Total assessed | Not assessed | % assessed | Size classes |       |       |        |      | Mean diameter  |
|--------------------------|------------------|----------------|--------------|------------|--------------|-------|-------|--------|------|----------------|
|                          |                  |                |              |            | < 2          | [2-3[ | [3-5[ | [5-10[ | > 10 |                |
| <i>Populus</i>           | 22               | 22             | 0            | 100.00     | 2            |       | 1     | 5      | 14   | 11.52          |
| <i>Quercus</i>           | 212              | 116            | 96           | 54.72      | 16           | 6     | 12    | 22     | 60   | 9.86           |
| <i>Fagus</i>             | 772              | 396            | 376          | 51.30      | 61           | 39    | 34    | 46     | 216  | 9.80           |
| <i>Acer</i>              | 338              | 178            | 160          | 52.66      | 46           | 16    | 27    | 44     | 45   | 6.74           |
| Rosaceae                 | 60               | 59             | 1            | 98.33      | 16           | 7     | 8     | 16     | 12   | 6.19           |
| <i>Carpinus</i>          | 4432             | 2264           | 2168         | 51.08      | 768          | 311   | 293   | 430    | 462  | 5.69           |
| <i>Corylus</i>           | 559              | 226            | 333          | 40.43      | 112          | 31    | 29    | 33     | 21   | 3.84           |
| <i>Salix/Populus</i>     | 51               | 28             | 23           | 54.90      | 13           | 2     | 4     | 5      | 4    | 4.70           |
| <i>Prunus</i>            | 27               | 17             | 10           | 62.96      | 4            | 4     | 3     | 5      | 1    | 4.62           |
| <i>Cornus</i>            | 10               | 4              | 6            | 40.00      | 2            |       |       | 2      |      | 4.25           |
| <i>Salix</i>             | 101              | 33             | 68           | 32.67      | 16           | 1     | 5     | 10     | 1    | 3.89           |
| <i>Viburnum</i>          | 8                | 3              | 5            | 37.50      | 2            |       | 1     |        |      | 2.00           |
| Undetermined             | 150              | 2              | 148          | 1.33       | 2            |       |       |        |      | Not calculated |
| <i>Betula</i>            | 14               | 0              | 14           | 0.00       |              |       |       |        |      |                |
| cf. <i>Alnus</i>         | 1                | 0              | 1            | 0.00       |              |       |       |        |      |                |
| cf. <i>Carpinus</i>      | 79               | 16             | 63           | 20.25      | 10           | 3     | 1     | 1      | 1    |                |
| cf. <i>Cornus</i>        | 2                | 1              | 1            | 50.00      |              | 1     |       |        |      |                |
| cf. <i>Corylus</i>       | 3                | 1              | 2            | 33.33      | 1            |       |       |        |      |                |
| cf. <i>Prunus</i>        | 5                | 0              | 5            | 0.00       |              |       |       |        |      |                |
| cf. Rosaceae             | 112              | 55             | 57           | 49.11      | 40           | 10    | 1     | 3      | 1    |                |
| cf. <i>Salix/Populus</i> | 66               | 29             | 37           | 43.94      | 16           | 5     | 3     | 2      | 3    |                |

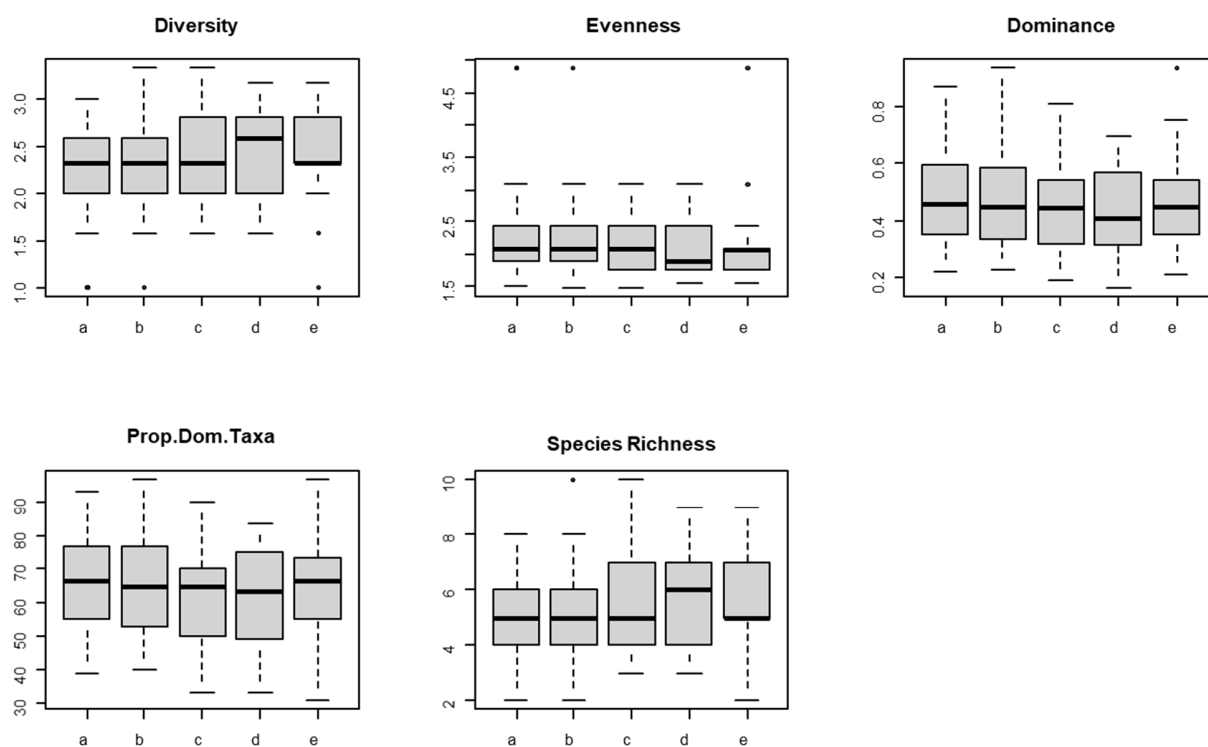


Figure S1: Boxplot for the five community structure index according to the subsample location. The central bar represents the median, the box represents 25% and 75% quartiles and the whiskers represent 1.5 times the interquartile range. Points represent the outliers.

