**Appendix E**

Tree counts results analysed by the Census code, which counted tree top annotation for all sites.

Part 1

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Species label | Site1 | Site4 | Site6 | Site7 | Site11 | Site12 | Site13 | Site2 | Site3 | Site5 | Site8 | Site9 | Site10 |
| S01 | 107 | 58 | 47 | 72 | 54 | 91 | 106 | 23 | 53 | 47 | 32 | 7 | 14 |
| S02 | 24 |  | 4 | 3 | 26 | 31 | 10 | 35 | 3 | 18 | 8 | 30 | 29 |
| S03 | 201 | 129 | 156 | 55 | 125 | 73 | 229 | 195 | 122 | 51 | 7 | 53 | 74 |
| S04 | 125 | 9 | 25 | 22 | 31 | 29 | 2 | 3 | 3 | 14 | 1 |  |  |
| S05 | 9 | 7 | 3 | 13 |  | 12 | 2 | 45 | 66 | 53 | 42 | 51 | 51 |
| S06 | 19 | 7 |  |  | 1 | 1 |  |  | 27 | 0 |  |  |  |
| S07 |  |  |  |  |  |  |  |  | 27 | 4 | 1 | 53 | 10 |
| S08 | 19 | 6 | 5 | 1 | 6 | 7 | 17 | 63 | 32 | 42 | 7 | 22 | 35 |
| S09 | 145 | 12 | 10 | 67 | 36 | 144 | 60 | 351 | 605 | 176 | 241 | 140 | 167 |
| S10 | 13 | 0 |  |  |  |  |  |  | 3 | 0 |  |  | 4 |
| S11 | 15 | 1 | 5 | 16 | 16 | 38 | 21 | 63 | 75 | 52 | 38 | 169 | 88 |
| S12 |  | 78 | 8 |  |  |  |  |  | 1 |  |  |  |  |
| S13 | 8 | 1 | 16 | 14 |  |  |  |  | 2 | 3 | 1 |  |  |
| S14 | 4 |  | 10 |  |  |  |  |  | 4 | 1 | 2 |  | 1 |
| S15 | 14 |  | 7 | 14 |  |  |  |  |  |  |  |  |  |
| S16 | 23 | 2 | 5 |  | 9 | 21 | 22 | 7 | 17 | 13 | 14 | 24 | 16 |
| S17 | 9 |  |  |  |  |  |  |  |  |  |  |  |  |
| S18 |  |  | 6 |  |  |  |  | 2 |  |  | 13 | 45 | 13 |
| S19 |  |  | 1 |  |  |  |  |  |  |  |  |  |  |
| S20 |  |  | 4 |  |  |  |  |  |  |  |  |  |  |
| S21 |  | 2 |  |  |  |  |  |  |  |  |  |  |  |
| S22 |  |  |  | 2 |  |  |  |  |  |  |  |  |  |
| S23 | 13 | 12 | 9 | 1 | 5 | 17 | 26 | 2 | 14 | 17 | 15 | 8 | 5 |
| S24 |  | 1 |  |  |  | 14 | 2 | 6 | 7 |  | 14 | 6 | 8 |
| S25 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |

Part 2

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Site1 | Site4 | Site6 | Site7 | Site11 | Site12 | Site13 | Site2 | Site3 | Site5 | Site8 | Site9 | Site10 |
| S26 | 28 |  |  |  | 2 | 9 | 1 | 4 | 7 |  | 3 | 7 | 19 |
| S27 |  |  |  |  |  | 4 | 15 |  | 2 | 12 | 2 | 4 | 1 |
| S28 |  |  |  |  |  | 3 | 3 |  | 1 | 4 |  |  | 13 |
| S29 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S30 |  |  |  |  |  | 5 |  |  |  |  |  |  |  |
| S31 | 0 | 0 |  | 20 |  | 4 | 8 |  | 19 |  |  |  |  |
| S32 |  | 1 |  |  |  |  |  |  |  |  |  |  |  |
| S33 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S34 |  |  | 5 |  |  |  |  |  |  |  |  |  |  |
| S35 |  |  |  |  |  |  |  |  | 3 |  |  |  |  |
| S36 |  |  |  | 1 |  |  |  |  |  |  |  |  |  |
| S37 |  |  | 2 |  | 3 |  |  |  |  |  |  |  |  |
| S38 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S39 | 0 |  |  |  |  | 1 | 1 | 6 | 4 |  |  |  | 3 |
| S40 | 0 |  |  |  |  |  | 3 | 10 |  | 4 | 33 | 30 | 30 |
| S41 |  |  |  |  |  |  |  |  |  |  |  |  | 11 |
| S42 | 5 |  |  |  |  |  |  |  |  | 6 | 18 | 1 | 4 |
| S43 | 2 |  |  |  |  |  |  | 14 |  |  | 16 | 14 |  |
| mix |  |  |  |  |  |  |  | 2 |  |  |  | 53 |  |
| Sum | 783 | 326 | 328 | 302 | 314 | 504 | 528 | 831 | 1098 | 515 | 508 | 717 | 596 |

**Appendix F**

Area calculations performed on basis of counted black pixels, which were previously annotated in GIMP. The black pixels together with the set image resolution allowed the calculation of the area in m².

Part 1

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Site 1 | Site 4 | Site 6 | Site 7 | Site 11 | Site 12 | Site 13 | Site 2 | Site 3 | Site 5 | Site 8 | Site 9 | Site 10 |
| Species label | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** |
| S01 | 9864.20 | 4629.35 | 2655.65 | 5463.61 | 3608.91 | 5546.10 | 8920.32 | 1246.46 | 5899.66 | 3397.58 | 2410.54 | 240.25 | 1326.07 |
| S02 | 1235.52 | 0.00 | 68.33 | 84.53 | 978.47 | 1035.81 | 534.25 | 1637.10 | 217.83 | 594.62 | 339.75 | 763.86 | 1708.42 |
| S03 | 5838.15 | 2151.46 | 4207.55 | 1094.08 | 2370.87 | 1037.72 | 4565.50 | 5926.63 | 3155.72 | 563.15 | 242.78 | 1348.74 | 2236.27 |
| S04 | 7250.37 | 471.91 | 1338.17 | 1257.24 | 1875.15 | 1520.57 | 41.28 | 211.27 | 144.43 | 661.84 | 118.41 | 0.00 | 0.00 |
| S05 | 442.84 | 135.66 | 101.00 | 293.28 | 0.00 | 234.29 | 71.68 | 1649.56 | 2953.23 | 1096.13 | 1126.18 | 1193.48 | 1790.17 |
| S06 | 580.36 | 220.75 | 0.00 | 0.00 | 33.25 | 0.65 | 0.00 | 0.00 | 1253.27 | 0.00 | 0.00 | 0.00 | 0.00 |
| S07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1423.92 | 230.61 | 69.42 | 1062.12 | 502.52 |
| S08 | 915.87 | 199.97 | 290.72 | 30.67 | 365.01 | 286.80 | 551.13 | 4951.32 | 2044.01 | 3222.04 | 443.02 | 1163.13 | 2247.97 |
| S09 | 949.24 | 95.23 | 52.09 | 352.73 | 459.91 | 818.98 | 658.71 | 5241.54 | 4724.15 | 773.31 | 1935.43 | 1084.42 | 1388.53 |
| S10 | 572.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 148.63 | 0.00 | 0.00 | 0.00 | 162.15 |
| S11 | 438.59 | 9.39 | 147.17 | 238.91 | 462.16 | 682.14 | 576.79 | 2451.67 | 1860.74 | 1707.42 | 921.75 | 3991.45 | 2842.49 |
| S12 | 0.00 | 778.19 | 260.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 21.05 | 0.00 | 0.00 | 0.00 | 0.00 |
| S13 | 371.63 | 85.48 | 632.19 | 618.05 | 0.00 | 0.00 | 0.00 | 0.00 | 191.60 | 230.39 | 63.53 | 0.00 | 0.00 |
| S14 | 110.08 | 0.00 | 395.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 152.13 | 57.55 | 16.47 | 0.00 | 51.62 |
| S15 | 326.76 | 0.00 | 124.94 | 230.42 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S16 | 616.13 | 16.72 | 81.62 | 0.00 | 239.45 | 301.93 | 539.54 | 337.76 | 647.66 | 349.88 | 383.62 | 367.17 | 482.77 |
| S17 | 512.97 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S18 | 0.00 | 0.00 | 370.35 | 0.00 | 0.00 | 0.00 | 0.00 | 52.80 | 0.00 | 0.00 | 185.34 | 779.80 | 787.20 |
| S19 | 0.00 | 0.00 | 88.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S20 | 0.00 | 0.00 | 294.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| S21 | 0.00 | 112.77 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Part 2

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Site 1 | Site 4 | Site 6 | Site 7 | Site 11 | Site 12 | Site 13 | | Site 2 | | Site 3 | | Site 5 | | Site 8 | | Site 9 | | Site 10 | |
| Species label | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | **Area in m²** | | **Area in m²** | | **Area in m²** | | **Area in m²** | | **Area in m²** | | **Area in m²** | | **Area in m²** | |
| S22 | 0.00 | 0.00 | 0.00 | 44.04 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| S23 | 274.79 | 151.27 | 262.27 | 10.11 | 89.78 | 221.80 | | 474.56 | | 94.47 | | 378.12 | | 324.42 | | 429.79 | | 110.03 | | 153.09 |
| S24 | 0.00 | 23.45 | 0.00 | 0.00 | 0.00 | 265.49 | | 118.11 | | 232.15 | | 228.07 | | 0.00 | | 338.38 | | 69.48 | | 265.87 |
| S25 | 0.00 | 0.00 | 0.00 | 43.57 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 |
| S26 | 1091.48 | 0.00 | 0.00 | 0.00 | 36.00 | 253.38 | | 23.89 | | 131.96 | | 478.42 | | 0.00 | | 129.90 | | 283.58 | | 721.37 |
| S27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 107.29 | 232.21 | | 0.00 | | 0.00 | | 266.48 | | 83.84 | | 55.99 | | 76.08 | |
| S28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 55.71 | 47.51 | | 0.00 | | 17.07 | | 107.12 | | 0.00 | | 0.00 | | 179.63 | |
| S29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| S30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 74.50 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| S31 | 68.57 | 0.00 | 0.00 | 98.75 | 0.00 | 85.83 | 93.35 | | 0.00 | | 164.28 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| S32 | 0.00 | 85.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| S33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| S34 | 0.00 | 0.00 | 43.42 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| S35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 168.80 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| S36 | 0.00 | 0.00 | 0.00 | 82.38 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| S37 | 0.00 | 0.00 | 57.50 | 0.00 | 86.98 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| S38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | | 0.00 | |
| S39 | 41.04 | 0.00 | 0.00 | 0.00 | 0.00 | 27.77 | 20.77 | | 110.39 | | 80.70 | | 0.00 | | 77.34 | | 8.70 | | 138.96 | |
| S40 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 50.51 | | 376.19 | | 0.00 | | 65.98 | | 855.53 | | 778.96 | | 825.09 | |
| S41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 5.13 | | 0.00 | | 0.00 | | 86.97 | |
| S42 | 157.85 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | | 0.00 | | 247.56 | | 397.31 | | 57.79 | | 103.09 | |
| S43 | 27.97 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 605.12 | | 7.83 | | 0.00 | | 364.07 | | 266.57 | | 0.00 | |
| mix |  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 56.36 | | 0.00 | | 0.00 | | 0.00 | | 435.41 | | 0.00 | |
| Sum | 31686.7 | 9166.82 | 11100.1 | 9942.39 | 10605.9 | 12556.8 | 17520.1 | | 25256.4 | | 26361.3 | | 13901.2 | | 10932.4 | | 14060.9 | | 18076.3 | |

Part 3:

Calculation of area per tree based on the basal area and tree top counting.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | Site1 | Site4 | Site6 | Site7 | Site11 | Site12 | Site13 | Site2 | Site3 | Site5 | Site8 | Site9 | Site10 |
| S01 | 92.19 | 79.82 | 56.5 | 75.88 | 66.83 | 60.95 | 84.15 | 54.19 | 111.31 | 72.29 | 75.33 | 34.32 | 94.72 |
| S02 | 51.48 |  | 17.08 | 28.18 | 37.63 | 33.41 | 53.42 | 46.77 | 72.61 | 33.03 | 42.47 | 25.46 | 58.91 |
| S03 | 29.05 | 16.68 | 26.97 | 19.89 | 18.97 | 14.22 | 19.94 | 30.39 | 25.87 | 11.04 | 34.68 | 25.45 | 30.22 |
| S04 | 58 | 52.43 | 53.53 | 57.15 | 60.49 | 52.43 | 20.64 | 70.42 | 48.14 | 47.27 | 118.41 |  |  |
| S05 | 49.2 | 19.38 | 33.67 | 22.56 |  | 19.52 | 35.84 | 36.66 | 44.75 | 20.68 | 26.81 | 23.4 | 35.1 |
| S06 | 30.55 | 31.54 |  |  | 33.25 | 0.65 |  |  | 46.42 |  |  |  |  |
| S07 |  |  |  |  |  |  |  |  | 52.74 | 57.65 | 69.42 | 20.04 | 50.25 |
| S08 | 48.2 | 33.33 | 58.14 | 30.67 | 60.84 | 40.97 | 32.42 | 78.59 | 63.88 | 76.72 | 63.29 | 52.87 | 64.23 |
| S09 | 6.55 | 7.94 | 5.21 | 5.26 | 12.78 | 5.69 | 10.98 | 14.93 | 7.81 | 4.39 | 8.03 | 7.75 | 8.31 |
| S10 | 44.02 |  |  |  |  |  |  |  | 49.54 |  |  |  | 40.54 |
| S11 | 29.24 | 9.39 | 29.43 | 14.93 | 28.89 | 17.95 | 27.47 | 38.92 | 24.81 | 32.84 | 24.26 | 23.62 | 32.3 |
| S12 |  | 9.98 | 32.5 |  |  |  |  |  | 21.05 |  |  |  |  |
| S13 | 46.45 | 85.48 | 39.51 | 44.15 |  |  |  |  | 95.8 | 76.8 | 63.53 |  |  |
| S14 | 27.52 |  | 39.51 |  |  |  |  |  | 38.03 | 57.55 | 8.23 |  | 51.62 |
| S15 | 23.34 |  | 17.85 | 16.46 |  |  |  |  |  |  |  |  |  |
| S16 | 26.79 | 8.36 | 16.32 |  | 26.61 | 14.38 | 24.52 | 48.25 | 38.1 | 26.91 | 27.4 | 15.3 | 30.17 |
| S17 | 57 |  |  |  |  |  |  |  |  |  |  |  |  |
| S18 |  |  | 61.72 |  |  |  |  | 26.4 |  |  | 14.26 | 17.33 | 60.55 |
| S19 |  |  | 88.16 |  |  |  |  |  |  |  |  |  |  |
| S20 |  |  | 73.55 |  |  |  |  |  |  |  |  |  |  |
| S21 |  | 56.38 |  |  |  |  |  |  |  |  |  |  |  |
| S22 |  |  |  | 22.02 |  |  |  |  |  |  |  |  |  |
| S23 | 21.14 | 12.61 | 29.14 | 10.11 | 17.96 | 13.05 | 18.25 | 47.23 | 27.01 | 19.08 | 28.65 | 13.75 | 30.62 |
| S24 |  | 23.45 |  |  |  | 18.96 | 59.06 | 38.69 | 32.58 |  | 24.17 | 11.58 | 33.23 |
| S25 |  |  |  | 43.57 |  |  |  |  |  |  |  |  |  |
| S26 | 38.98 |  |  |  | 18 | 28.15 | 23.89 | 32.99 | 68.35 |  | 43.3 | 40.51 | 37.97 |
| S27 |  |  |  |  |  | 26.82 | 15.48 |  | 0 | 22.21 | 41.92 | 14 | 76.08 |
| S28 |  |  |  |  |  | 18.57 | 15.84 |  | 17.07 | 26.78 |  |  | 13.82 |
| S29 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S30 |  |  |  |  |  | 14.9 |  |  |  |  |  |  |  |
| S31 |  |  |  | 4.94 |  | 21.46 | 11.67 |  | 8.65 |  |  |  |  |
| S32 |  | 85.24 |  |  |  |  |  |  |  |  |  |  |  |
| S33 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S34 |  |  | 8.68 |  |  |  |  |  |  |  |  |  |  |
| S35 |  |  |  |  |  |  |  |  | 56.27 |  |  |  |  |
| S36 |  |  |  | 82.38 |  |  |  |  |  |  |  |  |  |
| S37 |  |  | 28.75 |  | 28.99 |  |  |  |  |  |  |  |  |
| S38 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| S39 |  |  |  |  |  | 27.77 | 20.77 | 18.4 | 20.18 |  |  |  | 46.32 |
| S40 |  |  |  |  |  |  | 16.84 | 37.62 |  | 16.5 | 25.93 | 25.97 | 27.5 |
| S41 |  |  |  |  |  |  |  |  |  |  |  |  | 7.91 |
| S42 | 31.57 |  |  |  |  |  |  |  |  | 41.26 | 22.07 | 57.79 | 25.77 |
| S43 | 13.98 |  |  |  |  |  |  | 43.22 |  |  | 22.75 | 19.04 |  |
| mix |  |  |  |  |  |  |  | 28.18 |  |  |  | 8.22 |  |