|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | | | | | | | | | | | | | | | | | |  |  |
| **Tree descriptiom and Summative of ecosystem services produced by each tree per investigated period (July-November,2019)** | | | | | | | | | | | | | | | | | | | | | | | | | |  | | | |
|  | **Trees description** | | | | | | | | | | | **Biomass carbon** | | **Transpiration and precipitation** | | | **Energy absorbed** | **PM10 particles absorbed, g** | | | **Leaf and wood indexes** | | | | | **Tree description** | | | |
| **id** | **Age group** | **Tree height, m** | **Trunk diameter,cm** | **Trunk growth,mm** | **Canopy area, m2** | **VTA** | **BEF** | **BCEF** | **R/S** | **Total tree carbon, kg** | **Average annual tree carbon increment, kg** | **Carbon stored, kg** | **Carbon stored per canopy area, kg m-2** | **Transpiration, mm** | **Precipitation, mm** | **Ratio of precipitation evaporated, mm** | **L, kWh** | **PM10max** | **PM10avg** | **PM10min** | **PAI, m2m-2** | **WAI, m2m-2** | **LAI, m2m-2** | |
| ***Acer platanoides*** | | | | | | | | | | | | | | | | | | | | | | | |
| **218A0077** | 50-60 | 20 | 35.65 | 3.36 | 55.7 | 2 | 1.31 | 1.05 | 0.317 | 580.02 | 10.55 | 12.95 | 0.23 | 83.59 | 183.5 | 0.46 | 2454 | 17976 | 11504 | 4494 | 4.21 | 0.47 | 3.74 |
| **218A0212** | 50-60 | 15 | 33.74 | 3.18 | 27.6 | 3 | 1.31 | 1.05 | 0.317 | 393.59 | 7.16 | 8.79 | 0.32 | 130.80 | 183.5 | 0.71 | 1615 | 7250 | 4640 | 1812 | 3.30 | 0.50 | 2.80 |
| **218A0255** | 50-60 | 20 | 34.38 | 3.24 | 55.3 | 2 | 1.31 | 1.05 | 0.317 | 559.75 | 10.18 | 12.50 | 0.23 | 92.10 | 183.5 | 0.50 | 2506 | 15065 | 9641 | 3766 | 3.47 | 0.42 | 3.04 |
| **218A0262** | 50-60 | 13 | 34.70 | 3.27 | 28.5 | 1 | 1.31 | 1.05 | 0.317 | 373.73 | 6.80 | 8.35 | 0.29 | 168.32 | 183.5 | 0.92 | 2739 | 7861 | 5031 | 1965 | 3.97 | 0.57 | 3.40 |
| **218A0281** | 50-60 | 14 | 45.84 | 4.32 | 35.8 | 4 | 1.31 | 1.05 | 0.317 | 684.96 | 12.45 | 15.30 | 0.43 | 190.09 | 183.5 | 1.04 | 3042 | 11940 | 7641 | 2985 | 2.92 | 0.43 | 2.49 |
| **Mean** |  | 16.8 | 36.86 | 3.47 | 40.58 |  |  |  |  | 518.41 | 9.43 | 11.58 | 0.30 | 132.98 | 183.5 | 0.72 | 2471.20 | 12018.6 | 7691.8 | 3004.6 | 3.57 | 0.48 | 3.10 |
| **SE** |  | 1.7 | 2.53 | 0.24 | 6.99 |  |  |  |  | 66.03 | 1.20 | 1.47 | 0.04 | 23.22 | 0.00 | 0.13 | 266.00 | 2302.1 | 1473.3 | 575.5 | 0.26 | 0.03 | 0.25 |
| ***Betula pendula*** | | | | | | | | | | | | | | | | | | | | | | | |
| **218A0104** | 50-60 | 11 | 21.65 | 2.72 | 7.6 | 1 | 1.19 | 0.761 | 0.219 | 80.41 | 1.46 | 2.39 | 0.31 | 242.16 | 183.5 | 1.32 | 1157 | 2029 | 1298 | 507 | 3.09 | 0.44 | 2.65 |
| **218A0210** | 30-40 | 11 | 21.01 | 2.64 | 6.4 | 1 | 1.19 | 0.761 | 0.219 | 73.70 | 1.34 | 2.19 | 0.34 | 304.40 | 183.5 | 1.66 | 1226 | 2046 | 1309 | 511 | 3.30 | 0.42 | 2.88 |
| **218A0285** | 30-40 | 11 | 23.87 | 3 | 8.2 | 1 | 1.19 | 0.761 | 0.219 | 93.85 | 1.71 | 2.79 | 0.34 | 340.33 | 183.5 | 1.85 | 1756 | 2468 | 1579 | 617 | 3.24 | 0.42 | 2.82 |
| **Mean** |  | 11 | 22.18 | 2.79 | 7.40 |  |  |  |  | 82.65 | 1.50 | 2.46 | 0.33 | 295.63 | 183.50 | 1.61 | 1379.4 | 2181.2 | 1396.0 | 545.3 | 3.21 | 0.43 | 2.79 |
| **SE** |  | 0 | 7.00 | 0.91 | 0.55 |  |  |  |  | 8.34 | 0.15 | 0.39 | 0.10 | 100.49 | 64.88 | 0.55 | 436.7 | 149.8 | 95.9 | 37.4 | 1.05 | 0.14 | 0.90 |
| ***Larix sibirica*** | | | | | | | | | | | | | | | | | | | | | | | |
| **218A0079** | 80-100 | 25 | 32.15 | 2.02 | 65.9 | 3 | 1.13 | 0.754 | 0.326 | 421.11 | 7.66 | 6.28 | 0.10 | 41.04 | 183.5 | 0.22 | 1701 | 17527 | 11218 | 4382 | 3.49 | 0.80 | 2.69 |
| **218A0138** | 80-100 | 19 | 40.74 | 2.56 | 37.4 | 2 | 1.13 | 0.754 | 0.326 | 519.51 | 9.45 | 7.75 | 0.21 | 137.62 | 183.5 | 0.75 | 3238 | 9824 | 62878 | 2456 | 3.38 | 0.46 | 2.92 |
| **218A0277** | 80-100 | 24 | 26.10 | 1.64 | 32.3 | 2 | 1.13 | 0.754 | 0.326 | 272.47 | 4.95 | 4.06 | 0.13 | 72.88 | 183.5 | 0.40 | 1481 | 8805 | 5635. | 2201 | 3.72 | 0.37 | 3.35 |
| **Mean** |  | 22.7 | 33.00 | 2.07 | 45.20 |  |  |  |  | 404.36 | 7.35 | 6.03 | 0.14 | 83.85 | 183.50 | 0.46 | 2140.0 | 12052.5 | 7713.6 | 3013.1 | 3.53 | 0.54 | 2.99 |
| **SE** |  | 2.2 | 5.20 | 0.33 | 12.80 |  |  |  |  | 87.94 | 1.60 | 1.31 | 0.04 | 34.80 | 0.00 | 0.19 | 676.9 | 3372.1 | 2158.1 | 843.0 | 0.12 | 0.16 | 0.24 |
| ***Tilia cordata*** | | | | | | | | | | | | | | | | | | | | | | | |
| **218A0111** | 50-60 | 12 | 28.01 | 5.28 | 20 | 3 | 1.16 | 0.682 | 0.282 | 137.55 | 2.50 | 6.12 | 0.31 | 174.45 | 183.5 | 0.95 | 2195 | 6454 | 4131 | 1613 | 3.45 | 0.53 | 2.92 |
| **218A0121** | 50-60 | 17 | 37.88 | 7.14 | 31.3 | 1 | 1.16 | 0.682 | 0.282 | 345.00 | 6.27 | 15.34 | 0.49 | 171.14 | 183.5 | 0.93 | 3370 | 6708 | 4293 | 1677 | 3.77 | 0.56 | 3.21 |
| **218A0153** | 40-50 | 14 | 35.33 | 6.66 | 21.1 | 2 | 1.16 | 0.682 | 0.282 | 245.59 | 4.47 | 10.92 | 0.52 | 165.41 | 183.5 | 0.90 | 2196 | 5405 | 3459 | 1351 | 3.66 | 0.42 | 3.24 |
| **218A0186** | 40-50 | 17 | 40.43 | 7.62 | 19.5 | 3 | 1.16 | 0.682 | 0.282 | 400.09 | 7.27 | 17.79 | 0.91 | 175.42 | 183.5 | 0.96 | 2152 | 4893 | 3131 | 1223 | 3.32 | 0.52 | 2.80 |
| **218A0270** | 30-40 | 11 | 25.15 | 4.74 | 22.4 | 3 | 1.16 | 0.664 | 0.272 | 96.81 | 1.76 | 4.30 | 0.19 | 84.88 | 183.5 | 0.46 | 1196 | 6478 | 4146 | 1619 | 3.69 | 0.48 | 3.21 |
| **Mean** |  | 14.1 | 33.36 | 6.29 | 22.86 |  |  |  |  | 245.01 | 4.45 | 10.89 | 0.48 | 154.26 | 183.50 | 0.84 | 2221.7 | 5987.6 | 3832.0 | 1496.9 | 3.58 | 0.50 | 3.08 |
| **SE** |  | 1.3 | 3.26 | 0.61 | 2.42 |  |  |  |  | 64.98 | 1.18 | 2.89 | 0.14 | 19.49 | 0.00 | 0.11 | 385.4 | 396.4 | 253.7 | 99.1 | 0.09 | 0.03 | 0.10 |