**Table S1：The habitat features of 81 sample plots in three urban wetlands**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Names** | **No** |  | **Geographic** **information** |  | **Natural****environmental factors** |  | **Artificial** **interference factors** |  | **Information of diversity index and coverage** |
|  | **Long** | **Lat** |  | **Pre**  | **AAT** | **Alt**  | **WT** | **WSI** |  | **HA** | **CILUD** | **PSP** | **ICP** |  | **D** | **H** | **J** | **TC** |
| Xixi wetland | 1 |  | 120.0796 | 30.2783 |  | 1399 | 15.17 | 3 | 50 | 1.08  |  | 18 | 253.33  | 49 | 52 |  | 101 | 4.11  | 0.453  | 180 |
| 2 |  | 120.0818 | 30.2788 |  | 1399 | 15.17 | 4 | 47 | 1.21  |  | 18 | 293.71  | 50 | 34 |  | 84 | 4.03  | 0.429  | 120 |
| 3 |  | 120.0859 | 30.2801 |  | 1399 | 15.17 | 4 | 65 | 1.16  |  | 18 | 309.43  | 49 | 16 |  | 65 | 3.42  | 0.387  | 140 |
| 4 |  | 120.0899 | 30.2813 |  | 1399 | 15.17 | 5 | 70 | 1.61  |  | 18 | 207.11  | 67 | 13 |  | 80 | 3.75  | 0.399  | 98 |
| 5 |  | 120.0953 | 30.2786 |  | 1399 | 15.17 | 3 | 50 | 1.51  |  | 18 | 228.89  | 44 | 27 |  | 71 | 3.57  | 0.394  | 80 |
| 6 |  | 120.0924 | 30.2789 |  | 1399 | 15.17 | 4 | 82 | 1.79  |  | 18 | 211.56  | 51 | 11 |  | 62 | 3.33  | 0.381  | 55 |
| 7 |  | 120.0894 | 30.2796 |  | 1399 | 15.17 | 3 | 65 | 1.25  |  | 18 | 205.78  | 41 | 10 |  | 51 | 2.99  | 0.354  | 65 |
| 8 |  | 120.0863 | 30.2788 |  | 1399 | 15.17 | 3 | 60 | 1.32  |  | 18 | 232.00  | 28 | 23 |  | 51 | 2.99  | 0.354  | 45 |
| 9 |  | 120.0809 | 30.2751 |  | 1399 | 15.17 | 4 | 70 | 1.77  |  | 18 | 241.78  | 45 | 32 |  | 77 | 3.69  | 0.399  | 170 |
| 10 |  | 120.0829 | 30.2696 |  | 1399 | 15.17 | 4 | 55 | 1.32  |  | 18 | 216.67  | 38 | 15 |  | 53 | 3.05  | 0.360  | 150 |
| 11 |  | 120.0813 | 30.2705 |  | 1399 | 15.17 | 4 | 66 | 1.11  |  | 18 | 212.89  | 47 | 20 |  | 67 | 3.47  | 0.390  | 110 |
| 12 |  | 120.0786 | 30.2711 |  | 1399 | 15.17 | 5 | 70 | 1.14  |  | 18 | 215.33  | 37 | 10 |  | 47 | 2.84  | 0.342  | 70 |
| 13 |  | 120.0776 | 30.2741 |  | 1399 | 15.17 | 4 | 70 | 1.63  |  | 18 | 221.11  | 42 | 23 |  | 65 | 3.42  | 0.387  | 130 |
| 14 |  | 120.0782 | 30.2779 |  | 1399 | 15.17 | 4 | 59 | 1.18  |  | 18 | 234.89  | 50 | 13 |  | 63 | 3.36  | 0.383  | 110 |
| 15 |  | 120.0763 | 30.2822 |  | 1399 | 15.17 | 5 | 70 | 1.19  |  | 18 | 208.00  | 54 | 24 |  | 78 | 3.71  | 0.399  | 85 |
| 16 |  | 120.0743 | 30.2851 |  | 1399 | 15.17 | 4 | 50 | 1.36  |  | 18 | 231.11  | 33 | 7 |  | 40 | 2.56  | 0.315  | 75 |
| 17 |  | 120.0688 | 30.2853 |  | 1399 | 15.17 | 4 | 70 | 1.27  |  | 18 | 220.00  | 55 | 17 |  | 72 | 3.59  | 0.395  | 60 |
| 18 |  | 120.0657 | 30.2837 |  | 1399 | 15.17 | 1 | 40 | 1.17  |  | 18 | 221.78  | 1 | 1 |  | 2 | 0.60  | 0.091  | 40 |
| 19 |  | 120.0643 | 30.2807 |  | 1399 | 15.17 | 2 | 80 | 1.15  |  | 18 | 200.00  | 42 | 0 |  | 42 | 2.65  | 0.323  | 95 |
| 20 |  | 120.0571 | 30.2810  |  | 1399 | 15.17 | 2 | 75 | 1.35  |  | 18 | 235.56  | 43 | 19 |  | 62 | 3.33  | 0.381  | 140 |
| 21 |  | 120.0551 | 30.2667 |  | 1399 | 15.17 | 4 | 70 | 1.21  |  | 18 | 208.44  | 30 | 9 |  | 39 | 2.52  | 0.311  | 78 |
| 22 |  | 120.0536 | 30.2683 |  | 1399 | 15.17 | 2 | 55 | 1.11  |  | 18 | 200.00  | 30 | 25 |  | 55 | 3.25  | 0.422  | 75 |
| 23 |  | 120.0514 | 30.2665 |  | 1399 | 15.17 | 6 | 50 | 1.15  |  | 18 | 226.67  | 32 | 12 |  | 44 | 2.73  | 0.331  | 70 |
| 24 |  | 120.0517 | 30.2638 |  | 1399 | 15.17 | 2 | 70 | 1.11  |  | 18 | 200.00  | 42 | 24 |  | 66 | 3.44  | 0.388  | 70 |
| 25 |  | 120.0512 | 30.2572 |  | 1399 | 15.17 | 7 | 60 | 1.09  |  | 18 | 224.44  | 60 | 18 |  | 78 | 3.71  | 0.399  | 130 |
| 26 |  | 120.0543 | 30.2544 |  | 1399 | 15.17 | 6 | 55 | 1.20  |  | 18 | 208.44  | 49 | 18 |  | 67 | 3.31  | 0.386  | 80 |
| 27 |  | 120.0566 | 30.2548 |  | 1399 | 15.17 | 7 | 50 | 1.09  |  | 18 | 226.67  | 39 | 14 |  | 53 | 3.05  | 0.360  | 50 |
| 28 |  | 120.0592 | 30.2572 |  | 1399 | 15.17 | 7 | 65 | 1.11  |  | 18 | 210.00  | 30 | 16 |  | 46 | 2.80  | 0.338  | 40 |
| 29 |  | 120.052 | 30.2703 |  | 1399 | 15.17 | 2 | 75 | 1.12  |  | 18 | 217.78  | 34 | 14 |  | 48 | 2.88  | 0.345  | 78 |
| 30 |  | 120.0528 | 30.2747 |  | 1399 | 15.17 | 2 | 38 | 1.22  |  | 18 | 210.00  | 28 | 9 |  | 37 | 2.44  | 0.303  | 55 |
| 31 |  | 120.0683 | 30.2627 |  | 1399 | 15.17 | 2 | 50 | 1.18  |  | 18 | 382.22  | 27 | 12 |  | 39 | 2.52  | 0.311  | 80 |
| 32 |  | 120.0724 | 30.2641 |  | 1399 | 15.17 | 4 | 65 | 1.06  |  | 18 | 281.33  | 47 | 16 |  | 63 | 3.36  | 0.383  | 110 |
| 33 |  | 120.0673 | 30.2655 |  | 1399 | 15.17 | 7 | 75 | 1.08  |  | 18 | 227.33  | 30 | 17 |  | 47 | 2.84  | 0.342  | 90 |
| 34 |  | 120.0669 | 30.2667 |  | 1399 | 15.17 | 6 | 60 | 1.16  |  | 18 | 208.00  | 18 | 16 |  | 34 | 1.78  | 0.239  | 100 |
| 35 |  | 120.0665 | 30.2735 |  | 1399 | 15.17 | 3 | 79 | 1.15  |  | 18 | 213.11  | 54 | 19 |  | 73 | 3.61  | 0.396  | 110 |
| 36 |  | 120.0675 | 30.2761 |  | 1399 | 15.17 | 2 | 65 | 1.11  |  | 18 | 248.44  | 39 | 12 |  | 51 | 2.99  | 0.354  | 130 |
| 37 |  | 120.0697 | 30.2774 |  | 1399 | 15.17 | 4 | 55 | 1.80  |  | 18 | 277.78  | 29 | 12 |  | 41 | 3.19  | 0.377  | 120 |
| 38 |  | 120.0737 | 30.278 |  | 1399 | 15.17 | 6 | 77 | 1.10  |  | 18 | 225.33  | 38 | 15 |  | 53 | 3.05  | 0.360  | 130 |
| 39 |  | 120.076 | 30.2746 |  | 1399 | 15.17 | 4 | 55 | 1.14  |  | 18 | 214.00  | 46 | 10 |  | 56 | 3.15  | 0.368  | 95 |
| 40 |  | 120.0755 | 30.267 |  | 1399 | 15.17 | 4 | 82 | 1.15  |  | 18 | 248.89  | 28 | 9 |  | 37 | 2.44  | 0.303  | 80 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tongjian Lake wetland | 1 |  | 120.0319 | 30.0718 |  | 1454 | 18 | 7 | 38 | 1.11  |  | 6 | 219.56  | 8 | 4 |  | 12 | 1.20  | 0.169  | 90 |
| 2 |  | 120.0334 | 30.0756 |  | 1454 | 18 | 14 | 55 | 1.15  |  | 6 | 231.11  | 22 | 32 |  | 54 | 2.67  | 0.330  | 83 |
| 3 |  | 120.0335 | 30.0754 |  | 1454 | 18 | 12 | 35 | 1.26  |  | 6 | 225.11  | 26 | 20 |  | 46 | 2.60  | 0.313  | 78 |
| 4 |  | 120.0335 | 30.0752 |  | 1454 | 18 | 11 | 45 | 1.39  |  | 6 | 227.56  | 27 | 34 |  | 61 | 2.77  | 0.339  | 159 |
| 5 |  | 120.0338 | 30.0748 |  | 1454 | 18 | 9 | 45 | 1.44  |  | 6 | 210.00  | 30 | 19 |  | 49 | 2.64  | 0.320  | 65 |
| 6 |  | 120.0339 | 30.0745 |  | 1454 | 18 | 8 | 40 | 1.53  |  | 6 | 240.89  | 23 | 24 |  | 47 | 2.66  | 0.313  | 140 |
| 7 |  | 120.0341 | 30.0745 |  | 1454 | 18 | 8 | 48 | 1.68  |  | 6 | 208.89  | 24 | 25 |  | 49 | 2.64  | 0.320  | 68 |
| 8 |  | 120.0346 | 30.0746 |  | 1454 | 18 | 10 | 55 | 1.40  |  | 6 | 239.56  | 26 | 22 |  | 48 | 2.63  | 0.318  | 78 |
| 9 |  | 120.0348 | 30.0743 |  | 1454 | 18 | 8 | 30 | 1.18  |  | 6 | 234.44  | 17 | 13 |  | 30 | 2.17  | 0.267  | 75 |
| 10 |  | 120.0348 | 30.0740  |  | 1454 | 18 | 7 | 35 | 1.19  |  | 6 | 222.67  | 19 | 24 |  | 43 | 2.55  | 0.306  | 83 |
| 11 |  | 120.0351 | 30.0731 |  | 1454 | 18 | 11 | 30 | 1.42  |  | 6 | 230.00  | 26 | 19 |  | 45 | 2.59  | 0.311  | 105 |
| 12 |  | 120.0355 | 30.0726 |  | 1454 | 18 | 7 | 28 | 1.94  |  | 6 | 230.67  | 21 | 21 |  | 42 | 2.53  | 0.303  | 212 |
| 13 |  | 120.0353 | 30.0721 |  | 1454 | 18 | 6 | 30 | 1.58  |  | 6 | 311.11  | 14 | 16 |  | 30 | 1.91  | 0.236  | 161 |
| 14 |  | 120.0349 | 30.0725 |  | 1454 | 18 | 7 | 42 | 1.48  |  | 6 | 224.22  | 6 | 3 |  | 9 | 0.89  | 0.124  | 124 |
| 15 |  | 120.0300  | 30.0371 |  | 1454 | 18 | 7 | 20 | 1.29  |  | 6 | 241.78  | 17 | 18 |  | 35 | 2.35  | 0.284  | 155 |
| 16 |  | 120.0256 | 30.0734 |  | 1454 | 18 | 9 | 24 | 1.34  |  | 6 | 317.33  | 13 | 10 |  | 23 | 2.24  | 0.291  | 181 |
| 17 |  | 120.0254 | 30.0737 |  | 1454 | 18 | 7 | 45 | 1.05  |  | 6 | 247.11  | 22 | 10 |  | 32 | 2.25  | 0.274  | 130 |
| 18 |  | 120.0252 | 30.0738 |  | 1454 | 18 | 6 | 30 | 1.25  |  | 6 | 222.22  | 19 | 8 |  | 27 | 2.05  | 0.256  | 145 |
| 19 |  | 120.0257 | 30.0728 |  | 1454 | 18 | 7 | 20 | 1.47  |  | 6 | 225.56  | 16 | 17 |  | 33 | 2.28  | 0.278  | 97 |
| 20 |  | 120.0305 | 30.0730  |  | 1454 | 18 | 7 | 25 | 1.59  |  | 6 | 200.00  | 13 | 13 |  | 21 | 1.75  | 0.229  | 174 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Qingshan Lake wetland | 1 |  | 119.4541 | 30.1532 |  | 1427 | 15.9 | 30 | 30 | 1.30  |  | 6 | 248.00  | 31 | 9 |  | 40 | 2.41  | 0.395  | 70 |
| 2 |  | 119.4538 | 30.1532 |  | 1427 | 15.9 | 26 | 30 | 1.23  |  | 6 | 200.00  | 5 | 6 |  | 11 | 0.59  | 0.082  | 80 |
| 3 |  | 119.4537 | 30.1530  |  | 1427 | 15.9 | 28 | 30 | 1.67  |  | 6 | 221.78  | 23 | 6 |  | 29 | 1.93  | 0.283  | 73 |
| 4 |  | 119.4537 | 30.1529 |  | 1427 | 15.9 | 29 | 15 | 1.50  |  | 6 | 220.67  | 38 | 10 |  | 48 | 2.65  | 0.476  | 50 |
| 5 |  | 119.4535 | 30.1527 |  | 1427 | 15.9 | 32 | 30 | 1.05  |  | 6 | 263.56  | 28 | 5 |  | 33 | 2.12  | 0.324  | 70 |
| 6 |  | 119.4534 | 30.1519 |  | 1427 | 15.9 | 25 | 35 | 1.10  |  | 6 | 209.56  | 0 | 1 |  | 1 | 0.00  | 0.000  | 36 |
| 7 |  | 119.4537 | 30.1515 |  | 1427 | 15.9 | 29 | 35 | 1.08  |  | 6 | 231.33  | 0 | 5 |  | 5 | 0.30  | 0.039  | 43 |
| 8 |  | 119.4538 | 30.1513 |  | 1427 | 15.9 | 37 | 35 | 1.07  |  | 6 | 219.33  | 11 | 3 |  | 14 | 1.00  | 0.131  | 43 |
| 9 |  | 119.4541 | 30.1512 |  | 1427 | 15.9 | 39 | 25 | 1.15  |  | 6 | 220.67  | 18 | 6 |  | 24 | 1.65  | 0.232  | 175 |
| 10 |  | 119.4544 | 30.1510  |  | 1427 | 15.9 | 41 | 35 | 1.16  |  | 6 | 220.00  | 13 | 7 |  | 20 | 1.41  | 0.192  | 96 |
| 11 |  | 119.4540  | 30.1529 |  | 1427 | 15.9 | 28 | 30 | 1.22  |  | 6 | 226.67  | 17 | 11 |  | 28 | 1.88  | 0.273  | 79 |
| 12 |  | 119.4544 | 30.1532 |  | 1427 | 15.9 | 31 | 32 | 1.79  |  | 6 | 240.00  | 32 | 8 |  | 40 | 2.77  | 0.310  | 65 |
| 13 |  | 119.4545 | 30.1534 |  | 1427 | 15.9 | 31 | 35 | 1.59  |  | 6 | 220.44  | 26 | 7 |  | 33 | 2.12  | 0.324  | 90 |
| 14 |  | 119.4548 | 30.1536 |  | 1427 | 15.9 | 32 | 38 | 1.53  |  | 6 | 225.78  | 20 | 4 |  | 24 | 1.65  | 0.232  | 53 |
| 15 |  | 119.4605 | 30.1427 |  | 1427 | 15.9 | 27 | 50 | 1.20  |  | 6 | 200.00  | 35 | 8 |  | 43 | 2.51  | 0.426  | 42 |
| 16 |  | 119.4601 | 30.1430  |  | 1427 | 15.9 | 32 | 45 | 1.14  |  | 6 | 221.33  | 45 | 20 |  | 65 | 3.00  | 0.350  | 70 |
| 17 |  | 119.4559 | 30.1433 |  | 1427 | 15.9 | 29 | 31 | 1.32  |  | 6 | 232.00  | 0 | 1 |  | 1 | 0.00  | 0.000  | 80 |
| 18 |  | 119.4609 | 30.1421 |  | 1427 | 15.9 | 26 | 42 | 1.30  |  | 6 | 208.00  | 20 | 13 |  | 33 | 2.12  | 0.324  | 73 |
| 19 |  | 119.4612 | 30.1420  |  | 1427 | 15.9 | 30 | 22 | 1.20  |  | 6 | 200.00  | 18 | 6 |  | 24 | 1.65  | 0.232  | 50 |
| 20 |  | 119.4606 | 30.1417 |  | 1427 | 15.9 | 31 | 30 | 1.49  |  | 6 | 216.67  | 35 | 12 |  | 47 | 2.44  | 0.277  | 70 |
| 21 |  | 119.4602 | 30.1414 |  | 1427 | 15.9 | 32 | 25 | 1.10  |  | 6 | 216.67  | 27 | 4 |  | 31 | 2.03  | 0.304  | 36 |

Notes: Long: Longitude(°), Lat: Latitude(°), Pre: Precipitation (mm), AAT: Annual average temperature (℃), Alt: Altitude (m), WT: Water transparency (cm), WSI: Water shape index, HA: Habitate age (years), CILUD: Comprehensive index of land use degree, PSP: Preservation of spontaneous plants(species), ICP: Introduction of cultivated plants (species), D: Patrick index, H: Shannon-Wiener index, J: Pielou index, TC: Total coverage (%)