**Table S2: Distribution of tree species with respect to amount of flooding.**

Species are sorted in order from the one experiencing the most flooding to the one experiencing the least flooding. The distribution of a species is described by the percent of the year that the 10th percentile, median and 90th percentile individuals of that species experience flooded conditions. For example, half of all *Salix nigra* individuals experience flooding more than 19.3% of all days, while the other half experience less than that. Only 10% of *S. nigra* individuals experience flooding less than 8.7% of all days, while 90% of individuals experience flooding less than 23.9% of all days. Species habitat classifications are based on the floodplain forest community ecology literature cited in the methods. Habitats include: low floodplain forest (F), swamps (S), rich high terrace floodplain forest (R), upland forest (U), disturbed areas (D), non-native invasive (I). Trees are defined as individuals with circumference 10 cm or greater. Only species with a number of 50 or more occurrences are listed (N).

| **Species** | **Habitat** | **N** | **10th** | **50th** | **90th** |
| --- | --- | --- | --- | --- | --- |
| *Salix nigra* Marsh. | F | 230 | 8.736 | 19.284 | 23.912 |
| *Acer saccharinum* L. | F | 3573 | 1.375 | 8.065 | 30.475 |
| *Quercus palustris* Münchh. | F,S | 260 | 0.044 | 5.114 | 18.030 |
| *Fraxinus pennsylvanica* Marsh. | F | 935 | 0.058 | 4.854 | 24.888 |
| *Alnus incana* (L.) Moench ssp. *rugosa* (Du Roi) R.T. Clausen | F,S | 226 | 0.044 | 4.679 | 30.712 |
| *Populus deltoides* Bartram ex Marsh. | F | 432 | 0.125 | 3.457 | 11.618 |
| *Viburnum lentago* L. | F,S | 141 | 0.014 | 1.858 | 7.964 |
| *Juglans cinerea* L. | F,R | 56 | 0.003 | 1.762 | 5.887 |
| *Platanus occidentalis* L. | F | 336 | 0.041 | 1.548 | 9.476 |
| *Ulmus americana* L. | F,R | 1849 | 0.007 | 1.545 | 7.448 |
| *Abies balsamea* (L.) Mill. | F,R,U | 51 | 0.003 | 1.289 | 3.261 |
| *Acer negundo* L. | F,D | 627 | 0.000 | 1.273 | 5.891 |
| *Ilex verticillata* (L.) A. Gray | F,S | 95 | 0.238 | 1.264 | 10.467 |
| *Lindera benzoin* (L.) Blume | F,R | 280 | 0.000 | 0.870 | 8.771 |
| *Fraxinus nigra* Marsh. | F,S | 93 | 0.041 | 0.813 | 4.480 |
| *Acer rubrum* L. | F,S,R,U | 1268 | 0.000 | 0.794 | 10.571 |
| *Carya cordiformis* (Wangenh.) K. Koch | R,U | 348 | 0.000 | 0.580 | 5.748 |
| *Carya ovata* (Mill.) K. Koch | R,U | 111 | 0.000 | 0.410 | 5.771 |
| *Frangula alnus* Mill. | I | 56 | 0.012 | 0.309 | 5.056 |
| *Rhus typhina* L. | D | 84 | 0.000 | 0.164 | 1.943 |
| *Acer nigrum* Michx. f. x *Acer saccharum* Marsh. | R | 141 | 0.000 | 0.158 | 0.992 |
| *Prunus serotina* Ehrh. | R,U | 560 | 0.000 | 0.096 | 2.241 |
| *Tilia americana* L. | R,U | 181 | 0.000 | 0.071 | 2.424 |
| *Fraxinus americana* L. | R,U | 236 | 0.000 | 0.050 | 1.526 |
| *Carpinus caroliniana* Walter | R,U | 290 | 0.000 | 0.043 | 2.074 |
| *Pinus strobus* L. | R,U | 248 | 0.000 | 0.036 | 3.284 |
| *Robinia pseudoacacia* L. | D | 56 | 0.000 | 0.030 | 0.766 |
| *Prunus virginiana* L. | R,U | 53 | 0.007 | 0.023 | 1.427 |
| *Quercus rubra* L. | R,U | 187 | 0.000 | 0.022 | 1.905 |
| *Ulmus rubra* Muhl. | R | 91 | 0.000 | 0.022 | 1.058 |
| *Betula alleghaniensis* Britton | U | 50 | 0.000 | 0.012 | 0.309 |
| *Acer saccharum* Marsh. | R,U | 518 | 0.000 | 0.011 | 0.910 |
| *Betula lenta* L. | R,U | 92 | 0.000 | 0.006 | 1.247 |
| *Fagus grandifolia* Ehrh. | U | 91 | 0.000 | 0.004 | 0.970 |
| *Tsuga canadensis* (L.) Carrière | U | 97 | 0.000 | 0.000 | 0.484 |