

Table S1. Effect size, reported as Cohen's *d* and exact Tukey-adjusted *p*-value (in parentheses) of pairwise comparisons among species within water level bins and among water level bins within species of estimated marginal means and slopes.

Measure	Compared Within	Pairwise Comparison		
		Black Ash - Red Maple	Red Maple - Yellow Birch	Black Ash - Yellow Birch
Mean Sap Flux	Low Water Levels	2.518 (<0.0001)	0.110 (0.9327)	2.627 (<0.0001)
Mean Sap Flux	Mean Water Levels	1.623 (0.0002)	0.046 (0.9875)	1.670 (0.0001)
Mean Sap Flux	High Water Levels	1.320 (0.0039)	0.024 (0.9969)	1.345 (0.0040)
Sap Flux Response to Dz	Low Water Levels	1.733 (0.0868)	1.456 (0.0822)	3.189 (0.0002)
Sap Flux Response to Dz	Mean Water Levels	1.755 (0.0677)	0.320 (0.8466)	2.075 (0.0196)
Sap Flux Response to Dz	High Water Levels	0.172 (0.9711)	0.711 (0.4573)	0.883 (0.4550)
		Low to Mean Water Levels	Mean to High Water Levels	Low to High Water Levels
Mean Sap Flux	Black Ash	0.922 (<0.0001)	0.395 (0.0305)	1.318 (<0.0001)
Mean Sap Flux	Red Maple	0.028 (0.9691)	0.116 (0.3895)	0.144 (0.5548)
Mean Sap Flux	Yellow Birch	0.036 (0.9450)	0.010 (0.9969)	0.046 (0.8696)
Sap Flux Response to Dz	Black Ash	1.177 (0.0813)	1.761 (0.0105)	2.938 (<0.0001)
Sap Flux Response to Dz	Red Maple	1.199 (0.0195)	0.179 (0.8819)	1.377 (0.0094)
Sap Flux Response to Dz	Yellow Birch	0.063 (0.9839)	0.569 (0.2218)	0.632 (0.2867)

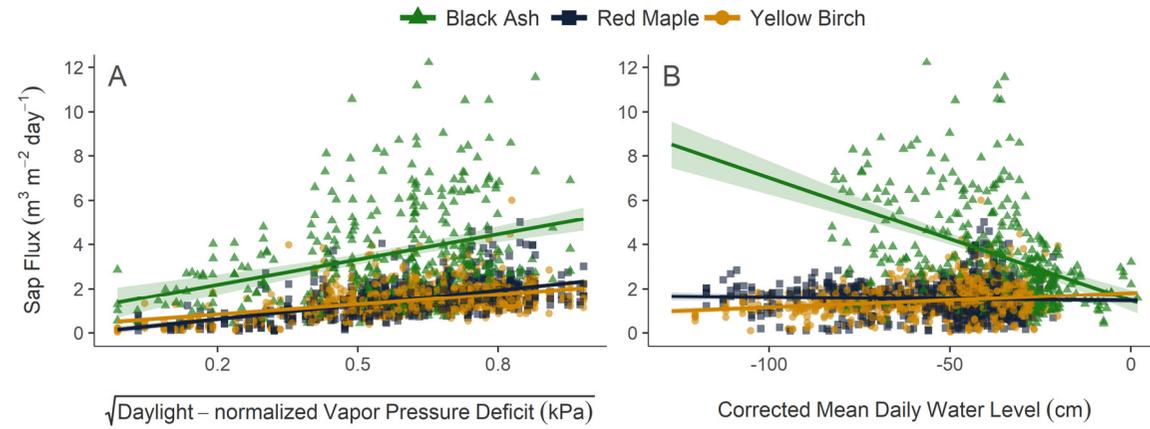


Figure S1. Daily mean sap flux of individual probes by (A) daylight-normalized vapor-pressure deficit (D_z) and (B) mean daily water level. Linear models with 95% prediction intervals fit individually for each driver.