

Date of study:

May - September 2015

Date of public archiving: Should be published with Functional Traits 2019 (or before)

November 2024

Last modified:

December 17, 2024

Goal

Measure functional traits for 43 woody plant species at four sites: Harvard Forest, White Mountains, Second College Grant, and St.-Hippolyte

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Category	Trait	Units	Significance
Leaf morphology	Leaf size	cm ²	Climate gradients
	SLA	mm ² /mg	Life history, leaf economics spectrum
	Leaf shape	Level of toothedness/ dissection	Strong latitudinal and climate gradients for some species
Tissue nutrient status	Leaf N%	mg/g	Life history strategy, investment in light-harvesting modules
	δ ¹³ C		Leaf lifetime integrated stomatal conductance
	Leaf dry matter content	mg/g	Leaf toughness, resistance to herbivores
Growth form	Height	m	Size, performance

Reproduction	Seed size	g	Allocation to each diaspore
Wood anatomy	Stem specific density	mg/mm ³	Growth rate, drought resistance
	Pore anatomy	Categorical: 3-5	Taken from http://insidewood.lib.ncsu.edu/menu/type/modern?0 3 Wood ring-porous 4 Wood semi-ring-porous 5 Wood diffuse-porous

Data and Code

Github <https://github.com/DeirdreLoughnan/Treetraits>

W: drive WeldShare > Wolkovich Lab > Tree Traits Summer 2015

Files	Where	What
Summer 2015 Tree Traits.xlsx	Github	Compiled data from the four sites; C/N added June 2016
Code	Github	R code
Datasheets	W: drive > Datasheets Midge: home/deirdre/ WDrive_traits > Datasheet scans	Raw scanned datasheets, including lab notebooks
SLA Summer 2015 images	W: drive > SLA Summer 2015 Midge: home/deirdre/ WDrive_traits > SLA Summer 2015	Scanned images of leaves
Maps and field sampling	W: drive > Mapping and Sample Design Midge: home/deirdre/ WDrive_traits > Mapping and Sample Design	
Trait Protocol 2015.doc	W: drive Midge: home/deirdre/ WDrive_traits	Overview of trait protocols

Wolkovich&HS_Forest_C.N Data_July2015_Results.xls x	W: drive Midge: home/deirdre/ WDrive_traits/CN measurement	C/N data from St. Hippolyte and Harvard Forest done by Harry Stone at HF
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Note:

This data has been submitted to the Harvard Forest Data Archive, but they are holding off on publishing it until we have analyzed and published on the data ourselves. See correspondence with Emery Boose for details.