*Date of study: May 2019*

*Date of public archiving (should be published at similar time to Tree Traits 2015)*: **Spring 2025**

*Last modified*:

Dec 17, 2024

*Goal*

To collect functional trait data (SLA, height, branch wood density, & C:N) for 21 dominant woody species in Smithers, Alex Fraser research forest, Kamloops, and E. C. Manning Park, British Columbia, Canada.

*Contributors:*

Deirdre Loughnan

Elizabeth Wolkovich

**Github**

[Github Treetraits](https://github.com/DeirdreLoughnan/Treetraits)

*General Files*

| **Files** | **Where** | **What** |
| --- | --- | --- |
| traitPheno.Rnw | [docs](https://github.com/DeirdreLoughnan/Treetraits/blob/master/docs/traitPheno.Rnw) | Outline for manuscript |
| README | [Github](https://github.com/DeirdreLoughnan/Treetraits/blob/master/README.md) | Outline of repo and experimental aims |

*Data and Code*

| **Files** | **Where** | **What** |
| --- | --- | --- |
| traits\_ht\_dbh.csv | [data/western/uncleaned](https://github.com/DeirdreLoughnan/Treetraits/tree/master/data/western/uncleaned) | Raw trait data for height, dbh, stem volume collected in 2019 |
| area\_mass.csv | [data/western/uncleaned](https://github.com/DeirdreLoughnan/Treetraits/tree/master/data/western/uncleaned) | Raw leaf mass and leaf area data for samples collected in 2019 |
| traits\_stem\_vol.csv | [data/western/uncleaned](https://github.com/DeirdreLoughnan/Treetraits/tree/master/data/western/uncleaned) | Raw stem volume for stem specific density for samples collected in 2019 |
| stem.wt.total.csv | [data/western/uncleaned](https://github.com/DeirdreLoughnan/Treetraits/tree/master/data/western/uncleaned) | Raw stem weights for stem specific density for samples collected in 2019 |
| Traits\_cn\_2019.csv | [data/western/uncleaned](https://github.com/DeirdreLoughnan/Treetraits/tree/master/data/western/uncleaned) | CN data recieved from S. Guichon |
| Loughnan\_Deirdre\_sample\_submission\_form.xlsx | [data/western/uncleaned](https://github.com/DeirdreLoughnan/Treetraits/tree/master/data/western/uncleaned) | Submission form for C:N with sample weights |
| westTrait.csv | [data/western/cleaned](https://github.com/DeirdreLoughnan/Treetraits/tree/master/data/western/cleaned) | Combined data file for all trait data |
| data/eastern | [data/eastern](https://github.com/DeirdreLoughnan/Treetraits/tree/master/data/eastern) | Folder copied directly from DF repo containing data from eastern transect |
| Cleaning\_compiling\_data.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | Code to compile a single dataset for all traits measured |
| bc\_trait\_only\_testdata.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | Developing test data for trait portion of joint model |
| pheno\_traits\_na\_testdata.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | R code making test data |
| testDataTransectTraitPhenoNoGrand.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits/blob/master/analysis/rcode/testDataTransectTraitPhenoNoGrand.R) | Test data for full model |
| checkPriorPosterior.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | Code to do visualizations and prior/posterior predictive checks |
| ppc\_XX.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | Code to run prior predictive checks for each trait individually (XX—specific file for each trait) |
| jointMdlContLat100.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | Main model code, joint model with continuous cues and some traits rescaled by 100. |
| manuscriptVales.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | Code extracting values to be referenced in sweave files. |
| traitMuPlots.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | Code to make mu plots |
| traitGradientBBPlot.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | Code to plot of species estimates organized by bb date |
| traitEyePlots.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | Code to make eye plots using model posteriors. |
| slopes\_vs\_cues\_100.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | Code to make figure comparing slopes and cues. |
| figModelFit.R | [analysis/rcode](https://github.com/DeirdreLoughnan/Treetraits) | Code to make eyeplot figure comparing model estimates to raw data |

Notes:

