Fuelinex WDC

Last Modified: 24 February 2024

Date of study

February 2024 -- > December 2025 (Estimated)

Date of Public Archiving:

June 2026 (Estimated)

Goal

Investigate how extended growing seasons influence tree's capacity to grow to following year. And also get a Master's degree!

Contributors

Elizabeth Wolkovich
wolkovic@mail.ubc.ca

Frederik Baumgarten
frederik.baumgarten@protonmail.ch

Xiaomao Wang
wangxm29@mail.ubc.ca

Deirdre Loughnan

Ken Michiko Samson

Justin Ngo

Britany Wu

Selena Shew

Mark Pan

Julie Sieg

Colette Bennett

General Files

File	Where	What
greenHouseDesign.pdf	Github	Greenhouse arrangement by blocs for Fuelinex 2024. Might change for 2025.
dailylog (folder)	Github	all .tex files necessary to run Fuelinex daily log activities. Run main.tex without moving the folders and files.
IP_adresses.md	Github	IP adresses for the climate chambers. Useful when using VNet to control them.
schedule (folder)	Github	.sch files for the CoolSpring and WarmFall treatments. This is the file extension necessary to load them in VNet.
BalsamPoplarPhenologyObservations inCommonGarden.docx	Github	Phenology guide kindly provided by Raju Soolanayakanahally.
OakPhenologyStages.docx	Github	Phenology guide kindly provided by Raju Soolanayakanahally.
budsetdataFINAL_JS.xlsx	Github	Pheanoflex budset data with pictures.

Data

File	Where	What
		Hobo loggers that were set up at totem

hoboLight (folder). 22 files according to their position in the greenhouse. B1, B2, B3 and roof. See greenHouseDesign.pdf for the greenhouse organization. Structure as follows: *BX*loggerID *dateLogged 1356_34 PDT (Data PDT)(1).csv*	Github	field and in the growth chambers. Each date folder contains the data when it was logged in as a back-up.
hoboTemp (folder). 5 files recording the temperature log in the climate chambers for the CoolSpring treatments in 2024, followed by the temperature recording at Totem. See greenHouseDesign.pdf for the greenhouse organization. Structure as follows: **needs to be updated when I am back in Vancouver**	Github	Hobo loggers that were set up at totem field and in the growth chambers. Each date folder contains the data when it was logged in as a back-up.
2024MiscellaneousMonitoring.csv	Github	miscellaneous monitoring spreadsheet. This is a condensed version of the different problems trees have had so far in 2024. E.g. dead apical shoot, chlorosis, light stress, mildew
2024BudburstToBudset.csv	Github	Bi-weekly, weekly monitoring of phenological events for 2024 from budburst, to leaf unfolding to budset.
2024Senescence.csv	Github	
TotemField_30Years.csv	Github	
		inventory of leftover trees next to the

Jun2024TreeInventory.csv	Github	greenhouse
TreeMeasurements.xlsx	Github	Diameter and height measurements

Cleaned files	Where	What
TotemField_30YearsCleaned.csv	Github	Cleaned version of climate data from Totem Field climate station. Needs to be moved to data.

Code

Code		What
hobotemp_cc.R	Github	Cleaning data and organizing temp data from hobo loggers
hobolight_cc.R	Github	Cleaning and organizing light data from hobo loggers
phenostages.R	Github	Phenostages data visualisation from budburst to budset
shootElongation.R	Github	Shoot elongation data visualisation
temperatureFallWarming.R	Github	Code to calculate temperature of warm fall treatment based on historic temperature records at totem field.
temperatureSpringWarming.R	Github	Code to calculate temperature of cool spring treatment based on historic temperature records at totem field.

Possible Extras:

Any amendments to when public archiving happen should mentioned here and an asterisk given above where archiving date is given.

Be sure all your data is somewhere where it is backed up as per the data management plan.

Check this file for accuracy, and update as needed, every 6 months or sooner.