

Date of Study

May 2024 - August 2024

Date of Public Archiving:

End of 2024 (hopefully, when wine-growing area shapefiles are published by Nacho and his student)

Last Modified:

31 March 2025

Goal

Assess suitability of common winegrape varieties in wine-growing areas of BC using models based on climatic limits defined by phenological and climate data for 1994 - 2023

Contributors

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General Files

File	Where	What
BCWGC Report (full and short version)	Full and snapshot reports available online at stateofwine.org ; main working files in the private GitHub repo bcvinvarieties: docs/	Report for the British Columbia Wine Grape Council

Data and Code

Main workspace in GitHub repo [bcvinvar](https://github.com/lizzieinvancouver/bcvinvarieties): <https://github.com/lizzieinvancouver/bcvinvarieties>
Big data files (indicated separately below) in midge

File	Where	What
Data	GitHub: analyses/input	Phenological data from vin, wine-growing region shapefiles from Brad and Nacho, and climate data from EnvCanada
Gridded Climate Data	midge: analyses/input/	Historical climate data from Daymet and projected climate data from NEX-GDDP-CMIP6 dataset

File	Where	What
Data Formatting Code	GitHub: analyses/data_formatting/	Code to format data
Data Preparation Code	GitHub: analyses/data_preparation/	Code to run models
Formatted Data	GitHub: analyses/output/formatted_data/	Formatted data used by data preparation scripts
Model Data	GitHub: analyses/output/prepared_data/	Model data and projections
General Climate Envelope Model Data	midge: analyses/output/prepared_data/	Model output and metrics of general climate envelope model
Winegrape Climate Envelope Data	midge: analyses/output/prepared_data/wr_data/	Model output of winegrape climate envelope model
Figure-making code	GitHub: analyses/	Code to make report figures
Figures	GitHub: analyses/figures	Figures for report
Hardiness Models	GitHub: analyses/hardiness/	Hardiness models used by Faith and Al
Checks	GitHub: analyses/checks/	Code used to check data and test model-running scripts

Notes

Additional contributions are made by:

- Faith Jones and Al Kovaleski shared hardiness models and data and assisted with cold hardiness modeling
- Ignacio Morales-Castilla shared shapefiles of wine-growing regions and assisted with species distribution modeling
- Justin Ngo made Figure 1 for the report
- Britany Wu reviewed literature on winegrowing in British Columbia
- Carl Bogdanoff
- Ben-Min Chang shared shapefiles of wine-growing regions courtesy of Scott Smith
- Brad Estergaard shared shapefiles of wine-growing regions
- Steve Marsh