Winegrape Phenology in the Okanagan Valley

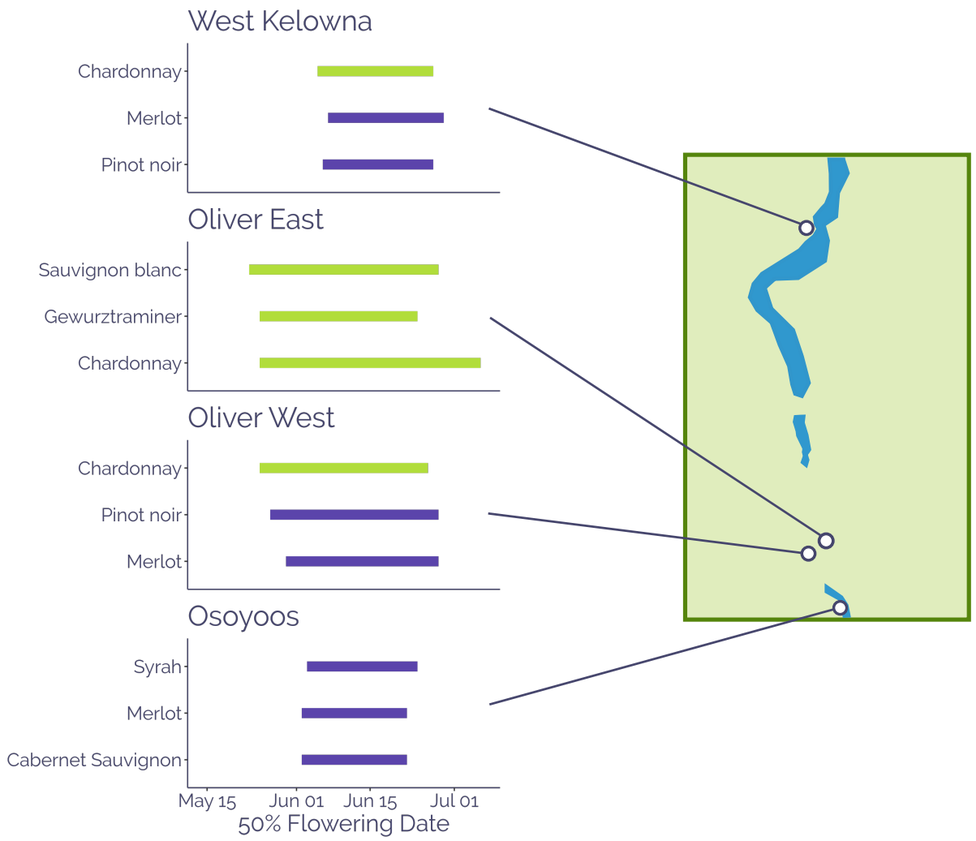
Historical trends in phenology of winegrapes in the Okanagan Valley, BC

Flowering

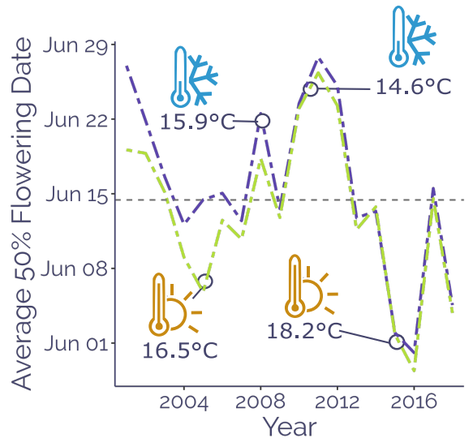
When 50% of caps fall (Eichhorn-Lorenz Stage 23)

Differences across the Okanagan Valley

Flowering dates vary across the Okanagan Valley, but less so than between years or varieties. Below are flowering ranges for commonly grown varieties in vineyards at each location.



Flowering trends over time



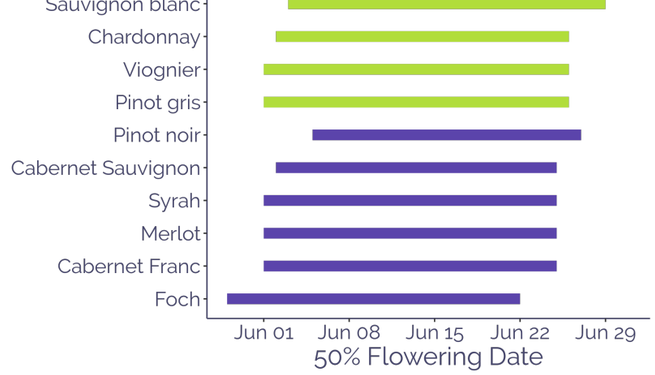
Winegrapes flowering from late May to July 1st in the Okanagan Valley, averaged across sites. Average flowering dates varied between 2002 and 2018 by up to 4 weeks.

This graph shows the average flowering dates for Merlot (purple), Chardonnay (green), and the overall average across all sites and years (horizontal grey line), with average daily temperatures in May and June in Penticton, BC, shown for extreme years. Both Merlot and Chardonnay on average flower earlier during warmer years (2004 and 2015) in comparison to colder years (2008 and 2011).

Varieties have different flowering date ranges

Varieties have different flowering date ranges, as shown for a selection of commonly grown varieties.

Foch is the first variety to flower, followed by Pinot gris, Syrah, Merlot, Viognier, and Cabernet Franc. Sauvignon blanc and Pinot blanc flower over a longer period of time. Riesling and Pinot noir are the last varieties to flower, and they flower over a comparatively short period of time.



Project information

Data for this project was generously donated by Arterra Wines Canada, Quails' Gate Winery, and Sebastian Farms. We analysed historical phenology data for vineyards spanning companies and locations to compile historical trends. All bars displaying date ranges show the date where 10% to 90% of vines had flowered (50% cap fall).

Additional factsheets on growing degree days, Brix and more to come. For further information please visit ***stateofwine.org***.

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