



Sub-Appellation Overview

Expansive vineyards, abundant full sunlight, warm intense growing conditions

Four Mile Creek is the fertile plain that makes up central Niagara-on-the-Lake. It lies slightly inland from the lake and below the bench of the Niagara Escarpment providing for warm days and cool nights during the growing season.

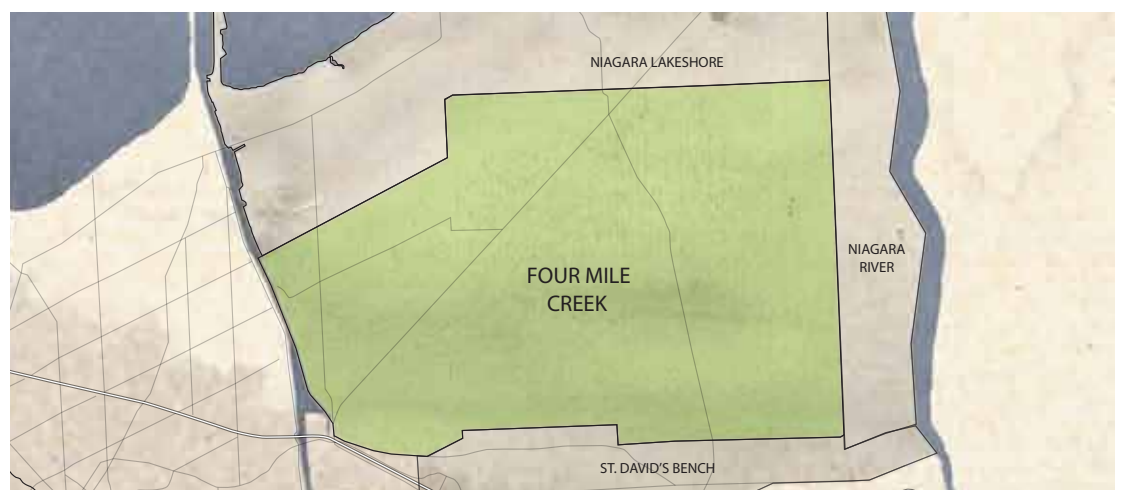
Soils are red shale with high silt and clay content, good water retention and ideal characteristics for vines. The relatively flat topography leads to abundant exposure to sunshine and warm days giving growers the opportunity to grow many varieties. Four Mile Creek is the most productive sub-appellation in the Niagara Peninsula.

NOTABLE FEATURES

Four Mile Creek is the largest sub-appellation in the Niagara Peninsula accounting for a significant portion of premium grape production. With excellent sun exposure, this appellation is known for full bodied red varieties.

STATISTICS

GROWING DEGREE DAYS (AVG.): **1425**
 FROST FREE DAYS: **197 (-2°)**
 JULY MEAN TEMPERATURE: **22.6°**
 GROWING SEASON: **April to October**
 PRECIPITATION: **541mm (grow season)**
 COMMON VARIETALS: **Pinot Noir, Chardonnay, Cabernet Sauvignon**
 PRODUCTION (2010 REPORTING YEAR): **9631 (9L cases)**
 NUMBER OF APPROVED WINES: **29**
 NUMBER OF WINERIES: **9**



Terroir Overview

Climate

Although the entire appellation enjoys full and intense exposure to sunlight, its size gives rise to material differences from its northern and southern boundaries.

In spring, the southern half of the sub-appellation, which is further removed from Lake Ontario, tends to warm earlier than the northern half thereby encouraging earlier bud break. Growers have effectively tamed the risk of spring and fall frosts with fans that circulate air among the vines. The sun-soaked soils of this large appellation give off heat and produce large convection currents drawing the cool air from Lake Ontario farther inland during the warm and dry months of July and August.

This generates warm days and cool nights into the fall with an average range between the daytime maximum and nighttime minimum temperatures for September and October being just over 12°C, supporting the development of deep colours, flavours and aromas in the grapes.

Topography

Made up of gentle, almost flat slopes that face in all directions, the major topographical feature is the valley of the Four Mile Creek, a buried former valley of the Niagara River.

The appellation is also home to a handful of small creeks that enhance the soil drainage of their adjacent vineyards, but most become dry beds by late spring. Elevation ranges from 105 metres to 89 metres with an average elevation of about 95 metres.

Generous exposure to sunlight throughout the day, combined with strong radiation cooling of the canopy air layer at night results in a high differential between day and night conditions.

Soil Characteristics

The soils of this appellation have developed on the bedrock belonging to the Queenston Formation, a red shale with high silt and clay content. As is common throughout the Niagara region, the bedrock is covered by glacial sediments that vary in composition and texture.

Halton Till, a rich clay loam, covers the majority of the appellation and tends to retain a high water content well into the late spring.

This high water holding capacity ensures that the vines enjoy a constant supply of moisture during the drier weather typical for July and August.

