Bannockburn, Central Otago
Climate

This part of Central Otago has a distinctive semi-continental climate, found nowhere else in New Zealand. Being the furthest inland one can be in New Zealand, it is one of the hottest, coldest and driest regions in New Zealand. Maximum summer air temperatures can reach 38°C and winter minimums of -10°C. The diurnal temperature range is typically 15 to 20°C and can be as great as 30°C (30°C during the day and down to 0°C at nights) in the weeks leading up to harvest: unusually high and a key reason for the intense varietal character, palate profile and fresh acidities typical of the region. Rainfall is very low with an annual average of 400mm that normally falls equally throughout the year and along with the low humidity, results in very low disease pressure. Our vineyards range in altitude from 210 to 335 metres above sea level with immediate surrounding mountains up to 2000 metres in elevation.

Sunshine hours exceed 2000 annually and solar radiation is much higher in Central Otago than at similar latitudes in the northern hemisphere. The southern limit of grape growing at 45°S has 11% higher solar radiation than the northern latitude limit of 50°N with ultraviolet light levels being up to 40% higher. This arises as the earth’s elliptical orbit means it is closer to the sun during the southern hemisphere growing season. The “ozone hole” and clearer atmosphere results in much higher levels of ultraviolet radiation than in the northern hemisphere.

Felton Road
Viticulture & Biodynamics

The viticulture on our four vineyards is carried out 100% organically and biodynamically and is fully certified by Demeter. Meticulous summer management of a single vertical shoot positioned (VSP) canopy ensures even and early fruit maturity. Shoot thinning, shoot positioning, leaf plucking and bunch thinning are all carried out by hand to ensure optimum quality fruit. Cover crops are planted between rows to assist in moderating vine vigour, to improve soil structure and health, and general biodiversity. Organic mulch is also used in drier parts of the vineyard to help retain moisture, minimize the requirement for irrigation and to balance areas of lighter, more free draining soils.

Organic compost is applied to maintain soil fertility and encourage earthworm and soil microbial activity. The compost is made utilising the winery waste, vine prunings, organic cow manure and our own organically grown straw. Pruning in winter is carried out to leave desired bud numbers, thus ensuring low to moderate yields and to create a balanced and light-penetrable canopy. Irrigation is usually necessary during the later dry summer months, but as the vines are getting older and their roots exploring deeper into the sub soils, supplemental irrigation is becoming increasingly less required. Soil moisture levels are carefully monitored and water is applied only when necessary to maintain appropriate levels for vine health. Due to the low rainfall and low humidity, disease pressure is extremely low and insect problems are virtually non-existent. Sheep are used in the autumn and spring to “mow” the vine row grass and cover-crops, and a tractor mounted under-vine cultivator is used to control weeds under the vines. All grapes are carefully hand-picked with harvest normally occurring around the end of March/early April. Any quality differences between and within blocks due to clones, rootstocks and viticultural trials are kept separate for individual vinification.