"Some of the information in this document may be redacted to protect the privacy of natural persons".

Declaration



being a person authorised to present evidence in support of this Application on behalf of the Applicant, solemnly and sincerely declare that:

- 1. The evidence contained in and with this application, including appendices and attachments, is true and correct to the best of my knowledge.
- 2. I make this solemn declaration conscientiously believing the same to be true and by virtue of the Oaths and Declarations Act 1957.

Name: Gillian Claire Walsh

Signature:

Declared at RANGIORA

this

25⁷⁺⁺ day of July 2017.

Before me:

[Name of Justice of the Peace, or solicitor, or other person authorised to take a statutory declaration.]

Signature:



Evidence in support of an application for registration of a New Zealand Geographical Indication: *CANTERBURY*

Geographical Indication name

Name

The name of the geographical indication (GI) for which registration is sought is CANTERBURY.

The Applicant notes that the CANTERBURY GI may be used in conjunction with the smaller WAIPARA VALLEY or NORTH CANTERBURY GIs.

Quality, Reputation or Other Characteristic

The CANTERBURY GI is one of the oldest grape growing regions in the South Island of New Zealand. French immigrants brought grapes to Akaroa on Banks Peninsula in the 1840s. The modern winemaking era began much later after trials at Lincoln College (now Lincoln University) began in 1973 as collaboration between fruit scientist Dr David Jackson and the Prague born winemaker Danny Schuster. The first commercial wine came in 1978 from St Helena in Belfast north Christchurch.

The CANTERBURY GI is New Zealand's largest GI, covering most of the Canterbury local government region - excluding the districts of Waitaki and Kaikoura. While it covers a large land area, producing vineyard area is comparatively small at 1419 hectares. The region features 91 vineyards, eight winery restaurants, over 20 cellar doors. With a harvest tonnage of 12,170 tonnes in 2016, it is still predominantly a region of boutique producers.

There are several growing regions with the CANTERBURY GI. The large area in North Canterbury incorporating the Waipara and Waikari Valleys is where the main production is concentrated; there are a handful of vineyards in and on Banks Peninsula and scattered vineyards on the Canterbury plains that stretch from Ashley River down to the northern banks of the Waitaki River.

The CANTERBURY GI brings together both the distinctive elements and the 'family' similarities of wines from those areas. Wines from the CANTERBURY GI have the following quality, reputation or other characteristics that are essentially attributable to their geographical origin:

Key aspects of the CANTERBURY GI which contribute to the quality, reputation or other characteristics of wines grown and made there include:

- a moderate climate with low rainfall that is conducive to producing high quality wines from a
 particular suite of grape varieties;
- a high level of diurnal fluctuation driven by hill ranges close to the sea, giving wines of great fruit character with well-balanced acidity;
- distinctive geology and soils that contribute to the flavour of the wines;





¹ New Zealand Winegrowers Vineyard Register Report 2016-2019

² New Zealand Winegrowers Vintage Survey Results 2016

- high costs relative to the volume of production, necessitating ultra-premium positioning in the market;
- the predominance of small, owner-operated wine businesses with a shared vision of the GI as a region for producing high quality wines;
- Strategic location near to the major urban centre of Christchurch and tourism hubs such as Hanmer Springs and Kaikoura contributes to wine tourism and reputation.

Consequently, wines from the CANTERBURY GI have the following quality, reputation or other characteristics that are essentially attributable to their geographical origin:

- CANTERBURY GI wines are specialised in a particular suite of classic grape varieties and wine styles suited to both the physical environment and the market, in particular: aromatic varieties, Chardonnay and Pinot Noir.
- CANTERBURY GI wines display recognisable and consistent sensory characteristics across a range
 of varieties and styles due to the physical environment as well as viticultural and winemaking
 practices.
- CANTERBURY GI wines are high quality products produced for the premium to ultra-premium market segments.
- CANTERBURY GI wines have a global reputation for the foregoing based on many years of use and recognition by consumers, tourists wine experts and visitors to the GI.

History and background

Setting aside the early plantings in Akaroa that did not last, production in Canterbury started in the late 1970s.

"The twentieth century history of wine in Canterbury is largely the product of the chance meeting of two very different men, one an academic fruit scientist working at the then Lincoln College, and the other a Central European visitor of a complex background, classical winemaking skills and entrepreneurial tendencies"³.

Trial plantings commenced at Lincoln, in the mid 70s. Seminars, workshops and courses came next with the first with a one day course entitled "Grapes Wine and Winemaking" instigated in 1976. The initial success of these trials led David Jackson's technician Graeme Steans to buy land in Kaituna Valley in the Banks Peninsula, where he planted an acre of vines in 1977. Pinot Noir was a major variety in Steans' vineyard, and these 1977 plantings are now likely to be some of New Zealand's oldest Pinot Noir vines. Two plantings on the Plains flowed directly from involvement with Lincoln in Luchbuie orchard near Belfast and at the Mundy's property in Coutts Island.⁴

The first wine produced from the Mundy's site known as St Helena was in 1981. With Schuster as winemaker the second vintage of the St Helena Pinot Noir, the 1982, won gold medal at the Air New Zealand Wine Awards, which helped put the region on the map. This was only the second Pinot Noir from New Zealand to have won a gold medal. Planting soon followed in Tai Tapu west of Christchurch where Rossendale Vineyards were planted in the mid-eighties. The restaurant was established in 1992 and is still open today.

The first plantings in the Waipara Valley itself were made by John McCaskey, who had a 400 hectare farm with stony soils on the Weka plains. He first experimented with grapes in the mid-1960s, but

⁴ A History of Grape Production and Winemaking in Canterbury, New Zealand 1840-2002, R Tipples





gav

³ A History of Grape Production and Winemaking in Canterbury, New Zealand 1840-2002, R Tipples

these hybrid vines were washed away by a flash flood. He tried again in 1981, with 4 hectares planted with vines that he'd obtained from Nelson. In 1982 there were four more vineyard projects: Bruce and Jill Moore (Waipara Springs), Derek Quigley (now Dancing Water), the Glenray partnership (now Mt Cass Wines) and John Corbett. Corbett was to establish Waipara Riesling on the New Zealand wine map, winning gold medals with his 1986, 1988 and 1989 vintages. ⁵

Vineyards in the Waipara Valley expanded rapidly in the 80s and 90s and the sub-region now dominates the wider winegrowing region. In recent years, the quest for special terroirs has led to the westwards expansion of North Canterbury region through the Weka Pass, into the foothills of the Southern Alps at Waikari and Pyramid Valley. In 1997 Bell Hill established a close-planted vineyards on an old limestone quarry, and Pyramid Valley was planted in 2000 on clay and limestone soils. These new ventures have been significant, because they have resulted in some stunning wines.⁶

Geographical features in the area / soil composition in the area

Canterbury is the longest region in New Zealand, measuring over 300 kilometres from north to south. Between the foothills of the Southern Alps and the east coast are a variety of different terrains, mesoclimates and soils that contribute to an array of local environments suitable for growing vines.⁷

Ninety percent of the region's vineyards are situated in the Waipara and Waikari Valleys in the northern part of the region, 40km north of Christchurch, where the coastal Teviotdale Hills provide shelter from the prevailing easterly wind. Soils on the floor of the Waipara Valley feature stoney gravels over alluvial subsoils while vineyards on the slopes around this valley and in the Waikari region are planted on limestone derived clays.

Vineyards on the Canterbury plains are mainly clustered around Christchurch with some extending down into south Canterbury. These vineyards enjoy free draining stony soils courtesy of the braided formerly glacial rivers flowing from the Southern Alps. The soils deposited by these rivers have complex layers of course gravels, fine sands and clays⁸. While more exposed than their valley counterparts, vineyards in these areas typically have a longer growing season with harvest normally taking place in late April and early May.

Banks Peninsula separates the flood plain draining into Pegasus Bay North of Christchurch from the Canterbury Bight to its south. It was the first locality in Canterbury to have grapes planted in the mid nineteenth century⁹.

Banks Peninsula is dominated by the eroded calderas of the Lyttelton and Akaroa volcanoes which were active some 7-10m years ago. The four commercial vineyards on Banks Peninsula all lie within these two volcanic craters. The widespread production of quartz and feldspar rich silt sized glacial flour in the southern alps and the later transport and deposition by the dominant North Westerly wind, produced an extensive mantle of airborne clayey silt (Loess) on Banks Peninsula. Loessal soils (Aeolian clayey (11-25%); silt (65-80%)) are characterised by an organic rich topsoil; a clayey silt





⁵ Wineanorak.com/NewZealand/NorthCanterbury_waiparavalley

⁶ www.nzwine.com/

⁷ New Zealand Wine: The Land, The Vines, The People; Moran

⁸ New Zealand Wine: The Land, The Vines, The People; Moran

⁹ New Zealand Wine: The Land, The Vines, The People; Moran

compact layer of 700-1200mm; parent layer from 1 -2 m; weathered volcanic bedrock. They are low to moderate vigour soils of low friability and moderate drainage.

Climate in the area

Climate is one of the primary determinants of the growth and ripening of the grapes grown within a GI, which in turn contributes to distinctive sensory attributes in the wine produced in the GI. It affects the development of fruit, the duration of ripening and the timing of harvest, as well as impacting upon fruit quality and vine health.

The CANTERBURY GI's key features are its long growing season, distinct seasons with warm summers and cold winters, significant diurnal shift and very low rainfall with drying summer winds. The South Island's CANTERBURY GI is spread across a wide area, sweeping over 300km up the coast from its southern boundary on the Waitaki River, north past Christchurch and Banks Peninsula to its northern boundary near the Conway River, south of the Kaikoura Ranges. It extends westwards from its lengthy Pacific Ocean coastline into the Southern Alps (Main Divide) the defining mountain range spine of the country which exercises a profound effect on the CANTERBURY GI's climate.

The wine-growing areas of the CANTERBURY GI are clustered around the city of Christchurch, where the GI's first commercial winery was established in 1978, and the Waipara Valley some 60 km to the north, adjacent to the seaward Teviot Hills. The extensive Canterbury Plains stretch around 100km inwards to the foothills of the Southern Alps, drained by numerous braided river systems and swept by winds from the south and north. The Plains vineyards are mainly found around the outskirts of Christchurch, scattered across the plains and into the foothills of Banks Peninsula. Vineyards here experience cooler temperatures than those in Waipara Valley, which receives protection from cold southerly flows by the Teviotdale Hills.

Banks Peninsula enjoys a distinct macro/mesoclimate compared to Christchurch and the Plains. Vineyards on the Peninsula are sited on elevated positions with northerly sloping aspect. This provides good natural drainage (which also reduces the risk of frost) and the interception of more solar radiation.

Whilst the CANTERBURY GI has an overall cool climate (its GDD being 1,288 in the WAIPARA VALLEY GI sub-region in the north, and 844 in the Waimate region in the south) it is prone to extremes of temperature in both summer and winter; summer days over 30 degrees Celsius are common and winters are very cold with generally clear skies contributing to frequent frosts that can at times be severe. This effect becomes more notable the further inland one goes, a contributing factor to most of the GI's vineyards being towards the coast. The CANTERBURY GI also experiences significant diurnal shifts, which contributes to its wines' high degree of fruit intensity as well as retention of natural acidity. The GI is moderately sunny with around 2000 hours sunshine per annum; being sunniest further inland and to the north due to the rain shadow effect of the Main Divide, whilst closer to the coast sea moisture brings high, hazy cloud cover at times.

The CANTERBURY GI experiences very low rainfall and has a propensity for droughts due to the marked rain shadow effect of the Southern Alps combined with its free-draining soils. Irrigation is regarded as essential. However the advantage of low rainfall is a long, dry growing season: not only essential for ripening grapes in such a cool climate but also contributing to very low disease pressure, enhanced flavour and phenolic development without excessive sugars, plus excellent retention of natural acids. As a result, CANTERBURY GI wines, particularly those from the Plains vineyards, are generally aromatically intense, display high varietally expression and are finely





structured with an often racy freshness. Wines from the more northerly and protected Waipara Valley typically have more rounded weighty palates but exhibit the same fruit-driven intensity and fresh acidity.

Prevailing winds are from the north-east and south-west. A key feature of the CANTERBURY GI are its exceptionally drying nor'westers: strong, hot winds which blast across the region in spring and summer. Their arrival is heralded by high streaky clouds arching over the Main Divide and their extreme lack of moisture has a significant impact on vines, buffeting shoots and leaves and causing water stress. The Plains is also subject to cold weather systems arriving from the Southern Ocean, bringing rain and causing temperatures to plummet. The Waipara Valley is also receives the blustery nor'westers but is generally sheltered from the cold southerly winds, as such its wines tend to be more weighty and rounded in comparison to the same varieties from the Canterbury Plains. With the GI's long coastline and extensive plains, cooling sea-breezes in summer and early autumn afternoons are also a notable feature, moderating temperatures across the Canterbury Plains.

With its cool climate, marked temperature shifts and many vineyards planted on flat land, frosts are a notable threat to the CANTERBURY GI's vineyards at both ends of the growing season; frost protection systems are therefore generally regarded as a necessity 10.

Key climate indices and statistics

The following tables and charts provide data on key climate statistics relevant to the viticulture of the CANTERBURY GI region ¹¹. To illustrate the variety of climate conditions within the region, data are presented from both the WAIPARA VALLEY GI sub-region, which is in the north of the CANTERBURY GI region, and from the Waimate sub-region, near the southern boundary of the CANTERBURY GI region. All data were sourced from the National Institute of Water and Atmospheric Research.

chi and the Plains dog situasis ites dae cargion of come	Sunshine Hours (sum)	Growing Degree Days (>10°C) (sum)	Rainfall (mm) (sum)	Screen (air) frost (# days per month) (sum)	Ground Frost (# days per month) (sum)
Annual					solat tadba raina.
Waipara Valley	2,421	1,288	623	16	59
Christchurch	2,071	1,055	622	47	86
Waimate	1,803	844	620	33	102
Season (Sept - April)	ched wedger	4 et griferistr	or agide ne	وفرأنا فارتاء وفعوتهم واع	yersvirtus sahirmyr
Waipara Valley	1,822	1,137	377	1.9	14
Christchurch	1,547	1,020	380	6.6	25
Waimate	1,279	822	438	2.8	26
Season % of annual		astrolomas	de Estendora	the second second second second	a michina Pilasa Lingui
Waipara Valley	75%	93%	61%	12%	24%
Christchurch	75%	97%	61%	14%	28%
Waimate	71%	97%	71%	9%	25%

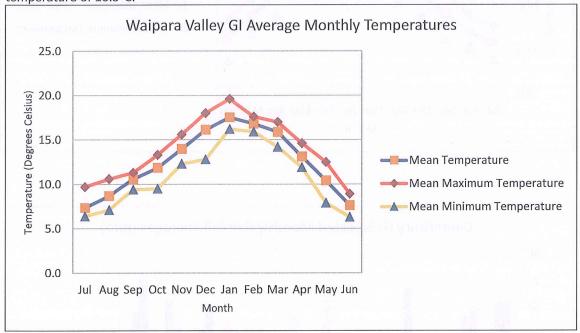
¹¹ Data sourced from Waipara West EWS, from Christchurch Aero, and from Waimate and Waimate CWS

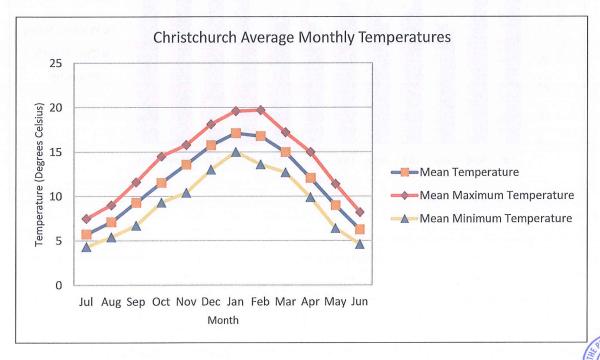


J.P. IEI

Growing Season metrics (Sept-April)	°C			
AS GARRIAN YOLA	Waipara Valley	Christchurch	Waimate	
Mean Maximum Temperature	15.9	16.4	15.7	
Mean Minimum Temperature	12.8	11.3	10.3	
Mean Diurnal Shift	3.1	5.1	5.4	

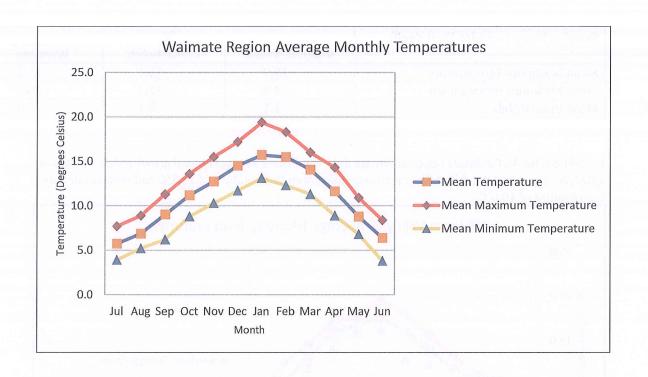
In addition, Banks Peninsula regional climate data 12 indicates average annual growing degree days of 1,027; mean annual rainfall of 687 mm; mean maximum temperature of 16.1°C and mean minimum temperature of 10.5°C.

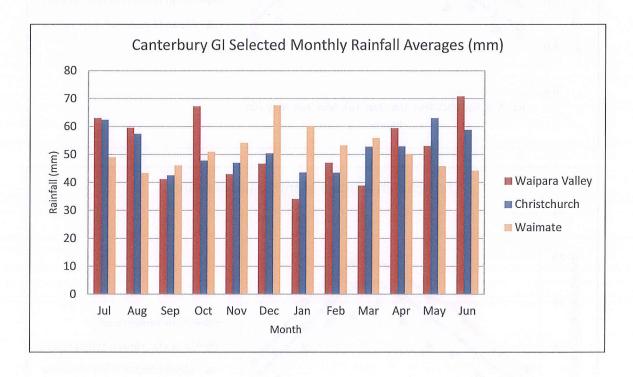




¹² Data sourced from Mt Pleasant and Quail Island.

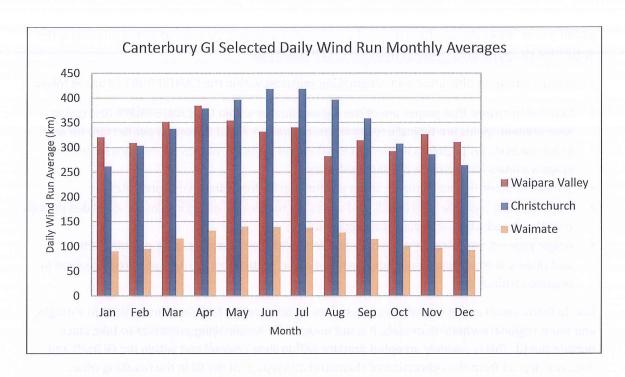












Methods of producing wines

Grape varieties and wine styles

Canterbury typically produces red, white and rosé wines from the following grape varieties.

- Chardonnay
- Pinot Noir
- Sauvignon Blanc
- Pinot Gris
- Riesling

In 2016, the tonnes harvested within the CANTERBURY GI from each grape variety were as follows: 13

WHITE THE PARTY OF		High sequestion of RED and sequent		
Variety	Tonnes	Variety	Tonnes	
Sauvignon Blanc	4,691	Pinot Noir	2,358	
Riesling	2,536	Merlot	30	
Pinot Gris	1,840	Cabernet Sauvignon	26	
Chardonnay	499	Syrah	25	
Gewurztraminer	99	Other red varieties	24	
Other white varieties	42	and a second and the		
TOTAL	9,707	TOTAL	2,463	

Viticulture and winemaking

Viticultural and winemaking practices within the CANTERBURY GI are adapted to the production of ultra-premium wines from specific grape varieties in the range of physical environments that exist



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¹³ New Zealand Winegrowers Vintage Survey Results 2016

within the GI. While the practices themselves may not be unique, they are aimed at promoting the distinctive characteristics of wines from the CANTERBURY GI.

Particular features of viticulture and winemaking practices within the CANTERBURY GI are as follows:

- In order to ensure that grapes are of the highest quality within the CANTERBURY GI growing environment, yields are typically restricted to between 4.6 and 10 tonnes per hectare for red grape varieties for premium bottled production and 6 and 13 tonnes per hectare for white grape varieties for premium bottled production.
- Wines are made in small batches, often predominantly from single vineyards sites.
- Red wines are typically aged in oak. Red wines are macerated on their skins for extended periods resulting in red wines with significant aging ability.
- Grape growers and winemakers within the CANTERBURY GI have a strong commitment to sustainable winegrowing, with most participating in Sustainable Winegrowing New Zealand or organic certification.

Due to factors such as the capital intensive nature of winemaking facilities, fluctuations in vintages, and multi-regional ownership models, it is not unusual for winemaking processes to take place outside the GI. This is a widely accepted practice within New Zealand and within the GI itself and does not detract from the expression of characteristics typical of the GI in the resulting wine.

Wines from the GI may be made in styles that are lower in alcohol, including sweet wines and lower alcohol dry wines produced using permitted viticultural and winemaking practices.

Quality

Master of Wine, Emma Jenkins, has provided the following descriptions of the sensory attributes typically associated with wines from the CANTERBURY GI.

- (i) Chardonnay
 - Chardonnay is a key variety for the CANTERBURY GI, whose cool climate and long growing season with marked diurnal shifts produces bright, fruity wines with excellent natural acidity and moderate alcohols. Wines typically display vivid citrus and stonefruit characters; the warmer Waipara Valley and Banks Peninsula wines generally have more rounded, richer palates than wines from the cooler Plains vineyards. Unoaked and lightly oaked styles are found throughout the GI though a broad range of winemaking techniques including wild yeast, lees, malolactic fermentation and varying degrees of French oak may be used. Overall quality is good with wines typically positioned at mid to premium market pricing, though there are some highly sought-after wines from the Waipara Valley that would be positioned as ultra-premium. Chardonnay may also be used the production of Methode Traditionelle sparkling wines, either solo or blended with Pinot Noir.
- (ii) Sauvignon Blanc

Distinctive aromatic Sauvignon Blanc with crisp, textural palates and juicy natural acidity is grown throughout the CANTERBURY GI. The long growing season enhances varietal expression and depth of flavour, and the cool climate and marked diurnal shifts deliver heightened aromatics and racy palate structure. Wines are typically vinified in a neutral manner to preserve fruit purity but styles with a degree of oak influence may also be seen. Wines are typically positioned mid to premium market.



(iii) Pinot Noir

The dominant red variety for the CANTERBURY GI, producing a wide range of wines, typically displaying cherry, plum and red berryfruit with light spice and herbal notes. The cool climate and long growing season with marked diurnal shifts means wines are typically medium-bodied with expressive perfume and fruit intensity and bright acidity. Wines from the Waipara Valley tend to be slightly richer with darker fruit expression and more spice, courtesy of the relatively warmer and more protected conditions. Wines would typically be made using some degree of fine French oak, and are usually sold at the premium end of the market. Pinot Noir may also be used for quality Methode Traditionelle sparkling wines, generally blended with Chardonnay, and is also made into still rosé wines in bright, fresh styles intended for early consumption.

(iv) Riesling

The CANTERBURY GI has small but critically significant plantings of Riesling. The long growing season, significant diurnal shifts and cool dry autumnal weather makes it very well suited to quality Riesling production across a wide range of styles from dry to late harvest. The GI's wines are typically highly aromatic with pure-fruited expression of citrus and green apple, honey and floral notes and cleansing natural acidity. Wines are mostly delicately structured with good balance between acidity, any residual sugar and alcohol, and the cool climate and long season means fully ripe wines with naturally low to moderate alcohols (around 10% abv) are possible. Winemaking is typically neutral and protective in approach in order to showcase fruit purity.

(v) Pinot Gris

Pinot Gris is grown throughout the CANTERBURY GI, with a wide range of aromatic, fruit-driven wines produced. The long, generally cool and dry growing season with marked diurnal shifts gives very varietally expressive wines, showing ripe pear, stonefruit and spice notes. Wines are typically light to medium-bodied, with some weightier rounded and textural styles produced at warmer sites within the GI. Some residual sugar in wines is common, balanced by the GI's ability to retain naturally crisp acidity. Winemaking input is mostly neutral to preserve fruit purity, though there is may be some use of lees influence and occasionally older oak for texture and complexity.

REPUTATION

Use of the CANTERBURY GI

"Canterbury" has been used consistently and continuously on wines since the first commercial release of wines from this region by St Helena in 1982. Some examples of labels using the GI are attached as Appendix 1.

The total harvest in the CANTERBURY GI in 2016 was 12,170 tonnes, yielding approximately 8.7 million litres of wine. A significant proportion of this will be labelled with the CANTERBURY GI either alone or in conjunction with one of the sub-regional GIs of NORTH CANTERBURY or WAIPARA VALLEY.

Wines from the CANTERBURY GI are also exported around the world. Data from the Ministry of Primary Industries indicates that 928,000 litres of wine from the 2010-2016 vintages have been exported using the CANTERBURY GI. It is likely that many wines using the NORTH CANTERBURY or WAIPARA VALLEY sub-regional GIs will also have used the CANTERBURY GI.

Gard

The national wine industry association, New Zealand Winegrowers (NZW), has long recognised the CANTERBURY GI and reference to the GI has been included in many of NZW's publications which are publicly available and distributed nationally and internationally in hard and soft versions. These include the following examples:

- The NZW Annual Report https://www.nzwine.com/media/1214/nzw-annual-report-2016.pdf;
- The NZW Vineyard Register Report: https://www.nzwine.com/media/4221/2017-vineyard-register.pdf;
- The <u>www.nzwine.com</u> website;
- NZW pamphlets and materials about the NZ wine industry and its regions, such as:
 - o *Canterbury and Waipara Valley*: https://www.nzwine.com/media/4877/regional-canterbury%C3%AF-waipara-2015-lowres.pdf
 - o *A Land Like No Other*: https://www.nzwine.com/media/4906/nzw intro guide 2016-low-res.pdf.
- The New Zealand wine regions map A0 size poster which is widely used including in association with all national and international promotional activities. This map also appears as the sixth panel in the A Land Like No Other pamphlet.

The CANTERBURY GI has been used in marketing and promotional activities for many years. Wines of Canterbury have had a promotional online presence via their website, www.canterburywine.co.nz since 2003. In 2010 the inaugural David Jackson Dinner was begun as a way of the industry recognising the input of the now late Dr David Jackson and Lincoln University on the Canterbury grape growing region. In 2012 the Canterbury Wine Awards were started and these are now presented annually at the David Jackson Dinner. Both these industry events are successful and continue to this day. ¹⁵

Producers within the CANTERBURY GI also participate in international marketing events and incoming visitor programmes and events organised through NZW. These frequently feature regional overview tastings and education programmes including CANTERBURY GI wines as well as participation from producers within the GI. These combined activities have an enormous global reach, covering millions of consumers in NZ, Australia, Europe, North America and Asia. Data on the reach of these events is set out in the NZW 2016 Annual Report available at https://www.nzwine.com/media/1214/nzw-annual-report-2016.pdf.

The CANTERBURY GI is also featured in national and regional tourism and publicity materials, for example:

http://www.christchurchnz.com/what-to-see-and-do/canterbury-vineyards//http://www.tourism.net.nz/region/canterbury/tours/wine-tours

Attached as Appendix 2 are marketing images from the CANTERBURY GI. These include screen shots from the website, facebook and twitter accounts along with images from recent marketing initiatives.

15 http://www.canterburywine.co.nz/wine-awards/





¹⁴ Where NZW publications provide data for both Waipara and Canterbury regions, Canterbury data typically exclude Waipara data, so totals may need to be aggregated to produce CANTERBURY GI data.

Formal recognition of the CANTERBURY GI

While New Zealand has not had a formal registration system for GIs in place, the New Zealand Government has formally recognised Canterbury on several occasions where this has been necessary to facilitate exports. This provides evidence that the Nelson GI is already recognised by the New Zealand Government to the extent possible under the current New Zealand law, and that such recognition has been accepted by the governments of other countries.

In 1981, the New Zealand Government requested that Canterbury be included as a viticultural region on the European Union's official list of "geographical ascriptions" 16 to be used on New Zealand wines exported to that market. 17

The New Zealand Government included Canterbury in the list of "Appellations of Origin" submitted to the United States Department of the Treasury Bureau of Alcohol Tobacco and Firearms as the official list for use on wines exported to that market.

In 2008, the New Zealand Government included Canterbury as a New Zealand geographical indication for use on wines exported to the European Union in the *European Union: Wine: Overseas Market Access Requirements* Notice.¹⁸

In 2010, the New Zealand Government included Canterbury as a New Zealand geographical indication for use on wines exported to Brazil in the *Brazil Wine Notice of Overseas Market Access Requirements*. ¹⁹

In 2013, the New Zealand Government included Canterbury on the list of New Zealand wine regions²⁰ notified pursuant to Article 4(3)(e) of the World Wine Trade Group *Protocol to the 2007 World Wine Trade Group Agreement on Requirements for Wine Labelling Concerning Alcohol Tolerance, Vintage, Variety, and Wine Regions.*²¹

Canterbury is included as a New Zealand GI on the International Organisation for Wine and Vine's International Database of Geographical Indications.²²

References to the CANTERBURY GI in various media

The CANTERBURY GI is identified in all of the key national and international wine reference works, and has been for many years. Appendix 3 contains indicative examples from the most nationally and globally authoritative and biggest selling wine books including:

- 1996 Cooper, M. Wines and Vineyards of New Zealand, 6th Ed.;
- 2001 Jackson, D & Schuster, D. The Production of Grapes and Wines in Cool Climates
- 2007 Johnson H. & Robinson, J. World Atlas of Wine, 5th Ed.;
- 2010 Cooper, M. Wine Atlas of New Zealand 2nd Ed.
- 2016 Robinson J. & Harding J. (Eds.) Oxford Companion to Wine 4th Ed.;
- 2016 Cooper, M. New Zealand Wines 2016 Michael Cooper's Buyer's Guide.

)



¹⁶ Note that the terminology of "geographical indications" did not come into use internationally until 1995.

¹⁷Commission Regulation (EEC) No 997/81 of 26 March 1981 laying down detailed rules for the description and presentation of wines and grape musts, Official Journal L 106/52.

¹⁸http://www.foodsafety.govt.nz/password-protected/omars/eun/wine/other/part-2.pdf

¹⁹http://www.foodsafety.govt.nz/password-protected/omars/bra/wine/other/part2.pdf

 $^{^{20}}$ Note that the Protocol does not use the terminology of "geographical indications" although it is understood that GIs fall within the definition of "wine regions" at Article 1(g) of the Protocol.

²¹http://ita.doc.gov/td/ocg/Notification%20of%20Wine%20Regions%204%203(e)%20New%20Zealand.pdf

²²http://www.oiv.int/oiv/info/enbasededonneesIG

This is just a small selection and virtually every recent wine book that covers the New Zealand wine industry will refer to the CANTERBURY GI.

The CANTERBURY GI and/or specific wines labelled with the GI are also featured on a large number of national and international websites and blogs. Some indicative examples including the following:

http://wwwwinesofnz.com/new-zealand-wine-regions/canterbury-wine-region

https://www.cuisinewine.co.nz/region/new-zealand/canterbury/

https://www.jancisrobinson.com/learn/wine-regions/new-zealand/south-island

https://www.tripadvisor.co.nz/Attractions-g657271-Activities-c36-t132-

Canterbury Region South Island.html

http://www.fourcorners.co.nz/new-zealand/canterbury-wine/

Appendix 4 is a selection of national and international publications and media articles which refer to the CANTERBURY GI.

Awards and competitions

Wines from the CANTERBURY GI have won recognition for their high quality in many national and international wine competitions and influential reviews. One of the first examples of a prize-winning wine bearing the GI name Canterbury was the famous 1982 Pinot Noir from St Helena Winery, the first wines from this variety in the South Island to win a gold medal.

Below are some other indicative examples over the years:

Air New Zealand Wine Awards

- Canterbury House Noble Riesling 2000: Champion Wine of the Show 2001, Champion Sweet Wine 2001
- Canterbury House Noble Riesling 2004: Champion Sweet Wine 2005



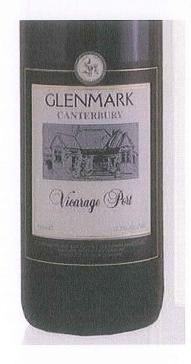




Appendix 1 - Wine labels Showing Canterbury GI usage

<u>1980s</u>









PEGASUS BAY



CHARDONNAY -WHOLE BUNCH PRESSED

1997

14% Vol

e750ml

GROWN, VINTED & BOTTLED BY IVAN & CHRIS DONALDSON AND FAMILY. WAIPARA CANTERBURY NEW ZEALAND. CONTAINS PRESERVATIVE (220)

PEGASUS BAY



CABERNET MERLOT

1999

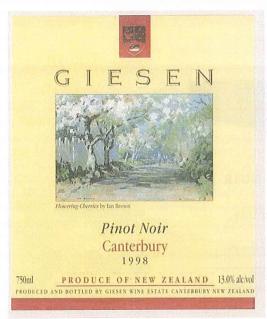
13% Vol

e750m

PRODUCED & BOTTLED BY DONALDSON FAMILY LTD WAIPARA CANTERBURY NEW ZEALAND













GCW

2000s



ROSSENDALE

PINOT NOIR

CANTERBURY 2004

Produced and bettled by Rossendale Wines 150 Old Tai Tasu Roed, Christeburch, New Zealand Wine of New Zealand 12.5% vol 750ml

PINOT NOIR 2004

Rossendale Wines is a family owned winery which produces high quality, hand-crafted wines from grapes grown on their own vineyards in Canterbury and Marlborough.

This Pinot Noir has aromas of fresh raspherries, game and spicy oak with a soft lingering finish. Excellent drinking now, particularly with game and red meats. Enjoy wine with food and in moderation.

Contains Sulphites

Imported by Peter Osbourne & Co Wallington Oxon OX49 5E8







2010 onwards











Appendix 2 - Marketing of the CANTERBURY GI

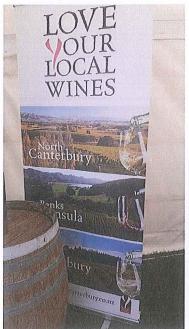


Explore Canterbury Vineyards

Canterbury, New Zealand is one of the oldest grape growing regions in the South Island of New Zealand. The plains vineyards enjoy free-draining stoney soils and the peninsula vineyards are typically planted in valleys that enjoy favourable mesoclimates. The area is becoming known for its excellent wines....read more,

Grape varieties planted include Pinot Noir, Riesling, Pinot Gris, Sauvignon Blanc and Chardonnay. The Pinot Noir, Pinot Gris and Rieslings are putting Canterbury wines squarely in front of wine drinkers....read more.

Screen shot above from www.canterburywine.co.nz

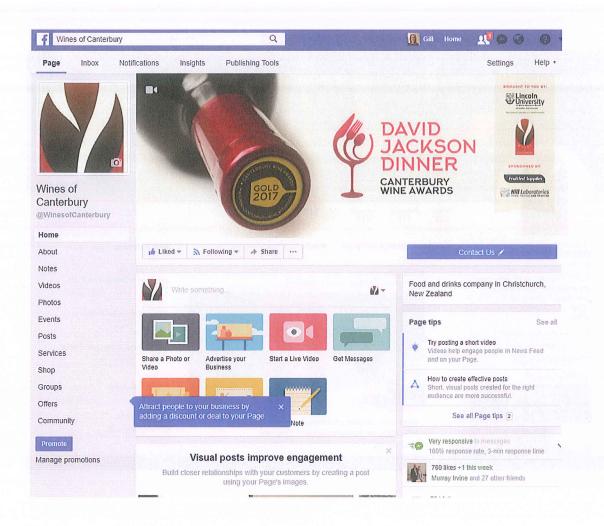


Images from Canterbury A&P Show display November 2016





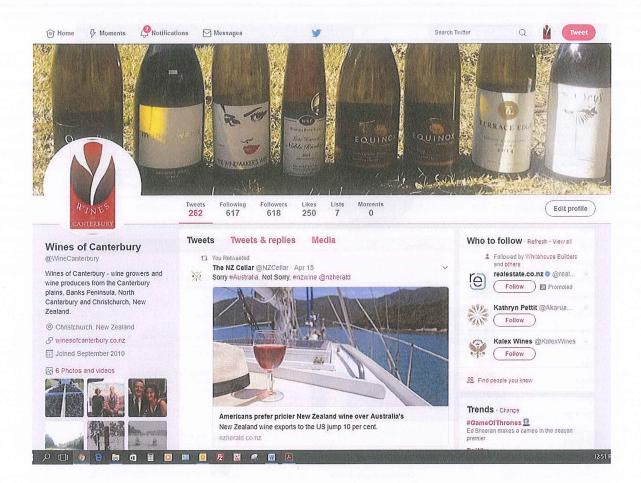








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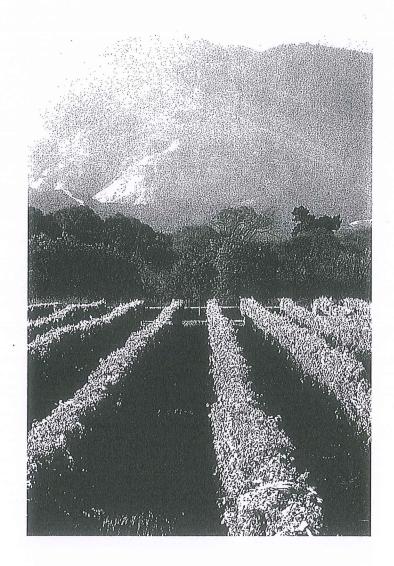




THE WINES AND VINEYARDS OF NEW ZEALAND

Michael Cooper

PHOTOGRAPHY BY ROBIN MORRISON



Foreword by Jancis Robinson



Appendix 3 — Examples of discussion of CANTERBURY GI in wine reference books

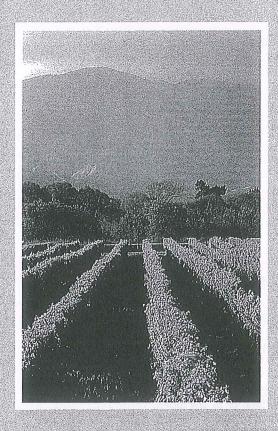




THE WINES AND VINEYARDS OF NEW ZEALAND

Michael Cooper

PHOTOGRAPHY BY ROBIN MORRISON





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Photographic Acknowledgements

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Auckland Public Library, from The New Zealand Farmer, Feb. 1899 21

Corbans Wines 120

Hocken Library 30

Mary McIntosh 11

Morton Estate 182

New Zealand Herald 48, 253

North and South Magazine 47

Quickcut, Liquor Industry Products, 1988 50

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Cartography

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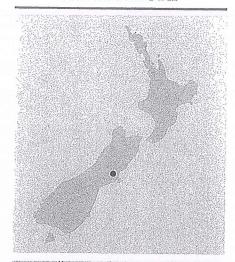
en years after the planting of the province's first commercial vineyard, Canterbury has emerged as a fully fledged wine region with half-a-dozen wineries up and running and a cluster of auspicious Pinot Noirs and Rieslings safely ensconced in bottles.

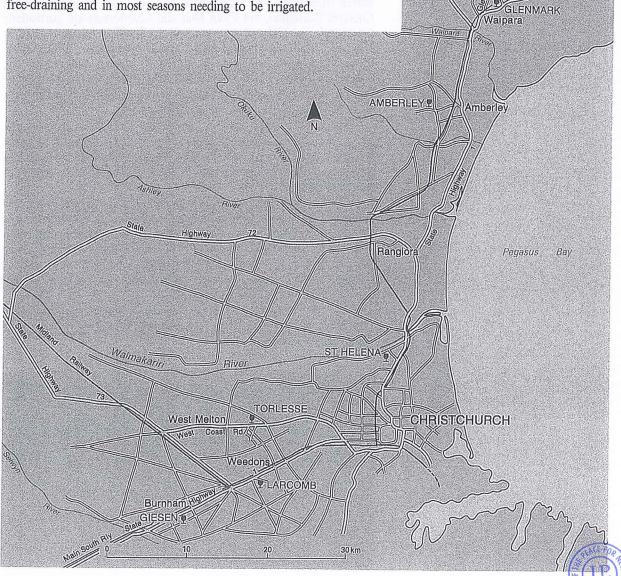
The climatic hazards for viticulture in Canterbury are more severe than for districts further north. Canterbury, although nearer the equator than many European wine regions, in cooler years can fail to accumulate the heat readings necessary to fully ripen grapes. In this respect it parallels parts of Germany. October spring frosts are a risk and April frosts can retard ripening.

Canterbury, however, like Marlborough, enjoys one vital advantage over most North Island winegrowing regions – low rainfall. During Canterbury's long dry autumns, the warm days and cool nights enable the fruit to ripen slowly, with high levels of acidity and extract. Müller-Thurgau is usually harvested in mid-April – a month or more later than in the North Island – and Riesling and Pinot Noir hang on the vines until May.

Most of the vineyards are located in two areas: south of Christchurch and at Waipara in North Canterbury. The soils in both districts are typically silty loams – shallower in the south – overlying river gravels, free-draining and in most seasons needing to be irrigated.

CANTERBURY





The fortunate viticultural combination of low rainfall and low to moderate soil fertility means that excessive vine foliage growth is not a problem here. Open vine canopies and dry weather also reduce disease problems and can encourage the development of 'noble rot'.

French peasants who landed in 1840 at Akaroa on Banks Peninsula carried vine cuttings, from which wine soon flowed for their domestic consumption. A century after their arrival, W.H. Meyers built a small winery, Villa Nova, in the Heathcote Valley. By 1945 he had a tiny vineyard of about 0.8 hectares planted in Verdelho – a Portuguese variety – Pinot Gris, Muscat and other grapes. Although wine was made, Meyers' vines were uprooted around 1949 after they failed to flourish.

The current resurgence of interest in Canterbury wine stems from research conducted at Lincoln College under the direction of Dr David Jackson. When the first grape trials commenced in 1973, research focussed on identifying the most suitable varieties for Canterbury's cool climate. After losing seventy percent of his vines in the first year to a late frost, Jackson began 'wondering if I really was making a mistake'.

Trial plantings of over sixty varieties have since demonstrated, according to the College, that Canterbury produces grapes of high acidity and high sugar levels. Jackson sees Canterbury as 'borderline' for such mid-to-late season ripeners as Sauvignon Blanc and such late-season ripeners as Cabernet Sauvignon, but Pinot Noir and Chardonnay are 'particularly promising'. The highest hopes are held for Riesling; this enthusiasm is reflected in the 1986 vineyard survey, which listed the five most popular varieties planted in Canterbury as (in order): Riesling, Müller-Thurgau, Chardonnay, Pinot Gris and Pinot Noir. Lincoln College is now winding down its programme of variety research and concentrating more on clonal evaluation, pruning and vine-management trials.

Torlesse is the newest label in Canterbury. Twenty-one shareholders, about one-half of them grapegrowers, with Development Finance Corporation assistance, have founded Torlesse Wines in West Melton about twenty kilometres from Christchurch, near the highway leading to the West Coast.

Danny Schuster, Torlesse's winemaker, is one of Canterbury wine's most passionate advocates. Born in Germany, Schuster gained a diploma in viticulture, oenology and wine evaluation, then worked in European vineyards and at research institutions in South Africa and Australia, before arriving in this country in the late 1970s. After establishing the winemaking trials at Lincoln College with David Jackson, Schuster guided St Helena's early vintages before joining Torlesse.

From the 1987 vintage has flowed a dry Gewürztraminer, two styles of Riesling, a Pinot Noir 'Beaujolais-style' and a blended, 'Chablis-style' Estate Dry White.

CANTERBURY'S LOW TO MODERATE SOIL FERTILITY AND LIGHT AUTUMN RAINFALL ARE WELL SUITED TO VITICULTURE - THE AMBERLEY VINEYARD IN NORTH CANTERBURY.





mberley is a small North Canterbury winery, fifty kilometres north of Christchurch and two kilometres inland from Amberley township. Here, on a twenty-hectare property also devoted to sheep farming and mixed cropping, in 1979 Jeremy and Lee Prater began planting grapevines. Today, their gently undulating vineyard on north-facing Waipara loam-clay slopes includes five hectares of Riesling, Müller-Thurgau, Gewürztraminer, Sauvignon Blanc and Pinot Noir.

Prater (39), who was born in England, arrived in New Zealand in 1970 and later graduated with a B.A. from Canterbury University. He then spent four years in Switzerland – gaining a diploma in viticulture and winemaking from the Swiss Federal College, near Geneva – Germany and France, learning the ropes of cool-climate winemaking, and more than a year with Montana at Marlborough, before processing his first Amberley vintage in 1984.

In his insulated timber winery, Prater makes only about 1000 cases of wine per year, which will gradually climb to a maximum of 2000 cases. His first oak barrel arrived in September 1987.

To judge from the wines I have tasted – the 1987, 1986 and 1985 Brackenfield Rhine Rieslings, the 1985 Teviotdale Gewürztraminer and the 1987 and 1986 Glens of Tekoa Chardonnays – Prater is gradually coming to grips with the intricacies of cool-climate white winemaking. The Amberley range also features a medium Müller-Thurgau, a dry Riesling-Sylvaner and – coming up in the next couple of years – a Sauvignon Blanc and Pinot Noir.



Amberley









JEREMY AND LEE PRATER - A QUIET START BUT THEIR VINEYARD AT AMBERLEY LOOKS LIKELY TO BE A SOURCE OF INTERESTING RIESLING AND PINOT NOIR.

rom Hermann Seifried in the Upper Moutere hills to Danny Schuster – formerly at Lincoln College and St Helena, now at Torlesse – and Almuth Lorenz – previously at Hunter's, now at Merlen Wines – the impact of Austrian and German-born winemakers on the South Island has been sweeping. The German influence has been even more keenly felt of late since members of the Giesen family, hailing from Neustadt in the Rhine Valley, have founded the largest vineyard in Canterbury.

The Giesen property at Burnham, twenty-five kilometres south of Christchurch, is run by brothers Theodor (29), Alexander (28) and Marcel Giesen (23). The family, involved in granite construction in Germany, wanted to escape Europe's overcrowding and environmental problems.

Giesen





Text by

Michael Cooper

John McDermott





Bibliography

Beaven, D., Donaldson, I. and Watson, G., Wine - A New Zealand Perspective, 2nd ed., 1988.

Brimer, R., Boutique Wineries of New Zealand, 1993.

Brooks, C., Marlborough Wines and Vines, 1992.

Campbell, B., New Zealand Wine Annual 1996, 1995.

Coopet, M., Michael Cooper's Buyer's Guide to New Zealand Wines, 4th ed., 1995.

Cooper, M., Michael Cooper's Pocket Guide to New Zealand Wines and Vintages, 1990.

Graham, J.C., Know Your New Zealand Wines, 1980.

Halliday, J., James Halliday's Pocket Companion to Australian and New Zealand Wines, 1995.

Halliday, J., Wine Atlas of Australia and New Zealand, 1991.

MacQuitty, J., Jane MacQuitty's Pocket Guide to New Zealand and Australian Wines, London, 1990.

Reynolds, T., My Side of the River: Tales From a Marlborough Vineyard, 1995.

Saunders, P., A Guide to New Zealand Wine, 18th ed., 1995.

Scott, D., Winemakers of New Zealand, 1964.

Scott, D., A Stake in the Country: A.A. Corban and Family 1892-1977, 1977.

Stewart, K., The Fine Wines of New Zealand, 1995.

Stewart, K., The New Zealander's Guide to Wines of the World, 1994.

Talmont, R., New Zealand Wineries and Vineyards 1996, 1995.

Thorpy, F., Wine in New Zealand, 1971, revised ed., 1983.

Williams, V., The Penguin Good New Zealand Wine Guide, 4th ed., 1995.

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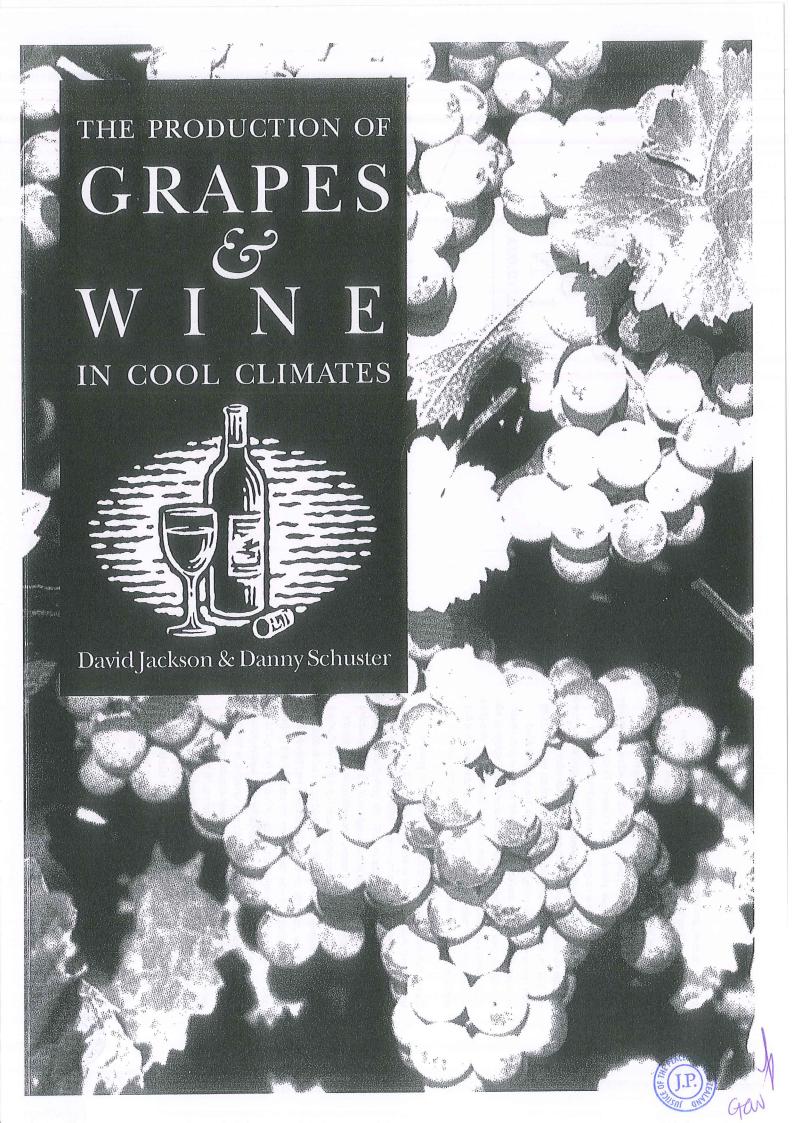
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CANTERBURY **PRODUCERS** Darjon Vineyards French Farm Gatehouse Wines Giesen Wine Estate Glenmark Wines Kaituna Valley Langdale Wine Estate Mark Rattray Vineyards Omihi Hills Vineyard Pegasus Bay Rosebank Estate Rossendale Wines St Helena Wine Estate Sandihurst Wines Sherwood Estate Silverstream Vineyard Torlesse Wines Waipara Downs Waipara Estates Waipara Springs







grapes and wines. His extensive research has included assessments in 1965. After further work with the Fruit Research Division, he joined obtained a doctorate in fruit science at the Waite Institute in Adelaide most recent publications are Monographs in Cool Climate Viticulture and chief author of Temperate and Subtropical Fruit Production. His - 1: Pruning and Training and 2: Climate. Dr Jackson has travelled result of this research that Canterbury has emerged as a promising extensively in scientific and commercial journals and is joint editor of grape varieties and training methods for cool climates. It is as a Zealand in 1952 and, after graduating with a Masters Degree at area for the production of high quality wines. He has published the staff at Lincoln where he gradually extended his interest to Lincoln College, joined the Fruit Research Division of the New widely in viticultural districts in the USA, Canada and Europe. University, was born in Lancashire, England. He came to New Zealand Department of Scientific and Industrial Research. He Dr David Jackson, professorial fellow in viticulture at Lincoln

the mid 1980s he has been a wine consultant in California and Italy. With David Jackson he was responsible for establishing grape trials Hills, in Waipara, which he runs together with his wife, Mari. Since He is an author and co-author of several books on viticulture, wine, Estate. In 1986 he established his own vineyard and winery, Omihi Oenology at the Meinik Institute in 1967. He gained further valuable recently, an Italian edition of Terroir - the Place, Time and People. wine evaluations of the earliest Canterbury vintages of the modern Grapes and Wine in Cool Climates, The World of Cacti, and most 1970s. He was the winemaker and established a tasting panel for experience in the major cool climate regions of Europe, including activities to the research centres of Australasia and South Africa. winemaker at Canterbury's first modern winery, St Helena Wine grape varieties, new vinifera crossings and the micro-vinification Prague, he graduated with a four-year diploma in Viticulture and techniques employed in research winemaking, he extended his Burgundy and Bordeaux in France. Specialising in cool climate era. In 1981 he became the first commercial viticulturalist and wine appreciation, and cacti, most notably The Production of and a micro-vinification cellar at Lincoln University during the international viticultural and winemaking experience. Born in Danny Schuster brings to this publication some 30 years of

GRAPES

IN COOL CLIMATES

Gas

THE PRODUCTION OF

GRAPES GRAPES W I N E

David Jackson & Danny Schuster



Daphne Brasell Associates Ltd and Gypsum Press



The Production of Grapes and Wine in Cool Climates

	0 (f.		ပွဲ မြ
	1150°	(2070	1500°C (2700°F)
and a more	0001-006	mm (35-38 in)	525 mm (21 in)
Soil Types and Position	Volcania red baselt or		Sandy-clay loams over clay on flats, gravel and sandy loams over clay on the clay of the clay on the clay of the clay on the clay on the clay of the c
Varieties			Great Western (Vic) White, red Chasseles, Ondenc, and Pinot meunier, Mataro, snarkling Chardonnay, Resiling.
	-	Red and white, some sparkling	White, red and sparkling
Table 2.4 Continued District		Yarra Valley (Vic)	Great Western (Vic)
	Wines Varieties Soil Types and Position Authorities	Wines Varieties	Wines Varieties Wines Varieties Red and Cabernet Sauvignon, white, Pinot noir, Merlot, Shiraz, some Chardonnay, Resling, sparkling Gewürztraminer, Sernillon, Sauvignon blano.

9 1 - 13 slopes Flats and gentle slopes. Frosts in spring can be a problem. Cabernet Sauvignon, Merlot, Malbec, Pinot Gewürztraminer,

446

1200°C (2160°F) Volcanic, red-brown Riesling, Gewürztraminer,

noir, Shiraz.

White, red

Drumborg (Vic)

sparkling and

750 mm (30 in) loams over gravel-clay sub soils, often rich in limestone Mostly flat. Sauvignon, Muscadelle, Chardonnay, Ondenc. Sylvaner, Chasselas, Pinot noir, Cabernet

1250-1300°C (2250-2340°F) mm (20-22 in) 500-550 loams mostly over clay sub-soils. Frost in spring Variable sandy gravel, volcanic basalt or clay a problem in flat

blanc, Gewürztraminer, Shiraz, Chenin blanc,

Cabernet Sauvignon, Pinot noir

Chardonnay, Riesling,

Sémillon, Sauvignon

White and red

Bendigo (Vic)

493

530 mm (21 in) Reddish clay limestones vineyards.

423

1200°C (2160°F)

or well-drained deep volcanic basalts over clay or limestone sub-soils. Gentle slopes or flats.

Shiraz, Cabernet Sauvignon, Pinot noir, Gewürztrarniner,

Red and white

Geelong(Vic)

Chardonnay.

Riesling,

mm (28-30 in) 700-750 Coarse granite soils and sandy loams over clay sub-soils. Best sites are on gentle slopes at Cabernet Sauvignon, Shiraz, Malbec, Merlot, Cabernet Franc, Riesling,

474

1200°C (2160°F)

higher elevations.

Chardonnay, Sémillon,

Gewürztraminer

Sauvignon blanc,

Red and white

Macedon (Vic)

Well-drained gravel-

Cabernet Sauvignon, Merlot, Malbec, Shiraz,

Red, white

Moonambel -Pyrenees (Vic)

Sauvignon blanc,

and sparkling

Cabernet Franc,

061

1350-1400°C (2430-2520°F)

600 mm (24 in) quartz loams over clay sub-soils, in parts rich in limestone, Gentle slopes. Chardonnay, Riesling, Trebbiano, Chenin blanc.

(22-24 in) 550-600 mm Gravel and sandy loams over clay sub-soils Flats and gentle slopes.

Trebbiano, Chardonnay, Sémillon, Cabernet Sauvignon, Shiraz,

Red and white, sparkling

Avoca-Pyrenees (Vic)

Malbec

1400°C (2520°F)

Isolated areas with a wide variation of soils from well-drained sandy-gravel loams to clay soils, both over clay sub-soils.

1000-1150°C (1800-2070°F)

(30-32 in) 750 -800 mm Mostly slopes of varying steepness.

Gewürztraminer, Chardonnay, Sauvignon blanc, Müller Thurgau

Cabernet Sauvignon, Pinot noir, Riesling,

Red and white

Launceston and Hobart (Tas)

many of the original sites around Auckland, grapes were often lost to disease, and those surviving had little chance of producing quality wine. The methods adopted by growers from the European wine regions proved to be of little help in the local warm and humid conditions.

> grown, and the wines produced were said to be The progress of viticulture was slow in many

of good quality.

Grapes for winemaking were first planted in New Zealand in the early nineteenth century by French settlers and religious missions. At first only the European, Vitis vinifera varieties were

New Zealand

was not suitable for grape-growing and making wines in the European tradition. Owing to high rainfall and high humidity on

parts of the North Island, since the climate

Factors Contributing to Quality in Some Cooler Wine Districts Outside Europe

In February 1895 the government brought in the services of the Italian, Romeo Bragato, who Victorian government. His report, issued in September of the same year, could have been an excellent blue print for the New Zealand was at that time the viticultural advisor to the

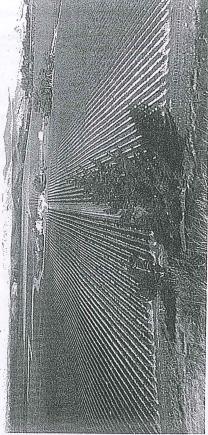
Hawkes Bay Wairarapa Auckland Waikato Christchurch Central Otago

Figure 2.5 The major wine regions of New Zealand

40

	moior wines	o = The major wines, varieties, soils and climates of New Zealand	nates of New Zealand				
Table 2.5 Inc	Wines	Varieties	Soil Type and Position	Annual Rainfall	Heat Units in Growing Season	E7	
Northland	Red and white table wines, some fortified	Cabernet Sauvignon, Chasselas, Palornino, Pinotage, Müler- Thurgau.	Shallow clay soils over sandy-clay subsoils Flats and mild slopes.	1600 mm (63 in)	1300-1400 °C (2340-2520 °F)	450	
Auckland White and (Henderson and red table Kumeu) wines, some fortified a sparkfined a sparkfined a sparkfined a	White and a red table wines, some fortified and sparkling	Müller-Thurgau, Pinotage, Chasselas, Cabernet Sauvignon, Merlot, Gawi'zntaminer, Pinot noir, (including Gamay de Beaujolais), Sémillon and	Shallow clays over hard silty-clay subsoils or sandy loams. Mainly flats.	1500 mm (59 in)	1300-1350 °C (2340-2430 °F)	440	

Shallow clays over hard silty-clay subsoils or sandy loams. Mainly flats. Heavy loams over clay subsoils. Flats and mild slopes.
Heavy loams over clay subsoils. Flats and mild slopes.
Fertile, alluvial loams over sandy or volcanic subsoils. Flats.
Olay loams of medium to high fertility over gravelly or volcanic subsoils. Flats.
Deep story and silt loams 1050 over gravel
Clay loams over hard clay subsoils. Slopes
Sity-alluvial loams over gravely subsolis. In parts compacted silt or clay pans of various thickness and depth are found.
Alluvial silt loams over gravel subsolls in the central parts. Chalky loam soils often rich in limestone in the northern out centrel shores.



Vineyard in Marlborough, photograph by courtesy of Montana Wines Ltd

wine industry but, regrettably, it remained largely

He returned to Victoria, but was back in New Zealand in 1902 as Viticulturist and Head of the Viticultural Division of the Department of Agriculture. He expanded the research station at Te Kauwhata and produced an excellent handbook in 1906. This notwithstanding, his efforts were largely ignored by the government of the day and by 1909 he had become disillusioned. He resigned and returned to Italy.

by that time and Bragato had recommended the grafting of vinifera grapes on American rootstocks. Unfortunately many growers ignored his advice and instead planted Franco-American hybrids and labrusca grapes which, in a short Phylloxera was already present in New Zealand time, became predominant.

With the introduction of hybrid grapes, the until the 1960s. The strong prohibitionist movement during the first two decades of this century did little to encourage growers and consumption, produced high yields of fruit which proved to some extent resistant to huhopes for quality wine production were lost winemakers to plan for a long-term future. Dual-purpose grape types, for wine and table midity at ripeness. Ordinary table and fortified

260

850-1000°C (1530-1890 °F)

mm (15-18in) 400-450

Silt loams with mica and schists. Moderate to part. Gentle slopes.

Riesling, Pinot noir, Chard-Silt loams with onay, Sauvignon blanc, schists. Mode Pinot gris, Gewürztraminer. steep slopes

White and red

Central Otago

Cabernet Sauvignon, and Sauvignon blanc.

best, an ordinary wine quality resulted. At one wines were made from Siebel, Baco, and Albany Surprise grapes. The better types included Pinotage, Cabernet and Müller-Thurgau. To avoid potential spoilage, even the better vineyards were often harvested prematurely and the widespread virus infection of local vineyards prevented grapes from reaching wine. To compensate for excess acidity and low sugar, winemakers had to resort to the use of water and to sugaring their wine heavily and, at stage the shortage of wine grapes caused winemakers to buy all grapes that were offered to them - often with little regard to their Palomino, Chasselas, and more recently, good maturation levels needed for quality ripeness and quality.

the demand for wine—mainly sparkling and fortified. Increased vineyard planting in Auckland and Hawkes Bay areas resulted, and alquality only, several fine table wines were also made, thus showing the potential for future The 1950s witnessed a dramatic increase in though the average wine made was of fair years.

The 1970s were the decade of rapid expansion and growth in the New Zealand wine industry, and several large companies joined 43

Hugh Johnson

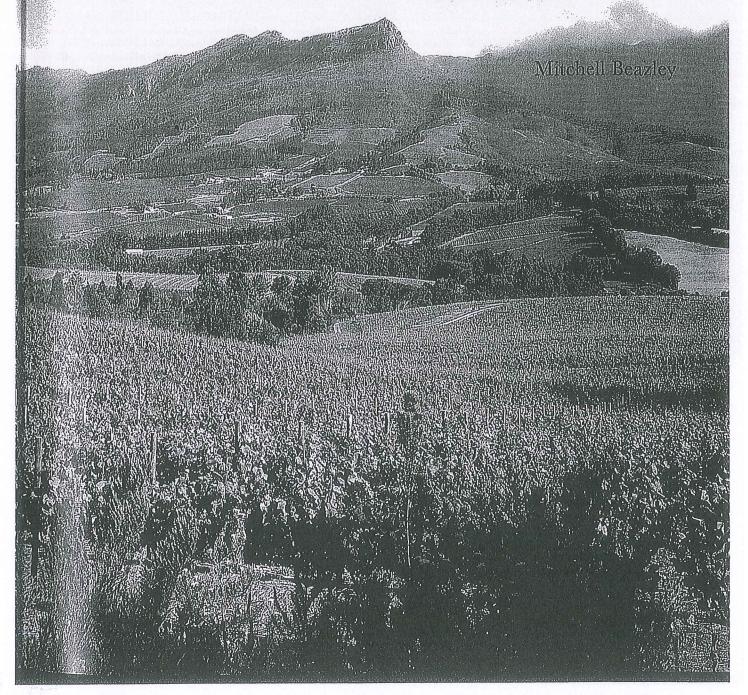
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FIFTH EDITION







Hugh Johnson, Jancis Robinson THE WORLD ATLAS OF WINE

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How the maps work

The maps in this Atlas vary considerably in scale, the level of detail depending on the complexity of the area mapped. There is a scale bar with each map. Contour intervals vary from map to map and are shown in each map key. Serif type (eg MEURSAUIT) on the maps indicates names and places connected with wine; sans serif type (eg Meursault) mainly shows other information.

shows other information.

Each map page has a grid with letters down the side and numbers across the bottom. To locate a château, winery, etc. look up the name in the Gazetteer (pages 338–351) which gives the page number followed by the grid reference.

Every effort has been made to make the maps in this Atlas as complete and up to date as possible. In order that future editions may be kept up to this standard, the publishers will be grateful for information about changes of boundaries or names that should be recorded.





cover moderates what could be overmuch sunshine and gives steady ripening conditions. Vintage-time rain and rot are problems. The most ingenious (and successful) answer has been to plant, as it were, out to sea — on an island east of the city that misses the mainland rain. Waiheke Island's Stonyridge and Goldwater Cabernets are evidence of a mesoclimate miraculously right for Bordeaux grapes.

Of the wineries using West Auckland grapes, Kumeu River is the most successful. Collards is another largely dedicated to local fruit. Most other Auckland wineries such as Nobilo's and Selaks (both owned by Hardys of Australia), Babich, Matua Valley, Delegat's, and Villa Maria draw on other wine regions for the majority of their grapes.

The wine giant Montana has over 60% of the New Zealand market following its purchase of Corbans (the second-largest company) in 2000. Both ferment in local sub-wineries in Gisborne, Hawkes Bay or Marlborough and finish their wines in Auckland. But many wine producers still transport white grapes long distances to their own crushers – a process that is not without some risk.

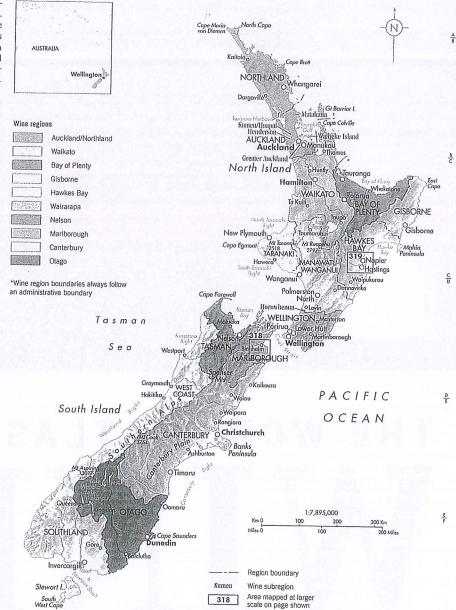
Gisborne on the east coast of the North Island (it has another name, Poverty Bay, like so many of New Zealand's wine regions) is a good example of a region plundered by the bottlers. It is the country's third most important wine region, after Marlborough and then New Zealand's answer to Bordeaux: Hawkes Bay (see page 319 for more detail), but has very few wineries. Gisborne, warmer but wetter than Hawkes Bay, especially in autumn, grows almost exclusively white grapes on relatively fertile soils and it has a particular reputation for Chardonnay.

The North Island's most exciting area for Pinot Noir is variously called Martinborough, Wairarapa, and Wellington; it is just an hour's drive west of the nation's capital over the mountains and into the country's eastern rain shadow. Temperatures may be lower but autumns are drier here than in other North Island wine regions, and its nearly 40 wineries, led by Ata Rangi, Martinborough Vineyards, and Dry River, have made some of New Zealand's most vividly varietal Pinot Noir so far. It has ranged from potently plummy to lean, dry, and earthy; but then so does burgundy. Here Chardonnay ripens well, keeping high acidity, while Riesling has demonstrated real potential.

Just across the windy straits on the South Island, the little Nelson region to the west of Marlborough has higher rainfall and richer soil than Martinborough but does well with similar grape varieties.

Meanwhile, well south of Marlborough, on the plains surrounding Christchurch and an hour's drive north in undulating terrain at Waipara, Canterbury's winemakers are producing crisp, flinty Rieslings and Chardonnays as well as Pinot Noir that ranges from disappointingly herbal to tantalizingly promising in extremely varied environments.

2 | 3



Canterbury's grapes struggle to ripen in some years. Even further south, testing the limits of cool-climate grape-growing, is Central Otago, the world's southernmost wine region. In this mountainous inland region the climate is not maritime, as in the rest of New Zealand, but continental, and vines have to be planted on hillsides to maximize radiation and escape frost

danger. In a good year, however, Central Otago can produce Pinot Noir, Pinot Gris, and Riesling to rank among New Zealand's finest, and many believe that this is where the Pinot grail is to be found. The old contention that New Zealand conditions are close to German is truer here than anywhere – and marginal vineyards can make wonderful wine.

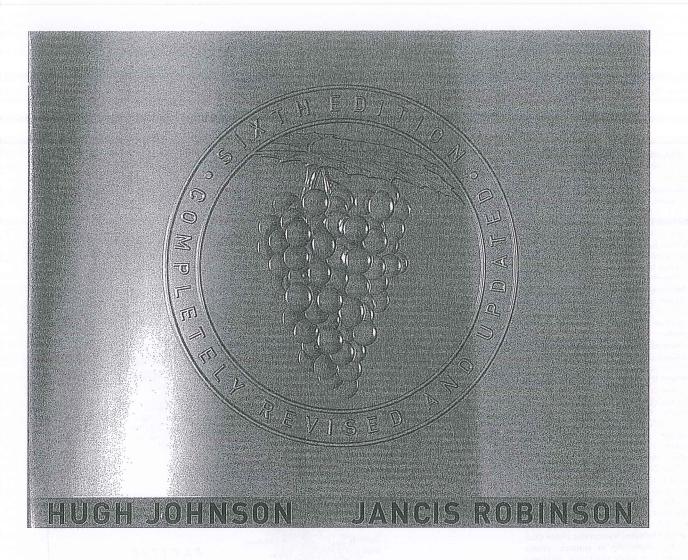


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THE WORLD ATLAS OF

MITCHELL BEAZLEY



THE WORLD ATLAS OF WORLD ATLAS OF

SIXTH EDITION

Mitchell Beazley

HUGH JOHNSON JANCIS ROBINSON



Gew

THE WORLD ATLAS OF WINE Hugh Johnson, Janeis Robinson

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How the maps work

The maps in this Allas vary considerably in scale, the level of detail depending on the complexity of the area mapped. There is a scale bar will each map. Contour intervals vary from map to map and are shown in each map key. Seril type (eg MEURSALIT) on the maps indicates names and places connected with wine; sans seril type (eg Meursault) mainly shows other information.

Each map page has a grid with letters down the side and numbers across the bottom. To locate a chalcau, winery, et look up the name in the Gazetteer (pages 385-399), which gives the page number followed by the grid reference.

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New Zealand



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Few wine countries have quite so sharp an image as New Zealand. The word sharp is apt, for the wines are characterized by piercingly crystalline flavours and bracing acidity. But then many of the world's wine drinkers will never have experienced proof of this, for New

Zealand is not just one of the most isolated countries on earth (more than three hours' flight from its nearest neighbour Australia), but it is a newcomer to wine. And it is small, producing less than 0.3% of the world's crop. New Zealand has colonized as much space in this book as it has because it is now exporting seriously - most of its wine is now sold abroad and because so many of those who try the wines fall madly in love with their unusually

powerful, direct flavours. In historical terms this is Stop Press news. In 1960 the country had fewer than 1,000 acres (400ha) of vines, mainly in Auckland and Hawke's Bay, and too many of them hybrids. By 1980 there were 14,000 acres (5,600ha), 2,000 of which were in the brand-new Marlborough region on the South Island (see p.362). In the 1990s it seemed as though anyone with a few acres wanted to try their hand at vine-growing so that by 2006 the total area in production was more than 54,000 acres (22,000ha), and there were 530 wine producers. This is a relatively small average holding and a high proportion of producers have a label but no winery of their

own; contract winemaking is big business. It was New Zealanders who coined the term and bought the concept of a "lifestyle winery": a bucolic way of life whereby, typically, a fine education is focused on producing, in the most pleasing environment, one of life's more delicious commodities from the earth.

New Zealand had some natural problems to contend with before this enthusiasm could be positively harnessed. Only 150 years ago much of this long, thin country was covered with rainforest. Soils here tend to be so rich in nutrients that vines, like everything else, grow too vigorously for their own good, a phenomenon exacerbated by the country's generous rainfall. Canopy management techniques were sorely needed, and were introduced in the 1980s most notably by the then state viticulturist Dr Richard Smart, allowing light to shine both literally and figuratively on New Zealand's unique style of wine.

Wine-growing New Zealand lies, in terms of the northern hemisphere, on latitudes between those of Morocco and Bordeaux (see the key facts panels on pages 360 and 362). The effects of latitude are countered, though, by the Pacific, by strong prevailing westerlies, and by the effects of the mountains on their rain-clouds: factors that give the two islands a wide range of growing conditions - almost all cooler than the statistics suggest.

AUSTRAUA Wellington Wine regions Tasman Auckland/Northland Waikato/Bay of Plenty Sea Gisborne Hawke's Bay Wairarana Nelson Marlborough Canterbury Otago linglet. Region boundary Wine subregion Kumeu Area mapped at larger scale on page shown 360 South Island CANTERBURY SOUTHLAND Invercorgill^O Stewart I. South, West Capa

It was Sauvignon Blanc that made the world take notice of New Zealand. After all, a cool climate is needed if it is to be lively, and the cool, bright, sunny, and windy northern tip of the South Island seems to have been designed to intensify the scarcely subtle twang of Sauvignon. Early examples of Marlborough Sauvignon in the 1980s opened a Pandora's box of flavour that no one could ignore and, most importantly, no other part of the world seems able to replicate. Today Sauvignon Blanc is the country's most important grape, and for the moment it seems that no matter how much is planted, demand will always be greater.

Chardonnay, enlivened by the country's trademark zestiness, was for long New Zealand's other calling card but it has recently been overtaken in terms of vineyard area, and certainly in

terms of reputation, by Pinot Noir. This variety has enjoyed success for much the same reason as Sauvignon Blanc: New Zealand's cool climate. In a surprisingly wide range of wine regions, this finicky grape has provided Kiwi growers with another chance of succeeding where so many other regions (most importantly, most of Australia) have failed.

North Cape

Kumen/Huapai-

North Island

Hamilton

TARANAKI

oKaiko

Christchurch

WHUNGTON

· WAIKATO

GISBORNE

Mahia Peninsuk

BAY (360 Napier OHastings

PACIFIC

OCEAN

1:7,895,000

NORTHLAND Whangarei

Merlot overtook the inconveniently lateripening Cabernet Sauvignon in 2000. Bordeaux blends are in general more popular with Kiwis themselves than outside in the big, wide, Cabernet-saturated world. Other significant grapes include Riesling, which can be very fine here, both dry and sweet; and a significant number of producers and growers are now investing their hopes in Gewurztraminer, Viognier, and, especially Pinot Gris and Syrah (see Hawke's Bay). Isolation has proved no defence against vine pests and diseases; most of these new plantings are grafted onto phylloxeraresistant rootstocks.

New Zealand wine has come a long way since it was known locally as "Dally plonk", a reference to settlers from Dalmatia, lured from the kauri gum forests of the far north to plant vineyards near Auckland in the early 20th century. They persisted despite a rainy subtropical climate; several of the families in what is now a surprisingly good red wine area have Dalmatian names. As in Australia's Hunter Valley, cloud

MICHAEL COOPER VINTE ATTLAS of New Zealand



MICHAEL COOPER White A Teal and A Teal and

Second Edition

Text by Michael Cooper
Photography by John McDermott





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Front cover: From the south side of Marlborough's Wairau Valley, past the Oyster Bay winery, vines sweep across the plains to the Richmond Range. Back cover: Matahiwi Estate, Masterton, Wairarapa.

Waipara

RANGIORA

Woodend

Tram Road Mandeville
Darjon North

KAIAPOI

Ist Helena Belfast

Darfield

Gatehouse

CHRISTCHURCH

Larcomb

Rolleston

Lincoln

Lake Ellesmere

Southbridge

[]] Intensive vine-growing areas

(i) state highways







Cracroft Chase

Thumbing through a copy of *The Production of Grapes & Wine in Cool Climates*, by Canterbury-based David Jackson and Danny Schuster, Alessandro Laryn stumbled across 'a very small line in the book which says some small valleys of the Port Hills could be good for growing grapes. We started from there.'

On the doorstep of Christchurch, Cracroft Chase's driveway winds from the suburb of Cashmere into a fertile, valley-floor site, sheltered on three sides and exposed only to hot nor'westers. The vineyard and winery were named after the Cracroft-Wilson family, who first settled and built a hunting chase on the property.

Laryn, who previously worked as a biologist and commodities trader, and his wife, Wilma, a former

maths teacher, emigrated from Italy to New Zealand in 1996. Since 1998 — despite the early loss of young vines to wild deer, a problem solved with a live wire to keep animals out — they have planted 5 hectares of Pinot Gris.

Why Pinot Gris? 'The Christchurch climate is similar to that of north-east Italy, where Pinot Grigio abounds,' believes Wilma. Due to the richness of the soils, which encourages vigorous growth, the vines are trained on a lyre (U-shaped) trellising system. By splitting the vines' canopies, the system boosts sunlight penetration and air circulation, thus advancing ripening and reducing the risk of disease.

Winemaker Alistair Gardner, who has also worked in Australia and France, produces about 2000 cases per year in the on-site, barn-style winery. Crafted in a dry style, Cracroft Chase Wood's Edge Pinot Gris is scented, with good depth of fresh, crisp, pear and spice flavours, and lees-aging and light oak handling adding a touch of complexity.

Giesen

From the start, Theo, Alex and Marcel Giesen thought big — the boutique scale typical of Canterbury wineries was never their style. In the 1980s, they upset sections of the fledgling local industry by buying Marlborough grapes. Relentless marketers, they swiftly emerged as the region's largest producer, built a national following, plunged into export, and now own one of New Zealand's largest wine companies, specialising in a single variety from a single region: Marlborough Sauvignon Blanc.

Giesen still has its headquarters in Canterbury and the brothers still live there, but the company's focus today is clear from the first sentence on its website: 'Giesen Wines is one of New Zealand's leading producers of Marlborough Sauvignon Blanc.' From the first vintage in 1984, the Giesen range included Marlborough Sauvignon Blanc.

When their bank manager heard of their plans to focus on one type of wine, rather than offer the public a wider range, he 'expressed concern,' recalls Theo. 'But we intended to sell almost all our wine on the export market and our customers only wanted Sauvignon Blanc. Being virtually a one-wine producer makes life a whole lot simpler.'

The Giesen brothers were raised at Neustadt, in the wine-growing Rheinpfalz region. Granite quarrying, construction and masonry were the family's chief occupation, but the Giesens, like countless other German families, also owned a small plot of grapevines and made wine for their private consumption.

Why did they uproot themselves to start a new life in New Zealand? 'For opportunity, space, clean air and freedom,' says Marcel Giesen (an incident with a snake in a swimming pool deterred them from settling in Australia). Winemaking was not part of the brothers'

Cracreft Chase
Single Vineyand

Wood's Edge

Pinot Gris
Critical Duty

Wine of New Zealand

Address

Cracroft Chase Vineyard, 110 Shalamar Drive, Cashmere www.cracroftchase.co.nz

Owners

Alessandro and Wilma Laryn

Key Wines

Wood's Edge Pinot Gris

Address

Giesen Wine Estate, Hornby, Christchurch www.giesen.co.nz

Owners

Theo, Alex and Marcel Giesen

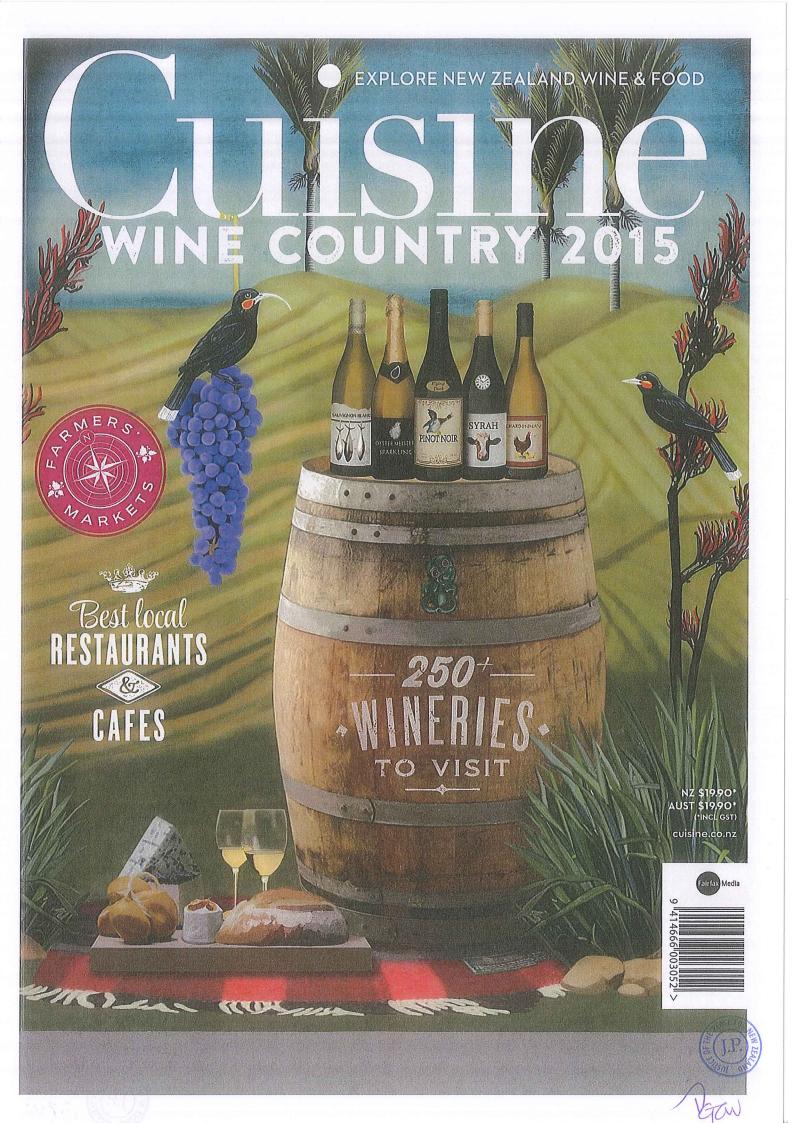
Key Wines

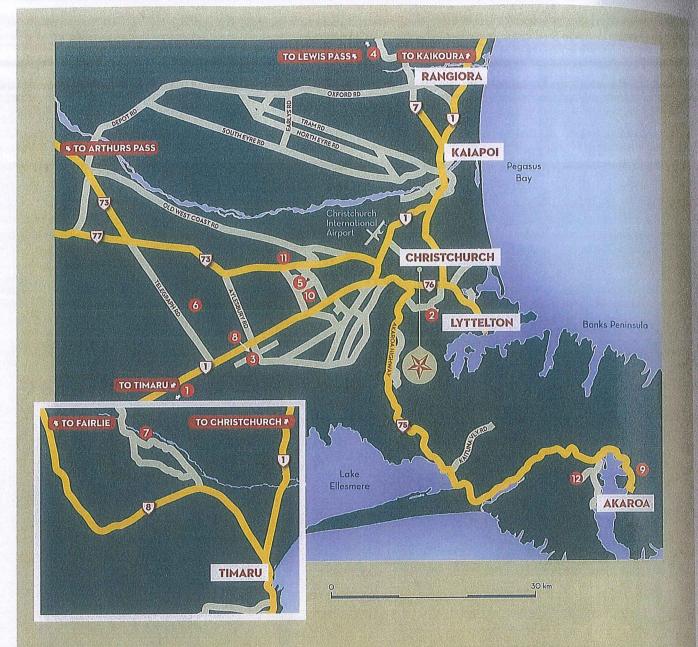
Marlborough Sauvignon Blanc, The Brothers Marlborough Sauvigno Blanc, Marlborough Chardonnay, Marlborough Riesling, Marlborough Pinot Noir, Voyage Special Cuyée Brut











- 1 CharRees Vineyard
- 2 Cracroft Chase Vineyard
- 3 Lone Goat Vineyard
- 4 Marble Point Winery
- 5 Melton Estate
- 6 Ngapuarata Wines
- 7 Opihi Vineyard8 Straight 8 Estate
- 9 Takamatua Valley Vineyards & Akaroa Winery
- 10 Tresillian Estate
- 11 True & Daring Wine Centre
- 12 Valley Road Vineyard



LOCAL PICK

CHRISTCHURCH MARIANO'S SPANISH GOODS





ou begin to feel the history and pedigree of the Canterbury region as soon as you travel south along the Kaikoura coastline and over the Hunderlee Range.

The early whalers set themselves up on Banks Peninsula in the mid-1830s, while a decade later the first European settlements began in earnest around the region. İn a single century, the Canterbury Plains became an agricultural powerhouse for the nation and grapes were no exception.

Today, the greater Canterbury wine region stretches as far south as Timaru, east to Akaroa, west across the Selwyn District and then horseshoes north around the sub-region of Waipara Valley to encapsulate the limestone-rich Waikare Valley, the Cheviot pastures and inland towards Hanmer Springs.

Lifted, floral, aromatic whites such as pinot gris, riesling and gewurztraminer are strongly represented here, but perfumed, spicy, cellar-worthy pinot noir is fast becoming the star performer. Even if you aren't able to travel out to visit the wine producers, you'll be struck by the support they receive from the local hospitality sector. Wine lists across the province are loaded with local offerings, so it's not hard to get a taste for what's out there from the comfort of your table.

Nowhere in New Zealand is the restaurant scene more explosive than in Canterbury's capital city, Christchurch. Four years on from the devastating earthquakes that destroyed many much-loved eating establishments in the CBD, new, exotic and exciting restaurants are rising from the rubble at an astonishing rate, both in the city and sprawling into the suburbs. Food lovers have gone from famine to feast at a ferocious pace and the hospitality boom doesn't look like it's going to slow down any time soon. Pay a visit and be inspired by the palpable sense of energy and enthusiasm.

Above: Looking down into Akaroa Harbour from Valley Road Vineyard

cuisine.co.nz

CUISINE WINE COUNTRY 187

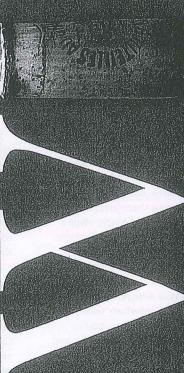


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FOURTH EDITION





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The Oxford Companion to

WINE

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Fourth Edition

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Valérie Lavigne & Denis Dubourdieu







Marlborough, at the north eastern tip of the South Island, consists of a large, flat, river valley with deep deposits of silt and gravel. A number of soil patterns are found throughout the valley and even within single vineyards, leading to significant variations in quality and style depending on the grape source. Shallow, stony soils, which aid DRAINAGE and limit fertility, are favoured for high-quality wine production although some of the region's best Pinot Noir is from heavier, clay-rich soils at the base of the Wither Hills. Irrigation is widely used throughout the valley to establish vines in the sometimes arid, freedraining soils and to relieve vine stress during the typically dry Marlborough summer. Many of Marlborough's best wines are made from irrigated grapes, which, it is claimed, would have suffered a loss in quality if the vines were forced to rely on a natural supply of ground water. Three subregions are now gaining increased recognition. The northern Wairau Valley's lighter, stonier soils tend to make riper and often more pungent wines. The Southern Valley's richer soils produce richer and more concentrated wines, while the cooler, lower-cropping Awatere Valley would be the country's second-largest if it were a region in its own right.

Sauvignon Blanc is Marlborough's bestknown and most planted variety. These pungent, aromatic wines that blend tropical fruit flavours with gooseberry and capsicum herbaceousness are regarded as representative of New Zealand's national wine style. The scramble to meet growing world demand for Marlborough Sauvignon Blanc combined with an unexpectedly bloated 2008 crop resulted in a drop in grape, vineyard land, and export prices causing financial hardship for many producers. Sauvignon Blanc accounts for more than 80% of the country's exports while Marlborough has nearly 90% of the country's vines. In the early years of this century Marlborough Sauvignon Blanc enjoyed particular success in Australia where it captured 40% of the white wine market, to the annoyance of local wine producers. Marlborough Pinot Noir has overtaken Chardonnay to become the region's second most planted grape variety, and a small but growing proportion of the Marlborough Pinot and Chardonnay crop is used in traditional method SPARKLING WINE production. Pinot Gris, whose NZ wines tend to follow the richer Alsace style than the Italian Pinot Grigio model, has risen rapidly to follow closely in Chardonnay's wake, although growth appears to have tapered off. Riesling is another very successful Marlborough vine variety, reaching its apogee as a sweet, luscious, botrytis-affected dessert wine. BOTRYTIZED wines can be produced here most years although the results vary considerably with vintage conditions.

Hawke's Bay around the town of Napier is one of New Zealand's older wine regions and

certainly one of the best. Complex soil patterns and MESOCLIMATES make it difficult to generalize about the wines of such a diverse region, particularly when they are made by such an eclectic group of winemakers. Situated on the east coast of the North Island, 215 km/130 miles south of Gisborne and 323 km/194 miles north of Wellington, Hawke's Bay frequently records the country's highest sunshine hours. The terrain varies from coastal ranges that rise to 1600 m/ 5,300 ft to wide, fertile plains consisting of alluvial and gravelly soils. A high water table and fertile soils can result in excessive vine vigour over much of the plains. In other parts of the region, deep, well-drained gravel soils encourage water stress and many vines require irrigation during long, dry periods. In pursuit of wine quality, vineyards were established on free-draining soils of lower fertility, at least from the mid 1980s. For ease of cultivation, vines have been almost exclusively planted on flat land, despite the allure of nearby limestone hills which may offer superior aspect and DRAINAGE. A collective of local grape growers and winemakers has identified an approximate 800 ha of deep shingle soils as an ideal area for the production of high-quality wines, particularly Syrah, Merlot, and Cabernet Sauvignon. The defined area has been named Gimblett Gravels, a district name that now appears on some of Hawke's Bay's better red wines.

Chardonnay and Merlot are the most planted Hawke's Bay varieties, with Sauvignon Blanc close behind. The best Hawke's Bay reds are a blend of Merlot and Cabernet Sauvignon, often with Cabernet Franc and/or Malbec playing a supporting role. They have intense berry and cassis flavours, often with a gently HERBACEOUS reminder of their moderately COOL CLIMATE origin and, sometimes, strong OAK influence from up to two years' maturation in new French BARRIQUES. The exalted status of BORDEAUX BLENDS is being tested by a small but rapidly expanding volume of Syrah, which at its best can perform with distinction. Hawke's Bay Chardonnay may lack the seductive charm of the Gisborne equivalent but the best have intense citrus flavours and a brooding elegance that are seldom matched by the wines of other regions. Hawke's Bay Sauvignon Blanc is a softer, fleshier wine than the better-known Marlborough Sauvignon Blanc. It often has a nectarine or stone fruit character, a useful indicator of regional identity.

Central Otago Central Otago grows New Zealand's, and the world's, most southerly grapevines, some of them cultivated south of the 45th parallel. It is New Zealand's only wine region with a CONTINENTAL climate, providing greater diurnal and seasonal TEMPERATURE VARIABILITY than any other. Most Central Otago vines are planted on HILLSIDE VINEYARDS to give better sun

exposure and reduce frost risk. No other New Zealand wine region is as dependent on a single grape variety. Pinot Noir represents nearly 75% of the region's vines with Pinot Gris a distant second and Riesling in third place; this is one of New Zealand's very few Sauvignon Blanc-free zones. The growth in vineyard area, and development of new districts within the larger region, have been extraordinary. The now crowded valley at Gibbston was, with Wanaka, one of the orginal areas to be planted with vines as recently as the early 1980s. Bannockburn is widely regarded as the most successful district although subsequently planted vineyards in the Cromwell/Bendigo and Alexandra districts may challenge Bannockburn's crown. Central Otago's often voluptuous and intensely fruity Pinot Noir has helped put New Zealand red wine on the world map. The wines from this youthful and very experimental area have evolved rapidly in quality with potential for further gain.

Gisborne Total plantings in this cast coast North Island region peaked in 2009, not least because of its dependence on once-popular Chardonnay when Pernod Ricard N7. decided that the future lay in Sauvignon Blanc. Gisborne Chardonnay is certainly the country's most distinctive regional example of the variety, with soft and charming fruit flavours that often resemble ripe peach, pineapple, and melon. Gewürztraminer is Gisborne's other claim to vinous fame. Pernod Ricard NZ sold off its large Gisborne winery and cancelled grape contracts there. Most Gisborne grapes are grown by farmers who sell them to wineries under long-term contract, or to the highest hidder. Several Auckland wineries buy Gisborne grapes and ship juice or wine to avoid extraction of unwanted PHENOLICS that might result from shipping grapes.

At the other end of the production scale are many small LIFESTYLE WINERIES that make only premium bottled table wine of TRADITIONAL METHOD sparkling wines. They include Millton Vineyards, New Zealand's first certified Organic winery, which now produces grapes and wine according to the principles of BIODYNAMICS.

Canterbury/Waipara Canterbury, around Christchurch on the central east coast of the South Island, represents a collection of mostly small and very diverse subregions. Waipara, one hour's drive north of Christchurch, is by far the largest while each of Banks Peninsula to the east of the city, the plains west of Christchurch, the Cheviot Hills 40 minutes north of Waipara, and the limestone-rich Waikari Basin 15 minutes north west of Waipara have just a few producers each or, in the case of Cheviot Hills, a single winery. The region is cool







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and dry with a moderate risk of October and April FROSTS. Low rainfall and light soils of moderate fertility help control vine vigour and canopy here. Viticultural research at LINCOLN has had a considerable influence on selecting suitable vine varieties for the local growing conditions and in assisting local growers with viticultural techniques. Sauvignon Blanc and Pinot Noir are, yet again, the region's most planted varieties, with Pinot Gris in third place.

Nelson Nelson is the South Island's most northerly wine region, nearly two hours' drive across high ranges from Marlborough. The rolling hills of Nelson rise from a scenic coastline to form a beautiful setting for the region's 38 wineries. Sauvignon Blanc has overtaken Chardonnay to become the region's main grape variety, thanks to world demand for this varietal. Pinot Noir and Pinot Gris are second and third respectively with Chardonnay a distant fourth. The varied topography of Nelson makes it difficult to generalize about weather and soils, although records show that the region is slightly cooler and wetter than the Marlborough average.

Wairarapa/Martinborough Wairarapa, which includes the Martinborough region, is at the southern end of the North Island about one hour's drive from the nation's capital, Wellington. In 2012, Wairarapa had less than 3% of the country's vines but 9% of its winemakers. They are typically small-scale, LIFESTYLE producers with a quality-at-all-costs attitude to winemaking and a passionate faith in their region's potential. Pinot Noir occupies half the region's vineyard area and is undoubtedly the flagship wine. In their quest to make great wine, most producers crop their vines so that YIELDS are considerably below the national average, a significant factor in the region's success. In terms of topography, climate, and soils, Wairarapa might easily be considered a miniature Marlborough, were it not for the region's ability to make top-quality reds on a regular basis.

Auckland Auckland, the largest city, gives its name to the one New Zealand wine region where winery visitors can be assured of finding Wines made from grapes grown as far south as Canterbury in the South Island, and are more likely to be offered wine from Marlborough and Hawke's Bay than the product of a local vineyard. Auckland viticulture declined during the rapid growth of Gisborne, Hawke's Bay, and Marlborough through the 1970s and 1980s but began to grow in the 1990s as grapegrowers adopted canopy-thinning techniques to correct vine vigour. New subregions, including Clevedon, Matakana, and especially Waiheke Island, where some very fine BORDEAUX BLENDS are made, are now producing high-quality and highly fashionable reds which have

and dry with a moderate risk of October and helped raise Auckland's profile and esteem as April FROSTS, Low rainfall and light soils of moda wine region.

Northland Northland, at the very northern tip of the country, was the birthplace of New Zeal- and wine. The region's warm, wet, temperate climate has proved to be a barrier to good-quality wine production, particularly on the wetter west coast. Modern viticultural methods and careful site selection have allowed several producers to establish relatively rot-resistant varieties such as Cabernet Sauvignon and Syrah with promising results.

Waitaki on LIMESTONE in North Otago was rapidly being developed in the mid 2000s. That development has slowed although the quality of Waitaki's Pinot Noir and Pinot Gris may stimulate further growth.

R.F.C.

Cooper, M., Wine Atlas of New Zealand (Auckland, 2008).

Saker, J., Pinot Noir: The New Zealand Story (Auckland, 2010).

Thomson, J., The Wild Bunch (Auckland 2012). www.nzwine.com (NZ Winegrowers website). www.nzwine.com www.gisbornewine.co.nz

www.gisbornewine.co.nz
www.winehawkesbay.co.nz
www.winesfrommartinborough.com
www.canterburywine.co.nz
www.cowa.org.nz
www.centralotagopinot.co.nz
www.wine-marlborough.co.nz
www.winenelson.co.nz

Neyret, Neret, or Neiret, rare, dark-berried vine, strictly Neret di Saint-Vincent, still found in VALLE D'AOSTA and likely to be related to several transalpine varieties.

Niagara, American hybrid grown successfully in New York state. This vitis labrusca variety is vigorous, productive, and withstands low temperatures well. Known as the white answer to CONCORD, one of its parents, it makes wines with a particularly foxy flavour. It was created in Niagara, New York, in 1866 and is now planted widely in New York state, Canada, and Brazil. For details of Niagara, Canada, see

Nieddera, promising Sardinian red wine grape.

Niederösterreich, or Lower Austria, is the state in which well over half of the country's vineyards are situated. In it are the wine regions Carnuntum, kamptal, kremstal, thermenregion, Traisental, wachau, wagram, and weinviertel. Since the names Kamptal, Kremstal, Traisental, and Weinviertel between 2002 and 2008 became those of official DAC appellations of origin reserved for wines made from Grüner Veltliner or (in the first three of these) Riesling, wines made

from other varieties are labelled simply Niederösterreich, guaranteeing this name a prominence that it did not previously enjoy.

Nielluccio, Corsica's name for SANGIOVESE, probably brought there by the GENOESE who ruled the island until the late 18th century. Often blended with SCIACARELLO (Mammolo), it constitutes an increasing proportion of the island's APPELLATION CONTROLEE reds and, particularly, rosés, for which it is especially suitable. It is the principal ingredient in Patrimonio, on whose clay-limestone soils it thrives. It buds early and ripens late and is therefore susceptible to late frosts in spring and rot during the harvest.

nitrogen, mineral element and inert colourless, odourless, tasteless gas that is extremely useful in both grape-growing and winemaking. Nitrogen gas is an inert constituent of the atmosphere, making up 78% by volume. In its combined forms, nitrogen is an essential element in AMINO ACIDS, PROTEINS, and ENZYMES, without which life could not exist. In soil, it is an important constituent of ORGANIC MATTER, from which it is released during decomposition in the form of ammonium ions. Although these ions are taken up by plant roots, much of the ammonium is oxidized by specialist soil bacteria to nitrate ions, which are also absorbed by roots. Ammonium and nitrate compounds are important constituents of many FERTILIZERS.

Viticulture

Nitrogen has a major impact on vineyard VIGOUR, and potentially on wine quality. Nitrogen is essential for vine growth and is one of the three major elements, along with POTASSIUM and PHOSPHORUS, needed most for plant growth. It is an important component of proteins, and also of chlorophyll. The most common symptoms of nitrogen deficiency, which can be expected on sandy soils low in organic matter, are reduced vigour and uniformly pale green or yellow leaves. Soil and plant tests can be used as a guide to the use of nitrogen fertilizers.

Much more caution is needed with vines than with most other plants in applying nitrogen fertilizers, or large amounts of manure, or planting in soils naturally rich in nitrogen. The use of COVER CROPS containing clover and other legumes should also be monitored carefully as they might add excessive nitrogen to the vine-yard soil.

Whatever the origin, too much nitrogen in a vineyard results in excessive vegetative vine growth, termed high vigour. Such vineyards typically show higher YIELDS than low-vigour vines and reduced quality owing to the SHADE effects. CANOPY MANAGEMENT procedures may be used to overcome some of these effects, but will not eliminate them completely. Vineyards with excessive nitrogen supplies are also prone to



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Designed by www.cvdgraphics.nz Printed by Opus Group Pty Ltd Front cover photograph: Greenhough's Apple Valley Vineyard, Nelson, by Elspeth Collier.



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New Zealand Wines 2016

After a norably warm, dry spring and summer, Nelson's drought ended at the beginning of March, triggering an early harvest of wines described by Neudorf as displaying 'elegance, vibrancy and purity'.

In spring, October and November were both sunnier than usual, and rainfall in November was the third lowest on record. However, a cold snap during the vines flowering in late November and early December caused significant frost damage.

needed rain to help with canopy growth, before we settled into a warm, dry Christma and January, reported Neudorf. Disease pressure from powdery mildew reduced the In summer, the weather stayed sunny, warm and dry. 'December brought muchvines' yields further, according to New Zealand Winegrower.

feel,' says Neudorf. 'The moderately warm February slowed sugar accumulation, but In lare summer, 'the great growing conditions continued ... albeit with an autumnal allowed for continued flavour development.'

In early auttumn, the rains arrived. 'Nelson's drought broke with a vengeance roday, The Nelson Mail reported on 6 March, 'with waves of heavy rain . . .

After a warm first half of the month, temperatures declined markedly in the last rwo weeks of March. Overall, although March proved slightly sunnier and drier than usual, it still ranked as the wettest month in Nelson since June 2014.

earlier than any other of its 34 vintages. It praised 2015 as 'an uncomplicated vintage with the juice ... displaying elegance, vibrancy and purity. We are seeing lower alcohols Neudorf, the region's most prestigious producer, picked its last grapes on 8 Apriland are quietly predicting a classic vintage.'

Marlborough produced 75 per cent of the country's grape crop in 2015, despite the fact that only 233,000 tonnes of grapes were picked – a steep drop of 30 per cent from the 329,500 tonnes harvested in 2014. The Marlborough Research Centre attributed the drop to lower remperatures during the vines' flowering, which meant poorer fruit set (fewer berries per bunch) and consequently lower bunch weights at harvest....

and very sunny November, flowering started at Pernod Ricard's Squires vineyard at Spring was warm, although with frequent frosts. After a warm, dry September, October was sunny and dry, with average temperatures. Following a windy, warm, dry Rapaura on 1 December – earlier than in most of the past 10 years.

That day, temperatures plummeted, affecting many of the region's Sauvignon Blanc blocks, just starting to flower. December proved to be a month of two halves, beginning with two weeks of cool, cloudy weather. However, from the middle of the month, remperatures soared and hot conditions prevailed.

Summer was warmer, sunnier and drier than 2014. January was the hottest since 2008 and notably dry, with less than 10 per cent of the average monthly rainfall. In hate January, a grass fire swept across 50 hectares in the Awarere Valley.

In early February, Marlborough was declared a drought zone (total rainfall from My 2014 to February 2015 was the lowest for 86 years). The rest of the month was dry and sunny, with warm days, cool nights and slightly below-average mean temperatures. ingation schemes were sometimes turned off, leading growers to use water tankers.

At the start of autumn, early March rains eased the irrigation problem. March s the month wore on. Rainfall, although slightly below average for the month, was proved to be slightly warmer and sunnier than average, although it cooled significantly

the highest since June 2014.

April was average, in terms of rainfall, but also cloudy and warm, due to high might-time temperatures. May was slightly warmer, a lot sunnier and much drier than HSU. Overall, reports about wine quality have been upbeat. 'The signs are that vintage 2015 will be one out of the box . . . enthused Winepress. 'Winemakers throughout the province are lauding the ferments and promising some iconic wines."

Nautilus reported 'exceptionally clean' fruit with no bottytis pressures. 'The crops were down,' noted The Darling, 'but the intensity was up.

and structure. A 'cautiously optimistic' Mahi predicted 2015 'will go down as one of Spy Valley reported 'remarkable' Pinot Noir, 'in that the acids were the highest and best balanced of any vintage so far, and with low crops, some real intensity of flavour the classics'.

Canterbury

Canterbury winegrowers, mostly clustered in the north at Waipara, were the hardest hit of all the country's producers, in terms of yields, with a grape tonnage drop of over 50 per cent, compared to 2014.

In spring, an October frost affected up to 80 per cent of all vineyard blocks in Waipara, savs New Zealand Wingrower. The district was also buffeted by high winds. Sauvignon Blanc, Chardonnay and Pinot Noir were all hard hit.

declared Black Estate. In the spring of 2014, Mother Nature was not playing cricket by the rules and she bowled the Waipara Valley an underhand ball,' reported Pegasus Strong nor-west winds, direct from the Main Divide, was the theme of spring,'

In summer, 'beautiful weather from mid-December promoted really good ripening,' stated Black Estate. Towards the end of a dry, warm January, "the big dry" hit much earlier than usual', according to the New Zealand Herald, and irrigation Bay. 'Many vineyards sustained some frost damage. schemes were struggling'.

Top wines are expected. 'Crops were well down,' reported Torlesse, 'but the fruit was of excellent quality.' Sherwood enthused: 'This year's Pinot Gris is the best we Black Estate experienced 'a wonderfully dry, hot growing season' with 'glorious autumn weather'. Tongue in Groove agreed: 'The fruit looks beautiful, with plenty of small berries.'

Appendix 4 - Selection of Media Articles Referring to CANTERBURY GI

 $\underline{\text{http://www.stuff.co.nz/life-style/food-wine/79333613/eight-wines-are-competing-to-be-named-canterburys-best}$

http://www.nzherald.co.nz/nz/news/article.cfm?c id=1&objectid=189546

http://www.decanter.com/wine-news/earthquake-spares-canterbury-wine-industry-41377/

http://www.stuff.co.nz/business/farming/69530433/South-Canterbury-vineyards-in-it-for-the-long-haul

http://www.stuff.co.nz/life-style/food-wine/4084098/Antonio-Pasquale-pushes-wine-frontiers

 $\underline{\text{http://www.stuff.co.nz/life-style/food-wine/food-news/82717526/quality-of-canterbury-restaurants-soars}$





