By nature, every winery strives to make a classic wine. By nature, this opportunity does not come often. By man, then the need to recognise the ultimate when it occurs is critical if the opportunity is to be seized.

Introduction
This paper is an internal analysis of the production and marketing of a portfolio of Merlot wines by a South Australian winemaking company, Irvine Wines. The views expressed in this paper are personal and are not prescriptive for the universal growing and making of Merlot. After seventeen Merlot vintages at Irvine Wines in Eden Valley and almost as many consulting in other regions, the author’s insights into the Merlot are extensive.

The author believes that tunnel vision or focused direction on Merlot has been rewarding in many ways, but none more so than sitting, unknown, and watching people enjoy your Merlot. Merlot makers really do march to the beat of a different drum, but hopefully they lift enjoyment of premium red wine to a new level for a greater number of enthusiastic consumers. Makers of Merlot have a very distinct responsibility to current and future consumers to provide the styles that show Merlot at its best, equal to or better than, other well-known varieties.

Merlot Background Data
Merlot plantings in most New World viticultural regions of the world have increased rapidly in recent years. It is a relative newcomer to Bordeaux appearing only in the 18th Century, but is now the most widely planted variety in the region (32,300 ha c.f. 17,400 ha of Cabernet Sauvignon). Total planting of Merlot in France in 1979 was only 38,000 hectares.

Californian Merlot plantings grew from 1,820 hectares in 1988, to more than 13,000 hectares in 1996. Over this period of 8 years production increased ten-fold to 100,000 tonnes.

In Australia, Merlot production in the 2000 vintage was 53,580 tonnes and is forecast to reach 107,540 tonnes by 2005 (Australian Bureau of Statistics, 2000). South Australia had 3,170 hectares of Merlot planted by 2000, of which more than 35% was still to come into bearing (1,160 ha). The majority of the production (58%) in the 2000 vintage was from the SA Riverland (Table 1). The Eden Valley production had grown from 3 tonnes in 1980 (less than 0.4 hectares at Mountadam Wines) to 173 tonnes in 2000.

<table>
<thead>
<tr>
<th>Region</th>
<th>Production (t)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>53,580</td>
</tr>
<tr>
<td>South Australia</td>
<td>20,770</td>
</tr>
<tr>
<td>SA Riverland</td>
<td>12,020</td>
</tr>
<tr>
<td>Eden Valley</td>
<td>173</td>
</tr>
</tbody>
</table>

D3V14 is the most commonly planted clone used in Australia to date, but for increased complexity it is recommended to consider the use of D3V5 and D3V7, and other clones as they become commercially available.

Many of the great French Merlots are traditionally from small vineyards of only 4 to 15 hectares in size (Table 2). In Bordeaux, there are really only one or two true 100% varietal Merlots, the rest being blends of up to four varieties.

There are at least 160 branded Australian Merlots available in the marketplace with the style ranging from Buyer’s Own Brand through to world competitor status.

<table>
<thead>
<tr>
<th>Region</th>
<th>Merlot</th>
<th>Petit Verdot</th>
<th>Cabernet Franc</th>
<th>Malbec</th>
<th>Cabernet Sauvignon</th>
<th>Area (ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pomerol</td>
<td>95%</td>
<td>&lt; 5%</td>
<td>5%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trotanoy</td>
<td>85%</td>
<td>15%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Le Pin</td>
<td>100%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>La Conseeilante</td>
<td>45%</td>
<td>45%</td>
<td>10%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chateau Vieux Certan</td>
<td>50%</td>
<td>25%</td>
<td>5%</td>
<td>20%</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Pauillac</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lafite</td>
<td>15%</td>
<td>2%</td>
<td>13%</td>
<td>70%</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>Latour</td>
<td>10%</td>
<td>10%</td>
<td></td>
<td>80%</td>
<td>60</td>
<td></td>
</tr>
<tr>
<td>Mouton Rothschild</td>
<td>7%</td>
<td>7%</td>
<td></td>
<td>85%</td>
<td>72</td>
<td></td>
</tr>
<tr>
<td>St Julien</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ducru Beauciliou</td>
<td>25%</td>
<td>5%</td>
<td>5%</td>
<td>65%</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>Leoville-Las-Cases</td>
<td>17%</td>
<td>3%</td>
<td>13%</td>
<td>67%</td>
<td>85</td>
<td></td>
</tr>
<tr>
<td>Beychevelle</td>
<td>28%</td>
<td>4%</td>
<td>8%</td>
<td>60%</td>
<td>72</td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Merlot components in selected French wine styles.
Irvine Wines – The Company

Irvine Wines is a small family winery based in Eden Valley, South Australia. The principal, James Irvine, has been a winemaker in the Australian wine industry since 1951, with extensive experience of winemaking, distillation and sparkling wine production. In managerial roles in both South Australia and Victoria, James has been directly involved in the development of marketing and sales programs, and has held a public relations role with larger companies through the growth of the Australian wine industry. In 1980, planting of the Irvine vineyards commenced. Within 12 months James also established a wine consultancy business operating throughout Australia. The company’s first wines were released in 1991.

The Irvine deluxe Merlot has achieved widespread acclaim over a number of years in tastings in many countries, including top rated Merlot in the Robert Parker Review (2001), “World’s Best” at the Swiss World Merlot tasting (1997), gold medals at the International Wine Challenge (1999) and InterVin USA (1999 and 2000), and most recently, silver medal at the International Wine and Spirit Competition 2001.

The Viticultural Challenge

Irvine Wines investigated the planting of Merlot in 1982, at which stage only 0.4ha were planted in Eden Valley. In the early years a number of questions about the viticulture of Merlot needed to be addressed.

- What soil type does it like?
- What aspect does it like?
- What is the best trellis system?
- What planting distances should be used?
- Does Merlot require the use of rootstocks / what rootstocks are appropriate?
- How does it grow in Eden Valley?

Viticulture – Springhill Vineyard, Eden Valley

The 12-hectare vineyard is situated on a boomerang-shaped double-sided ridge running North South approximately with the apex facing East, at an elevation of between 390 and 410 meters above sea level. The predominant soil type is grey brown podzols associated with schist gravel, minor quartz reefs, and small amounts of sandy loam. The topsoil varies from less than 10cm at the top of the ridge, to more than 40cm on the lower slopes.

The average annual rainfall is 680mm predominantly falling in winter and spring. Rainfall is supplemented when necessary with irrigation water drawn from an underground aquifer at 38m depth, into a holding dam with a capacity of 22 megaliters. The dam capacity restricts irrigation applications to less than 100mm per year. The vineyard is free of any drainage problems. The freely draining gravelly soils allow a strategy of applying smaller, more frequent irrigations. Deep, long irrigation would waste available water resources. The aim of the vineyard’s irrigation management is to maintain the health and function of the leaves.

In mid summer, the daily temperature variation is from 14 to 35°C. Mid-winter daily temperatures range from –3° to 10°C. Snowfalls are recorded in two out of 10 years. Because of problems with persistent strong winds from the Southwest in the November flowering season, wind breaks of native trees and bushes have been planted on the western slopes.

The vineyard is planted to five varieties—Merlot, Zinfandel, Chardonnay, Pinot Gris, and Meslier.

The planting program was completed in 2001, but grafting of Chardonnay to Merlot, Tannat and Albarino will continue until the planted area of Chardonnay is reduced to 2 hectares.

Merlot is grown at the Springhill Vineyard either on its own roots or grafted to Teleki, Kofer, and Chardonnay rootstocks. Initial plantings in 1983 were on their own roots. Vine growth in the first and second years ranged from miserable to mediocre, and vines struggled to reach the wire at 800mm. Following these results it was decided to only use grafted vines to ensure adequate growth. Following advice from local experts, replants and new vines planted in 1985 had been grafted to SO4. Growth on both own-rooted and grafted vines was very good in that year, so use of rootstocks was again suspended. Richard Cirami (formally of South Australian Department of Agriculture) has suggested problems may develop as a result of the use of rootstocks in a late ripening area such as Eden Valley (pers. comm.). Vines may be expected to struggle to reach the desired ripeness, colour depth, and flavour profile.

Setting problems inherent in Merlot in other locations have not been apparent at Springhill Vineyard where crops are consistently yielding 8–10 tonnes per hectare. Merlot top-grafted onto Chardonnay stock also seems to have no setting problem.

The performance of Merlot in terms of vigour, set and yield appears to be better on any of these stocks compared to its own roots.

Cultivation of the vineyard is basically minimal because of very high gravel content of the soils and the terracing. Vine rows are sprayed out with knockdown sprays, while the mid-row area is slashed.

The initial Merlot plantings were trained to a two-wire vertical with a bottom wire at 90cm and the top wire at 120cm. This training system was replaced in 1994 by a combination of Smart-Dyson and VSP with single cordons. At this time vine spacing within the row was reduced to 1m with 2.2m row spacing. Subsequently, row spacing reverted to 3m. Consequently, vine density within the vineyard varies from 2,160 to 4,100 vines per hectare.

The Smart-Dyson training system has given excellent results for both Merlot and Pinot Gris when considering wine complexity, yield, ease of viticultural operation, and exposure to sunlight. Zinfandel is planted to a VSP single cordon. The vineyard plan is to gradually replace the narrow spaced, two-wire vertical trellis with a wider (50-60cm) two-wire vertical, or removal of the top cordon. Both options would be expected to improve canopy structure and allow better fruit quality. In the latter option, movable catch wires would be added to carry the canopy.

The change of trellis from a two-wire vertical trellis to Smart-Dyson has resulted in an improvement in wine colour, and the signature plummy character and general complexity of the finished wine.

Pruning varies according to the block, the variety and the result required. Nevertheless, most blocks are either spur pruned to a permanent cordon or rod and spur pruned both using a unilateral cordon. Light summer trimming can be employed as necessary.

A Minimal Input Program for pest and disease control has been employed throughout the vineyard. Light brown apple moth and powdery mildew are the main problems, with minor Botrytis infections in some years. The hot spots have been identified and monitored with action according to the severity of outbreak.
Because of the proximity of native vegetation to the vineyard, birds are frequently a pest within the vines when their food source becomes limited. Merlot in particular is subject to bird damage.

Supplementary fertilisation with molibdenum, as foliar sprays, is applied to all Merlot blocks pre-flowering and mid season. Other varieties receive one or two general fertiliser foliar sprays (the frequency depends on the season and vine appearance) and a single urea injection via drip system. The majority of the vineyard is mechanically harvested, with the exception of Zinfandel, some Merlot blocks and young grafted blocks, which have traditionally been picked by hand.

### The Consumer Challenge for Merlot

In recent years Merlot has enjoyed "The Merlot Madness" at consumer level, provoking a series of questions in the wine industry:

**What has caused this consumer led excitement?**

The consumer excitement comes from the very nature of the Merlot grape itself. Its early maturing nature, the sheer ease of drinking, the softness of tannins, and the gentle but rich plumminess all combine to give quick smooth reward to the taste. Given good winemaking, excellent samples of illustrative Merlots with these attributes can be found across all price ranges. Finding these examples is made easier through tasting reports in popular wine magazines.

These reviews will often provide prices and branding, but the comments provided should be treated with caution since many tasters may consciously, or unconsciously, judge Merlot as if it were a Shiraz or Cabernet. Many winemaker tasters have never made Merlot wine, yet can appraise Merlot. This situation is believed to arise due to the lack of knowledge/understanding of Merlot by some tasters because of their inexperience of the range and depth of Merlot.

**Why has the wine industry seemingly been slow to take advantage of this revolution?**

The major winemaking companies do not yet appear to be serious about Merlot. Given the extent of recent plantings of Merlot and its use in blending, this is difficult to rationalise. The actions of the major companies are more concerning given the strength of the consumer message sweeping the world. Italy and France have undergone huge plantings of Merlot and are now producing varietal Merlot wines that are becoming increasingly successful. The emergence of Merlot as a significant variety within Europe is heralding a significant change in its future.

Suggested approaches that a small grower/maker of Merlot are as follows:

1. Decide how many Merlot wines to make, and in which price brackets.
2. Support as many tasting opportunities as possible.
3. Ensure availability of supporting point of sale material to emphasise the Merlot wines.
4. Investigate different styles or combinations with Merlot as the majority component, eg. sparkling Merlot.

A White Merlot is commercially available in the USA. Could a Merlot-Chardonnay be successful as a luncheon red? Shiraz/Merlot blends are already successfully marketed. Is there an opportunity for Merlot/Shiraz, Merlot/Grenache, etc? Small makers need to investigate and undertake niche marketing.

Wine consumers are curious and will try different styles if given the opportunity to do so. Different age groups are looking for different wine styles. Non-wine consumers and first time drinkers are looking for softer wines. Merlot is arguably the silkiest wine in the world.

In summary, small makers of Merlot should be making wines that have the following characteristics:

- early maturing and easy to drink,
- soft tannins, with gentle plumminess,
- a quick, smooth palate reward,
- a breadth of examples across a price range,
- and taste, sell, promote and innovate.

### The Winemaking Challenge

The winemaking decisions relating to the production of the Irvine Merlots have a well established basis extrapolated that for their use. Many of the first growth or Grand Cru houses in France have a secondary label. These are usually significantly different in style to the prime wine, and are produced in significantly larger volumes. Irvine Wines have replicated this approach.

The winemaking program for the deluxe wine was initially established, and development of the secondary wine naturally followed. The development of an oenological policy for the production of the deluxe Merlot required extensive research and analysis of the most appropriate procedures. The successful formula adopted at Irvine Wines will not necessarily succeed when transported to other regions. Instead the winemaker must continually seek avenues to learn, understand, or object to what others are doing. This will concentrate the focus on successful Merlot making.

Nevertheless, the formula adopted for production of the superior Merlot included the following features:

- drop must temperature to 5-8°C for 4-5 days prior to adding yeast starter to lift the fruitiness and plummy bouquet and flavour.
- high ferment temperature (30-32°C) – leather, tobacco and olive flavours reputedly develop at higher fermentation temperatures, with cherry, plum, dark chocolate and raspberry flavours at lower temperatures.
- stalk inclusion – low pH
- ferment to dryness
- extended maceration on skins
- tannin addition
- ripeness 14°-14.5° Baumé
- barrel maturation – Allier – 30-33 months
- bottle maturation – 12 months

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**Table 3: Average harvest data at Springhill Vineyard, Eden Valley.**

<table>
<thead>
<tr>
<th>Variety</th>
<th>Time of harvest</th>
<th>Target Baumé</th>
<th>Target yield (t/ha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chardonnay</td>
<td>mid March</td>
<td>13.5-14.0</td>
<td>8-12</td>
</tr>
<tr>
<td>Merlot</td>
<td>late April to early May</td>
<td>14.5-15.0</td>
<td>6-9</td>
</tr>
<tr>
<td>Meisler</td>
<td>early to mid March</td>
<td>10.0-10.5</td>
<td>12.5-13</td>
</tr>
<tr>
<td>Pinot Gris</td>
<td>late March to early April</td>
<td>14.2-14.5</td>
<td>12-15</td>
</tr>
<tr>
<td>Zinfandel</td>
<td>early May</td>
<td>&gt; 15.0</td>
<td>8*</td>
</tr>
</tbody>
</table>

* Initially harvested at approximately 25t/ha, but subsequently reduced.
For the secondary label the following features were adopted:

- lively, racy style at a reasonable price
- 60% Merlot and 40% Cabernet Sauvignon according to the vintage
- higher pH
- residual sugar – 4-5g/l
- barrel maturation – French oak innerstave
- fruit ripeness 13.5°-14° Baumé
- bottle maturation – 6 months

**Merlot Style – a Comparison**
Understanding of the accepted style per price point is a vital ingredient to successful Merlot making, and this accepted style is open to subjective opinion. Irvine Wines approach has been to adopt the following rationale.

**Merlot Wine Flavour Descriptors**
Understanding the intensity and the level of influence of the following list of possible descriptor attributes of Merlot wine will give insight to its enjoyment.

Of the descriptors, the main signature for Merlot is plum—rich ripe plum in both bouquet and palate. Of secondary note is the softness yet depth of flavour when made from ripe grapes. The final attribute could be the soft but full tannins.

**The Marketing Challenge**
Positioning and price are critical, and the marketing challenge is to make the specific Merlot stand out. The first step is to identify the “unique selling proposition (USP)”.

1. Be serious about finding the product’s USP. When found, stay with it and work it hard using every avenue to attract attention to it.
2. If possible, be first in the field. Small winemakers can niche market well and can set the style for a particular wine.
3. Make the product’s packaging professional.
4. Know who the consumers are, and know their buying habits. Offer alternatives on the wine’s style or variety.
5. At all public tastings offer the consumer the best wines that are produced, even if a sale is not achieved on that day. Even if the amount offered is restricted, offering your best product will produce positive impact.
6. Ensure the wine is the best that can be possibly made for the price. The wine must be as good as the packaging, or better, so ensure this balance reflects value to the consumer. Nevertheless, poor packaging will diminish the quality of the wine.
7. Be aware of the world wine scene. Participate in emerging trends in overseas markets by investigating the Internet, trade magazines, exhibitions and international wine shows and seminars.
8. Use consultants or others for help in marketing (or any other sphere). Their value is immense in the growth and success of a small company.

**Marketing Irvine Merlots**
The philosophy behind the domestic and export marketing of Irvine Wines has been simple.

1. Future sales have been based on the vineyard achieving full bearing by the 2009 vintage. The emphasis has been on one grape – Merlot, with niche products by personal desire and by demonstrated market need. All the business planning has been aligned to the timing of the full bearing of the vineyard.
2. Greater emphasis has been placed on the export market than domestic marketing with a goal of exporting 75% of production.
3. Emphasis has been placed on the emergence before the traditional markets to ensure being part of the new growth. The Pacific Rim has been the prime aim, along with the establishment of strong markets in Switzerland, Germany, UK and Ireland.
4. Satisfaction of the existing distribution chain prior to any extension.
5. At least annual distributor contact on a personal basis is critical.
6. The provision of sales support by product descriptions, functions, own magazine, CD-ROM, web page, and substantial tasting allowances is critical to spread knowledge of Irvine Merlot worldwide.

**The Merlot Challenge for the Future**
- new clones
- fruit maturation
- pruning techniques
- fermentation techniques
- carbonic maceration
- whole bunch fermentation
- extended maceration
- micro-oxygenation

**Summary**
Drinking Merlot … it can be one of the most exciting wine experiences of a lifetime. The wine’s luxuriously rich aromas and flavours give new meaning to epicurean pleasure.

**References**