## AUSTRALIAN WINE AND GRAPE INDUSTRY

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- For further information about these and related statistics, contact Helen Shannon on Adelaide 088237 7420, or Client Services in any ABS office as shown on the back cover of this publication.


## NOTES

ABOUT THIS PUBLICATION

CHANGESINTHISISSUE

SOURCE MATERIAL

ROUNDING

SYMBOLS AND OTHER
USAGES

This publication presents a summary of statistics on grape and wine production and related activities collected by the Australian Bureau of Statistics (ABS) and from other sources.

From 1999, data in chapter 2 for grape cultivation and production include some viticulture businesses not previously included in ABS collections even though they have existed for some time. Details are included at the beginning of chapter 2 .

With the exception of the Special Article and chapter 13, all sources cited in tables and graphs are to ABS publications and/or unpublished data.

Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

| ABS | Australian Bureau of Statistics |
| :--- | :--- |
| AWBC | Australian Wine \& Brandy Corporation |
| L al | litres of alcohol |
| n.a. | not available |
| n.c. | not collected |
| n.p. | not available for publication but included in totals where applicable, unless <br> otherwise indicated |
| OIV | Office International de la Vigne et du Vin <br> PSM |
| Population Survey Monitor |  |
| r | figure or series revised since previous issue <br> nil or rounded to zero |

[^0]Chapter 1
OVERVIEW

## INTRODUCTION

All the grape-growing and winemaking indicators in the table below, excluding imports of wine, reached record levels in 1998-99 driven by significant increases in export sales. A substantial rise in the area of bearing grapes and favourable seasonal conditions in New South Wales, Victoria and Western Australia lead to record levels of both grape and beverage wine production. Stocks of beverage wine also reached over one billion litres for the first time.

WINE AND GRAPE INDUSTRY, Statistical Summary—1998-99

| Area of bearing vines (ha) | 95301 |
| :--- | ---: |
| Total grape production (t) | 1265536 |
|  |  |
| Fresh grapes crushed (t) | 1125840 |
| Beverage wine production (million L) | 811.4 |
| Beverage wine stocks (million L) | 1089.6 |
|  |  |
| Domestic sales of Australian wine (million L) | 348.3 |
| Exports of Australian wine (million L) | 215.5 |
| Imports of wine (million L) | 24.3 |

Source: Sales of Australian Wine and Brandy by Winemakers
(Cat. no. 8504.0); Wine Statistics Survey, 1998-99; Wine and
Spirit Production Survey, 1998-99; Stocks of Australian Wine and
Brandy and Vineyards Survey, 30 June 1999.

BEVERAGE WINE TRADE


The total area of vines at harvest increased by $25 \%$ from last years record of 98,612 hectares to a new record of 122,915 hectares in 1999. Of this area 95,301 hectares were bearing grapes and 27,614 hectares were not yet bearing. The total grape production from the 1999 harvest was 1,265,536 tonnes, up 153,366 tonnes or $14 \%$ on the record 1998 harvest. Increases in total grape production were recorded in all mainland grape-growing States with South Australia up 8\%, Victoria up 5\%, New South Wales up $39 \%$ and Western Australia up 38\%.

## WINEMAKING

Winemakers who crush 50 tonnes or more reported a record 1,125,840 tonnes of fresh grapes crushed for the 1999 vintage, up $15 \%$ or 150,171 tonnes on 1997-98. Beverage wine produced by these winemakers during 1998-99 was 811.4 million litres, up $17 \%$ on 1997-98. Beverage wine production levels, for winemakers crushing over 400 tonnes, rose in all winemaking States except Tasmania with New South Wales up 55.5 million litres (26\%), South Australia up 29.2 million litres ( $9 \%$ ) and Victoria up 21.0 million litres (18\%) between 1997-98 and 1998-99. Stocks of Australian produced beverage wine rose $21 \%$ to a record $1,089.6$ million litres at 30 June 1999.

Australian wine production is highly concentrated amongst a few producers. While 276 winemaking businesses crushed 50 or more tonnes of grapes in 1998-99, the largest 10 of these businesses crushed $68 \%$ of these grapes and produced $70 \%$ of beverage wine.

GRAPES CRUSHED AND WINE PRODUCED—1998-99

| Size | Winemakers | Grapes crushed | Beverage wine produced |
| :---: | :---: | :---: | :---: |
| tonnes crushed | no. | t | ‘000 L |
|  |  |  |  |
| 50-400 | 163 | 25358 | (a)18000 |
| 401-10 000 | 92 | 172824 | 110415 |
| 10 001-20 000 | 11 | 159603 | 115888 |
| 20001 or more | 10 | 768055 | 567087 |
| Total | 276 | 1125840 | 811389 |

(a) Wine production is not collected from winemakers who crushed $50-400$ tonnes but it is estimated to be 18 million litres (based on 700 litres per tonne extraction rate).
Source: Wine Statistics Survey, 1998-99; Wine and Spirit Production Survey, 1998-99.

Wine exports in 1998-99 were a record 215.5 million litres, up $12 \%$ on the previous record in 1997-98. The value of wine exported continued to increase, reaching a record high of $\$ 1,068.0$ million in 1998-99, up $22 \%$ on 1997-98. Imports of wine into Australia were 24.3 million litres in 1998-99, down $5 \%$ on the record high of 25.6 million litres in 1997-98.

While the amount of Australian-produced wine available for disposal is affected by previous vintages and movement in stocks, domestic demand over the past five financial years has been met in part with imports, while substantial quantities of Australian wine were exported.

## CONSUMPTION

Wine available for consumption in Australia remained relatively constant between 1991-92 and 1995-96, increasing by $2 \%$ in this period. In the three financial years since, wine available for consumption has increased by $13 \%$, with a $13 \%$ rise in domestic sales of Australian-produced wine and a $20 \%$ increase in imports cleared for home consumption. Over a 50 -year period consumption of wine in Australia rose sevenfold from an average of 3 litres per person in the late 1930s to 20 litres per person in the late 1980s but has remained between 18 and 20 litres in recent years.

WINE AVAILABLE FOR CONSUMPTION IN AUSTRALIA

|  | Domestic sales of Australianproduced wine | Imports cleared for home consumption | Available for consumption | Apparent per capita consumption |
| :---: | :---: | :---: | :---: | :---: |
| Period | '000 L | '000 L | '000 L | L |
| 1991-92 | 314830 | 8703 | 323533 | 18.6 |
| 1992-93 | 312081 | 7832 | 319913 | 18.3 |
| 1993-94 | 319534 | 8341 | 327875 | 18.6 |
| 1994-95 | 313357 | 14057 | 327414 | 18.4 |
| 1995-96 | 309463 | 20256 | 329719 | 18.3 |
| 1996-97 | 333591 | 13589 | 347180 | 19.0 |
| 1997-98 | 338814 | 25622 | 364436 | 19.7 |
| 1998-99 | 348349 | 24255 | 372604 | p19.8 |

Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0); Apparent Consumption of Foodstuffs, 1998-99.

Disposals of Australian-produced wine have risen by $43 \%$ since 1991-92, with domestic sales of Australian-produced wine up $13 \%$ and exports up $174 \%$ over this period.

DISPOSALS OF AUSTRALIAN-PRODUCED WINE

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...............................................
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Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

## PRICES

While the prices paid by winemakers for grapes continues to increase, the rate of increase has slowed from the peak in 1994. Average grape prices for the 1999 vintage were up 3\% following a $6 \%$ increase for the 1998 vintage. Prices paid for wine grapes increased significantly in the mid-1990s, by $33 \%$ in $1994,22 \%$ in 1995 and a further $7 \%$ in 1996. The average price of wine produced by winemakers (wholesale price) decreased in 1998-99 (by 1\%) for the first time since 1990-91. Over the last nine vintages grape prices have increased $90 \%$. In contrast, during the same period the average price of wine produced by winemakers rose by $28 \%$ while the average price of table wine exported from Australia rose by $43 \%$.

## chapter 2

The 1999 data in this chapter include operations by viticulture businesses which have existed for some time but which for various reasons have not previously been added to the ABS business register. Inclusion of these businesses for the first time in the 1999 collection means that some proportion of any gross change is due to better coverage in the collection rather than actual change by the industry. An indication of actual change between 1998 and 1999 is given in the table below along with the gross rates of change.

## VITICULTURE CHANGE

AREA OF VINES..

| States(a) | Gross change(b) | Rate of change based on consistent coverage(c) | Gross change(b) | Rate of change based on consistent coverage(c) | Gross change(b) | Rate of change based on consistent coverage(c) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New South Wales | 29.5 | 15.2 | 39.2 | 25.3 | 54.1 | 37.2 |
| Victoria | 23.0 | 11.0 | 5.1 | -2.8 | 29.6 | 19.6 |
| Queensland | 23.8 | 21.2 | 42.5 | 41.0 | 82.4 | 71.9 |
| South Australia | 20.6 | 9.2 | 7.6 | 1.6 | 7.9 | 1.8 |
| Western Australia | 48.0 | 15.5 | 37.6 | 21.0 | 49.8 | 31.0 |
| Tasmania | 25.4 | 21.1 | -0.5 | -2.1 | -0.5 | -2.1 |
| Australia | 24.6 | 11.6 | 13.8 | 5.3 | 23.6 | 14.1 |

(a) None of the additional businesses were in the Northern Territory or the Australian Capital Territory.
(b) Growth rate calculated including the new businesses for 1999 but not for 1998.
(c) This provides the rate of change for businesses who were included in both 1998 and 1999 surveys. Businesses added in 1999 because of improved coverage are not included in the calculations.

Source: Vineyards Survey, 1999.

Season 1999 was another record year for Australia's grape growers, with 122,915 hectares of vines being cultivated. The total area of vines increased in every State, with South Australia, New South Wales and Victoria having the largest increases.

The area of vines planted or grafted during season 1999 was 16,048 hectares. South Australia was once again the major State for new plantings, accounting for $45 \%$ of the newly planted vines for season 1999. The total area of vines currently not bearing grapes was 27,614 hectares ( $22 \%$ ), while the area of vines bearing grapes was 95,301 hectares (78\%).

Existing vineyards expect to plant a further 7,412 hectares of vines before the 2000 harvest. This represents $6 \%$ of the current plantings and a decline from last year's intended plantings. Of the new plantings, South Australian vineyards intend to plant 3,854 hectares ( $52 \%$ ), and Victoria 1,818 hectares ( $25 \%$ ).

## GRAPE PRODUCTION

The 1999 grape harvest was a record $1,265,536$ tonnes. Grapes harvested increased in all States except Tasmania with New South Wales recording the largest rise in production. South Australia remained the largest grape producing State with a harvest of 496,534 tonnes or $39 \%$ of the total harvest.

The yield per hectare of bearing vines was 13.3 tonnes in season 1999. Victoria achieved the highest yield per hectare of 15.9 tonnes.

## GRAPE VARIETIES

Red grape varieties covered 67,925 hectares ( $55 \%$ ) at harvest 1999 compared to white grape varieties at 54,990 hectares ( $45 \%$ ). In season 1999, red grape varieties overtook white grape varieties for the first time since this data was collected by the ABS.

The new plantings of red grape varieties totalled 13,546 hectares with the main varieties being Shiraz ( 5,534 hectares) and Cabernet Sauvignon (4,315 hectares). There were 2,502 hectares of new plantings of white grape varieties during season 1999 , with the main varieties being Chardonnay ( 633 hectares) and Semillon ( 375 hectares).
$\qquad$
$\qquad$

Not yet bearing
(planted or grafted)...

| Bearing | Prior to collection year | During collection year | Total | Winemaking(b) | Drying | Table and other | Total | Yield(c) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ha | ha | ha | ha | t | t | $t$ | t | t/ha |


| New South Wales |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1995 | 12626 | 729 | 1082 | 14437 | 104687 | 25823 | 8439 | 138950 | 11.0 |
| 1996 | 13768 | 1933 | 1183 | 16883 | 167556 | 46687 | 10841 | 225084 | 16.3 |
| 1997 | 15898 | 1802 | 2290 | 19990 | 174265 | 24364 | 11273 | 209901 | 13.2 |
| 1998r | 17108 | 2324 | 2765 | 22197 | 175321 | 31438 | 11228 | 217987 | 12.7 |
| 1999 | 22525 | 2684 | 3535 | 28744 | 270236 | 19137 | 14128 | 303501 | 13.5 |
| Victoria |  |  |  |  |  |  |  |  |  |
| 1995 | 18989 | 1094 | 1509 | 21591 | 137613 | 112981 | 26840 | 277435 | 14.6 |
| 1996r | 19821 | 1506 | 1761 | 23088 | 199141 | 193028 | 34522 | 426691 | 21.5 |
| 1997 | 21338 | 2416 | 1602 | 25356 | 181772 | 106662 | 41253 | 329687 | 15.5 |
| 1998r | 21609 | 2290 | 2352 | 26251 | 214462 | 140850 | 41684 | 396996 | 18.4 |
| 1999 | 26149 | 2641 | 3510 | 32299 | 277869 | 96788 | 42391 | 417048 | 15.9 |
| Queensland |  |  |  |  |  |  |  |  |  |
| 1995 | 894 | 85 | 71 | 1050 | 380 | - | 3523 | 3903 | 4.4 |
| 1996 | 967 | 92 | 113 | 1172 | 618 | - | 3366 | 3984 | 4.1 |
| 1997 | 1048 | 123 | 154 | 1325 | 746 | - | 3784 | 4530 | 4.3 |
| 1998 | 1041 | 199 | 165 | 1405 | 693 | - | 4113 | 4806 | 4.6 |
| 1999 | 1378 | 130 | 230 | 1739 | 1264 | - | 5586 | 6850 | 5.0 |
| South Australia |  |  |  |  |  |  |  |  |  |
| 1995 | 27237 | 2274 | 3092 | 32603 | 320169 | 6714 | 2913 | 329797 | 12.1 |
| 1996 | 27153 | 4826 | 3310 | 35289 | 395835 | 7229 | 3769 | 406832 | 15.0 |
| 1997 | 30270 | 4741 | 3535 | 38546 | 367792 | 4245 | 2551 | 374589 | 12.4 |
| 1998 | 34324 | 4162 | 5072 | 43557 | 455531 | 3337 | 2390 | 461257 | 13.4 |
| 1999 | 40188 | 5177 | 7185 | 52551 | 491621 | 2764 | 2149 | 496534 | 12.4 |
| Western Australia |  |  |  |  |  |  |  |  |  |
| 1995 | 2415 | 197 | 175 | 2788 | 12314 | 1487 | 2740 | 16541 | 6.8 |
| 1996 | 2803 | 453 | 386 | 3642 | 17234 | 1398 | 3288 | 21920 | 7.8 |
| 1997 | 3106 | 430 | 432 | 3969 | 17295 | 1164 | 3337 | 21796 | 7.0 |
| 1998 | 3521 | 447 | 566 | 4534 | 21406 | 946 | 4063 | 26414 | 7.5 |
| 1999 | 4453 | 770 | 1489 | 6712 | 32067 | 749 | 3531 | 36347 | 8.2 |
| Tasmania |  |  |  |  |  |  |  |  |  |
| 1995 | 293 | 67 | 40 | 400 | 2200 | - | - | 2200 | 7.5 |
| 1996 | 324 | 88 | 63 | 475 | 1988 | - | 1 | 1989 | 6.1 |
| 1997 | 341 | 102 | 41 | 484 | 1497 | - | - | 1497 | 4.4 |
| 1998 | 379 | 111 | 45 | 535 | 3136 | - | - | 3136 | 8.3 |
| 1999 | 460 | 143 | 68 | 671 | 3121 | - | - | 3121 | 6.8 |
| Australia(d) |  |  |  |  |  |  |  |  |  |
| 1995 | 62454 | 4446 | 5969 | 72869 | 577364 | 147006 | 44456 | 768827 | 12.3 |
| 1996r | 64845 | 8900 | 6815 | 80559 | 782381 | 248342 | 55786 | 1086509 | 16.8 |
| 1997 | 72119 | 9615 | 8063 | 89797 | 743382 | 136435 | 63296 | 943113 | 13.1 |
| 1998 | 78090 | 9532 | 10989 | 98612 | 870627 | 176570 | 64972 | 1112170 | 14.2 |
| 1999 | 95301 | 11566 | 16048 | 122915 | 1076207 | 119438 | 69891 | 1265536 | 13.3 |

(a) Fresh weight.
(b) Wine grape production data are less than grape-crushings data in chapter 4 (see Explanatory Note 4).
(c) Yield represents the quantity of grapes produced per hectare of bearing vines.
(d) Includes Australian Capital Territory and Northern Territory from and including 1997.

Source: Vineyards Survey, 1999.

AREA OF VINES $\qquad$ GRAPE PRODUCTION(a) $\qquad$
(planted or grafted)...

| Bearing | Prior to collection year | During collection year | Total | Winemaking | Drying | Table and other | Total | Yield(b) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ha | ha | ha | ha | t | t | $t$ | t | t/ha |


| Red grapes |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Barbera | 111 | 80 | 25 | 216 | 669 | - | - | 669 | 6.0 |
| Cabernet Franc | 559 | 55 | 73 | 687 | 5365 | - | - | 5365 | 9.6 |
| Cabernet Sauvignon | 13629 | 3226 | 4315 | 21169 | 127494 | - | 193 | 127687 | 9.4 |
| Currant | 889 | 23 | 26 | 938 | 5515 | 7189 | 10 | 12714 | 14.3 |
| Grenache | 2025 | 92 | 139 | 2255 | 24196 | 53 | 33 | 24281 | 12.0 |
| Malbec | 399 | 21 | 28 | 448 | 2857 | - | - | 2857 | 7.2 |
| Mataro | 683 | 78 | 105 | 866 | 9217 | - | 69 | 9286 | 13.6 |
| Merlot | 3465 | 1270 | 1653 | 6387 | 31801 | 16 | 246 | 32063 | 9.3 |
| Muscat a Petit Grains |  |  |  |  |  |  |  |  |  |
| Petit Verdot | 110 | 74 | 187 | 370 | 1045 | - | - | 1045 | 9.5 |
| Pinot Noir | 2226 | 330 | 440 | 2996 | 19668 | 26 | 267 | 19960 | 9.0 |
| Ruby Cabernet | 1102 | 312 | 564 | 1978 | 18414 | - | 49 | 18462 | 16.8 |
| Sangiovese | 311 | 29 | 100 | 440 | 403 | - | - | 403 | 1.3 |
| Shiraz | 16944 | 3117 | 5534 | 25596 | 192330 | 36 | 477 | 192843 | 11.4 |
| Tarrango | 87 | - | 20 | 107 | 2199 | - | - | 2199 | 25.3 |
| Other red grapes | 2528 | 296 | 305 | 3129 | 7228 | 658 | 20179 | 28065 | 9.8 |
| Total red grapes | 45363 | 9017 | 13546 | 67925 | 449809 | 8025 | 21929 | 479762 | 10.6 |
| White Grapes |  |  |  |  |  |  |  |  |  |
| Chardonnay | 15298 | 925 | 633 | 16855 | 210770 | - | 299 | 211069 | 13.8 |
| Chenin Blanc | 884 | 29 | 26 | 939 | 16621 | - | - | 16621 | 18.8 |
| Colombard | 1382 | 123 | 143 | 1648 | 34781 | - | - | 34781 | 25.2 |
| Crouchen | 83 | 1 | 4 | 87 | 1136 | - | - | 1136 | 13.7 |
| Doradillo | 306 | 2 | 6 | 314 | 6597 | - | 1 | 6598 | 21.6 |
| Marsanne | 137 | 31 | 32 | 201 | 1878 | - | - | 1878 | 13.7 |
| Muscadelle | 230 | 2 | 15 | 247 | 2106 | - | 7 | 2113 | 9.2 |
| Muscat a Petit Grains Blanc | 261 | 1 | 7 | 269 | 3334 | 5 | 24 | 3363 | 12.9 |
| Muscat Gordo Blanco | 2924 | 39 | 42 | 3005 | 58017 | 2575 | 112 | 60703 | 20.8 |
| Palomino | 161 | 1 | 1 | 163 | 2581 | - | - | 2581 | 16.1 |
| Pedro Ximenes | 146 | - | - | 146 | 1981 | - | - | 1981 | 13.6 |
| Riesling | 3190 | 68 | 89 | 3347 | 30144 | - | - | 30144 | 9.4 |
| Sauvignon Blanc | 1926 | 240 | 247 | 2413 | 22834 | - | 100 | 22934 | 11.9 |
| Semillon | 5307 | 362 | 375 | 6044 | 80191 | - | - | 80191 | 15.1 |
| Sultana | 12943 | 397 | 299 | 13639 | 117783 | 105982 | 26339 | 250103 | 19.3 |
| Taminga | 44 | - | - | 44 | 862 | - | - | 862 | 19.5 |
| Traminer | 531 | 4 | 3 | 538 | 5357 | - | - | 5357 | 10.1 |
| Trebbiano | 689 | - | 1 | 690 | 10482 | - | - | 10482 | 15.2 |
| Verdelho | 708 | 98 | 169 | 975 | 7290 | - | - | 7290 | 10.3 |
| Viognier | 79 | 23 | 28 | 130 | 494 | - | - | 494 | 6.3 |
| Waltham Cross | 407 | 12 | 10 | 429 | 2366 | 2277 | 1200 | 5842 | 14.3 |
| Other white grapes | 2303 | 192 | 372 | 2867 | 8794 | 575 | 19881 | 29251 | 12.7 |
| Total white grapes | 49938 | 2550 | 2502 | 54990 | 626398 | 111414 | 47962 | 785774 | 15.7 |
| Total grapes | 95301 | 11566 | 16048 | 122915 | 1076207 | 119438 | 69891 | 1265536 | 13.3 |

(a) Fresh weight.
(b) Yield represents the quantity of grapes produced per hectare of bearing vines.

[^1]Total dried grape production fell by $33 \%$ in season 1999. The production of all varieties fell, with Raisins down by $58 \%$, Sultanas by $32 \%$ and Currants (including Carina) by $17 \%$.

## PRODUCTION OF DRIED GRAPES(a)

|  | Currants (incl. Carina) | Raisins | Sultanas | Total |
| :---: | :---: | :---: | :---: | :---: |
|  | '000t | '000t | '000t | '000t |
| 1996 | 4.4 | 2.1 | 48.1 | 54.6 |
| 1997 | 2.9 | 1.7 | 25.3 | 29.9 |
| 1998r | 2.4 | 2.5 | 33.8 | 38.6 |
| 1999 | 2.0 | 1.1 | 23.0 | 26.1 |

(a) Dried weight.

Source: Vineyards Survey, 1999.

Net increase in area planted under vines for 1998-99 (derived from vines planted and vines lost during the year) was recorded as 13,796 hectares. It should be noted that both vines planted and vines lost include vines changed to another variety (e.g. by grafting) therefore net change represents actual change to the area planted.

Most activity occurred in the red grape varieties with a net increase of 12,795 hectares compared with 1,001 hectares of white grapes. The total area of vines lost or regrafted was highest for white grape varieties at 1,501 hectares, while red grape varieties recorded 751 hectares

For red grape varieties the highest gain in area was recorded for Shiraz with 5,356 hectares which represented $42 \%$ of the total gain in area of red grapes. This was followed by Cabernet Sauvignon with 4,195 hectares (33\%) and Merlot with 1,619 hectares ( $13 \%$ ). Currants and Carignan were the only red grape varieties to show a net area loss, 50 hectares and 2 hectares respectively. Net change as a proportion of total area under vines was highest for Ruby Cabernet with $28 \%$, followed by Merlot ( $25 \%$ ), Shiraz (21\%) and Cabernet Sauvignon (20\%). Intended planting in 1999-2000 will see a further increase in the area of Shiraz of 2,089 hectares and Cabernet Sauvignon of 1,690 hectares.

For white grapes the highest gains in area during 1998-99 were for Chardonnay of 473 hectares, Semillon 279 hectares, Sauvignon Blanc 198 hectares and Verdelho 163 hectares. Sultanas showed a net loss of 312 hectares, with Muscat Gordo Blanco (103 hectares) and Riesling ( 39 hectares) also recording losses. The largest intended plantings for 1999-2000 are in the varieties of Sultanas (342 hectares), Chardonnay (215 hectares) and Colombard (193 hectares).

The largest net change to area planted occurred in South Australia where 6,326 hectares ( $46 \%$ of total) were gained despite a minor loss in white grape area ( 79 hectares).
Western Australia recorded the largest net increase in area of white grape planting with 395 hectares.

South Australia also recorded the highest intended planting of 3,854 hectares, followed by Victoria ( 1,818 hectares) and New South Wales ( 1,205 hectares).

VINE PLANTING, Net Change-By State


Source: Vineyards Survey, 1999.

VINE PLANTING, Gains and Losses-By variety

CHANGES TO AREA
PLANTED DURING 1998-99..

|  | Net | Intended planting |
| :--- | ---: | ---: |
| Planted | Lost |  |
| change | 1999 to 2000 |  |


| Red grapes |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Barbera | 25 | - | 25 | 18 |
| Cabernet Franc | 73 | 7 | 66 | 36 |
| Cabernet Sauvignon | 4315 | 119 | 4195 | 1690 |
| Carignan | 2 | 3 | -2 | - |
| Currant | 26 | 76 | -50 | 26 |
| Grenache |  |  |  |  |
| Malbec | 139 | 51 | 88 | 218 |
| Mataro | 28 | 4 | 24 | 44 |
| Merlot | 105 | 16 | 90 | 62 |
| Meunier | 163 | 34 | 1619 | 695 |
|  | 1 | - | 1 | 18 |
| Muscat a Petit Grains Rouge/Rosé | 32 | 18 | 15 | 14 |
| Nebbiolo | 10 | 1 | 9 | 12 |
| Petit Verdo | 187 | 2 | 184 | 253 |
| Pinot Noir | 440 | 41 | 400 | 248 |
| Ruby Cabernet | 564 | 17 | 548 | 312 |
|  |  |  |  |  |
| Sangiovese | 100 | - | 100 | 108 |
| Shiraz | 534 | 178 | 5356 | 089 |
| Tarrango | 20 | - | 20 | 45 |
| Touriga | 3 | - | 3 | 6 |
| Other red grapes | 289 | 186 | 104 | 156 |
| Total red grapes |  |  |  |  |


| White grapes |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Canada Muscat | - | 1 | -1 | - |
| Chardonnay | 633 | 159 | 473 | 215 |
| Chenin Blanc | 26 | 13 | 13 | 18 |
| Colombard | 143 | 13 | 130 | 193 |
| Crouchen | 4 | 9 | -5 | 1 |
| Doradillo | 6 | 30 | -24 | 21 |
| Marsanne | 32 | 6 | 26 | 7 |
| Muscadelle | 15 | 19 | -4 | - |
| Muscat a Petit Grains Blanc | 7 | 12 | -5 | 8 |
| Muscat Gordo Blanco | 42 | 145 | -103 | 34 |
| Palomino | 1 | 32 | -31 | 4 |
| Pedro Ximenes | - | 16 | -15 | 2 |
| Riesling | 89 | 128 | -39 | 92 |
| Sauvignon Blanc | 247 | 50 | 198 | 96 |
| Semillon | 375 | 96 | 279 | 77 |
| Sultana | 299 | 611 | -312 | 342 |
| Taminga | - | 3 | -3 | - |
| Traminer | 3 | 24 | -21 | - |
| Trebbiano | 1 | 59 | -58 | 4 |
| Verdelho | 169 | 6 | 163 | 62 |
| Viognier | 28 | - | 28 | 40 |
| Waltham Cross | 10 | 21 | -11 | 10 |
| Other white grapes | 372 | 49 | 323 | 136 |
| Total white grapes | 2502 | 1501 | 1001 | 1364 |
| Total grapes | 16048 | 2252 | 13796 | 7412 |

Source: Vineyards Survey, 1999.

| VINE PLANTING, Gains and Losses-By State |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | CHANGES TO AREA PLANTED DURING 1998-99.. |  |  |  |
|  | Planted | Lost | Net change | Intended planting 1999 to 2000 |
| New South Wales |  |  |  |  |
| Total red grapes | 2798 | 147 | 2651 | 842 |
| Total white grapes | 737 | 347 | 390 | 363 |
| Total | 3535 | 494 | 3041 | 1205 |
| Victoria |  |  |  |  |
| Total red grapes | 2836 | 263 | 2573 | 1362 |
| Total white grapes | 673 | 517 | 156 | 456 |
| Total | 3510 | 780 | 2730 | 1818 |
| Queensland |  |  |  |  |
| Total red grapes | 124 | 30 | 94 | 52 |
| Total white grapes | 106 | 15 | 91 | 35 |
| Total | 230 | 46 | 184 | 88 |
| South Australia |  |  |  |  |
| Total red grapes | 6666 | 261 | 6405 | 3436 |
| Total white grapes | 519 | 598 | -79 | 418 |
| Total | 7185 | 859 | 6326 | 3854 |
| Western Australia |  |  |  |  |
| Total red grapes | 1071 | 50 | 1021 | 325 |
| Total white grapes | 418 | 23 | 395 | 68 |
| Total | 1489 | 73 | 1416 | 393 |
| Tasmania |  |  |  |  |
| Total red grapes | 42 | - | 42 | 22 |
| Total white grapes | 27 | - | 27 | 15 |
| Total | 68 | - | 68 | 37 |
| Australia(a) |  |  |  |  |
| Total red grapes | 13546 | 751 | 12795 | 6049 |
| Total white grapes | 2502 | 1501 | 1001 | 1364 |
| Total | 16048 | 2252 | 13796 | 7412 |

(a) Includes Australian Capital Territory and Northern Territory.

Source: Vineyards Survey, 1999.

## PRINCIPAL GRAPE-PRODUCING REGIONS

South Australia remains the principal red grape-growing State with $56 \%$ of total red grape production. In season 1999, South Australia produced $59 \%$ of the red grapes used for winemaking. The major South Australian regions for red wine grape production in season 1999 were the North Murray District, Central District and South Eastern District. South Australia also accounted for $36 \%$ of the total production of white grapes used for winemaking.

Victoria produced $41 \%$ of all white grapes harvested in 1999. The Victorian Sunraysia region was the largest producer of white wine grapes with 147,826 tonnes or $24 \%$ of Australian white wine grape production, followed by the New South Wales region of Murrumbidgee with $12 \%$.

Victoria also produced $81 \%$ of the total grapes harvested for drying, and $61 \%$ of total table and other grape production, in 1999. Dried and table and other grapes made up $33 \%$ of Victoria's total grape production. The main regions producing drying and table and other grapes in Victoria were Sunraysia and Kerang-Swan Hill. Together with Sunraysia (New South Wales), these three regions made up 97\% of total drying grape production and $70 \%$ of the total table and other grape production.

The regions with the largest areas of vines planted or grafted during season 1999 were the Central District in South Australia and the Sunraysia region of Victoria.

SELECTED GRAPE-PRODUCING REGIONS—1999


[^2]AREA AND PRODUCTION OF RED AND WHITE GRAPES, By Principal Grape-Producing Regions-At Harvest 1999

AREA OF VINES $\qquad$
$\qquad$

|  |  | Not yet bea (planted or | aring <br> grafted)... |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bearing | Prior to collection year | During collection year | Total | Winemaking | Drying | Table and other | Total | Yield(b) |
|  | ha | ha | ha | ha | t | t | t | t | t/ha |
|  |  |  | NEW S | TH WAL |  |  |  |  |  |
| Murrumbidgee |  |  |  |  |  |  |  |  |  |
| Total red grapes | 3345 | 736 | 884 | 4966 | 46039 | - | 3 | 46042 | 13.8 |
| Total white grapes | 4511 | 154 | 111 | 4775 | 77058 | 32 | 16 | 77106 | 17.1 |
| Total | 7856 | 890 | 995 | 9741 | 123097 | 32 | 19 | 123148 | 15.7 |
| Hunter Valley |  |  |  |  |  |  |  |  |  |
| Total red grapes | 1466 | 89 | 139 | 1695 | 6845 | - | 12 | 6857 | 4.7 |
| Total white grapes | 2724 | 72 | 108 | 2904 | 22789 | - | - | 22789 | 8.4 |
| Total | 4191 | 161 | 247 | 4598 | 29633 | - | 12 | 29645 | 7.1 |
| Sunraysia (New South |  |  |  |  |  |  |  |  |  |
| Total red grapes | 1354 | 483 | 549 | 2386 | 16196 | 1173 | 1966 | 19334 | 14.3 |
| Total white grapes | 3589 | 124 | 137 | 3850 | 47129 | 17892 | 6316 | 71338 | 19.9 |
| Total | 4944 | 607 | 686 | 6236 | 63325 | 19065 | 8282 | 90672 | 18.3 |
| Rest of New South Wa |  |  |  |  |  |  |  |  |  |
| Total red grapes | 2671 | 763 | 1226 | 4660 | 24771 | - | 1594 | 26365 | 9.9 |
| Total white grapes | 2863 | 264 | 382 | 3509 | 29410 | 40 | 4221 | 33671 | 11.8 |
| Total | 5535 | 1026 | 1608 | 8169 | 54181 | 40 | 5815 | 60036 | 10.8 |
| Total New South Wales |  |  |  |  |  |  |  |  |  |
| Total red grapes | 8837 | 2071 | 2798 | 13706 | 93850 | 1173 | 3575 | 98598 | 11.2 |
| Total white grapes | 13687 | 613 | 737 | 15038 | 176386 | 17965 | 10553 | 204904 | 15.0 |
| Total | 22525 | 2684 | 3535 | 28744 | 270236 | 19137 | 14128 | 303501 | 13.5 |


| VICTORIA |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sunraysia (Victoria) |  |  |  |  |  |  |  |  |  |
| Total red grapes | 3238 | 783 | 1345 | 5366 | 37719 | 4195 | 5215 | 47129 | 14.6 |
| Total white grapes | 11512 | 430 | 337 | 12279 | 147826 | 83545 | 12595 | 243966 | 21.2 |
| Total | 14750 | 1212 | 1683 | 17645 | 185545 | 87740 | 17811 | 291095 | 19.7 |
| Kerang-Swan Hill |  |  |  |  |  |  |  |  |  |
| Total red grapes | 1328 | 191 | 324 | 1843 | 12611 | 298 | 5877 | 18786 | 14.1 |
| Total white grapes | 3525 | 240 | 146 | 3911 | 33175 | 8635 | 16983 | 58793 | 16.7 |
| Total | 4853 | 431 | 470 | 5753 | 45787 | 8933 | 22860 | 77579 | 16.0 |
| Rest of Victoria |  |  |  |  |  |  |  |  |  |
| Total red grapes | 3932 | 733 | 1167 | 5832 | 26186 | 93 | 1307 | 27585 | 7.0 |
| Total white grapes | 2614 | 265 | 190 | 3069 | 20352 | 23 | 415 | 20789 | 8.0 |
| Total | 6546 | 998 | 1357 | 8901 | 46538 | 116 | 1721 | 48374 | 7.4 |
| Total Victoria |  |  |  |  |  |  |  |  |  |
| Total red grapes | 8498 | 1706 | 2836 | 13040 | 76516 | 4585 | 12399 | 93500 | 11.0 |
| Total white grapes | 17651 | 935 | 673 | 19259 | 201353 | 92203 | 29993 | 323548 | 18.3 |
| Total | 26149 | 2641 | 3510 | 32299 | 277869 | 96788 | 42391 | 417048 | 15.9 |

(a) Fresh weight.
(b) Yield represents the quantity of grapes produced per hectare of bearing vines.

Source: Vineyards Survey, 1999.

AREA AND PRODUCTION OF RED AND WHITE GRAPES, By Principal Grape-Producing Regions—At Harvest 1999 continued

AREA OF VINES $\qquad$ GRAPE PRODUCTION(a) $\qquad$

(a) Fresh weight.
(b) Yield represents the quantity of grapes produced per hectare of bearing vines.

Source: Vineyards Survey, 1999.

AREA AND PRODUCTION OF RED AND WHITE GRAPES, By Principal Grape-Producing Regions—At Harvest 1999 continued

AREA OF VINES $\qquad$ GRAPE PRODUCTION(a) $\qquad$

|  |  | Not yet be (planted or | aring <br> grafted)... |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Bearing | Prior to collection year | During collection year | Total | Winemaking | Drying | Table and other | Total | Yield(b) |
|  | ha | ha | ha | ha |  | t | t | t | t/ha |
|  |  |  | WES | N AUS |  |  |  |  |  |
| Swan Shire |  |  |  |  |  |  |  |  |  |
| Total red grapes | 323 | 28 | 24 | 375 | 1192 | 204 | 962 | 2359 | 7.3 |
| Total white grapes | 433 | 17 | 20 | 470 | 3533 | 10 | 1168 | 4711 | 10.9 |
| Total | 756 | 46 | 44 | 845 | 4725 | 214 | 2131 | 7069 | 9.4 |
| Margaret River |  |  |  |  |  |  |  |  |  |
| Total red grapes | 606 | 184 | 384 | 1175 | 4352 | - | 313 | 4665 | 7.7 |
| Total white grapes | 794 | 85 | 162 | 1040 | 6966 | - | 15 | 6980 | 8.8 |
| Total | 1400 | 269 | 546 | 2215 | 11318 | - | 328 | 11645 | 8.3 |
| Rest of Western Australi |  |  |  |  |  |  |  |  |  |
| Total red grapes | 1178 | 293 | 663 | 2134 | 6746 | 497 | 929 | 8172 | 6.9 |
| Total white grapes | 1119 | 162 | 237 | 1518 | 9279 | 38 | 145 | 9461 | 8.5 |
| Total | 2297 | 456 | 899 | 3652 | 16024 | 535 | 1073 | 17632 | 7.7 |
| Total Western Australia |  |  |  |  |  |  |  |  |  |
| Total red grapes | 2107 | 506 | 1071 | 3684 | 12290 | 701 | 2204 | 15195 | 7.2 |
| Total white grapes | 2346 | 264 | 418 | 3028 | 19777 | 47 | 1328 | 21152 | 9.0 |
| Total | 4453 | 770 | 1489 | 6712 | 32067 | 749 | 3531 | 36347 | 8.2 |


|  |  |  |  | AN |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Tasmania |  |  |  |  |  |  |  |  |  |
| Total red grapes | 205 | 30 | 42 | 276 | 1471 | - | - | 1471 | 7.2 |
| Total white grapes | 254 | 114 | 27 | 394 | 1650 | - | - | 1650 | 6.5 |
| Total | 460 | 143 | 68 | 671 | 3121 | - | - | 3121 | 6.8 |


|  |  |  |  | AUSTRAL |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Australia(c) |  |  |  |  |  |  |  |  |  |
| Total red grapes | 45363 | 9017 | 13546 | 67925 | 449809 | 8025 | 21929 | 479762 | 10.6 |
| Total white grapes | 49938 | 2550 | 2502 | 54990 | 626398 | 111414 | 47962 | 785774 | 15.7 |
| Total | 95301 | 11566 | 16048 | 122915 | 1076207 | 119438 | 69891 | 1265536 | 13.3 |

(a) Fresh weight.
(b) Yield represents the quantity of grapes produced per hectare of bearing vines.
(c) Includes Australian Capital Territory and Northern Territory.

Source: Vineyards Survey, 1999.

## CHAPTER 3

## STRUCTURE OF THE WINE MANUFACTURING INDUSTRY

## NUMBER AND SIZE OF WINERIES

Wine industry commentators estimate there are around 1100 wineries manufacturing, blending or selling wine in Australia. Many of these are very small establishments which do not crush grapes and have their wine made elsewhere. Those that do crush grapes range in size from small family businesses without employees, producing a few thousand litres of wine, to large corporations producing over one hundred million litres.

For the 1999 vintage there were 321 locations around Australia which crushed 50 tonnes or more of grapes, owned by 276 winemaking businesses. While all States crushed some grapes, just under one-third of all locations are in South Australia and these account for almost one-half of the Australian wine grape crush.

SIZE OF GRAPE CRUSH AND NUMBER OF WINE-PRODUCING LOCATIONS—1998-99

|  | NSW/ACT | Vic. | Qld | SA | WA | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grapes crushed ('000 t) | 384.6 | 189.9 | 0.9 | 515.5 | 32.2 | 2.7 | 1125.8 |
| Proportion (\%) | 34 | 17 | - | 46 | 3 | - | 100 |
| Locations crushing |  |  |  |  |  |  |  |
| 50-400 t (no.) | 27 | 45 | 7 | 34 | 43 | 7 | 163 |
| More than 400 t (no.) | 36 | 32 | - | 69 | 19 | 2 | 158 |
| Total locations (no.) | 63 | 77 | 7 | 103 | 62 | 9 | 321 |
| Proportion (\%) | 20 | 24 | 2 | 32 | 19 | 3 | 100 |

Source: Wine Statistics Survey, 1998-99; Wine and Spirit Production Survey, 1998-99.

The following table gives details of the 276 winemaking businesses which crush 50 tonnes or more of grapes. It shows that these businesses are diverse in size with the 92 smallest crushing less than $1 \%$ of all grapes, averaging about 89 tonnes each, and the 10 largest crushing $68 \%$ of all grapes and averaging about 76,800 tonnes each.

WINEMAKERS, Size of Production-1998-99

|  | Winemakers | Grapes crushed | Beverage wine produced |
| :---: | :---: | :---: | :---: |
| Size (tonnes crushed) | no. | t | '000 L |
|  |  |  |  |
| 50-99 | 62 | 4485 | n.a. |
| 100-149 | 29 | 3671 | n.a. |
| 150-199 | 27 | 4778 | n.a. |
| 200-400 | 45 | 12424 | n.a. |
| 401-1 000 | 41 | 25935 | 18374 |
| 1001-3 000 | 32 | 50982 | 36113 |
| 3 001-5 000 | 11 | 43113 | 28759 |
| 5 001-10 000 | 8 | 52794 | 27169 |
| 10 001-20 000 | 11 | 159603 | 115888 |
| 20001 or more | 10 | 768055 | 567087 |
| Total | 276 | 1125840 | (a)811 390 |

(a) Includes production from those crushing less than 400 tonnes. This is estimated to be 18 million litres.

Source: Wine Statistics Survey, 1998-99; Wine and Spirit Production Survey, 1998-99.

This data does not include very small winemaking businesses run by sole proprietors and partnerships which do not employ other staff. The tables below show details from the 1997-98 collection.

An alternative view of the wine manufacturing industry is available from the annual manufacturing industry collection which covers establishments mainly engaged in the manufacturing or blending of wine which had some employment at 30 June.
At 30 June 1998 the wine manufacturing industry employed 7,788 persons and had a total turnover of $\$ 2,595.1$ million.

Continued growth by this industry is illustrated by the 1997-98 manufacturing survey estimates showing that turnover for the wine manufacturing industry exceeded turnover for the beer and malt manufacturing industry. This has not occurred previously in the period since integrated economic surveys were introduced in 1968-69.

WINE MANUFACTURING ESTABLISHMENTS—1997-98

|  | Employment at end of June | Wages and salaries | Turnover | Industry value added |
| :---: | :---: | :---: | :---: | :---: |
| Employment size group | no. | \$'000 | \$'000 | \$'000 |
| Less than 5 persons | 347 | 7569 | 57046 | 13584 |
| 5-19 persons | 875 | 20031 | 149707 | 61994 |
| 20-99 persons | 2010 | 49466 | 418317 | 155567 |
| 100 or more persons | 4556 | 152315 | 1970074 | 853108 |
| Total | 7788 | 229381 | 2595145 | 1084253 |

Source: Manufacturing Industry Survey, 1997-98.

South Australia accounted for $44 \%$ of total employment in the wine manufacturing industry, $47 \%$ of total wages and salaries, $55 \%$ of total turnover and $58 \%$ of the industry value added. Victoria employed a slightly higher proportion of people in the industry ( $24 \%$ ) and accounted for more turnover ( $22 \%$ ) compared with New South Wales, ( $22 \%$ and $17 \%$ respectively). Victoria also contributed $25 \%$ of the total industry value added, almost double that of New South Wales (13\%).

WINE MANUFACTURING ESTABLISHMENTS—1997-98

|  | Employment at end of June | Wages and salaries | Turnover | Industry value added |
| :---: | :---: | :---: | :---: | :---: |
|  | no. | \$'000 | \$'000 | \$'000 |
| New South Wales | 1706 | 55664 | 450000 | 140240 |
| Victoria | 1833 | 47912 | 582002 | 269168 |
| Queensland | 24 | 452 | 1645 | 436 |
| South Australia | 3420 | 106996 | 1435399 | 626905 |
| Western Australia | n.p. | n.p. | n.p. | n.p. |
| Tasmania | n.p. | n.p. | n.p. | n.p. |
| Australian Capital Territory | n.a. | n.a. | n.a. | n.a. |
| Australia | 7788 | 229381 | 2595145 | 1084253 |

Source: Manufacturing Industry Survey, 1997-98.

The details about wine production presented in this chapter are collected from Australian winemakers who crush more than 400 tonnes. They reported a record 793.4 million litres of beverage wine production in 1998-99, up $17 \%$ on the previous record volume of 680.2 million litres in 1997-98. Unfortified wine production accounted for all of this increase, up $19 \%$ to 772.0 million litres. Production of fortified wine fell by $26 \%$ to 21.4 million litres. Fortified wine has fallen from a $4 \%$ share of total beverage wine production in 1997-98 to $3 \%$ in 1998-99.

BEVERAGE WINE PRODUCTION


Source: Wine and Spirit Production Survey, 1998-99.

Production of distillation wine decreased to 57.8 million litres in 1998-99, down $6 \%$ on last year and $14 \%$ down on the record production level of 67.3 million litres in 1995-96.

WINE PRODUCTION

|  | $1994-95$ | $1995-96$ | $1996-97$ | $1997-98$ | $1998-99$ |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Type | '000 L | ،000 L | '000 L | '000 L | '000 L |


| Beverage wine |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| $\quad$ Fortified(a) | 25399 | 28874 | 28656 | 28947 | 21433 |
| $\quad$ Unfortified | 433005 | 577272 | 538123 | 651291 | 771957 |
| $\quad$ Total | 458404 | 606146 | 566779 | 680239 | 793389 |
| Distillation wine(b) | 44393 | 67299 | 50601 | 61309 | 57754 |
| Gross total wine | $\mathbf{5 0 2 7 9 6}$ | $\mathbf{6 7 3 4 4 5}$ | $\mathbf{6 1 7 3 7 9}$ | $\mathbf{7 4 1 5 4 7}$ | $\mathbf{8 5 1} \mathbf{1 4 3}$ |
| Net total wine(c) | 498381 | 668087 | 612906 | 736850 | 846762 |

(a) Relates only to production from unfortified wine of the same vintage.
(b) For manufacturing brandy and grape spirit. Includes wine obtained from marc.
(c) Excludes grape spirit used for fortifying (assumes 95.6\% alcohol by volume).

Source: Wine and Spirit Production Survey, 1998-99.

Beverage wine production in 1998-99 increased in all States except Tasmania with the three major wine-producing States accounting for $97 \%$ of total production. New South Wales recorded the largest increase in volume of beverage wine produced up $26 \%$ ( 55.5 million litres), followed by South Australia which in creased by 9\% ( 29.2 million litres) and Victoria up 18\% ( 21.0 million litres). Western Australia recorded the largest percentage increase (59\%) mainly as a result of a good vintage. Western Australian wine production reached 20.2 million litres while the Tasmanian contribution remained at 1.0 million litres. For these last two States the additional contribution of smaller winemakers is significant-see the next section on grapes crushed.

BEVERAGE WINE PRODUCTION, By State


Source: Wine and Spirit Production Survey, 1998-99.

All States recorded a decrease in production of fortified wine as a consequence of falling sales over the last few years and a preference to divert good quality grapes this year to the production of unfortified wine. South Australia's production of fortified wine fell 30\% to 12.9 million litres, New South Wales fell $26 \%$ to 4.4 million litres and Victoria fell $6 \%$ to 4.1 million litres. South Australia produced $60 \%$ of the total fortified wine.

WINE PRODUCTION—1998-99

|  | SA | NSW | Vic. | WA | Tas. | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Type | '000 L | '000 L | '000 L | '000 L | '000 L | '000 L |
| Beverage wine |  |  |  |  |  |  |
| Fortified(a) | 12888 | 4425 | 4113 | 7 | - | 21433 |
| Unfortified | 355868 | 261719 | 133215 | 20166 | 989 | 771957 |
| Total | 368756 | 266144 | 137328 | 20173 | 989 | 793389 |
| Distillation wine(b) | 39563 | 11994 | 6197 | - | - | 57754 |
| Gross total wine | 408319 | 278138 | 143525 | 20173 | 989 | 851143 |
| Net total wine(c) | 405661 | 277159 | 142782 | 20171 | 989 | 846761 |

(a) Relates only to production from unfortified wine of the same vintage.
(b) For manufacturing brandy and grape spirit. Includes wine obtained from marc.
(c) Excludes grape spirit used for fortifying (assumes 95.6\% alcohol by volume).

Source: Wine and Spirit Production Survey, 1998-99.

In 1998-99 there was a record 1,125,840 tonnes of grapes crushed by winemakers crushing 50 tonnes or more, an increase of $15 \%$ or 150,171 tonnes on 1997-98. This is the first time over one million tonnes of grapes were crushed in a single vintage. The larger winemakers (crushing more than 400 tonnes of fresh grapes) contributed $98 \%$ or 1,100,482 tonnes to the 1998-99 total.

FRESH GRAPES CRUSHED(a)

(a) By winemakers crushing 50 tonnes or more.

Source: Wine and Spirit Production Survey, 1998-99.

All States recorded an increase in grapes crushed. South Australian wineries recorded an increase of $6 \%$ in grapes crushed and were responsible for nearly half of all grapes crushed in Australia. Grapes crushed in New South Wales/Australian Capital Territory, Victoria and Western Australia increased by $25 \%, 20 \%$ and $45 \%$ respectively on their 1997-98 crush. The total crushed by winemakers crushing 50 tonnes or more in 1998-99 was a record in each State.

The crush for both red and white varieties increased in 1998-99. Red grapes crushed increased by $24 \%$ on 1997-98 and represented $40 \%$ of the total crush. The tonnage of white grapes crushed increased by $10 \%$ and represented $60 \%$ of the total crush. The larger winemakers (those crushing more than 400 tonnes) reflected these proportions, while the smaller winemakers (crushing between 50 and 400 tonnes) crushed more red grapes (58\%) than white (42\%). The smaller winemakers recorded an increase of $24 \%$ in red grapes crushed and $12 \%$ in white grapes crushed.

Readers should not infer that all grape juice produced in a particular State for winemaking was necessarily used to produce wine in the same State. Some unfermented grape juice is transported interstate and may subsequently be used in winemaking in another State. No reliable information is available concerning the volume of these interstate movements.

|  | 1998-99. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1996-97 | 1997-98 | Red | White | Total |
| Fresh grapes crushed by | t | t | t | t | t |
| Winemakers crushing more than 400 tonnes |  |  |  |  |  |
|  |  |  |  |  |  |
| South Australia | 382974 | 479623 | 249781 | 259400 | 509181 |
| New South Wales | 260938 | 304841 | 111914 | 268643 | 380557 |
| Victoria | 119898 | 150787 | 62537 | 121084 | 183621 |
| Western Australia | 14267 | 17468 | 9467 | 16196 | 25663 |
| Tasmania | 485 | 1606 | 612 | 848 | 1460 |
| Australia | 778562 | 954325 | 434311 | 666171 | 1100482 |
| Winemakers crushing 50 to 400 tonnes |  |  |  |  |  |
|  |  |  |  |  |  |
| South Australia | 6301 | 4932 | 4884 | 1456 | 6340 |
| New South Wales(b) | 3603 | 3573 | 1868 | 2197 | 4065 |
| Victoria | 4694 | 6990 | 3858 | 2449 | 6307 |
| Western Australia | 3784 | 4707 | 2948 | 3595 | 6543 |
| Tasmania | 772 | 938 | 681 | 570 | 1251 |
| Queensland | 276 | 204 | 419 | 433 | 852 |
| Australia | 19430 | 21344 | 14658 | 10700 | 25358 |
| Total of winemakers crushing 50 tonnes or more |  |  |  |  |  |
|  |  |  |  |  |  |
| South Australia | 389275 | 484555 | 254665 | 260856 | 515521 |
| New South Wales(b) | 264541 | 308414 | 113782 | 270840 | 384622 |
| Victoria | 124592 | 157777 | 66395 | 123533 | 189928 |
| Western Australia | 18051 | 22175 | 12415 | 19791 | 32206 |
| Tasmania | 1257 | 2544 | 1293 | 1418 | 2711 |
| Queensland | 276 | 204 | 419 | 433 | 852 |
| Australia | 797992 | 975669 | 448969 | 676871 | 1125840 |

(a) Grape crush data are greater than wine grape production data in chapter 2 (see paragraph 4 of the Explanatory Notes).
(b) Includes Australian Capital Territory.

Source: Wine Statistics Survey, 1998-99; Wine and Spirit Production Survey, 1998-99.

The grape spirit used in fortifying current vintage wine decreased by $7 \%$ to 4.2 million litres of alcohol in 1998-99 with all States recording a decrease.

## GRAPE SPIRIT USED IN CURRENT VINTAGE WINE

|  | 1994-95 | 1995-96 | 1996-97 | 1997-98 | 1998-99 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | ‘000 L al | '000 L al | ‘000 L al | ‘000 L al | '000 L al |
| South Australia | 2215 | 2842 | 2302 | 2624 | 2541 |
| New South Wales | 984 | 1405 | 1152 | 1030 | 936 |
| Victoria | 1021 | 873 | 821 | 832 | 710 |
| Other States | 1 | 2 | 2 | 5 | 2 |
| Australia | 4221 | 5122 | 4277 | 4490 | 4189 |

[^3]
## CHAPTER 5

## BACKGROUND

Over 40 major winemaking areas have been identified in Australia. Many contain small or boutique wineries. While some grape-growing data are available for smaller areas (vines are cultivated in more than 250 local government areas across Australia) the following table contains details of regions for which comprehensive statistical information is available.

Regions may obtain some of their grape supply or unfermented grape juice from outside their area. For example, grapes crushed by Barossa Valley wineries may also be sourced from the South Australian Riverland, while some New South Wales wineries may also source from Victorian Sunraysia and the South Australian Riverland.

The top two wine regions in terms of volume of wine produced continue to be the Riverland and Barossa regions in South Australia.

REGIONAL VITICULTURE AND WINE PRODUCTION-1998-99

(a) Winemakers crushing more than 400 tonnes.
(b) Totals for Area of vines and Grape production includes Australian Capital Territory and Northern Territory.

[^4]
## CHAPTER 6

## WINE STOCKS

WINEMAKER STOCKS

Stocks of Australian beverage wine owned by winemakers at 30 June 1999 exceeded one billion litres for the first time. Stocks rose to $1,089.6$ million litres, an increase of $21 \%$ or 189.3 million litres compared with stocks held at 30 June 1998. However not all the wine types recorded an increase with fortified wine down $4 \%$, carbonated wine down $22 \%$ and vermouth down $17 \%$. Red/rosé table wine stocks increased by $33 \%$ or 118.4 million litres making this category the largest contributor to the overall stocks increase.

Stocks rose despite an increase in the total disposals of Australian wine (domestic sales plus export sales) in 1998-99 due to the record level of beverage wine production.
However it should be noted that differences in collection methodologies make an exact reconciliation of production, sales and stocks impossible.

STOCKS OF AUSTRALIAN WINE AND GRAPE JUICE HELD BY WINEMAKERS

|  | 1995 | 1996(a) | 1997 | 1998 | 1999 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Stocks at 30 June | '000 L | '000 L | '000 L | '000 L | '000 L |
| Beverage wine |  |  |  |  |  |
| Fortified |  |  |  |  |  |
| Sherry | 24141 | 25868 | 22169 | 21042 | 20267 |
| Port | 53768 | 51613 | 49953 | 49031 | 47398 |
| Other(b) | 5715 | 5536 | 7703 | 9256 | 8653 |
| Total | 83623 | 83017 | 79824 | 79329 | 76317 |
| Sparkling wine(c) |  |  |  |  |  |
| Bottle fermentation | 58335 | 62403 | 60730 | r63 307 | 65088 |
| Bulk fermentation | 1847 | 2414 | 2796 | 4326 | 7823 |
| Total | 60182 | 64817 | 63527 | 67633 | 72911 |
| Carbonated(d) | n.p. | 546 | 666 | r1 125 | 684 |
| Flavoured(e) | 2583 | 2694 | 2078 | 1829 | 1944 |
| Vermouth | n.p. | 425 | 624 | 633 | 523 |
| Table wine |  |  |  |  |  |
| White | 281753 | 364605 | 377328 | 386031 | 455044 |
| Red and rosé | 211933 | 266177 | 291511 | 363803 | 482159 |
| Total | 493685 | 630782 | 668839 | 749834 | 937203 |
| Total beverage wine | 642459 | 782281 | 815558 | 900299 | 1089583 |
| Distillation wine | 753 | 674 | 550 | 664 | 651 |
| Unfermented grape juice |  |  |  |  |  |
| Unfermented grape juice | 13329 | 22455 | 22201 | 17418 | 12289 |
| Concentrated must (single strength) | n.p. | 5168 | 3634 | 5692 | 6388 |

(a) Break in series, stocks owned at 30 June. See paragraph 11 of the Explanatory Notes.
(b) Includes muscat, madeira, tokay and white port.
(c) Spritzig wines are included with table wines.
(d) Prior to 1997-98, data for 'carbonated' wine included some spritzig style wine which now appears in 'Red and rosé table wine'.
(e) Includes wine cocktails, marsala, aperitif and tonic wines.

Source: Stocks of Australian Wine and Brandy Survey, 30 June 1999.

In $1999,86 \%$ of all beverage wine stocks was table wine, $7 \%$ was fortified wine and $7 \%$ was sparkling wine.

STOCKS OF AUSTRALIAN WINE—At 30 June(a)

(a) Break in data indicates a break in series, new definition used in 1996. See paragraph 11 of the Explanatory Notes.
Source: Stocks of Australian Wine and Brandy Survey, 30 June 1999.

Table wine stocks rose $25 \%$ to 937.2 million litres in 1999 . With red/rosé wine stocks rising faster than white wine over the last few years, stocks of red/rosé table wine now exceed white wine for the first time. The proportion is now $51 \%$ for red/rosé wine and $49 \%$ for white wine.

STOCKS OF AUSTRALIAN TABLE WINE-At 30 June(a)

(a) Break in data indicates a break in series, new definition used in 1996. See paragraph 11 of the Explanatory Notes.
Source: Stocks of Australian Wine and Brandy Survey, 30 June 1999.

Fortified wine stocks were 76.3 million litres, of which $62 \%$ was port and $27 \%$ was sherry. Despite the break in series in 1996, the general fall in the fortified wine stocks has been continuous since 1990.

Sparkling wine stocks rose $8 \%$ to 72.9 million litres with bottle fermentation representation falling to $89 \%$ of the total. This reflects the increasing production of bulk fermented sparkling wine.

CHAPTER 7

PRODUCTION

BRANDY AND GRAPE SPIRIT

Production of Australian brandy and grape spirit remained steady at 0.8 million and 5.4 million litres of alcohol respectively in 1998-99. South Australia continued to be the main producer of both brandy and grape spirit, with $99 \%$ and $72 \%$ respectively of the total Australian production.

BRANDY AND GRAPE SPIRIT PRODUCTION


Source: Wine and Spirit Production Survey, 1998-99.
stocks
Total stocks of brandy and grape spirit decreased 1\% in 1998-99. Stocks of brandy in bond fell to 5.3 million litres of alcohol (down 3\%) while rectified grape spirit and grape spirit unused fell $2 \%$ to 6.6 million litres of alcohol. However, spirit held in work in progress rose by $16 \%$ to 1.4 million litres of alcohol in 1998-99.

STOCKS OF AUSTRALIAN BRANDY AND GRAPE SPIRIT

|  | 1995 | 1996(a) | 1997 | 1998 | 1999 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Particulars at 30 June | '000 L al | '000 L al | '000 L al | '000 L al | '000 L al |
| Brandy in bond by age |  |  |  |  |  |
| Under 2 years | 2512 | 2781 | 2654 | 2125 | 1964 |
| 2 years and over | 2639 | 2655 | 2938 | 3363 | 3349 |
| Total | 5151 | 5435 | 5592 | 5488 | 5313 |
| Rectified grape spirit for fortifying wine and grape spirit unused | 3012 | 5315 | 5735 | 6763 | 6604 |
| Spirit held in work in progress (feints and low wine) | 685 | 788 | 538 | 1245 | 1445 |
| Total Stocks | 8848 | 11538 | 11865 | 13496 | 13362 |

(a) Break in series, new definition used in 1996. See paragraph 11 of the Explanatory Notes.

Source: Stocks of Australian Wine and Brandy Survey, 30 June 1999.

Domestic sales of Australian brandy continued to decline in 1998-99 to 905,000 litres of alcohol, down 7\% on 1997-98 and extending an unbroken downward trend since 1980-81 when sales totalled over 2.4 million litres of alcohol. Exports of Australian brandy are relatively small and tend to fluctuate from year to year. In 1998-99, 23,537 litres of alcohol were exported of which $92 \%$ originated from South Australia and $5 \%$ from New South Wales. Australia exported 50,976 litres of alcohol in grape spirit in 1998-99.

The volume of imported brandy cleared for home consumption in Australia fell $10 \%$ in 1998-99. France was the source of $95 \%$ of brandy imports, similar to the proportions in previous years. Imports of grape spirit for 1998-99 increased by $42 \%$ to 14,644 litres of alcohol. The main country of origin continued to be Turkey (59\%).

DOMESTIC SALES, EXPORTS AND IMPORTS OF BRANDY

| $1993-94$ | $1994-95$ | $1995-96$ | $1996-97$ | $1997-98$ | $1998-99$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| '000 L al | '000 L al | 'O00 L al | '000 L al | '000 L al | '000 L al |


| Australian brandy |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Domestic sales | 1301 | 1188 | 1113 | 987 | 974 | 905 |
| Exports | 36 | 36 | 24 | 17 | 26 | 24 |
| Total disposals | 1337 | 1224 | 1137 | 1004 | 1000 | 929 |
| Imported brandy | 634 | 590 | 583 | 628 | 661 | 598 |
| Consumption(a) | 1935 | 1778 | 1696 | 1615 | 1635 | 1503 |

(a) Available for consumption in Australia, Domestic sales plus Imports.

Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

Total disposals of Australian brandy (domestic sales plus exports) have declined significantly (31\%) from 1.3 million litres of alcohol in 1993-94 to 0.9 million litres of alcohol in 1998-99. Over the same period imports of brandy fell by $6 \%$, with imports for 1998-99 being 0.6 million litres of alcohol. The total brandy available for consumption in Australia has fallen by $22 \%$ since 1993-94 to 1.5 million litres of alcohol.

DOMESTIC SALES, IMPORTS AND CONSUMPTION OF BRANDY


Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

## CHAPTER 8

## INTRODUCTION

Information on the volume of domestic sales of Australian-produced wine is obtained from approximately 50 winemaking enterprises which have annual sales of at least 250,000 litres of wine. These are estimated to account for around $95 \%$ of domestic sales of Australian-produced wine by all winemakers.

In recent years the volume of sales has been affected by increasing exports of Australian-produced wine and the use of imported wine to supplement domestic demand. The analysis in this chapter excludes all imported wine sold in Australia even when blended with Australian wine. The imported component of such blends, which are largely packaged in soft packs or flagons, represents only a small proportion of sales.

WINE TYPES
In 1998-99 the trend of increasing sales continued with a record 348.3 million litres of Australian-produced wine sold. This is an increase of $3 \%$ from the previous record of 338.8 million litres in 1997 -98. Table wine, with sales of 287.4 million litres and accounting for $83 \%$ of total wine sales, continued to dominate wine sales. Sparkling wine accounted for 32.6 million litres (9\%) and fortified wine accounted for 23.9 million litres (7\%) of total wine sales.

While total wine sales have remained approximately within the range of 300 to 350 million litres each year since 1986-87, changes have occurred in the relative shares of various wine types indicating changes in consumer preferences. Table wine dominates, having increased its share of total wine sales from $78 \%$ in $1986-87$ to $83 \%$ in 1998-99. However this increase has been due entirely to sales of red/rosé table wines which have more than doubled over the period. In contrast, sales of white wine have decreased by $11 \%$ over the period.

DOMESTIC SALES OF AUSTRALIAN WINE BY WINEMAKERS


Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

WINE TYPES continued
Between 1986-87 and 1998-99 sales of fortified wine have decreased steadily, down 34\%. Sparkling wine sales, which have fluctuated over this period within the range of 28 to 33 million litres, rose by $5 \%$ to 32.6 million litres in 1998-99. Of all sparkling wine sold in 1998-99, bottle fermentation, at 20.3 million litres, accounted for $62 \%$ of sales, with bulk fermentation, increasing steadily over the last five years, from 4.4 million litres in 1994-95 to 12.3 million litres in 1998-99, now accounting for $38 \%$ of sales.

DOMESTIC SALES OF AUSTRALIAN WINE BY WINEMAKERS, Selected Wine Type


Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

DOMESTIC SALES OF AUSTRALIAN WINE BY WINEMAKERS

|  | TABLE. |  |  |  | SPARKLING.................. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | White | Red/rosé(a) | Total | Fortified | Bottle fermented | Bulk fermented | Total | Other(a) | Total |
| Period | million L | million L | million L | million L | million L | million L | million L | million L | million L |
| 1986-87 | 210.8 | 47.3 | 258.1 | 36.2 | 20.6 | 8.2 | 28.8 | 6.7 | 329.8 |
| 1987-88 | 204.2 | 51.6 | 255.8 | 35.1 | 25.0 | 7.6 | 32.6 | 7.0 | 330.5 |
| 1988-89 | 186.7 | 51.1 | 237.7 | 33.3 | 25.3 | 6.3 | 31.6 | 6.5 | 309.1 |
| 1989-90 | 180.4 | 49.5 | 230.0 | 33.1 | 25.6 | 5.6 | 31.2 | 6.3 | 300.6 |
| 1990-91 | 176.2 | 52.1 | 228.3 | 30.7 | 25.7 | 3.7 | 29.5 | 7.8 | 296.3 |
| 1991-92 | 190.2 | 56.5 | 246.7 | 29.9 | 25.4 | 4.7 | 30.2 | 8.1 | 314.8 |
| 1992-93 | 186.4 | 59.9 | 246.3 | 28.4 | 25.3 | 4.7 | 30.0 | 7.4 | 312.1 |
| 1993-94 | 192.5 | 62.2 | 254.7 | 27.0 | 26.3 | 4.3 | 30.6 | 7.2 | 319.5 |
| 1994-95 | 186.2 | 65.4 | 251.6 | 27.0 | 23.6 | 4.4 | 28.0 | 6.7 | 313.4 |
| 1995-96 | 178.7 | 68.6 | 247.3 | 25.9 | 22.9 | 7.2 | 30.1 | 6.2 | 309.5 |
| 1996-97 | 185.0 | 83.7 | 268.8 | 25.6 | 23.4 | 9.2 | 32.6 | 6.6 | 333.6 |
| 1997-98 | 189.5 | 88.9 | 278.4 | 24.6 | 22.3 | 8.8 | 31.1 | 4.7 | 338.8 |
| 1998-99 | 188.3 | 99.1 | 287.4 | 23.9 | 20.3 | 12.3 | 32.6 | 4.4 | 348.3 |

[^5]Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

While the category changed at July 1998 from 'glass containers 1 litre and under' to 'glass containers 2 litres and under', both categories represent mostly sales in 750 ml bottles. In 1998-99 sales of table wine in glass containers less than 2 litres was 117.1 million litres, $10 \%$ higher than the 106.1 million litres reported the previous year (in glass containers 1 litre and under). Soft pack sales decreased to 162.5 million litres (down 2\%). Table wine sold in glass containers 2 litres and over and bulk containers increased $36 \%$ from 5.8 million litres to 7.8 million litres.

DOMESTIC SALES OF AUSTRALIAN TABLE WINE, Container Tvpe

(a) Data for 1992-93 are not available for publication.

Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

The proportion of table wine sold in bottles rose to $41 \%$ in 1998-99, up from $38 \%$ in $1997-98$ and $24 \%$ in 1986-87. The proportion sold in soft pack fell slightly to $57 \%$, down from $60 \%$ in 1997-98, and has fluctuated since the 1986-87 proportion of $56 \%$. Wine sold in other containers increased from $2 \%$ in 1997-98 to $3 \%$ in 1998-99, however this is still well below the $13 \%$ recorded in 1986-87.

Sales of fortified wine are fairly evenly split between the container types. Of the total 23.9 million litres of fortified wine sold in 1998-99, $35 \%$ ( 8.5 million litres) was sold in glass containers less than 2 litres, 33\% ( 7.9 million litres) in softpacks and 31\% ( 7.5 million litres) in other containers. Port made up the largest proportion of fortified wine sold in glass containers less than 2 litres with $62 \%$ ( 5.2 million litres), followed by sherry with $33 \%$ ( 2.8 million litres).

(a) Prior to July 1998, data was collected for glass containers 1 litre and under.
(b) Prior to 1997-98, some spritzig style wine was reported as non-table wine. It now appears in this category.
(c) The categories red table wine and rosé table wine have now been combined as red/rosé table wine.

Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

Sales of red/rosé table wine increased faster over the period 1986-87 to 1998-99, than white table wine. Bottled red/rosé table wine sales increased by 33.6 million litres ( $167 \%$ ) to 53.7 million litres while bottled white table wine rose by 21.7 million litres ( $52 \%$ ) to 63.4 million litres. Soft pack sales over the same period show a different pattern. Red/rosé table wine in soft packs increased by 21.5 million litres ( $93 \%$ ) to 44.6 million litres whereas white table wine in soft packs has fallen by 20.8 million litres ( $15 \%$ ) to 118.0 million litres.

DOMESTIC SALES OF AUSTRALIAN RED AND WHITE TABLE WINE

(a) Data for 1992-93 are not available for publication.

Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

## CHAPTER 9

INTERNATIONALTRADE

## INTRODUCTION

In 1998-99 Australia exported a record 215.5 million litres of wine, valued at $\$ 1,068.0$ million, continuing the strong growth in Australian wine exports evident since the mid-1980s. Since 1986-87 the trade balance for wine in both quantity and value terms has consistently been in surplus (exports greater than imports) and has generally been increasing over time.

IMPORTS OF WINE AND EXPORTS OF AUSTRALIAN WINE


Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

## EXPORTS OF WINE

The 215.5 million litres of wine exported in 1998-99 represented an increase of $12 \%$ on the previous record of 192.4 million litres exported in the previous year. The volume exported has increased dramatically over the last decade; from 1988-89 (39.0 million litres) exports have risen by more than $400 \%$. The value of wine exported also continues to rise, reaching a record high of $\$ 1,068.0$ million in $1998-99$, an increase of $22 \%$ from the previous year. The average value of these exports was $\$ 4.96$ per litre, up from $\$ 4.54$ in 1997-98.

Table wine was the predominant type of wine exported in 1998-99 with 205.6 million litres or $95 \%$ of the total quantity. Sparkling wine exports were 6.9 million litres or $3 \%$ of the total quantity. There were 2.2 million litres of fortified wines exported in 1998-99. Table wine has largely influenced the rise in Australian wine exported. Over the last five years exports of table wine have almost doubled, from 105.5 million litres in 1994-95 to 205.6 million litres in 1998-99, accounting for almost all (98\%) of the increase in total Australian wine exports in that period.

## EXPORTS OF AUSTRALIAN WINE

WINE TYPE $\qquad$ TOTAL WINE $\qquad$

|  | Table | Fortified | Sparkling | Other | Quantity | Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period | '000 L | '000 L | '000 L | '000 L | '000 L | \$'000 |
|  |  |  |  |  |  |  |
| 1986-87 | 18627 | 1232 | 826 | 638 | 21324 | 44620 |
| 1987-88 | 35022 | 1411 | 1603 | 1088 | 39124 | 96157 |
| 1988-89 | 35873 | 1106 | 1764 | 301 | 39044 | 114521 |
| 1989-90 | 32095 | 1936 | 2074 | 2015 | 38120 | 121248 |
| 1990-91 | 46890 | 2765 | 3180 | 1321 | 54156 | 179588 |
| 1991-92 | 71752 | 2384 | 3904 | 639 | 78679 | 243526 |
| 1992-93 | 95468 | 1851 | 4730 | 784 | 102832 | 293157 |
| 1993-94 | 116655 | 2873 | 5042 | 893 | 125464 | 366574 |
| 1994-95 | 105542 | 2475 | 5109 | 537 | 113663 | 385704 |
| 1995-96 | 121037 | 2506 | 5489 | 639 | 129671 | 471576 |
| 1996-97 | 144892 | 2490 | 6046 | 966 | 154393 | 603297 |
| 1997-98r | 183024 | 2505 | 6110 | 764 | 192404 | 873847 |
| 1998-99 | 205639 | 2244 | 6937 | 681 | 215501 | 1067976 |

Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

DESTINATION OF EXPORTS
The European Union is the major region for the export of Australian wine, taking 127.6 million litres valued at $\$ 612.3$ million. This was $59 \%$ of the total quantity exported in 1998-99 and accounted for $96 \%$ of total exports to the Europe and Former USSR region. Shares of other regions are Northern America 21\%, Oceania and Antarctica 11\%, Northeast Asia 4\% and Southeast Asia with 2\%.

DESTINATION OF AUSTRALIAN WINE EXPORTS-1998-99


Source: International Trade database.

The United Kingdom was the major country of destination for Australian wine with 102.8 million litres, up $14 \%$ from last year and valued at $\$ 494.1$ million. The United States of America was the second largest export market with 36.7 million litres valued at $\$ 237.9$ million, followed by New Zealand with 21.0 million litres valued at $\$ 60.5$ million. Almost all major export markets increased when compared with last year, with Japan as a notable exception. After the significant increase in exports to Japan in 1997-98, the figure for this year has fallen $11 \%$ to 4.8 million litres.

The United Kingdom imported the largest quantities of both sparkling and fortified wines, $58 \%$ and $27 \%$ of total exports respectively.

EXPORTS OF AUSTRALIAN WINE, By Destination-1998-99

WINE TYPE. $\qquad$ TOTAL WINE $\qquad$

|  | Table | Fortified | Sparkling | Other | Quantity | Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Principal country/region | '000 L | '000 L | '000 L | '000 L | '000 L | \$'000 |
|  |  |  |  |  |  |  |
| New Zealand | 19401 | 340 | 1151 | 91 | 20983 | 60467 |
| Total Oceania \& Antarctica | 21203 | 398 | 1315 | 96 | 23012 | 67226 |
| Netherlands | 3303 | - | 4 | 8 | 3315 | 16400 |
| Germany | 6145 | 2 | 9 | 145 | 6300 | 31409 |
| Ireland | 4882 | - | 75 | 3 | 4960 | 28389 |
| Sweden | 3929 | 1 | 169 | 1 | 4101 | 14065 |
| United Kingdom | 98037 | 613 | 4028 | 108 | 102786 | 494099 |
| Total European Union | 122272 | 644 | 4383 | 269 | 127568 | 612313 |
| Norway | 2458 | - | 25 | - | 2483 | 9581 |
| Switzerland | 2290 | 6 | 98 | 54 | 2447 | 14768 |
| Total Europe and the |  |  |  |  |  |  |
| Former USSR | 127659 | 651 | 4507 | 323 | 133140 | 639033 |
| Total Middle East and |  |  |  |  |  |  |
| North Africa | 800 | 7 | 47 | 4 | 857 | 2658 |
| Total Southeast Asia | 3900 | 219 | 90 | 89 | 4298 | 24415 |
| Hong Kong | 1601 | 25 | 92 | 16 | 1735 | 10924 |
| Japan | 4369 | 136 | 218 | 47 | 4770 | 25021 |
| Total Northeast Asia | 7028 | 175 | 329 | 132 | 7664 | 43105 |
| Canada | 8570 | 494 | 155 | 9 | 9228 | 50444 |
| United States of America | 35931 | 261 | 464 | 27 | 36683 | 237946 |
| Total Northern America | 44528 | 755 | 619 | 37 | 45939 | 288545 |
| Total other regions | 522 | 39 | 31 | - | 591 | 2993 |
| Total all countries | 205639 | 2244 | 6937 | 681 | 215501 | 1067976 |

[^6]South Australia was the predominant source of Australian wine exports, supplying 155.3 million litres ( $72 \%$ ) valued at $\$ 693.7$ million in 1998 -99. New South Wales contributed 40.3 million litres (19\%) valued at $\$ 223.1$ million followed by Victoria with 18.5 million litres ( $9 \%$ ), with a value of $\$ 134.9$ million. State shares of exports have varied little over the last 10 years. The average prices per litre of wine exported in 1998-99 were $\$ 4.47$ for wine from South Australia, $\$ 5.53$ for wine from New South Wales and $\$ 7.31$ for wine from Victoria.

EXPORTS OF AUSTRALIAN WINE, By State of Origin(a)

(a) Proportion of total wine exports.

Source: International Trade database.

EXPORTS OF AUSTRALIAN WINE, By State of Origin

| Period | NSW | Vic. | Qld | SA | WA | Tas. | $\begin{array}{r} N T \& \\ A C T \end{array}$ | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | '000 L | '000 L | '000 L | '000 L | '000 L | '000 L | '000 L | '000 L |
| 1986-87 | 4194 | 1211 | 1 | 15842 | 75 | - | - | 21323 |
| 1987-88 | 7872 | 3253 | 30 | 26815 | 184 | 8 | - | 38161 |
| 1988-89 | 5870 | 5081 | 2 | 27990 | 100 | 1 | - | 39044 |
| 1989-90 | 6053 | 5123 | 12 | 26829 | 89 | 14 | 1 | 38120 |
| 1990-91 | 10088 | 3387 | 10 | 40487 | 194 | 11 | 20 | 54197 |
| 1991-92 | 15004 | 8271 | 3 | 55122 | 241 | 34 | 5 | 78680 |
| 1992-93 | 19225 | 10481 | 51 | 72605 | 445 | 20 | 5 | 102832 |
| 1993-94 | 25825 | 11629 | 40 | 87370 | 547 | 31 | 21 | 125464 |
| 1994-95 | 21480 | 8600 | 3 | 82823 | 724 | 31 | 2 | 113663 |
| 1995-96 | 22410 | 10331 | 155 | 96146 | 596 | 32 | - | 129671 |
| 1996-97 | 25400 | 13548 | 149 | 114408 | 842 | 45 | - | 154393 |
| 1997-98r | 36292 | 16748 | 77 | 138327 | 910 | 49 | - | 192404 |
| 1998-99 | 40302 | 18452 | 36 | 155255 | 1269 | 188 | - | 215501 |
|  | \$'000 | \$'000 | \$'000 | \$'000 | \$'000 | \$'000 | \$'000 | \$'000 |
| 1998-99 | 223055 | 134947 | 400 | 693725 | 13668 | 2179 | 1 | 1067976 |

[^7]Wine imports cleared for home consumption fell to 24.3 million litres in 1998-99, down $5 \%$ from the previous year's record high ( 25.6 million litres). Imports of table, fortified and sparkling wine all declined from 1997-98. However, the volume of imports has not fallen to previous levels experienced in the 1980s and early 1990s, indicating that the success of the export market is still leading to a shortfall in domestic supply, which is being supplemented by imports from overseas. While France and Italy maintained consistent levels of supply for their traditional markets within Australia, countries such as Spain, and this year South Africa, supplied lower priced wine for blending with Australian produced wine in soft packs.

Despite the fall in the quantity of imports, the value of wine imported rose $10 \%$ to $\$ 102.5$ million. As a result, the average price per litre increased from 1997-98, \$4.23 compared with $\$ 3.63$.

WINE IMPORTS CLEARED FOR HOME CONSUMPTION, By Wine Type

WINE TYPE. $\qquad$ .. TOTAL WINE....

|  | Table | Fortified | Sparkling | Other | Quantity | Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period | '000 L | '000 L | '000 L | '000 L | '000 L | \$'000 |
|  |  |  |  |  |  |  |
| 1986-87 | 5106 | 205 | 1967 | 389 | 7667 | 37585 |
| 1987-88 | 5302 | 178 | 2031 | 635 | 8146 | 41358 |
| 1988-89 | 6086 | 311 | 2264 | 1076 | 9737 | 46871 |
| 1989-90 | 6595 | 184 | 2736 | 937 | 10453 | 52692 |
| 1990-91 | 5604 | 191 | 2285 | 919 | 8999 | 46779 |
| 1991-92 | 5190 | 160 | 2373 | 979 | 8703 | 45649 |
| 1992-93 | 4833 | 106 | 2346 | 546 | 7832 | 46984 |
| 1993-94 | 4432 | 152 | 2301 | 1456 | 8341 | 47637 |
| 1994-95 | 9398 | 272 | 3065 | 1322 | 14057 | 61057 |
| 1995-96 | 16649 | 105 | 2673 | 830 | 20256 | 60478 |
| 1996-97 | 10105 | 105 | 2387 | 993 | 13589 | 66503 |
| 1997-98 | 21447 | 135 | 2996 | 1044 | 25622 | 92926 |
| 1998-99 | 20136 | 92 | 2915 | 1113 | 24255 | 102498 |

Source: Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0).

Imports of wine from Spain ( 6.7 million litres) supplied $28 \%$ of the total quantity of imported wine. This was despite a fall of $34 \%$ from the volume imported in 1997-98. Italy, traditionally the main contributor to Australian imports, was the second largest source of imports for the second consecutive year ( 5.4 million litres), followed by South Africa. Over the past year South Africa has become a significant supplier of imported wine, rising from 95,000 litres in 1997-98 to 4.1 million litres in 1998-99. Although France is fourth in terms of volume, it maintained its ranking of first in regard to value with imports of $\$ 43.1$ million having an average price per litre of $\$ 14.21$. This is in contrast to Spain and South Africa, although large suppliers, average $\$ 1.35$ and $\$ 0.56$ per litre respectively.

WINE IMPORTS CLEARED FOR HOME CONSUMPTION, By Country of Origin

|  | 1996-97....... |  | 1997-98...... |  | 1998-99...... |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Quantity | Value | Quantity | Value | Quantity | Value |
|  | '000 L | \$'000 | '000 L | \$'000 | '000 L | \$'000 |
| Chile | 820 | 1826 | 565 | 1652 | 299 | 1311 |
| France | 2093 | 28101 | 2875 | 34400 | 3032 | 43086 |
| Germany | 419 | 1580 | 443 | 1473 | 469 | 1865 |
| Greece | 467 | 867 | 377 | 786 | 359 | 992 |
| Hungary | 121 | 307 | 159 | 400 | 105 | 355 |
| Italy | 5655 | 18083 | 6536 | 23062 | 5439 | 22656 |
| New Zealand | 1843 | 8748 | 2834 | 14497 | 2728 | 15790 |
| Portugal | 565 | 2137 | 527 | 2263 | 455 | 1853 |
| South Africa | 86 | 388 | 95 | 429 | 4073 | 2261 |
| Spain | 388 | 1821 | 10083 | 10195 | 6704 | 9083 |
| United States of America | 125 | 708 | 132 | 923 | 111 | 858 |
| Other | 1007 | 1937 | 996 | 2846 | 481 | 2388 |
| Total | 13589 | 66503 | 25622 | 92926 | 24255 | 102498 |

Source: International Trade database.

## FRESH AND DRIED GRAPES

Australia exported a record 31,017 tonnes of fresh grapes in 1998-99. This was an increase from last year's total of 27,183 tonnes. The value of fresh grapes exported was $\$ 69.1$ million.

The Asian countries of Hong Kong and Singapore were the main markets for Australian fresh grapes, accounting for $40 \%$ and $25 \%$ respectively of total fresh grape exports in 1998-99. The value of these exports was $\$ 44.3$ million.

EXPORTS AND IMPORTS OF FRESH AND DRIED GRAPES

|  | FRESH GRAPES. |  |  |  | DRIED GRAPES. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Exports............... |  | Imports....... |  | Exports................ |  | Imports.............. |  |
| Period | t | \$'000 | t | \$'000 | t | \$'000 | t | \$'000 |
|  |  |  |  |  |  |  |  |  |
| 1986-87 | 14228 | 25516 | 31 | 53 | 57041 | 96798 | 4084 | 5784 |
| 1987-88 | 22390 | 42374 | 2 | 3 | 42824 | 78087 | 4749 | 6692 |
| 1988-89 | 10943 | 21159 | 53 | 87 | 51496 | 88226 | 6046 | 7174 |
| 1989-90 | 10680 | 21434 | - | - | 38794 | 69056 | 5475 | 7296 |
| 1990-91 | 8473 | 20794 | - | - | 36386 | 74156 | 5683 | 8027 |
| 1991-92 | 15408 | 36102 | 14 | 18 | 44592 | 82886 | 9681 | 13800 |
| 1992-93 | 12621 | 31513 | - | - | 55047 | 96927 | 5335 | 7429 |
| 1993-94 | 11702 | 28695 | 7 | 8 | 41087 | 73340 | 4725 | 6070 |
| 1994-95 | 13359 | 32337 | 2 | 12 | 14681 | 29642 | 7369 | 9090 |
| 1995-96 | 21056 | 46718 | - | - | 15216 | 34275 | 9265 | 12158 |
| 1996-97 | 26806 | 67065 | 5 | 32 | 25260 | 52173 | 10282 | 14162 |
| 1997-98 | 27183 | 52535 | 1 | 8 | 12277 | 29829 | 11852 | 19604 |
| 1998-99 | 31017 | 69138 | - | - | 13687 | 36806 | 16229 | 27773 |

Source: International Trade database.

Exports of dried grapes over the last five years have been substantially lower than the previous nine years when exports ranged from a low of 36,386 tonnes in 1990-91 to 57,041 tonnes in 1986-87. In 1998-99 Australia exported 13,687 tonnes of dried grapes valued at $\$ 36.8$ million, an $11 \%$ increase in quantity and $23 \%$ increase in value over 1997-98.

The major destinations of dried grapes were Canada ( 3,255 tonnes), Germany (2,944 tonnes) and the United Kingdom (2,639 tonnes), accounting for almost two-thirds of total exports.

INTERNATIONAL TRADE IN FRESH AND DRIED GRAPES


Source: International Trade database.

Imports of dried grapes continued to rise with a record high of 16,229 tonnes in 1998-99, valued at $\$ 27.8$ million. This was an increase of $37 \%$ from the previous year in terms of volume and $42 \%$ in terms of value.

Turkey was the major supplier of dried grapes to the Australian market, with imports at 7,731 tonnes valued at $\$ 12.6$ million. This accounted for $48 \%$ of total imports of 16,229 tonnes in $1998-99$ and $46 \%$ of the total value of imports of dried grapes.

EXPORTS AND IMPORTS OF FRESH AND DRIED GRAPES, By Country


Source: International Trade database.

GRAPE JUICE
In 1998-99 Australia exported 3.9 million litres of grape juice valued at $\$ 11.4$ million.
Grape juice (including grape must) is defined as unfermented juice not containing added spirit and with an alcoholic strength by volume not exceeding $0.5 \%$.

## chapter 10

WINE GRAPE PRICES

GRAPE AND WINE PRICES

While the prices paid for wine grapes continues to increase, the rate of increase has slowed from the peak in 1994. Average grape prices for the 1999 vintage were up $3 \%$ and over the last nine vintages grape prices have increased $90 \%$. The grape price index is calculated by using the movement in prices for each of the varieties included in the survey. The index does not allow for price movements caused by a change in the mix of varieties.

PRICE INDEX OF GRAPES USED IN WINE PRODUCTION, Change on Previous Vintage(a)

(a) Value for 1997 is $0.4 \%$.

Source: Price Indexes of Materials Used in Manufacturing Industries (Cat. no. 6411.0).

WINE PRICES

Prices received by winemakers for wine have generally shown steady growth in recent years. However, in 1998-99, the $1.2 \%$ fall in wholesale prices for wine reflects a price decrease of $1 \%$ for table and $2 \%$ for fortified wine. By contrast the retail price of wine in 1998-99 rose by $1.3 \%$.

The retail wine group index for 1998-99 increased by $1.3 \%$, while the all groups index rose by $1.2 \%$. This compares with an increase of $3.4 \%$ for wine in the previous financial year while the all groups index was constant. The influence of increasing wine exports would have contributed to increases in wine prices.

SELECTED PRICE INDEXES, Change on Previous Financial Year


Source: Consumer Price Index (Cat. no. 6401.0).

Between 1989-90 and 1998-99 wholesale prices for wine rose by $28 \%$, with table wine rising by $30 \%$ and fortified wine by $21 \%$. At the retail level, wine price rises have continued to shown steady growth in recent years to record an increase of $30 \%$ since 1989-90, larger than the wholesale price increase and larger than the general consumer price index increase.

SELECTED PRICE INDEXES OF WINE, Change 1989-90 to 1998-99


Source: Price Indexes of Materials Used in Manufacturing Industries (Cat. no. 6411.0); Export Price Index Survey, 1999; Import Price Index Survey, 1999; Consumer Price Index (Cat. no. 6401.0).

Export prices for table wine rose by 10\% between 1997-98 and 1998-98. This follows the $12 \%$ increase recorded in 1997-98. In 1998-99 the import price index rose by $5 \%$, after a rise in 1997-98 of 3\%.

SELECTED PRICE INDEXES, Percentage Change

|  | MANUFACTURING INDUSTRY |  |  |  | CONSUMER.. |  | EXPORT <br> Table wine | IMPORT <br> Wine |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period | Wine grapes | Table wine | Fortified wine | Wine | Wine | $\begin{array}{r} \text { All } \\ \text { groups } \end{array}$ |  |  |
| 1991-92 | 9.2 | 5.9 | -1.0 | 4.2 | 2.8 | 1.9 | 0.4 | 5.5 |
| 1992-93 | 9.9 | 2.7 | 3.1 | 2.8 | 1.8 | 1.0 | 1.6 | 5.8 |
| 1993-94 | 33.4 | 3.8 | 3.2 | 3.6 | 4.5 | 1.8 | 0.2 | -5.8 |
| 1994-95 | 22.2 | 6.5 | 4.1 | 5.9 | 5.1 | 3.2 | 1.0 | 3.1 |
| 1995-96 | 7.5 | 5.6 | 3.8 | 5.2 | 5.2 | 4.2 | -0.6 | 3.0 |
| 1996-97 | 0.4 | 3.5 | 2.9 | 3.4 | 1.9 | 1.3 | 6.2 | -0.6 |
| 1997-98 | 5.9 | 3.2 | 3.1 | 3.1 | 3.4 | 0.0 | 11.6 | 2.5 |
| 1998-99 | 3.0 | -1.0 | -2.0 | -1.2 | 1.3 | 1.2 | 10.2 | 5.2 |
| $\begin{gathered} 1989-90 \text { to } \\ 1998-99 \end{gathered}$ | 90.0 | 29.8 | 21.4 | 28.2 | 30.3 | 21.8 | 43.2 | 34.4 |

Source: Price Indexes of Materials Used in Manufacturing Industries (Cat. no. 6411.0); unpublished data, Export Price Index Survey, 1999 ; unpublished data, Import Price Index Survey, 1999; Consumer Price Index (Cat. no. 6401.0).

## chapter 11

## INTRODUCTION

WINE CONSUMPTION

## APPARENT CONSUMPTION

Data on the consumption of wine in Australia are available from measures of apparent consumption of foodstuffs and from periodic surveys in which members of individual households provide information on their consumption of alcohol. Details of household spending on alcohol are also available from a periodic household expenditure survey.

Using aggregates of domestic sales of wine by winemakers and imports cleared for home consumption, estimates of wine available for consumption are made each year and a mean population is applied to derive per capita apparent consumption. Per capita consumption of wine in Australia has recorded strong growth since the late 1930s, rising from 2.7 litres over the three years to 1938-39 to the peak of 20.2 litres over the three years to 1988-89. This has been followed by a slight decline over the last decade, with the three years ended 1998-99 at 19.5 litres. During the last decade the per capita consumption of wine had fallen to 17.8 litres in 1990-91, but had since been above 18.0 litres, rising to 19.8 litres in 1998-99.

PER CAPITA CONSUMPTION OF WINE


Source: Apparent Consumption of Foodstuffs, 1998-99.

There has been a more than sevenfold increase in average wine consumption over the last sixty years. This can be contrasted with a twofold increase in beer consumption over the period, rising from 53.2 litres over the three years ended 1938-39 to a peak of 133.2 litres over the three years ended 1978-79, with a subsequent decline to 94.3 litres over the three years ended 1998-99

## APPARENT PER CAPITA CONSUMPTION OF ALCOHOL

1991-92 1992-93 1993-94 1994-95 1995-96 1996-97 1997-98 1998-99p

| BEVERAGE (litres) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wine | 18.6 | 18.3 | 18.6 | 18.4 | 18.3 | 19.0 | 19.7 | 19.8 |
| Beer | 104.0 | 99.5 | 98.0 | 96.8 | 95.3 | 95.5 | 94.5 | 92.8 |


|  | ALCOHOL (litres of alcohol) |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: |
|  | 2.2 | 2.1 | 2.1 | 2.1 | 2.1 | 2.2 | 2.3 | 2.3 |  |
| Wine | 4.5 | 4.3 | 4.3 | 4.3 | 4.2 | 4.2 | 4.1 | 4.0 |  |
| Beer | 1.1 | 1.2 | 1.4 | 1.3 | 1.4 | 1.3 | 1.4 | 1.3 |  |
| Spirits | $\mathbf{7 . 8}$ | $\mathbf{7 . 6}$ | $\mathbf{7 . 8}$ | $\mathbf{7 . 7}$ | $\mathbf{7 . 6}$ | $\mathbf{7 . 6}$ | $\mathbf{7 . 8}$ | $\mathbf{7 . 5}$ |  |

Source: Apparent Consumption of Foodstuffs, 1998-99.

CONSUMPTION PATTERNS
Results from the 1995 National Health Survey indicate that an estimated 55\% of the adult population (those aged 18 years and over) consumed a drink containing alcohol in the week prior to the survey. The average daily consumption of alcohol of people who drank wine was 0.038 litres of alcohol, well below that for beer ( 0.060 litres of alcohol) and spirits ( 0.054 litres of alcohol).

Alcohol consumption through wine varied between the States and Territories with the Northern Territory recording the highest consumption ( 0.043 litres of alcohol) and Western Australia ( 0.036 litres of alcohol) the lowest. The daily amount of alcohol consumed through wine decreased with age, with people aged 18-24 years having the highest average intake of 0.055 litres of alcohol per day, compared with 0.029 litres of alcohol for people aged 65-74 years. Males consumed 0.046 litres of alcohol through the consumption of wine compared with the average female consumption of 0.032 litres of alcohol.

AVERAGE DAILY WINE CONSUMPTION—1995


[^8]It is estimated that 4.1 million people, or $31 \%$ of the population aged 18 years and over, drank some wine in the last week of either February or May 1998. 33\% of females drank wine compared with $29 \%$ of males. In the age groups between 18 and 44 years a higher proportion of females drank wine than males, whereas in the age groups over 45 years, a higher proportion of males drank wine.

PERSONS WHO DRANK WINE—February and May 1998


Source: Population Survey Monitor, February and May 1998.

White wine was more likely to have been consumed by females than males. Of the adult population it is estimated that $22 \%$ of females drank white wine compared with $15 \%$ of males. The reverse was true for red wine consumption- $17 \%$ of males compared with $13 \%$ of females. Sparkling wine was consumed by $4 \%$ of the adult population, and $2 \%$ drank fortified wine.

It is estimated that $89 \%$ of those persons who drank wine mainly consumed it with a meal. Wine was consumed at home by $74 \%$ of wine drinkers, while $21 \%$ drank wine at restaurants and $17 \%$ at dinner parties held at friends or relatives homes. Saturday was the most popular day of the week for drinking wine with $57 \%$ of wine drinkers consuming on that day, followed by Sunday (45\%) and Friday (39\%).

PLACE WHERE WINE WAS CONSUMED—February and May 1998


Source: Population Survey Monitor, February and May 1998.

During 1993-94 Australian households spent an average of $\$ 3.76$ per week on wine. Households in the Australian Capital Territory spent the most with $\$ 5.87$ and those in Tasmania the least (\$2.90). Australian Capital Territory households also had the highest proportion of their total expenditure on alcohol spent on wine (31\%) while Darwin households spent $16 \%$ of total weekly alcohol expenditure on wine.

AVERAGE WEEKLY HOUSEHOLD EXPENDITURE, Alcoholic Beverages-1993-94

|  | NSW | Vic. | Qld | SA | WA | Tas. | NT(a) | ACT | Aust. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ | \$ |
| ........................................................ |  |  |  |  |  |  |  |  |  |
| Wine | 4.10 | 3.65 | 3.18 | 3.81 | 3.70 | 2.90 | 4.20 | 5.87 | 3.76 |
| Beer | 9.41 | 8.45 | 10.37 | 7.82 | 9.94 | 9.55 | 13.26 | 8.51 | 9.29 |
| Spirits | 2.84 | 3.16 | 3.30 | 3.90 | 3.35 | 1.74 | 4.63 | 3.06 | 3.13 |
| Total(b) | 17.85 | 16.52 | 17.92 | 16.45 | 18.19 | 15.42 | 25.94 | 18.65 | 17.46 |

(a) Darwin and environs only.
(b) Including alcoholic beverages n.e.c.

Source: Household Expenditure Survey, Australia: Detailed Expenditure Items, 1993-94 (Cat. no. 6535.0).

From 1988-89 to 1993-94 there has been a $22 \%$ increase in weekly expenditure on wine, compared with a $5 \%$ fall in expenditure on beer. Weekly beer expenditure of $\$ 9.29$ was $53 \%$ of the total weekly alcohol expenditure in 1993-94. Expenditure on spirits increased marginally over the five-year period to $\$ 3.13$. The percentage increase in wine expenditure was greater than that of non-alcoholic beverages, which increased by $14 \%$ over the same period.

AVERAGE WEEKLY HOUSEHOLD EXPENDITURE, Alcoholic Beverages


Source: Household Expenditure Survey, Australia: Detailed Expenditure Items, 1993-94 (Cat. no. 6535.0).

# SPECIAL ARTICLE OBSERVATIONS ON ALCOHOL BEVERAGE CONSUMPTION 

## INTRODUCTION

This article draws on a paper presented by Lawrie Stanford, Wine Industry Analyst, Australian Wine and Brandy Corporation, to the 1999 Wine Outlook Conference held in Adelaide on 10 November 1999. The author has compiled a summary of his paper and this is presented below. For further reference the complete paper: Observations on Alcohol Beverage Consumption-Australian demographics and consumption characteristics can be obtained by contacting Sue Bell at the Wine Industry Information Service on (08) 83312220.

## BACKGROUND

In 1996, the Australian Wine Foundation released Strategy 2025-a thirty-year plan for the Australian wine industry. Critical to achieving the vision of Strategy 2025 was implementing 30 strategies identified through the strategic planning process. A priority ordering of the 30 strategies, in order of importance to the future prospects of the industry, lead to Strategy 10:

Gain, via market research, a better understanding of consumer behaviour and attitudes relating to wine.

This paper directly addresses Strategy 10 by assessing some of the key demographic characteristics of Australian alcohol beverage consumers-particularly of wine consumers

In 1998, the Winemakers' Federation of Australia and the Australian Wine \& Brandy Corporation (AWBC) commissioned the Australian Bureau of Statistics (ABS), with AWBC funding, to include questions about alcohol beverage consumption in the regular program of Population Survey Monitor (PSM) surveying by the ABS.

The PSM is a quarterly sample survey of Australian households the results of which are factored up to represent the whole population. Standard demographic characteristics asked for include age, gender, labour force status, occupation, education levels, income, marital status and location. These characteristics are then matched with questions about a variety of topics of social interest. In this instance, the results of the questions about the consumption of alcohol beverages are of interest and will be reported here.

The data was collected in February and May 1998 and represent two of the four quarters of data collecting in the 1998 PSM. There were more than 3,000 respondents in each of the two surveys conducted, resulting in a total sample of nearly 6,500 . The questions asked about alcohol consumption related to consumption that had occurred during the week prior the survey being conducted

The principal focus of this paper is to extract data from the database compiled through the PSM. This extraction represents a first level of analysis and will largely be a set of observations from the raw data. Hence, interpretation will be limited. In many instances the observations will raise as many questions as they will answer. This is the purpose and the service provided by the paper-a first step to a better understanding of alcohol beverage consumption, which up until now has been lacking in the public arena.

The observations made here will be of interest to marketers, health specialists and social policy-makers. More data than reported here is available. To obtain more information about this data please do not hesitate to contact the author or Sue Bell at the Wine Industry Information Service or the PSM Unit at the ABS.

## POPULATION DEMOGRAPHICS

Alcohol beverage consumers
Almost $60 \%$ of the Australian adult population were estimated to have consumed an alcohol beverage of some description in the week prior to the PSM. A breakdown suggests $33 \%$ of the adult population consumed beer, $31 \%$ wine and $17 \%$ spirits. Some consumers drank more than one beverage type as reflected in the sum of the shares of the adult population who consumed wine, beer or spirits individually ( $81 \%$ in all) exceeding the share that drank wine and/or beer and/or spirits ( $60 \%$ ).

CONSUMERS OF ALCOHOL BEVERAGES IN THE ADULT AUSTRALIAN POPULATION


Source: Population Survey Monitor, February and May 1998.

The full extent of consumption of more than one of beer, wine and spirits is illustrated in graph below. Just over one-third of all consumers of alcohol beverages drank more than one of the three in the week prior to the survey. Of the beverages consumed in combination with each other, the wine and beer combination was the most common with $16 \%$ of respondents who consumed alcohol of any description indicating this. Smaller numbers drank wine and spirits (8\%) or beer and spirits (7\%). A minority of consumers (4\%) drank all three beverages.

POPULATION SEGMENTATION OF WINE CONSUMERS


Source: Population Survey Monitor, February and May 1998.
Wine consumers
Most wine consumers (83\%) reported that they drank table wine only in the week prior to the survey but in total, $93 \%$ of wine consumers drank table wine. Of the wine consumers drinking more than one wine type during the week the table wine and sparkling wine combination was the most common-7\% of wine consumers. Wine consumers who drank sparkling wine only were few (4\%) although in total, $13 \%$ drank sparkling wine. Similarly, few wine consumers drank fortified wine only (3\%) while altogether $6 \%$ drank it. No respondents indicated they consumed all three wine categories.

Of consumers who drank bottled table wine, $47 \%$ drank white only and $35 \%$ drank red only. Just under one-fifth consumed both.

Age profiles of alcohol consumers
The estimated number of alcohol beverage consumers, disaggregated by age, is illustrated in the table below. It shows that in the overall population profile, the 25-44 year olds are the highest in number, followed by the 45-64 year and 65 years and over age groups and finally the youngest age group-the 18-24 year olds.

ALCOHOL BEVERAGE CONSUMERS BY AGE

|  | 18-24 ......... |  | 25-44 ........ |  | 45-64 ......... |  | 65 and over .. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | '000 | \% | '000 | \% | '000 | \% | ‘000 | \% |
| Beer | 660 | 36 | 2021 | 36 | 1248 | 31 | 482 | 24 |
| Wine | 373 | 21 | 1711 | 30 | 1521 | 38 | 536 | 26 |
| Spirits | 577 | 32 | 988 | 18 | 562 | 14 | 156 | 8 |
| Non consumers | 722 | 40 | 2102 | 37 | 1612 | 41 | 1096 | 54 |
| Total population | 1812 | 100 | 5612 | 100 | 3968 | 100 | 2026 | 100 |

Source: Population Survey Monitor, February and May 1998.

## Age profiles of alcohol consumers continued

By and large, the profiles of wine, beer and spirits consumers are determined by the profile of the total population. Reflecting the fact that the most numerous age group in the overall population is the 25-44 year age group, the largest number of consumers for each of the three beverage types is this age group. While the fall-away in numbers of consumers in each of the older age groups is relatively strong in the case of beer and spirits, it is not so strong for wine. In fact, for wine consumers, there is a reasonably strong representation of wine drinkers in the 45-64 year age group as well as in the 25-44 year age group.

The following observations can be made:

- Wine has a disproportionately low share of consumers in the 18-24 year age cohort. While $36 \%$ and $32 \%$ of the 18-24 year age group consumed beer and spirits respectively a much smaller proportion, at $21 \%$, consumed wine. There is apparently a marketing opportunity for wine sales in this age group.
- Wine consumption is more prominent in the older age groups. Successively increasing shares of the 25-44 year and 45-64 year age groups consumed wine while successively smaller shares of the same age groups consumed beer and spirits.
- Across all beverage types, there is a steep decline in the proportion of the 65 years and over age group that consumed alcohol beverages.

Hence, wine consumption has greater acceptance in the middle age groups and holds the highest share of the 45-64 year age group. It will be noted in the next section that female consumers are a significant influence on the increased proportion of 25-44 year olds, compared with 18-24 year olds, that consume wine and male consumers largely drive the even higher representation of wine consumers among 45-64 year olds.

## Gender profiles of alcohol consumers

By any measure, beer is the strongly favoured beverage of the adult male population. Just over half of the adult male population (52\%) consumed beer while $29 \%$ consumed wine and $18 \%$ consumed spirits.

PROPORTION OF ALCOHOL BEVERAGE CONSUMERS, By Gender


[^9]
## Gender profiles of alcohol consumers continued

Wine is the favoured beverage of the adult female population. One-third of the female population consumed wine compared with $16 \%$ who consumed spirits and $14 \%$ who consumed beer.

WINE CONSUMERS, By Gender and Age


Source: Population Survey Monitor, February and May 1998.

Looking at wine consumers in particular, and disaggregating males and females by age group, provides interesting results. Males and females make different contributions to the successive increases in the proportions of wine consumers in the ascending age groups. The proportion of both male and female 25-44 year olds who consumed wine, compared with 18-24 year olds, increased by around 10 percentage points. However, due to higher numbers of female wine consumers in each of these age groups, the contribution of females to the increased numbers consuming wine in the 25-44 year age group was greater- 780,000 more females consumed wine in the $25-44$ year age group, than those in the 18-24 year age group, while there were 560,000 more males. Hence, females in the 25-44 year age group exerted a greater influence on the increased proportion of wine consumers in the 25-44 age segment.

On the other hand, the share of wine-consuming males in the 45-64 year age group increased dramatically over the share in the 25-44 year age group (up 14 percentage points) while the increase in the share of females was only marginally greater-at 2 percentage points. Hence, males were the main drivers of the increased proportion of the 45-64 year age group that consumed wine compared with the proportion in the 25-44 year age group.

## CONSUMPTION CHARACTERISTICS

In the survey, details were asked about the place that alcohol beverages were consumed.

Place of consumption
The overwhelming preference of consumers was to consume at their own home compared with the alternatives which were to consume at a friends' or relatives' home, at licensed premises (where restaurants were identified separately from other licensed options such as bars, taverns, clubs) or 'other' (see table below). In broad terms, around half of the locations drunk at were people's own homes. 'Home' consumption would of course be boosted if consumption at a friends' or relatives' home were added on.

The next most frequent place for beer and spirits to be consumed (after the own-home choice) was licensed premises (ex restaurants) although for wine it was different. In the case of wine, the next most frequent place of consumption was shared between 'at a friends or relatives home' or at restaurants.

ALCOHOL CONSUMERS, By Age and Percentage Share of Drinking Locations

|  | Wine | Beer | Spirits and <br> liqueurs |
| :--- | ---: | ---: | ---: |
| Age group (years) | $\%$ | $\%$ | $\%$ |
| $\ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ |  |  |  |

Source: Population Survey Monitor, February and May 1998.

The occasions on which wine drinkers drank at home varied with age with the frequency increasing progressively with age. For wine consumers in the 65 years and over age group, $65 \%$ of the locations at which they drank wine were their own homes while in the $18-24$ year age group, only $34 \%$ of the locations were at home. With age, the progressive dominance of wine consumption at home came at the expense of all of the other alternatives.

Wine consumption by time of the week
Friday, Saturday and Sunday are the favoured days of the week for consuming wine-both in terms of drinking occasions and the average standard drinks per drinking occasion.

DAY OF WINE DRINKING OCCASIONS


Source: Population Survey Monitor, February and May 1998.

Just over half of the wine-drinking occasions are accounted for in these three days. Saturday is the day that accounts for the largest single share of drinking occasions, at $21 \%$. In terms of standard drinks per drinking occasion, higher rates of consumption were recorded on Friday, Saturday and Sunday compared with other days of the week. Consumption was highest on Saturday and lowest on Monday.

## Wine style and container type

In the survey, respondents were asked to indicate which of the following wine styles and container types they had consumed wine from in the week prior to the survey: red or white bottled table wine, red or white table wine in other containers (which is assumed to principally mean casks), sparkling wine/champagne and fortified wine. The results are summarised in the table below.

SHARES OF WINE CONSUMERS, By Age Groups and Wine Style/Container Type

|  | 18-24 | 25-44 | 45-64 | 65 and over |
| :---: | :---: | :---: | :---: | :---: |
|  | \% | \% | \% | \% |
| White bottled table wine | 43 | 47 | 43 | 34 |
| Red bottled table wine | 42 | 39 | 35 | 26 |
| White table wine in other containers | 17 | 18 | 20 | 25 |
| Red table wine in other containers | 9 | 10 | 19 | 19 |
| Sparkling wine | 13 | 17 | 8 | 7 |
| Fortified wine | 2 | 5 | 5 | 10 |

Source: Population Survey Monitor, February and May 1998.

## Wine style and container type continued

The most frequent choice of wine style and container type, across all age groups, was bottled table wine. Within this category, bottled white wine was more frequently drunk than was red bottled wine. Nevertheless, the frequency of bottled table wine consumption diminished through the 18-24 year to 65 years and over age groups. This does not mean that the 18-24 year age group consumes the most bottled wine-given the smaller number in the age cohort-but it does indicate that they have a much higher preference for bottled wine over the alternatives (mostly cask wine) than do older age groups.

While measurably more members of most age groups chose bottled white wine over red-this was not the case for the 18-24 year age group in which roughly equal numbers of the group chose to consume white and red bottled wine. On this evidence, younger wine consumers lead the increasing sentiment to consume premium, bottled wine and within this, red bottled wine. The younger age cohorts are also more inclined to consume sparkling wine. Larger proportions of the 18-24 and 25-44 age groups, but particularly the latter group, consume sparkling wine compared with the older age cohorts.

A smaller share of the 65 years and over age group drank bottled table wine than in the younger age cohorts although it was still their most frequent choice. A larger share of the 65 years and over age group drank cask wine than did their younger counterparts. Moreover, in the 65 years and over age group, an almost as big share drank white cask wine as drank bottled red wine. This age group, together with the 45-64 year age group, would have been the most exposed to the boom, around twenty years ago, in Australian wine sale volumes through the introduction and popularity of white cask wine. On the basis of this, it could be speculated that there is some persistence of drinking habits through time. If so, the indications of a stronger sentiment for bottled wine, particularly red wine, among younger wine consumers will have an enduring impact rather than a transient one. Greater proportions of the 65 years and over age cohort also drank fortified wine and red cask wine than their younger cohorts. The possibility of a bias in the survey data is suggested by the smaller numbers of cask-wine drinkers compared with bottled-wine drinkers, in the data. This result, combined with the indication that cask wine consumers drink less per drinking occasion than do bottled wine drinkers, is not consistent with the fact that almost half of domestic consumption is cask wine. Nevertheless, the trends are considered to be of analytical use.

WINE CONSUMERS, By Wine Style, Container and Gender


Source: Population Survey Monitor, February and May 1998.

Wine style/container type choices, disaggregated by gender, show a greater share of wine-consuming males drank red table wine while a greater share of wine-consuming females drank white table wine and sparkling wine.

Wine consumed with a meal
In the survey, respondents were asked to indicate if they consumed most wine with a meal. Three replies were possible-with a meal, not with a meal or both with and without a meal.

The table below illustrates that by far the major share of table wine consumers drink wine with a meal. This association was strongest for red cask wine ( $93 \%$ of respondents consuming most wine with a meal) and bottled table wine (90\%) and lowest for fortified wine ( $82 \%$ ) and sparkling wine ( $79 \%$ ).

CONSUMPTION CHARACTERISTICS FOR WINE CONSUMED WITH A MEAL

|  | Proportion consuming wine with a meal | Male to female standard drink ratio |
| :---: | :---: | :---: |
|  | \% | No. |
|  |  |  |
| Bottled table wine | 90 | 1.14 |
| Red table wine in other containers | 93 | 1.09 |
| White table wine in other containers | 85 | 1.07 |
| Sparkling wine | 79 | 0.83 |
| Fortified wine | 82 | 1.33 |

Source: Population Survey Monitor, February and May 1998.

## Wine consumed with a meal continued

The high association of wine consumption with food consumption has favourable implications with respect to potential physiological ill-effects from wine consumption. As physiological ill-effects are directly related to blood alcohol concentration, alcohol consumed with food significantly diminishes blood alcohol concentration and the potential for ill-effects (Stockley, C., Submission to the Tax Consultative Task Force on Taxation Reform, Appendix A, WFA, March 1998). Moreover, a PSM survey conducted in May 1995 , in which the same question was asked, found that $72 \%$ of respondents consumed wine with a meal. On this evidence, the level of wine consumption with a meal may have increased between 1995 and now. It is not unreasonable to expect this result on the evidence that wine styles/container types shown here to be more likely to be consumed with a meal (bottled and red wine) are known from domestic sales data, to be on an upward trend in consumption and some of the wine style/container types that are less likely to be consumed with a meal (white cask wine and fortified wine) are on a downward trend in consumption.

From the table above it can also be seen that males who consumed most wine with a meal, consumed more standard drinks per drinking occasion than females, by between $7 \%$ and $33 \%$ depending on the wine style. The exception is the case of sparkling wine where females who consumed most wine with a meal, consumed more standard drinks of sparkling wine on these occasions than did males. This observation is in addition to the observation made earlier that a greater proportion of the female population consumed sparkling wine than did males. Note that standard drink values are distorted by a process in which extreme values are 'capped' in the case of respondents who belong to small subsets in the sample (based on age, gender etc.) and for whom there is a remote possibility of being identified-by virtue of the small number set they belong to. This has the effect of biasing downward the values reported here-particularly for higher consumption levels. Despite this effect, the value's trend across the week has some interpretative value and is reported here for that purpose.

## Characteristics associated with personal income

To devise income quintiles, all respondents were ranked by their personal income and then divided into 5 equal groups. Each group is called a quintile with the 1st quintile containing the group of respondents with the lowest incomes and so on up to the 5th quintile which is the group with the highest incomes.


Source: Population Survey Monitor, February and May 1998

Progressively larger shares of higher income groups consume beer and wine. This pattern is also broadly true, but less pronounced, for spirits. These results most likely reflect increased levels of disposable income available in the higher income quintiles and a greater propensity to spend disposable income on wine or beer. They tend to confirm the general understanding that expenditure on wine has a strong link to income levels and suggests that expenditure on beer is the same.


Source: Population Survey Monitor, February and May 1998.

In the graph above, it can be seen that progressively larger shares of higher income groups consume bottled wine, both red and white. The converse relationship exists for table wine in other containers (assumed to be principally casks) where progressively smaller shares of higher income groups consume cask wine-although the relationship is less pronounced in the case of cask red wine than it is for cask white wine.

These observations tend to suggest different income effects for bottled and cask wine-with bottled wine 'favoured' by higher income earners and cask wine 'favoured' by lower income earners. The weaker trend for a declining number of red cask wine consumers in higher income brackets may be driven by price and/or quality issues. Firstly, based on the price relativities of red and white bottled wine, red cask wine could represent better value for one- or two-glass-a-day consumers who would not consume the contents of a whole bottle. These consumers are more likely to be distributed across the income range thereby raising the proportion of higher income consumers of this product. Secondly, more pronounced taste characteristics of red wine over the neutral whites used in casks, may give red cask wine a perceived quality edge over white cask wine. This may dilute the strength of the consumption/income relationship in the case of red cask wine.

An assumption that 18-24 year olds may tend to be located in the lower income quintile/s, may explain the higher proportions of bottled wine consumers in the 1 st quintile compared with the 2 nd. It has already been shown that this age group has a greater propensity to consume bottled red and white wine and based on the stated assumption that there are more 18-24 year olds in the 1 st quintile-they may account for the higher representation of bottled wine consumers in the lowest income quintile.

## FREQUENCY AND RISK FROM CONSUMPTION

Days per week alcohol beverages are consumed
The majority of consumers of alcohol beverages consume on one or two days per week- $66 \%$ of wine consumers are one or two days per week consumers, $63 \%$ of beer consumers and $84 \%$ of spirit consumers. While exponentially declining proportions of wine, beer and spirit consumers drank on an increasing number of days per week—reaching proportions of $1 \%$ or $2 \%$ for six days per week consumers-there is a significant number of seven days per week consumers (less pronounced in the case of spirits).

BEVERAGE CONSUMERS BY DAYS PER WEEK CONSUMPTION


Source: Population Survey Monitor, February and May 1998.

Looking at wine consumers in particular-bottled table wine consumers and cask table wine consumers exhibited similar patterns with respect to their days per week consumption profiles. A larger share of the respective consuming populations drank bottled or cask wine one or two days per week and exponentially declining proportions drank an increasing number of days per week, except for seven days per week consumers who made up a significant minority of each of the two consumer groups. Aside from similarities, there are also differences between the groups that consumed bottled and cask table wine. The distribution of the cask wine consuming population is more even across the 'days per week' spectrum with a lesser proportion consuming cask wine one day per week ( $46 \%$ compared with $54 \%$ for bottled wine) and a larger proportion consuming seven days per week ( $18 \%$ compared with $10 \%$ for bottled wine). This may demonstrate the convenience that a cask presents for consumers preferring regular intake, but less than the volume of a bottle.

## Consumption risk

Most drinking occasions for wine, beer and spirits fall into the category of low to moderate risk as defined by the National Health and Medical Research Council. Across all beverage types and for alcohol consumption overall, no less than $80 \%$ of the drinking occasions fall into these two categories. Male wine drinking occasions (both bottled and cask) had the highest proportion of low-risk drinking occasions, at around $88 \%$. However, for females, the proportion of low-risk drinking occasions were $43 \%$ for bottled wine, and $59 \%$ for cask wine drinking occasions.

The lowest proportion of low-risk drinking occasions was recorded for bottled wine consumption by females while the lowest proportion of low-risk drinking occasions for males was for beer consumption.

SHARES OF DRINKING OCCASIONS, By Risk and Alcohol Beverage

|  | Low risk | Moderate risk | High risk |
| :---: | :---: | :---: | :---: |
|  | \% | \% | \% |
|  |  |  |  |
| Males |  |  |  |
| Bottled wine | 89 | 6 | 6 |
| Cask wine | 87 | 6 | 4 |
| Beer | 62 | 18 | 21 |
| Spirits | 72 | 14 | 14 |
| Alcohol | 68 | 15 | 17 |
| Females |  |  |  |
| Bottled wine | 43 | 45 | 12 |
| Cask wine | 59 | 35 | 6 |
| Beer | 57 | 24 | 19 |
| Spirits | 73 | 14 | 13 |
| Alcohol | 53 | 33 | 12 |

[^10]The Population Census of 6 August 1996 identified 7,420 persons whose main job was in grape-growing and 8,328 persons whose main job was in the manufacturing or blending of wine. This excludes casual workers such as grape pickers and other seasonal workers not working in those industries in the week prior to the Census. It also excludes people who worked in wine and grape production as a second job. Of the grape industry workers, $44 \%$ were farmers and farm managers, $41 \%$ were agriculture and horticulture labourers and $2 \%$ were plant and machine operators. For the wine manufacturing industry, $7 \%$ were farmers and farm managers, $21 \%$ were agriculture and horticulture labourers, $4 \%$ were plant and machine operators, $14 \%$ were clerical sales and service workers, $10 \%$ were professionals and $5 \%$ were technicians and associate professionals.

A further 4,878 persons were employed in establishments mainly engaged in wholesaling beer, wine and spirits and 7,639 persons were employed in retail liquor stores.

Just over $72 \%$ of all persons employed in the grape-growing industry were employees compared with $96 \%$ in wine manufacturing and $91 \%$ across all industries.

At the time of the Census, the proportion of persons working full time in the grape-growing and wine manufacturing industries was slightly higher than for all industries.

LABOUR FORCE, Selected Characteristics of Employed Persons-1996

|  | Grapegrowing | Wine manufacturing | industries |
| :---: | :---: | :---: | :---: |
|  | \% | \% | \% |
| Status in employment |  |  |  |
| Employee | 72.2 | 95.9 | 90.6 |
| Employer | 9.2 | 1.5 | 2.5 |
| Own account worker | 15.3 | 1.8 | 5.8 |
| Contributing family worker | 3.3 | 0.7 | 1.0 |
| Full-time | 71.3 | 75.7 | 67.8 |
| Part-time | 27.7 | 23.5 | 29.9 |
| Not stated | 1.1 | 0.8 | 2.2 |
| Annual individual income |  |  |  |
| Less than \$15 600 | 33.1 | 18.5 | 22.8 |
| \$15 600-\$25 999 | 38.9 | 39.1 | 28.2 |
| \$26 000-\$51 999 | 19.8 | 34.0 | 37.6 |
| \$52 000 and over | 5.7 | 6.7 | 9.3 |
| Not stated | 2.6 | 1.7 | 2.0 |

[^11]There was a higher proportion of low income earners, (workers with an annual income of less than $\$ 15,600$ ) in the grape-growing industry ( $33 \%$ ) than in wine manufacturing (19\%) and for all industries (23\%). At the upper end of the income ranges, $6 \%$ of workers whose main job was in the grape-growing industry earned $\$ 52,000$ or more compared with $7 \%$ in the wine manufacturing industry. Both figures are lower than that for all industries (9\%).

Educational qualifications were less common among workers in both the grape-growing and wine manufacturing industries than the average across all industries. Of those employed in grape-growing, $6 \%$ had a degree or higher compared with $10 \%$ in wine manufacturing and $16 \%$ for all industries.

The grape-growing and wine manufacturing industries have a slightly higher male to female ratio than for all industries. Grape-growing workers tend to be older with $42 \%$ aged 45 years and over compared with $29 \%$ of wine manufacturing workers.

The grape-growing and wine manufacturing industries have a higher proportion of Australian-born workers compared with all industries. However, of those grape-growing workers born overseas, the proportion of workers born in southern Europe was more than four times that of wine manufacturing and more than twice that of all industries.

SOCIAL CHARACTERISTICS OF EMPLOYED PERSONS—1996

|  | Grapegrowing | Wine manufacturing | industries |
| :---: | :---: | :---: | :---: |
|  | \% | \% | \% |
| Level of highest qualification |  |  |  |
| Degree or higher | 5.7 | 10.1 | 15.5 |
| Other qualification | 18.0 | 22.9 | 26.0 |
| No qualification | 71.0 | 61.1 | 51.3 |
| Inadequately described or not stated | 5.3 | 5.8 | 7.3 |
| Sex |  |  |  |
| Males | 67.8 | 63.2 | 55.9 |
| Females | 32.2 | 36.8 | 44.1 |
| Age (years) |  |  |  |
| 15-24 | 13.9 | 16.7 | 18.0 |
| 25-34 | 19.5 | 26.8 | 25.4 |
| 35-44 | 24.6 | 27.6 | 26.3 |
| 45-54 | 23.8 | 19.9 | 20.9 |
| 55 or more | 18.3 | 9.0 | 9.5 |
| Birthplace |  |  |  |
| Australia | 81.7 | 84.5 | 74.5 |
| Overseas main English-speaking countries | 5.7 | 9.0 | 11.1 |
| Southern Europe | 7.8 | 1.9 | 3.5 |
| Other Europe | 1.8 | 2.0 | 2.6 |
| Other | 3.0 | 2.6 | 8.3 |

Source: 1996 Census of Population and Housing.

## GRAPE PRODUCTION, AREA OF VINES AND YIELD

Of the countries for which 1997 data are available, Australia's ranking rose two places to twenty second for area of vines and one place to ninth for wine production, fourteenth for total grape production and tenth for wine exports.

World grape production in 1997 increased by $1.0 \%$ to 59.2 million tonnes and followed a 5.2\% increase in 1996. Production of grapes in Australia in 1997 was 1.6\% of the world total, down from 1.9\% in 1996

GRAPE PRODUCTION, Area of Vines and Yield of Selected Countries-1997

|  | PRODUCTION....... |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $\begin{array}{r} \text { Total } \\ \text { grapes } \end{array}$ | Wine grapes | Area of vines(a) | Yield |
| Country (b) | '000 t | '000 t | '000 ha | t/ha |
| -........ | -• | -•• | -•• | -• |
| Italy | 8151.8 | 6621.8 | 914 | 8.9 |
| France | 7190.9 | 7087.2 | 914 | 7.9 |
| United States of America | 6606.4 | n.a. | 315 | 21.0 |
| Spain | 5503.2 | 5185.6 | 1155 | 4.8 |
| Turkey | 3700.0 | n.a. | 602 | 6.1 |
| Argentina | 2481.9 | 2426.3 | 209 | 11.9 |
| Iran | 2124.7 | n.a. | 270 | 7.9 |
| China | 2033.0 | n.a. | 188 | 10.8 |
| Chile | 1669.2 | 545.6 | 132 | 12.6 |
| South Africa | 1462.3 | 1120.6 | 108 | 13.5 |
| Germany | 1250.0 | 1250.0 | 105 | 11.9 |
| Greece | 1213.2 | 533.2 | 132 | 9.2 |
| Romania | 1179.0 | 1061.3 | 254 | 4.6 |
| Australia | 942.1 | 743.5 | 90 | 10.5 |
| Moldova | 800.0 | n.a. | 187 | 4.3 |
| Portugal | 763.7 | n.a. | 260 | 2.9 |
| Hungary | 716.7 | n.a. | 131 | 5.5 |
| Bulgaria | 660.0 | n.a. | 109 | 6.1 |
| Uzbekistan | 525.0 | n.a. | 120 | 4.4 |
| Ukraine | 319.0 | n.a. | 139 | 2.3 |
| Azerbaijan | 202.4 | n.a. | 135 | 1.5 |
| Georgia | 195.0 | n.a. | 100 | 2.0 |
| Other countries | 9517.2 | n.a. | 1245 | 7.6 |
| World total | 59206.7 | n.a. | 7814 | 7.6 |

(a) Includes area of vines not yet bearing.
(b) The selection is based on those countries which exceed Australian figures in any of the first three categories.
Source: Dutruc-Rosset 1999.

In Australia, $79 \%$ of all grapes grown were used for winemaking. The world's two largest producers, Italy and France, used a higher proportion of their grape production for winemaking; $81 \%$ and $99 \%$ respectively.
$\qquad$

## GRAPE PRODUCTION, AREA OF VINES AND YIELD continued

The area of vines in the world fell 10,000 hectares in 1997 to $7,814,000$ hectares continuing, but slowing, the downward trend evident since the 1980s. In contrast, the area under vines in Australia increased by 9,000 hectares to 90,000 hectares and was $1.2 \%$ of the world total. Spain, the largest cultivator, had an area of vines over 12 times greater than the Australian area

Australia recorded a decrease in yield from 13.4 tonnes of grapes per hectare in 1996 to 10.5 tonnes per hectare in 1997, which represents a reversal of the increased yield of the previous year. Vines which are not yet bearing are also included in the calculation of yield. Thus yields will be lower than they would be if bearing vines only were taken into account. This can make comparisons of yields problematic. Of the countries in the preceding table, the United States of America had the highest yield with 21.0 tonnes per hectare, an increase from the 1996 yield of 16.2 tonnes per hectare. In contrast, the largest cultivator, Spain, had a yield of 4.8 tonnes per hectare in 1997.

## WINE PRODUCTION

Australia ranked ninth in volume of world wine production in 1997, accounting for 617.4 million litres or $2.3 \%$ of the total world production. France ( $5,361.2$ million litres) remained as the largest producer of wine, followed by Italy ( $5,084.7$ million litres), together accounting for 40\% of world production, down from 43\% in 1996.

Of the major wine producing countries, the United States of America recorded the largest increase in wine production in terms of volume of $32 \%$ to 2,500 million litres, after a record harvest. Italy recorded the largest decrease of $13 \%$.

PRODUCTION OF WINE, Principal Countries


Source: Dutruc-Rosset 1999.

## EXPORTS OF WINE

The countries exporting the largest volumes of wine were France, Italy and Spain, with both France and Italy each exporting over 9 times the volume of Australian wine exports, and Spain 5 times.

In 1997 Australia's ranking moved up one place to tenth as an increase of $16 \%$ raised exports to 170.6 million litres.

Australia exported 28\% of its total wine production while Italy exported 30\%, France 29\% and Spain $27 \%$.

## EXPORTS OF WINE, Principal Countries



Source: Dutruc-Rosset, 1999.

WINE PRODUCTION, EXPORTS AND CONSUMPTION, Selected Countries-1997

|  | Wine production | Share of world production | Wine exports | Exports as a proportion of production | Wine consumption | Per capita consumption |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Country(a) | million L | \% | million L | \% | million L | L |
| France | 5361.2 | 20.3 | 1543.4 | 28.8 | 3494.1 | 60.0 |
| Italy | 5084.7 | 19.2 | 1537.4 | 30.2 | 3382.0 | 58.8 |
| Spain | 3388.7 | 12.8 | 909.5 | 26.8 | 1452.8 | 38.0 |
| United States of America | 2500.0 | 9.5 | 222.1 | 8.9 | 2080.0 | n.a. |
| Argentina | 1350.0 | 5.1 | 120.5 | 8.9 | 1350.5 | 41.0 |
| South Africa | 870.2 | 3.3 | 108.6 | 12.5 | 402.2 | 9.1 |
| Germany | 849.5 | 3.2 | 209.9 | 24.7 | 1858.0 | 23.1 |
| Romania | 668.8 | 2.5 | 82.5 | 12.3 | 588.9 | 29.6 |
| Australia | 617.4 | 2.3 | 170.6 | 27.6 | 347.2 | 18.8 |
| Portugal | 572.7 | 2.2 | 245.0 | 42.8 | 560.0 | 56.4 |
| Chile | 454.9 | 1.7 | 216.3 | 47.5 | 192.2 | 13.1 |
| China | 412.5 | 1.6 | 2.8 | 0.7 | 438.8 | n.a. |
| Moldova | 359.8 | 1.4 | 199.7 | 55.5 | 155.0 | n.a. |
| Bulgaria | 237.7 | 0.9 | 180.5 | 75.9 | 67.5 | n.a. |
| Other countries | 3714.1 | 14.0 | n.a. | n.a. | 5984.1 | n.a. |
| World total | 26442.2 | 100.0 | п.a. | n.a. | 22353.3 | n.a. |

(a) The selection is based on those countries which exceed Australian figures in any of the first three categories.
Source: Dutruc-Rosset 1999.

## CONSUMPTION

France had the highest consumption of wine ( 3494.1 million litres) in 1997 overtaking Italy ( 3382.0 million litres), while together they accounted for $31 \%$ of world consumption of wine. By comparison, Australia consumed 347.2 million litres, representing $1.6 \%$ of world consumption. Even though a large producer, Germany consumed $1,008.5$ million litres more than it produced.

Consumption in Australia of 18.8 litres for each person in 1997 compares with more than 56.0 litres recorded by France, Italy and Portugal.

Australia produced 61,600 tonnes of table grapes (less than $1 \%$ of world production of 12.5 million tonnes). Iran was the largest producer followed by Italy, China and Turkey. Australia exported 26,500 tonnes of table grapes, up $25 \%$ on 21,200 tonnes in 1996, compared with the largest exporter, Chile, with 519,100 tonnes.

PRODUCTION AND EXPORTS OF TABLE AND DRIED GRAPES, Selected Countries—1997

|  | TABLE <br> GRAPES $\qquad$ |  | DRIED <br> GRAPES(a) $\qquad$ |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Production | Exports | Production | Exports |
| Country (b) | '000 t | '000 t | '000 t | '000 t |
|  |  |  |  |  |
| Africa | 739.9 | n.a. | 41.2 | n.a. |
| Morocco | 254.9 | 0.2 | 0.6 | n.a. |
| South Africa | 177.7 | 117.0 | 39.0 | 28.0 |
| Egypt | 126.0 | 0.8 | n.a. | n.a. |
| Algeria | 120.0 | n.a. | 0.9 | n.a. |
| America | 2350.8 | n.a. | 417.5 | п.a. |
| Chile | 864.7 | 519.1 | 28.5 | 24.0 |
| United States of America | 852.3 | 268.8 | 375.2 | 117.8 |
| Asia | 5552.3 | п.a. | 510.3 | п.a. |
| Iran | 1550.6 | 0.8 | 90.0 | 25.0 |
| China | 1410.2 | 0.6 | 3.8 | 1.1 |
| Turkey | 1275.7 | 33.4 | 360.0 | 180.9 |
| Afghanistan | 159.3 | 21.0 | 28.1 | 20.0 |
| Europe | 3753.8 | n.a. | 93.6 | n.a. |
| Italy | 1530.0 | 418.5 | n.a. | 0.4 |
| Spain | 310.8 | 100.3 | 4.0 | 0.6 |
| Greece | 216.9 | 102.6 | 86.0 | 59.7 |
| Netherlands | n.a. | 73.2. | n.a. | 6.2 |
| Oceania | 61.6 | 26.5 | 29.5 | 17.0 |
| Australia | 61.6 | 26.5 | 29.5 | 17.0 |
| World | 12458.4 | n.a. | 1092.1 | n.a. |

(a) Data from India and Iraq not available.
(b) The selection of country is based on the top two contributors to each category.

Source: Dutruc-Rosset 1999.

Statistics available on dried grapes in 1997 are incomplete. Australia contributed 3\% (29,500 tonnes) of the world dried grape production in 1997. The United States of America ( 375,000 tonnes), with $34 \%$ of world production ( 1.1 million tonnes), overtook Turkey (360,000 tonnes) as the largest producer of dried grapes. Australia exported 17,000 tonnes of dried grapes compared with the largest exporter, Turkey, with 180,900 tonnes.

Australia is a relatively small importer of grape products. In 1997 Australia's imports of wine increased by $45 \%$ to 20.4 million litres compared to 14.1 million litres in 1996. Whilst no table grapes have been imported by Australia over the last couple of years, dried grape imports have increased $25 \%$ on 1996 to 12,000 tonnes.

Germany was the largest importer of wine followed by the United Kingdom and France and these three countries combined took nearly half (45\%) of the world imports of 5,620.9 million litres. In 1997 there was a large increase (62\%) in imports of wine to Asian countries, with a large proportion of the increase contributed by Japan and Hong Kong. China increased imports of wine by $664 \%$ to 33.6 million litres to become the region's third largest importer. The United States of America also substantially increased imports of wine, by $26.5 \%$ to 454 million litres.

The United States of America was the largest importer of table grapes in 1997, with 359,900 tonnes followed closely by Germany with 355,600 tonnes. From the information available, the United Kingdom was the largest dried grape importer, taking 125,900 tonnes.

IMPORTS OF WINE, TABLE AND DRIED GRAPES, Selected Countries—1997

|  | Wine | Table grapes | Dried grapes |
| :---: | :---: | :---: | :---: |
| Country (a) | million L | '000 t | '000 t |
| Africa | 137.3 | n.a. | n.a. |
| Angola | 27.0 | n.a. | п.a. |
| Ivory Coast | 21.3 | n.a. | n.a. |
| Egypt | 9.4 | 0.1 | 1.4 |
| Morocco | 9.4 | n.a. | 2.4 |
| America | 759.1 | п.a. | п.a. |
| United States of America | 454.4 | 359.9 | 11.7 |
| Canada | 178.4 | 141.5 | 34.8 |
| Brazil | 25.3 | 23.2 | 16.4 |
| Asia | 260.1 | n.a. | n.a. |
| Japan | 130.0 | 7.4 | 28.0 |
| Hong Kong | 34.1 | 106.2 | 8.0 |
| Pakistan | n.a. | 21.4 | 7.1 |
| United Arab Emirates | 2.1 | n.a. | 18.8 |
| Europe | 4413.6 | n.a. | n.a. |
| Germany | 1169.9 | 355.6 | 74.9 |
| United Kingdom | 802.2 | 123.6 | 125.9 |
| France | 573.8 | 149.3 | 22.6 |
| Oceania | 50.7 | n.a. | n.a. |
| New Zealand | 22.4 | n.a. | 9.0 |
| Australia | 20.4 | 0.0 | 12.0 |
| World total | 5620.9 | n.a. | n.a. |

(a) The selection of country is based on the top two contributors to each category.

Source: Dutruc-Rosset 1999.

World wine consumption, after recording a downward trend from 1980 to 1994, continued to increase marginally in 1997, up 208.9 million litres to $22,353.3$ million litres. There had been a decline in world wine production from a peak in the early 1980's which reversed in 1996. In 1997, while world wine production decreased by 554.8 million litres (2\%) to 26,442.2 million litres, this was still higher than the low in 1995 of $25,157.6$ million litres. In 1997 production exceeded consumption by 4,088.9 million litres ( $15 \%$ of production). This surplus was $16 \%$ less than in 1996.

Against this background, Australia recorded a trend of increased production of wine since the early 1990s, although with a decrease of $8 \%$ to 617.4 million litres in 1997. Wine exports have continued to rise over the same period, increasing by $16 \%$ from 1996. Australia's total wine consumption, which had been steady since the late 1980's, has more recently shown signs of growth and has increased by $5 \%$ in 1997 to 347.2 million litres.

SOURCE
The international comparisons in this section are sourced from the Office International de la Vigne et du Vin (OIV), are incomplete or inaccurate for some countries and are subject to revision. The OIV does not distinguish zero and not available figures in its statistical publication and these have been shown as 'n.a.' (not available) in this section. The Australian figures used in this world comparison have been revised in the earlier chapters of the compendium, e.g. chapter 2 and chapter 4 but the original figures are shown here to enable a world comparison to be made. The OIV requests calendar year data and the ABS complies with this where possible.

## EXPLANATORY NOTES

1 This publication presents final estimates from the ABS collections: Stocks of Australian Wine and Brandy, 1998-99; Wine and Spirit Production, 1998-99; Wine Statistics, 1998-99 and Vineyards, 1999. Not all data from these collections is published here. Some further data is available for a charge, on application to the ABS.

2 This publication is a summary of statistics on grape and wine production and related activities collected by the ABS and from other sources. Some of the data used in this publication were obtained from various ABS collections for which publications with appropriate explanatory notes are already available. The bibliography contains a list of these publications. However, much of the data are only available in this publication and the following notes are provided to assist users.
3 Chapter 2 replaces the previous publication Viticulture, Australia (Cat. no. 7310.0) and contains information on area of vines and production of red and white grapes for the 1999 season. The continuing collection of varietal data is partly funded by the Grape and Wine Research and Development Corporation.

4 Differences exist between the grape production intended for winemaking reported by grape growers in the viticulture collection and the quantity of fresh grapes crushed by winemakers reported in the Wine and Spirit Production collection. The size of the discrepancy is being investigated. Differences in the collection methodologies, as outlined below, mean some difference should always be apparent between the series.

## SCOPE AND COVERAGE OF VITICULTURE SURVEY

5 Viticultural statistics in chapter 2 relate to the year in which the harvest occurred and are derived from information obtained in a collection of all known growers.

6 Prior to the 1999 collection, an exercise was undertaken to increase the number of known growers included in the collection. The improved coverage, of over 1,000 growers, means that the data presented for 1999 in chapter 2 are not directly comparable with data for previous years. An explanation of the impact of this improved coverage on estimates is provided at the beginning of chapter 2 .
7 The scope of the 1999 collection is based on establishments undertaking agricultural activity and having an estimated value of agricultural operations of $\$ 5,000$ or more. The scope of the collection from season 1994 to season 1999 was also $\$ 5,000$. Prior to season 1994 the scope has varied. Details are available on request.

8 Tasmanian data are derived from a collection undertaken by the Appellation of Origin Board under the authority of The Commissioner of Licensing. The scope of the collected data is the same as for other States.

9 Statistics are provided for the several recognised grape-producing regions of each State which are described in the table below.

| Region | Local Government Area |
| :---: | :---: |
|  | NEW SOUTH WALES |
| Hunter Valley | Greater Cessnock, Muswellbrook, Scone and Singleton |
| Murrumbidgee Irrigation Area | Leeton and Griffith |
| NSW Sunraysia | Wakool, Balranald and Wentworth |
|  | VICTORIA |
| Victorian Sunraysia | Rural City of Mildura |
| Kerang-Swan Hill | Rural City of Swan Hill and the Shire of Gannawarra |
|  | SOUTH AUSTRALIA(a) |
| Central District | Adelaide Hills, Alexandrina, Mount Barker, Victor Harbor, Yankalilla, and Kangaroo Island and the Corporations of Adelaide, Burnside, Campbelltown, Charles Sturt, Holdfast Bay, Norwood Payneham and St Peters, Marion, Mitcham, Onkaparinga, Playford, Port Adelaide Enfield, Prospect, Salisbury, Tea Tree Gully, Unley, West Torrens, and the Municipalities of Gawler and Walkerville |
| Barossa District | Barossa, Mallala, Kapunda and Light, those portions of the district council of Wakefield south of the River Wakefield, the Hundreds of Dutton and Jellicoe in the district council of Mid Murray |
| Waikerie and Lower Murray District | The former district councils of Waikerie, Mannum, and Meningie and the district council of Morgan and Murray Bridge and the Hundreds of Anna and Skurray in the former district council of Ridley-Truro |
| North Murray District | Berri Barmera and Renmark Paringa and the Hundred of Katarapko and the Counties of Young and Hamley not otherwise included |
| South Murray District | Loxton, Browns Well and Peake and the district councils of Karoonda, East Murray and Southern Mallee |
| Northern District | Portions of the district council of Wakefield north of the River Wakefield, the district councils of Clare and Gilbert Valleys and the former district councils of Eudunda and Robertstown and the remainder of the State north and west of these areas which are not included in the above five districts |
| South Eastern District | Tatiara and Lacepede, the former district council of Coonalpyn Downs and the remainder of the State south and south-east of these areas which are not included in the above districts |

## WESTERN AUSTRALIA

## Swan Shire Shire of Swan

Margaret River Augusta-Margaret River and Busselton
(a) The regions adopted in South Australia correspond to the Phylloxera and Grape Industry Board's districts.
Note: In some tables in this publication, the Waikerie and Lower Murray District, North Murray District and the South Murray District are combined to form 'Riverland'.

10 Wine production data are collected only from winemakers who crush more than 400 tonnes of grapes. The grapes crushed by these wineries includes grapes owned by others and crushed on a commission or contract basis, often for wine producers who do not have their own crushing facilities. These wineries account for approximately $98 \%$ of total crushings by all winemakers crushing 50 or more tonnes. Limited information on the quantity of grapes crushed and domestic wine sales are also obtained from winemakers crushing between 50 and 400 tonnes. The main purpose for this supplementary collection is to establish the scope and coverage of both the main production collection and the monthly wine sales collection.

11 Details on stocks of Australian beverage wine by wine type are collected at 30 June from winemakers with wine sales of 250,000 litres or more in the previous year. All data are collected on an Australia-wide basis only and State figures are therefore not available. Stocks data collected from 1996 include all Australian-produced wines owned by these winemakers and held anywhere in Australia. In years previous to 1996, stocks included only those Australian-produced wines held by winemakers on any of their own premises, regardless of ownership. This change in the measurement of stocks means that data for 1996 and later are not directly comparable with earlier years.

12 The number of winemakers who fall within the scope of the wine stocks collection may vary from year to year as sales vary and individual wineries are included in, or excluded from, the sales collection. It is possible that stock data may vary slightly each year as new wineries, with either large or small stocks, come into the scope of the collection. In particular, the published (i.e. closing) stocks figures for any one year may not equate with the opening stocks for the following year.

13 The wine content of products consisting of a mixture of wine and fruit juice, commonly known as 'coolers', is included in the appropriate wine category of the wine from which it is made, which is generally table wine.

14 Current publications produced by the ABS are listed in the Catalogue of Publications and Products (Cat. no. 1101.0). The ABS also issues on Tuesdays and Fridays, a Release Advice (Cat. no. 1105.0) which lists publications to be released in the next few days. The Catalogue and Release Advice are available from any ABS office.

Much of the ABS data used in this publication were sourced from various ABS collections. In some cases more detailed data, which was previously unpublished, were used. In the list of ABS publications below a catalogue number is quoted whenever possible to enable users to access explanatory information about various data sets. Further inquiries about these data, and the availability of more detailed unpublished data, can be made either to Peter Carmalt (Adelaide 0882377632 ) or to the contact officer named in the specific publications.

1996 Census of Population and Housing: Basic Selected Family and Labour Force Characteristics, Australia (Cat. no. 2017.0)

Apparent Consumption of Foodstuffs, Australia (Cat. no. 4306.0)
Consumer Price Index (Cat. no. 6401.0)
Export Price Index (Cat. no. 6405.0)
Household Expenditure Survey, Australia: Detailed Expenditure Items, 1993-94 (Cat. no. 6535.0)

Import Price Index (Cat. no. 6414.0)
International Merchandise Trade, Australia (Cat. no. 5422.0)
Manufacturing Industry, Australia (Cat. no. 8221.0)
National Health Survey: Summary of Results, 1995 (Cat. no. 4364.0)
Population Survey Monitor (Cat. no. 4103.0)
Price Indexes of Articles Produced by Manufacturing Industries, Australia (Cat. no. 6412.0)

Price Indexes of Materials Used in Manufacturing Industries, Australia (Cat. no. 6411.0)

Sales of Australian Wine and Brandy by Winemakers (Cat. no. 8504.0)

## ABS SURVEYS AND DATABASES

Export Price Index
Import Price Index
International Trade database
Manufacturing Industry, 1997-98
Population Survey Monitor
Stocks of Australian Wine and Brandy, 30 June 1999
Vineyards, 1999
Wine and Spirit Production, 1998-99
Wine Statistics, 1998-99
NON-ABS SOURCES
Dutruc-Rosset, D. 1999, The State of Vitiviniculture in the World and the Statistical Information in 1997, Office International de la Vigne et du Vin, Paris.

## SELF-HELP ACCESS TO STATISTICS

| CPI INFOLINE | For current and historical Consumer Price Index data, <br> call 1902981074 (call cost 75 c per minute). |
| :--- | :--- |
| DIAL-A-STATISTIC | For the latest figures for National Accounts, Balance of <br> Payments, Labour Force, Average Weekly Earnings, <br> Estimated Resident Population and the Consumer Price <br> Index call 1900 986400 (call cost 75 c per minute). |
| INTERNET | www.abs.gov.au |
| LIBRARY | A range of ABS publications is available from public and <br> tertiary libraries Australia-wide. Contact your nearest <br> library to determine whether it has the ABS statistics <br> you require. |

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INQUIRIES

Darwin


[^0]:    W. McLennan

    Australian Statistician

[^1]:    Source: Vineyards Survey, 1999

[^2]:    Source: Vineyards Survey, 1999.

[^3]:    Source: Wine and Spirit Production Survey, 1998-99.

[^4]:    Source: Wine and Spirit Production Survey, 1998-99; Vineyards Survey, 1999.

[^5]:    (a) Prior to 1997-98, data for 'other' wine includes some spritzig style wine which now appears in 'Red/rosé table wine'.

[^6]:    Source: International Trade database.

[^7]:    Source: International Trade database.

[^8]:    Source: National Health Survey: Summary of Results, 1995 (Cat. no. 4364.0).

[^9]:    Source: Population Survey Monitor, February and May 1998.

[^10]:    Source: Population Survey Monitor, February and May 1998

[^11]:    Source: 1996 Census of Population and Housing.

