Oregon Wine Advisory Board Research Progress Report

1987

Vineyard Acreage in Oregon 1986

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INTRODUCTION

Oregon State University's Department of Agricultural and Resource Economics conducted a winegrape acreage survey in Oregon for the 1986 production year. Winegrape acreage has been increasing dramatically and the Wine Advisory Board (WAB) is interested in keeping track of these changes. In 1981, 1982, and 1984 the Department made surveys of acreage by county for both bearing and nonbearing vineyards. This 1986 survey also asked for information as to the acreage established in 1986, those planned for 1987, and the quantity of grapes sold out of state.

This report contains some comparisons made with the data from the other surveys. The data are not directly comparable because some of the vineyards reporting in 1986 are new or different from those reporting in the past. The two-year comparisons are given to provide an indication of the changes taking place in the industry. Although various methods were used to get names and addresses of vineyard operators to include in the survey, all could not be contacted and some did not respond. However, it is our estimate that the numbers included here are estimated to represent 80 percent or more of the established vineyard acreage.

ACRES REPORTED BY VARIETY

The 1986 survey shows an increase in bearing acreage from 1,040 in 1984 to 2,186 in 1986. This 1,146 acre increase more than doubled the bearing acreage of vineyards in Oregon. At the same time, nonbearing acres were down 29%, with total acreage up 14% to 3,845 acres. The decrease in nonbearing acreage reflects the fact that acreage is now shifting into the bearing category.

Pinot Noir, White Riesling, and Chardonnay continue to be the primary varieties in Oregon. These three varieties represented 76% of the bearing acres in 1986 and 70% of the total vineyard acres reported in this survey. While nonbearing acreage is dropping off, there is continued interest in Muller Thurgau (Table 1). This report shows a total of 164 acres planted with a 74% increase in nonbearing acres between 1984 and 1986.

TABLE 1
OREGON WINEGRAPE ACRES by VARIETY
1984-1986

		Bearing		N	onbearing		Total			
Variety	1984	1986	%+-	1984	1986	%+-	1984	1986	%+-	
Pinot Noir	303.8	689.9	127	584.2	383.7	-34	888.0	1073.5	21	
White Riesling	217.7	398.5	83	452.8	337.3	-26	670.5	735.8	10	
Chardonnay	255.0	578.3	127	539.1	295.1	-45	794.1	873.4	10	
Cabernet Sauv	67.4	110.3	64	124.2	97.8	-21	191.6	208.0	9	
Gewurztraminer	73.9	144.8	96	188.2	129.7	-31	262.1	274.5	5	
Chenin Blanc*	0.0	13.0	•••	0.0	36.3	•••	0.0	49.3	•••	
Merlot	6.4	15.0	134	60.9	59.5	-2	67.3	74.5	11	
Sauvignon Blanc	11.5	49.4	329	122.8	70.7	-42	134.3	120.1	-11	
Muller Thurgau	26.5	58.2	120	60.9	106.0	74	87.4	164.3	88	
Zinfandel	1.8	3.5	94	3.0	0.0	-100	4.8	3.5	-27	
Pinot Gris	22.9	46.8	104	45.8	54.9	20	68.7	101.7	48	
Misc. Red	7.4	34.4	364	25.8	15.9	-39	33.2	50.2	51	
Misc. White	45.6	44.1	•••	113.8	71.6	•••	159.4	115.7	•••	
TOTAL	1039.9	2186.1	110	2321.5	1658.4	-29	3361.4	3844.5	14	

^{*} Chenin Blanc was not reported separately in previous reports.

The increase in total vineyard acreage reported between 1982 and 1984 was 1,549 acres. This current survey has a reported increase of 483 acres between 1984 and 1986. While the wine industry is far from mature, these figures reflect a "slowing down" in new vineyard establishment. If the 3,845 acres reported for 1986 represent 80% of vineyard acres in Oregon, then total acreage planted in the state is about 4,800 acres. If the surveyed vineyards represent more than 80%, then there are less than 4,800 acres.

ACRES REPORTED BY COUNTY

The primary areas of winegrape production in Oregon are the Willamette Valley and the Douglas-Jackson-Josephine county area (Table 2). The three counties with the largest bearing acreage are Polk, Washington and Yamhill in the Willamette Valley. Morrow county is also showing significant potential with over 700 acres about to come into production. In 1986 there were 187 vineyards reporting bearing and/ or nonbearing acreage. (In 1984 reports were received from 179 winegrape growers.) Of the 187 vineyards, 126, or two-thirds, were from Willamette Valley counties.

TABLE 2
OREGON WINEGRAPE ACRES by COUNTY
1984-1986

	Bearing				onbearing				
County	1984	1986	%+-	1984	1986	%+-	1984	1986	%+-
Benton	24.3	36.6	51	39.1	43.4	11	63.4	80.0	26
Clackamas	13.6	12.1	-11	10.6	29.5	178	24.2	41.6	72
Douglas	145.1	254.0	75	124.3	31.0	-75	269.4	285.0	6
Jackson	65.2	140.9	116	90.2	34.8	-61	155.4	175.7	13
Josephine	46.4	87.8	89	106.9	81.0	-24	153.3	168.8	10
Lane	33.6	61.3	82	59.6	73.5	23	93.2	134.8	45
Linn	12.3	22.8	85	2.5	4.0	60	14.8	26.8	81
Marion	58.1	99.1	70	64.4	42.5	-34	122.5	141.5	16
Morrow	1.5	23.0	1433	722.7	701.2	-3	724.2	724.2	0
Polk	88.6	401.7	353	536.7	196.1	-63	625.3	597.8	-4
Umatilla	4.0	59.3	1381	55.5	8.0	-86	59.5	67.3	13
Wasco	4.0	18.0	350	6.0	10.0	67	10.0	28.0	180
Washington	186.2	422.6	127	232.2	240.5	4	418.4	663.0	58
Yamhill	357.1	542.6	52	268.8	163.0	-39	625.9	705.6	13
Other Co	0.0	4.5	***	0.0	0.0	•••	0.0	4.5	•••
TOTAL	1040.0	2186.1	110	2319.5	1658.4	-29	3359.5	3844.5	14

THE SIZE OF OREGON VINEYARDS

Vineyards in Oregon are relatively small (Table 3). Of the 187 vineyards reporting, only 27 had 30 acres or more planted to winegrapes. One hundred forty one of the 187 had 20 or fewer acres. However, in comparing similar tables from the 1982 and 1984 surveys, it is apparent that the vineyards' average size is gradually increasing.

TABLE 3
VINEYARD SIZE DISTRIBUTION
by COUNTY
1986

-				acres				
•	. 0	5.1	10.1	15.1	20.1	25.1	30.1&	Number of
County	to 5	to 10	to 15	to 20	to 25	to 30	Over	Vineyards
Benton	2	3	1	1	1	0	0	8
Clackamas	7	0	0	0	1	0	0	8
Douglas	9	4	3	4	2	0	2	24
Jackson	6	5	0	3	1	0	1	16
Josephine	4	0	2	2	0	0	1	9
Lane	3	5	0	3	0	0	1	12
Linn	0	0	2	0	0	0	0	2
Marion	2	3	1	4	0	1	0	11
Morrow	0	1	0	0	0	0	2	3
Polk	6	5	2	3	0	1	9	26
Umatilla	1	0	0	0	0	0	2	3
Wasco	1	1	1	0	0	0	0	3
Washington	4	2	3	2	3	-1	3	18
Yamhill	11	7	4	5	3	5	6	41
Other Co	3	0	0	0	0	0	0	3
TOTAL	59	36	19	27	11	8	27	187
Total From								
1984 Report	66	37	16	15	15	7	23	179

YIELDS AND PRICES

While acres by variety were quite consistently reported on the survey forms, the yield and price data

were not very complete. "Weighted averages" were calculated using the acreage and yield reported for each vineyard. Acreage on forms not reporting yield were not used in this calculation. (Table 4). It is interesting to note that average yields reported in 1986 were lower than those reported in 1984. There were many comments concerning frost and bird damage on the 1986 survey forms.

TABLE 4
WINEGRAPE YIELDS & PRICES
by VARIETY
1986

		Tons / acre			— \$ / ton		_	_
Variety	Weighted Average	High	Low	Weighted Average	High	Low		
Pinot Noir	2.4	8.6	0.1	647.4	1000.0	350.0		
White Riesling	2.6	6.6	0.2	550.9	940.0	350.0		
Chardonnay		6.1	0.1	655.1	1000.0	350.0		
Cabernet Sauv	1.9	6.0	0.1	623.3	667.0	500.0		
Gewurztraminer	2.2	7.6	0.1	525.3	940.0	250.0		
Muller Thurgau	4.5	12.0	0.5	522.0	650.0	415.0		

In previous reports concern was indicated because of the low yields. Given the higher yields received from some mature vineyards it appears that Oregon vineyards have the potential of attaining profitable production levels. (The **low** yields in the table represent acreage that is just coming into production.)

The prices reported for 1986 were either higher or about the same as those in the 1984 report. For example, the average price for Pinot Noir in 1984 was \$506 per ton and in 1986 was \$647. Please note the great variation in prices. There is a wide spread between the high and the low for most varieties. Much of this variation is probably because of differences in quality. (No quality standard was used in the survey.) Sugar content, bunch rot, material other than grapes, etc. all affect price and/or yield.

TOTAL PRODUCTION AND GRAPES SOLD OUT OF STATE

In Table 4.5 is a **rough estimate** of the 1986 production of the six leading varieties. Multiplying the weighted average yields times bearing acres gives the total tons produced. Using 150 gallons per ton provides an estimate of total gallons produced. This calculation is about 730,000 gallons for these six varieties and there would be some additional production from other varieties. According to one report, the Oregon Liquor Control Commission reported over 4,300 tons for 1986. Using 150 gallons per ton calculates a number of about 650,000 gallons.

TABLE 4.5
ESTIMATED PRODUCTION OF WINEGRAPES
in 1986

Variety	Tons/ Acre	Bearing Acres	Tons Produced	Gallons* Produced
Pinot Noir	2.4	690	1,665	249,746
White Riesling	2.6	399	1,040	155,928
Chardonnay	2.4	578	1,373	206,002
Cabernet Sauv	1.9	110	207	31,114
Gewurztraminer	2.2	145	317	47,575
Muller Thurgau	4.5	58	261	39,116
Totals	2.5	1,980	4,863	729,480

^{*} Assuming 150 gallons per ton.

The survey requested data on grapes sold out of state. A total of 172 tons were reported: 76.6 tons of Pinot Noir, 1.5 tons of White Riesling, and 93.7 tons of Chardonnay. All but seven tons of hese grapes

came from the Willamette Valley. Subtracting the out of state ton production from our estimated production leaves 4,691 tons. Assuming some home use and losses, thes estimate are quite close to the Oregon Liquor Control figure, indicating that we are probably getting almost all of the grapes reported in the survey.

NEW PLANTINGS OF WINEGRAPES

Information was requested on acreage planted in 1986 and planned for 1987 (see Table 5). Respondents indicated that they planted 205 acres in 1986 and planned to establish another 215 acres in 1987. (Note of caution: The 205 acres planted in 1986 are included in the nonbearing figures in other tables.) These numbers are down dramatically from 1984 (1,011 acres) and 1985 (650 acres) as shown in Table 5. Please note the 1985 and 1987 figures are "planned" acreage. Even in the new plantings, the top three varieties, Pinot Noir, White Riesling, and Chardonnay, are predominant. These figures reflect the continued interest in Muller Thurgau and Pinot Gris.

TABLE 5

NEW PLANTINGS of WINEGRAPES
by VARIETY

	4004	1005	1000	1007
	1984	1985	1986	1987 Planned
Modele	Planted	Planned	Planted	Planned
Variety	Acreage	Acreage	Acreage	Acreage
Pinot Noir	162.2	192.3	43.1	83.0
White Riesling	226.0	55.8	34.3	27.7
Chardonnay	171.5	112.4	18.5	53.1
Cabernet Sauv	80.3	10.8	20.5	1.0
Gewurztraminer	53.7	27.0	12.4	6.0
Merlot	51.2	0.0	6.5	7.2
Sauvignon Blanc	86.7	7.5	10.4	6.9
Muller Thurgau	43.7	77.1	31.9	11.5
Zinfandel	1.0	0.0	0.0	0.0
Pinot Gris	36.7	36.1	15.2	11.3
Misc. Red	14.0	39.3	2.8	5.6
Misc. White	83.7	91.7	9.3	2.3
TOTAL	1010.7	650.0	204.8	215.4

TABLE 6 1986 OREGON WINEGRAPES BEARING ACREAGE by COUNTY

															Other	
Variety	Benton	Clack.	Doug.	Jack.	Joseph.	Lane	Linn	Marion	Morrow	Polk	Umat.	Wasco	Wash.	Yamhill	Co.	TOTAL
Pinot Noir	13.5	7.5	49.8	17.9	25.0	22.2	1.5	43.0	0.0	196.5	0.3	1.5	120.9	188.4	2.0	689.9
White Riesling	7.5	0.3	62.1	0.4	7.1	15.3	0.3	24.8	21.5	14.1	21.0	3.0	108.4	110.3	2.5	398.5
Chardonnay	7.4	1.4	44.6	54.5	12.0	8.6	2.0	17.8	0.0	130.3	21.3	11.5	123.2	143.8	0.0	578.3
Cabernet Sauv	5.2	0.3	24.2	42.2	4.1	2.9	6.0	0.4	1.5	10.2	4.3	2.0	4.5	2.6	0.0	110.3
Gewurztraminer	1.7	2.3	29.8	7.4	21.6	11.0	3.3	3.2	0.0	24.3	4.3	0.0	26.0	10.0	0.0	144.8
Chenin Blanc	0.0	0.0	0.9	0.0	1.0	0.1	0.0	0.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0	13.0
Merlot	0.0	0.0	1.1	9.8	0.0	0.0	0.0	0.0	0.0	0.0	4.0	0.0	0.0	0.1	0.0	15.0
Sauvignon Blanc .	0.8	0.0	3.6	4.3	5.0	0.0	7.0	0.0	0.0	9.0	4.0	0.0	2.3	13.3	0.0	49.4
Muller Thurgau	0.0	0.1	1.0	0.0	7.5	0.5	0.3	3.5	0.0	3.4	0.0	0.0	7.3	34.7	0.0	58.2
Zinfandel	0.0	0.0	2.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5
Pinot Gris	0.5	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0	0.3	0.0	10.5	31.9	0.0	46.8
Misc. Red	0.0	0.1	15.2	2.4	0.0	0.7	0.5	1.5	0.0	1.0	0.0	0.0	11.4	1.5	0.0	34.4
Misc. White	0.0	0.1	19.6	0.6	4.5	0.1	2.0	1.3	0.0	2.0	0.0	0.0	7.9	6.1	0.0	44.1
TOTAL	36.6	12.1	254.0	140.9	87.8	61.3	22.8	99.1	23.0	401.7	59.3	18.0	422.6	542.6	4.5	2186.1
Total from																
1984 Report	24.3	13.6	145.1	65.2	46.4	33.6	12.3	58.1	1.5	88.6	4.0	4.0	186.2	357.1	0.0	1040.0

TABLE 7 1986 OREGON WINEGRAPES NONBEARING ACREAGE by COUNTY

															Other	
Variety	Benton	Clack.	Doug.	Jack.	Joseph.	Lane	Linn I	Marion	Morrow	Polk	Umat.	Wasco	Wash.	Yamhill	Co.	TOTAL
Pinot Noir	18.2	4.0	13.0	0.5	8.5	32.0	0.0	11.0	79.0	66.8	0.0	0.0	106.2	44.5	0.0	383.7
White Riesling	7.0	7.0	2.0	0.0	25.0	16.5	0.0	10.3	209.6	19.9	0.0	0.0	3.0	37.0	0.0	337.3
Chardonnay	7.0	6.0	8.0	4.5	13.0	11.5	0.0	12.5	108.8	63.0	0.0	2.0	22.4	36.5	0.0	295.1
Cabernet Sauv	0.0	0.0	4.0	20.5	0.0	5.0	0.0	0.4	53.8	2.1	8.0	4.0	0.0	0.0	0.0	97.8
Gewurztraminer	4.2	7.0	2.3	1.7	18.5	3.5	0.0	3.3	62.0	12.2	0.0	0.0	9.2	5.8	0.0	129.7
Chenin Blanc	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	21.5	2.5	0.0	0.0	12.0	0.0	0.0	36.3
Merlot	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	53.0	0.0	0.0	4.0	0.0	0.0	0.0	59.5
Sauvignon Blanc .	7.0	0.0	1.4	4.3	3.0	0.0	4.0	0.3	37.7	0.0	0.0	0.0	13.0	0.0	0.0	70.7
Muller Thurgau	0.0	2.0	0.0	0.0	10.0	0.0	0.0	0.5	18.3	16.0	0.0	0.0	46.1	13.2	0.0	106.0
Zinfandel	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pinot Gris	0.0	3.5	0.0	0.0	0.0	5.0	0.0	3.5	0.0	2.2	0.0	0.0	18.4	22.3	0.0	54.9
Misc. Red	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	4.9	0.0	0.0	8.2	2.0	0.0	15.9
Misc. White	0.0	0.0	0.0	0.0	3.0	0.0	0.0	0.7	57.6	6.5	0.0	0.0	2.0	1.9	0.0	71.6
TOTAL	43.4	29.5	31.0	34.8	81.0	73.5	4.0	42.5	701.2	196.1	8.0	10.0	240.5	163.0	0.0	1658.4
Total From																
1984 Report	39.1	10.6	124.3	90.2	106.9	59.6	2.5	64.4	722.7	536.7	55.5	6.0	232.2	268.8	2.0	2321.5

EDITORIAL COMMENT

The Oregon Wine Industry has a low volume, high quality and relatively high priced product. Many have worked very hard to develop the reputation and quality of Oregon wines. Careful planning is needed because this industry is expanding rapidly. American agriculture has been blessed with research, extension, new varieties, new technology, etc. With all of this, total production of all crops has increased dramatically over the years. Production is so great in some commodities that there are government programs to reduce acreage, find new markets and control storage and carryover supplies. This is a critical time in the development of the Oregon Wine Industry. As a group, the winegrape growers and the wineries need to make sure the market for the product is expanded as fast as production. Thoughtful planning may avoid the problems experienced in some other phases of agriculture. Given a year with favorable weather, lower bird damage, and three large vineyards coming into production, it is conceivable that we could have up to twice the grape production reported in 1986. If this were to happen, does the industry have the capacity to handle all the grapes and are there established markets to handle this magnitude of Oregon wine?