United States Department of Agriculture - National Agricultural Statistics Service

2011 Grape & Wine Industry Survey

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Cooperating with the Wisconsin Department of Agriculture, Trade and Consumer Protection.

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Survey Methodology

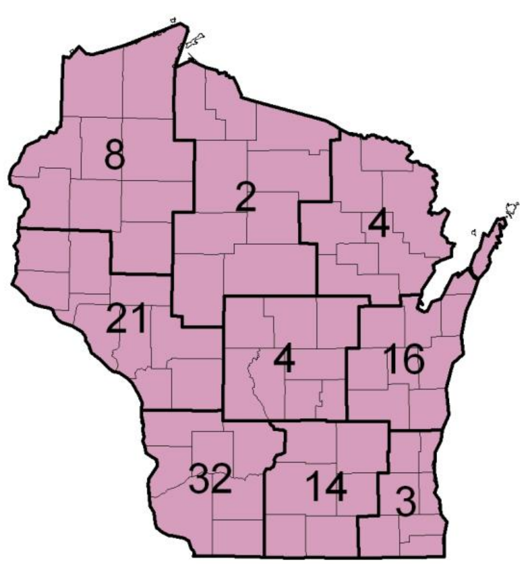
In 2012, Wisconsin grape growers and wine producers were asked to give input on their operations with regards to the 2011 production year. The grape and wine industries have grown significantly in recent years, and a need grew to assess their current status and see what the future may look like.

A list of grape growers and wineries was compiled with help from the Wisconsin Grape Growers and Wisconsin Winery Associations. An initial survey was mailed in June 2012, with a follow-up mailing in July. Phone follow-up was conducted in November, giving grape growers a break during harvest season. An overall response rate of 76 percent was attained. Summary data is based on completed reports. No attempt was made to estimate for operations that did not return their surveys.

Location and Establishment of Vineyards

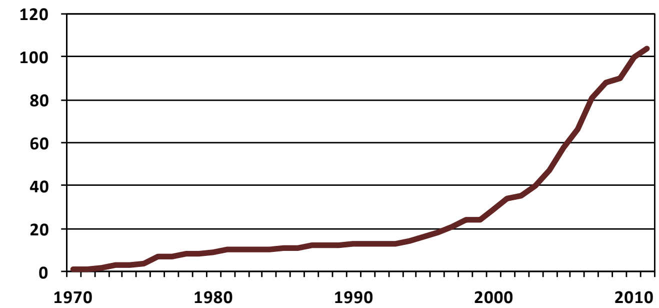
About half of responding commercial vineyards (those growing grapes for sale or for producing wine in their own winery) were located in the west central and southwestern parts of the state. An additional 15 percent were located in east central Wisconsin, and 13 percent were in the south central region.

Number of Reported Commercial Vineyards
Wisconsin, 2011



Just over half of the 104 vineyards that responded were established between 2005 and 2011, averaging 9.5 new vineyards a year during that period. Between 1950 and 1994 there was only 1 new vineyard every 3 years, while between 1995 and 2004 vineyards were established at rate of 3.7 per year. The average vineyard had its first sale 3.4 years after being established.

Number of Commercial Vineyards[1], Wisconsin, 1970-2011

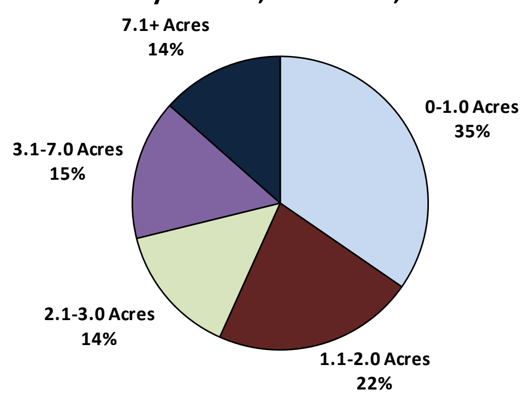


[1]Reported vineyards only.

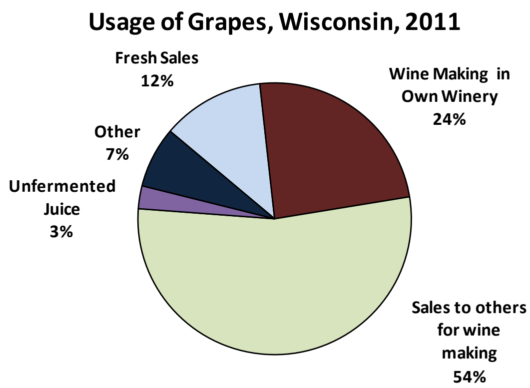
Vineyard Characteristics

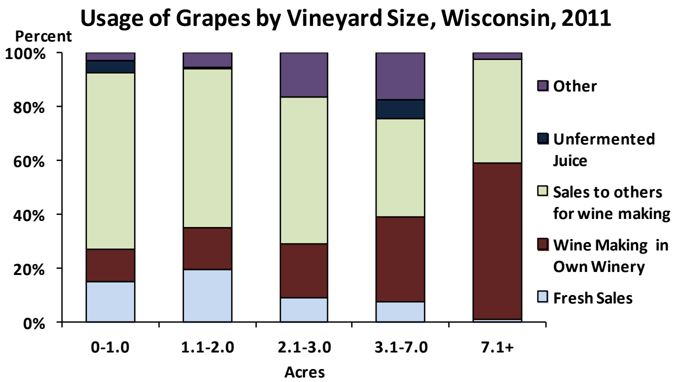
Vineyard's ranged from less than 1 acre to over 24 acres in size. However, 57 percent of respondents indictated they had 2 or fewer acres. On average, 69 percent of planted acreage was of bearing age, and 63 percent was harvested in 2011. The average yield was over 2 tons per acre.

Vineyard Size, Wisconsin, 2011



A majority of the grapes grown in Wisconsin vineyards are sold to wineries for wine making, while almost a quarter of the grapes are used to make wine in the vineyard owners own winery (i.e., joint vineyard winery operations). The smaller the vineyard, the more likely the grapes were sold to a separate winery, while over half of the largest vineyards use their grapes in their own wineries.





Respondents reported that 36 percent of grapes were sold through short term contracts (typically 1 year in length), 35 percent were sold through cash or spot markets (e.g., wholesale to a winery), and 29 percent were sold directly to consumers.

One-fifth of respondents had a cold storage facility, although 40 percent of the cold storage facilities were temporary.

Respondents were asked to rank a set of vineyard management issues from most to least problematic. Disease and/or insect management was ranked the most problematic issue.

Vineyard Management Issues, Wisconsin, 2011

Management issue	Rank[1]
Disease and/or insect management	1
Canopy management[2]	2
Weed management	3
Animal control	4
Pruning	5
Trellising	6
Winter/cold hardiness	7
Fertilization and/or pH adjustment	8
Knowledgeable vineyard labor force	9
Crop estimation before harvest	10
Herbicide drift	11
Marketing and contracts	12

[1]Rank of 1 is most problematic, 12 is least problematic. [2]Includes shoot thinning and positioning, cluster and leaf thinning.

Commercial Vineyard Characteristics, by Vineyard Size, Wisconsin, 2011

Vineyard size (acres)	Number of operations	Avg. number of planted varieties	Total planted acres	Total harvested acres	Tons/ acre harvested	Total tons harvested[1]	Total acres to be added in the next 3 years	Avg. FTEs[2]	Avg. number of visitors
Up to 1	36	3.0	26.0	18.6	1.9	35.2	19.0	0.45	15
1.1-2.0	23	4.3	38.5	23.7	2.6	60.7	11.7	0.58	130
2.1-3	15	4.3	39.6	21.7	2.8	60.0	15.6	0.74	62
3.1-7	16	6.9	81.9	50.0	2.6	127.6	11.3	1.41	152
7.1+	14	6.4	184.8	117.8	2.2	262.9	18.0	1.45	2,841
Overall	104	4.5	370.8	231.8	2.3	546.4	75.6	0.85	387

[1]Total tons imputed based on yields from good reports. [2]Full time equivalent employee.

Characteristics of Most Common Grapes Grown by Commercial Vineyards in Wisconsin, by Variety, 2011

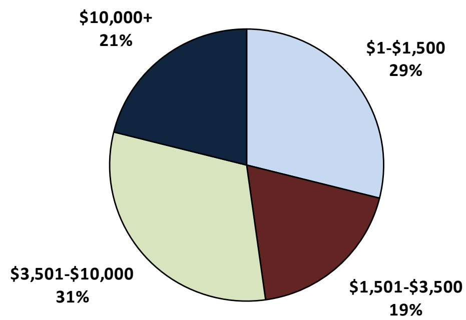
Variety	Number of vineyards with variety	Avg. vine age in years	Total planted acres	Total bearing acres	Total harvested acres	Avg. yield (tons / acre)	Total tons harvested[1]	Total acres to be planted in the next 3 years	Avg. price ($/ton)	Avg. degrees BRIX
Marquette	54	3.4	67.8	38.8	38.5	2.6	98.7	17.7	1,296	23.6
Frontenac	50	5.4	60.7	46.3	39.7	3.0	120.0	10.9	1,281	22.3
Marechal Foch	32	10.5	40.9	37.2	35.5	2.0	71.0	2.0	1,206	21.0
Frontenac Gris	30	4.7	27.6	20.5	20.1	3.3	65.2	1.8	1,293	22.6
La Crescent	27	4.4	26.2	12.6	10.8	2.6	28.2	1.2	1,290	22.6
St. Pepin	25	5.1	23.1	17.1	13.4	3.2	42.2	5.1	1,286	21.6
Concord	14	22.5	17.5	15.0	14.8	1.4	20.8	3.0	1,532	20.0
Edelweiss	24	6.9	15.7	13.0	10.3	2.7	28.2	0.5	1,090	16.6
St. Croix	22	6.6	11.9	8.1	6.2	2.9	17.7	0.5	1,119	21.1
All others	NA	NA	79.5	47.5	42.6	NA	54.4	32.9	NA	NA

[1]Total tons imputed based on yields from good reports

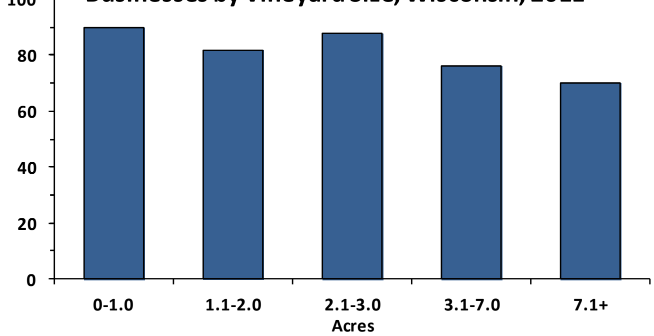
Commercial Vineyard Management Costs

Vineyard managers were asked to report input and overhead costs of managing their operations in 2011. Just over one-fifth of respondents had annual expenses of more than $10,000, while 29 percent had annual expenses of less than $1,500. The smaller the vineyard the more likely they were to purchase goods at Wisconsin businesses.

Vineyard Expenses, Wisconsin, 2011



Vineyard Expenses Spent at Wisconsin Businesses by Vineyard Size, Wisconsin, 2011



Gross sales in 2011 ranged considerably across operations. Almost 40 percent of respondents indicated sales of less than $1,500, while just under 10 percent had sales of over $15,000.

Gross Sales at Wisconsin Vineyards, 2011

Sales	Percent of wineries
Up to $1,500	38
$1,501-$5,000	32
$5,001-$15,000	21
$15,001+	9

Non-commercial Vineyards

Many survey respondents indicated that they grew grapes either as a hobby or with the hope of being able to sell grapes or wine commercially in the future.

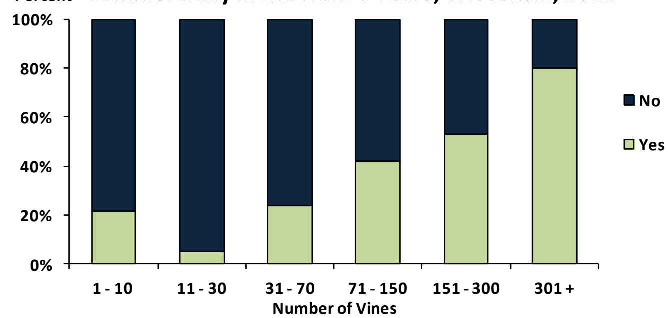
- 119 of 130 non-commercial vineyard respondents reported a total of 20,353 vines planted.
- Average spacing between rows was 9.5 ft., while spacing between vines was 7.2 ft.
- 32 percent plan on selling grapes or wine commercially in the next five years.

The most common grapes grown on these operations was similar to the commercial vineyards, with Marquette and Frontenac as the most common varieties.

Grape Varieties on Non-commercial Vineyards, Wisconsin, 2011

Variety	Percent of total vines planted
Marquette	20.7
Frontenac	16.7
St. Pepin	12.1
Marechal Foch	6.1
La Crosse	5.1
Concord	4.9
Brianna	3.9
St. Croix	3.6
Frontenac Gris	3.6
Other varieties	23.2

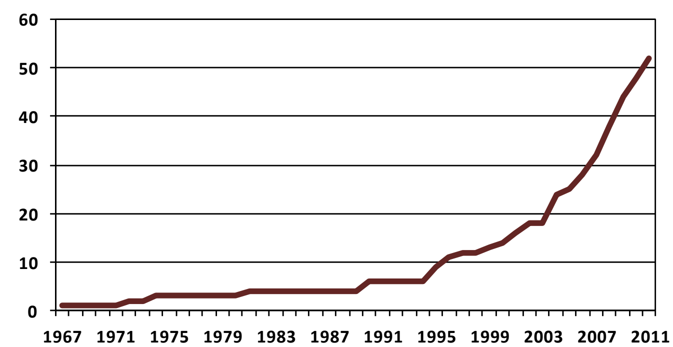
Non-commercial Vineyards Planning to Sell Commercially in the Next 5 Years, Wisconsin, 2011



Winery Characteristics

In 2011, there were 81 wineries licensed by the State of Wisconsin. Two-thirds of the wineries responded to the survey. Half of responding wineries opened since 2005. From 1967 to 2004, two wineries opened every 3 years, on average, while from 2005 to 2011, the rate was 4.8 wineries per year.

Number of Wineries[1], Wisconsin, 1967-2011



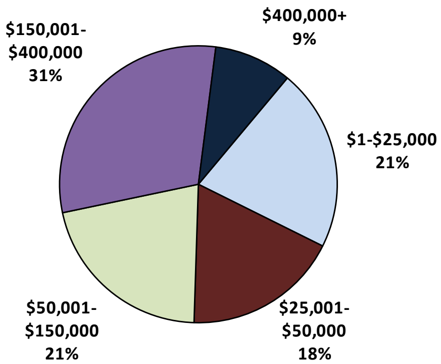
[1]Reported wineries only.

The total tankage capacity of wineries in 2011 varied considerably with about one-fifth of respondents having less than 1,000 gallons of capacity all the way up to 12 percent having capacity greater than 20,000 gallons. Total revenue from wine sales in 2011 followed a similar pattern, with 21 percent of respondents selling less than $25,000 worth of wine and 9 percent selling over $400,000 worth of wine.

Winery Tankage Capacity, Wisconsin, 2011

Capacity (gallons)	Percent of wineries	Total Capacity (gallons)
Up to 1,000	22	5,510
1,001-2,000	18	14,225
2,001-5,000	18	35,103
5,001-20,000	30	142,800
20,001+	12	461,195

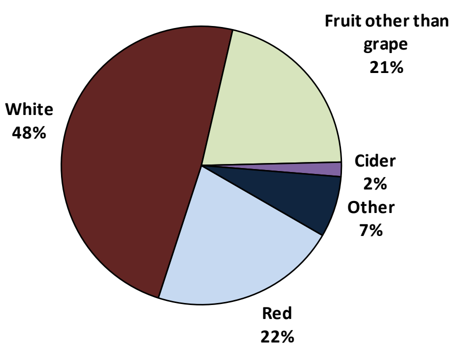
Revenue from Wine Sales, Wisconsin, 2011



Most wine sales occurred through tasting room sales and face-to-face (82 percent), while 16 percent of sales occurred through distributers or coops and 1 percent was sold through the mail or internet.

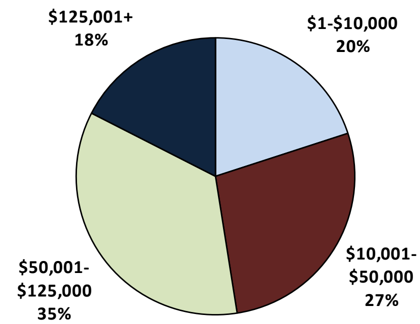
Almost half of the product sold by respondents was white wine. Red wine and wine from fruit other than grapes each accounted for about one-fifth of sales.

Type of Wine Produced, Wisconsin, 2011



Similarly to the vineyards, winery managers were asked to report input and overhead costs for 2011. One-fifth of respondents report expenses of less than $10,000, while 18 percent had expenses topping $125,000. Sixty-five percent of purchases were spent at Wisconsin businesses. Respondents were also asked to estimate the value of all assets at their wineries. Almost one-quarter of responding wineries had assets worth more then one million dollars.

Winery Expenses, Wisconsin, 2011



Winery Asset Value, Wisconsin, 2011

Value	Percent of wineries
Up to $50,000	19
$50,001-$250,000	22
$250,001-$500,000	24
$500,001-$1,000,000	11
$1,000,001+	24

In the next five years, 72 percent of respondents plan on expanding their wine production capacity.

- 35% plan on expanding by up to 2,500 gallons
- 18% plan on expanding by 2,501 up to 6,000 gallons
- 29% plan on expanding by 6,001 up to 12,000 gallons
- 18% plan on expanding by more than 12,000 gallons

Source of Grapes or Fruit for Wine Making, Wisconsin 2011

Source	Winery capacity (gallons)				
	1-1,000	1,001-2,000	2,001-5,000	5,001-20,000	20,000+
	Percent				
Grapes					
Own vineyard	12	2	17	19	14
Other WI vineyard	<1	12	12	11	4
Other state(s)[1]	15	38	2	15	47
Bulk wine					
WI	0	<1	3	2	0
Other state(s)[2]	0	4	3	12	4
Juice					
WI	0	3	0	1	2
Other state(s)[3]	32	10	24	22	8
Other fruite					
Own farm[4]	24	9	9	2	2
Other WI farm[5]	2	19	12	16	9
Other state(s)[6,7]	15	3	18	<1	10
Total	100	100	100	100	100

[1]CA, NY, OR, WA. [2]CA, MI, WA, NY, OR. [3]CA, NY, WA, OR. [4]Apple, black currant, cranberry, peach, pear, plum, raspberry, blueberry. [5]Apple, cherry, cranberry, pear, plum, raspberry, black currant, strawberry, blueberry. [6]Apple, blueberry, elderberry, peach, pear, apricot, cherry, pumpkin, pomegranate. [7]CA, IL, MI, OR, ID, WA

Thank you to all the grape growers and wine makers who answered this survey.
Your input is vital to show policy makers and industry leaders the current state of Wisconsin's grape and wine industry.

Additional results, including more breakdowns by vineyard and winery size, can be found at http://www.nass.usda.gov/wi/