## **APPENDIX**

## **OREGON WEATHER AND HARVESTS: A VINTAGE REVIEW**

- **1985**: The vintage was hot and dry from beginning to end. Harvest was in late September, under ideal conditions. Crop was a bit short. Also noteworthy was frost on May 11<sup>th</sup> and 12<sup>th</sup>, which affected many locations near the valley floor. Quality was good to excellent.
- **1986**: The year started early, with buds bursting around March 20th. Bloom was somewhat early. The summer was hot, with the year tracking very close to 85°F until 3" of rain fell in September. Good weather returned at the end of the month, but the poor weather during fruit maturation diminished the quality of the Pinot noir vintage somewhat. Some excellent Chardonnays were made. Quality was average to good.
- **1987**: Very hot, dry vintage with a September harvest. Grapes harvested in hot conditions. Sugars sometimes reached maximums before flavors developed. Quality was poor to very good.
- **1988**: The lack of rain in the fall and early winter of 1987 led to a peculiar malady in 1988 called "late fall drought-induced Boron deficiency." The result was a very poor set and resulting small crop. Nonetheless, 1988 was a classic Oregon Pinot noir vintage, with cool temperatures and a long, dry fall. Quality was good to excellent.
- **1989**: In the late winter of 1989, Oregon suffered a severe freeze with temperatures at below -5°F. The consequence was moderate to serious vine damage and bud damage in the spring of 1989. Crops were significantly reduced. The vintage was characterized by a late bud break, but a hot summer and fall. Harvest was in September. Quality was good to very good and the quantity was short.
- **1990**: Very cold conditions in December of 1989 caused bud damage, which led to the third straight year of short crops in Oregon. The vintage resembled 1988, with a long cool year and a dry fall. Quality was very good to excellent.
- **1991**: A long, cool spring pushed bloom into late June and early July. The rest of the season was, however, ideal with an extraordinary, long, warm fall. The crop was good. Because of the late harvest, quality was enhanced by severe thinning. Quality ranged from average to very good, depending on cultural practices.
- **1992**: This was the hottest year in Oregon's brief modern viticultural history. The harvest ranged from early to mid-September. Fortunately, the heat relented somewhat at the end of maturity, allowing many producers to make wines of outstanding quality. The experience of 1987 may have aided producers in making their cultural and picking decisions. Crop was good. Thinning was required to be successful. (The earliest harvest to date.) Very fruit-forward, many did not age well.
- **1993**: This may become another classic Oregon vintage. Bloom was in late June. Harvest was

relatively late, but the fall was warm and relatively dry. The crop was average. Thinning generally enhanced wine quality. The wines developed slowly, but are some of Oregon's best after a decade or more of aging.

- **1994**: A highly ballyhooed vintage, this was a short, dry and warm harvest. Thinning was unnecessary, with most vineyards having crop loads under two tons per acre. Alcohols are moderately high, extraction huge and the reception by press predictably strong. Seen as the best vintage released to date by some, with 1998 rivaling it. Ageability was variable, wines with better acidity have stood up well. Those picked very ripe with lower acids were better consumed in their youth (which most were). The very small yields and production made both these vintages financially challenging for wineries and growers. (The driest growing season to date.)
- **1995**: A vintage with rain at harvest ending a good growing season shy of full maturity at many sites. A moderate to good yield and heavy rains for a week or more in the middle of harvest meant many wines lack the depth of fruit and color that others have. The vintage made some very elegant-styled wines at the single vineyard and reserve levels. Unfortunately, following on the heels of 1994, it was reviewed poorly by many critics. It also has evolved well over the long term.
- **1996**: The second rain-affected harvest in a row, fruit in this year was closer to fully ripe when a few days of rain arrived, resulting in almost normal size and richness in the Pinot noirs. The vintage yields were slightly below normal levels but not as low as 1994 and 1998, plus in all years since 1994 more winemakers are choosing to crop-thin to achieve intensity. A fat, rich vintage considered the best of the rain years by critics.
- **1997**: The last of the three rain vintages, this year showed great promise until the skies opened. Crop loads promised the largest harvest yet and they were almost ripe when rains came. Unlike the prior two vintages when the rains stopped for post-rain ripening, 1997 remained wet. Botrytis pressure was high and earlier-picked vineyards and those who sorted and crop-thinned fared better. Very good structures bordering on tannic, plus slow-to-evolve fruit have made this vintage unpopular with critics, although excellent producers made stellar wines that have aged well.
- **1998**: Glorious wines, just not many of them. A large 1997 crop sapped vine energy and damp, cool weather at bloom doomed this vintage to short crops. But, that meant with a normal ripening season and no early rains, deeply extracted and highly structured wines could be produced. Crop loads were even smaller than 1994 and the wines were big, but would require time in bottle to regain their lushness and finesse. Possibly the best vintage to date.
- **1999**: Bloom was very late and was followed by a very cool growing season. There was much concern about whether the crop would ever ripen, and a full crop load hung in most vineyards. We would need two months of almost perfect weather to fully ripen the fruit. Many vineyards were severely crop-thinned as a precaution, but the weather was perfect through early November. If growers and winemakers were patient, the fruit was perfect. Many of the best wines are as good as 1998, some claiming to be better. Some variability can be expected, as

some panicked and picked early, not trusting Mother Nature. An almost Burgundian level of acidity will make this vintage ageworthy.

**2000**: The 2000 growing season was almost perfect, starting early in both bud break and bloom, setting a full crop in vineyards and thus giving a chance to precisely choose optimum yields with crop thinning. During harvest, which started the last week of September and lasted until the last week of October, only 1.1" of rain fell, with very good ripeness and moderate to good acids. Colors and extractions on the Pinot noir cuvees were excellent, acids good but not as firm as 1999 and fruit totally ripe without disease pressure. Third-in-a-row, 2000 was an average of the prior two vintages' characteristics. In a word, a "pretty" vintage.

**2001:** This year produced a soft, big vintage. It saw almost ideal growing and ripening weather and less than an inch of rain during harvest. This is not a typical cool-climate vintage, since acids are as low and ripeness as full, despite above average yields before crop thinning, as we've seen since perhaps 1987. The Pinot noirs will be soft, fleshy and early appealing, with moderate colors. Whites will be full and broad, and early maturing. The alcohols are restrained slightly by yields that didn't force extreme extraction. The wines were lighter, slightly harder and not as well-reviewed by critics. Perhaps the weakest vintage of the excellent 1998–2003 string.

**2002**: An extended, dry and moderately warm harvest put the finishing touches to what may be one of the best two or three vintages Oregon has seen—perhaps best ever for whites, close to best for reds. A slightly early bud break ushered in a warm, dry growing season with excellent heat summations, but not heat spikes. An inch of rain in mid- to late-September corrected imbalanced high sugars and low pH and set the stage for an extended harvest of well over a month for Pinot noir. Harvests of young fruit prior to this only rain event may give some elevated alcohols. Crop loads were full, requiring precise green harvesting for full ripeness and extraction. Excellent acidities due to moderate temperatures throughout the growing and harvest period make this a richly ripe but structured vintage, both for whites and reds.

**2003**: This is an excellent vintage, albeit unusual in the fiery nature of the growing season. The same dry and warm growing and ripening seasons held for 2003, with Region II (not coolclimate!) heat accumulations of 2,500 units, average highs of 78°F July-October, and half the normal rainfall with 2.75". Fruit was disease free, crop set was generous enough for easy honing to desired levels and soil moisture was adequate due to good pre-season winter rains. Concerns regarding this vintage center on high sugars, resultant high alcohols and low acids. Most comparable past vintages, like the excellent 1992, may urge us not to worry.

**2004:** This vintage started out as a carbon copy of 2003, but thankfully cooled off and got needed rains in late August and then again in mid-September before most vineyards' final ripening phase. What a difference some rain makes! Young and early vineyards that were almost ready to harvest the first week of September could have done without the rain, but the rest thought it a blessed relief and assured nutrient mobility in the vines. A short crop due to poor weather at set, extreme temperatures the prior vintage, and vineyard growth irregularities, plus growing season heat (2004's Degree Day 2404 compared to 2003's 2535 in

McMinnville) make 2004 properly plump and extracted, but with restraint—average Brix down 1%. An interesting vintage—almost an average of 2001, 2002 and 2003, with perhaps a little more variability in reds and more structured, brighter whites similar to 2002.

**2005**: Although moderate in temperature, this was the coolest vintage of the last six years. It got off to a very early start (March bud break), but the weather turned cool and rainy in late May and June, leading to a late bloom and reduced crop due to poor set. A warm and dry July and August followed. Fall was cool and it rained significantly late in September. Although most winemakers fear rain just prior to harvest, in Burgundy they say a good rainstorm in early September is a basic ingredient of a great vintage. 2005 was a classic example of fall rains providing balance to the fruit after a dry summer. There was almost no damage to the fruit from splitting or rot, and harvest followed in dry conditions over the next few weeks. There is significant excitement and pleasure over the quality of wines produced in this unusual vintage. The wines are well balanced and have moderate alcohol, good acidity and supple tannins.

**2006**: Thanks to favorable weather at bloom and an extended growing season, Oregon's 2006 vintage was characterized by that rare combination of plentiful crop, a warm and dry growing season with little precipitation and modest disease pressure. A hot, dry, eastern wind just prior to harvest caused dehydration at many sites, boosting acid and sugar levels. Some panicked at the high sugar levels and picked before the grapes developed full physiological maturity. The resulting wines were rich and hedonistic. Higher than average alcohols were common. 2003 was the only vintage in recent times warmer than 2006, as measured by heat unit accumulation.

**2007**: This was a challenging Oregon vintage. Bud break and bloom occurred "on time," followed by a summer of above normal temperatures (over 100°F). September was slightly below normal, setting up the possibility of long hang times. A series of rain fronts progressed weekly across Oregon's vineyards, delaying harvest by two weeks or more. As flocks of migratory birds invaded the vineyards with each successive storm front, growers used bird netting for the first time. Harvest went in spurts in the dry windows between weekly weather events. Growers who thinned to lower yields and rigorously maintained spray schedules were rewarded with balanced and elegantly ripened fruit. It was possible, but not easy to pick with ripe tannins, layers of complex and subtle flavors and a solid backbone of acidity. Many of the white wines achieved significant critical acclaim; the best of the Pinot noir wines have benefited from bottle age and are expected to age very well.

**2008**: Hailed by many as the "best vintage of the last 20 years," Oregon's 2008 started with a very late bud break—almost a full month late. It rained just enough in September to keep the vines working steadily. The weather throughout October was perfect: moderate temperatures during the day and cool nights allowed fruit to ripen slowly and evenly, with no real disease pressure. Surprisingly, the vintage ended with very low accumulated Degree Days—a mere 1976. Extremely well-balanced wines were produced with complex fruit flavors, excellent acidity, well-developed tannins and moderate alcohols. The downside was very low yields and small quantities of wine.

**2009**: Excellent weather during bloom created unusually large clusters with very high berry counts. Vineyards thinned to one cluster per shoot still achieved record yields. Weather during harvest was warm and dry. There was a distinct difference between vineyards located above McMinnville where there was significant dehydration and loss of acidity. Vineyards below McMinnville had little dehydration, normal acidity and a later harvest window. High yields and good quality fruit will help wineries recover from the small volume of 2008.

**2010**: Overall, this was the coolest growing season in the past 30 years. After a brief period into the 70's in mid-May, there was no real warmth until mid- and late-June. There were a few brief bouts of heat into the 90's in August, but September and October were mostly in the 60's and 70's. Our saving grace was an extended period of sun in October, 13 days, which allowed the skins to mature their tannins. Low sugars at harvest resulted in moderate alcohols. The wines have good acidity and the vintage also produced very good white wines. The Pinot noirs have well-developed flavors, especially given the relative coolness of the growing season. They are very textural in the mouth, unusually so, are capable of clear expressions of site and will be great food wines. Bird predation was a huge issue near harvest time.

**2011**: A very cold spring resulted in delayed bud break and the latest bloom in Oregon's history, occurring in early July. The summer was warmer than normal producing a good canopy and lower than normal disease pressure. Veraison occurred in September and at some sites, the grapes were not fully colored until early October. Cloudy and wet weather in early October increased the disease pressure, but then the weather cleared and was sunny into early November. For most Willamette Valley sites, this was the latest harvest on record. Low sugar, solid acidity and decent flavor development produced surprisingly generous wines from the better sites, especially if picked late in October and early into November.

**2012**: A cool spring with record moisture in June resulted in a slightly delayed bloom that was interrupted by cool, wet weather. This resulted in an extended period of flowering, diminished berry fertilization and some bunch stem necrosis. Consequently, the clusters had reduction both in absolute number and in the number of berries per cluster, significantly reducing the crop. Spring was followed by a beautiful, sunny, warm and dry summer, with the longest dry period in the Willamette Valley's history, over 100 days. The lovely weather continued into October with harvest occurring in mid-month. The grapes achieved ideal ripeness and wines have lovely ripe tannins, moderate alcohols and nice acidity. This is potentially one of Oregon's best harvests.

**2013:** A Tale of Two Harvests—one very early and one normal, with rain in between. They started as one very early harvest thanks to a very consistent, warm growing season, the warmest on record up to final ripening mid-September. An unanticipated 30-year rain event of 5" then appeared the last days of September, made of remnants from a typhoon that had hit Japan days before, ushering in a spate of cool weather, interrupting the season, slowing ripening and turning it into two discrete picks, with early Pinot noir ferments already in barrel before remaining grapes were ripe and picked! Although grapes ripe during the rain were vulnerable to botrytis, earlier and later picks showed very good quality, with many considering the coolness and longer hang-time a big benefit, preserving acidity and flavors, while

minimizing alcohol. Color, texture, balance and acidity on the whole were good for the vintage. Croploads were moderate to high, except for blocks and varieties lost to the rain.

**2014**: 2014 was one of those rare vintages when everyone is excited—writers and winemakers love the quality, grape growers had no handwringing to do and yields pleased bankers, which also means customers will see reasonable prices! Wine quality is excellent, based on full ripeness, probably the cleanest fruit we've seen in decades, and restrained extractions in fermentation to compensate for the warmest growing season on record assure balance. Despite the warmth of over 2800 degree days, driven by many very hot summer days (almost double the over 90F highs we've recently seen at 29) and warmer lows, good cropload balance and harvest timing gave reasonable alcohols, averaging just under 14%. Whites are lush and gorgeously fruited. Pinot noir colors are appropriately rich but not too deep, wines not tannic or over-extracted, and all's right with the world.

**2015:** Here, have a cigar! We just had twins, one year apart. The 2015 vintage was slightly different in early growing season timing from 2014, but the final effect was the same, with big heat, big crop and big expectations. The acids are down, the alcohols are slightly over 14% on average and the work many did to minimize over-extraction resulted in more elegant wines than a hot vintage deserves. Similar to 2014. Also as in 2014, the fruit was impeccably clean and devoid of disease, with only a little sunburn being tossed from the sorting conveyor. Whites again look fully ripe, texturally rich, and yet balanced. Pinot noirs will rival 2014 for rave reviews.

**2016:** This is the year of *Earliest Ever*. The winter was warm, budbreak was early and 2016 never looked back—bloom, veraison, and harvest all early records, beginning harvest in August and done before October. Although early, the growing season wasn't as hot as the prior three, but still in the same new, warm norm. Fruit is fully ripe but not overripe, with moderate alcohols, good enough acids and intense, easily extracted, dense wines, from 15% smaller berry sizes and yields. Potentially an excellent-to-classic vintage. Finally dialed back a little.

Vintage notes provided with significant assistance from Ted Casteel, Harry Peterson-Nedry, Scott Shull and Mark Vlosssak. Heat accumulation data provided by Harry Peterson-Nedry.

	TEMPERATURE MEAN AND EXTREMES, PLUS RAINFALL				
	McMinnville, OR Airport	Day Count			
		Mean High	Max Temp	> 80F	>90F
2008	May	67	97	4	1
	June	71	99	5	1
	July	82	96	20	6
	August	80	102	14	5
	September	79	92	15	3
	October	63	75	0	0
	Cetaber			58	16
2009	May	69	89	5	0
	June	74	87	6	0
	July	86	105	23	11
	August	80	96	15	5
	September	77	95	12	2
	October	62	70	0	0
				61	18
2010	May	62	76	0	0
	June	69	82	4	0
	July	81	96	17	5
	August	80	99	14	6
	September	74	89	7	0
	October	64	80	1	0
				43	11
2011	May	61	72	0	0
	June	70	85	2	0
	July	78	90	12	0
	August	83	97	24	6
	September	81	96	17	8
	October	63	76	0	0
				55	14
2012	May	68	87	3	0
	June	69	84	3	0
	July	80	90	19	0
	August	85	102	20	9
	September	80	96	14	3
	October	65	88	2	0
				61	12
2013	May	69	86	7	0
	June	76	96	10	2

	July	86	96	23	7
	August	83	95	22	4
	September	73	96	9	2
	October	64	77	0	0
				71	15
2014	May	71	89	5	0
	June	74	86	5	0
	July	87	98	25	14
	August	87	98	26	10
	September	80	97	15	5
	October	69	89	5	0
				81	29
2015	May	71	85	4	0
	June	83	99	21	9
	July	88	106	25	12
	August	85	103	26	5
	September	76	96	9	2
	October	69	96	3	0
				88	28
2016	May	71	89	7	0
	June	77	92	9	2
	July	81	97	15	3
	August	86	102	24	13
<u> </u>	September	76	90	9	2
	October				
<u> </u>				64	20

	DEGREE DAYS BY YEAR (50F)					
	McMinnville, OR Airport					
		1-Jun	16-Aug	12-Sep	12-0ct	31-0ct
	1961-90	203	1283	1635	1936	1970
	1997	363	1462	1902	2158	2196
	1998	293	1564	2030	2332	2400
	1999	213	1231	1676	1977	2043
	2000	309	1430	1782	2149	2211
	2001	411	1445	1823	2110	2260
	2002	312	1471	1843	2138	2243
	2003	343	1610	2064	2391	2535
	2004	367	1652	2080	2342	2404
	2005	327	1486	1897	2109	2226
	2006	358	1642	2115	2376	2417
	2007	355	1504	1958	2121	2143
	2008	252	1320	1683	1936	1980
	2009	244	1426	1852	2066	2124
	2010	164	1162	1478	1795	1821
	2011	94	1101	1634	1959	2035
	2012	340	1492	1888	2224	2301
4 of top			1000			
5	2013	385	1666	2189	2364	2412
	2014	398	1766	2283	2702	2826
1 10/10	2015 2016	439 558	1941 1787	2373 2240	2698 2489	2833 2489
thru 10/10		326	1508	1939	2222	2295
	mean	101	209	234	238	259
	std dev	101	203	23 <del>4</del>	230	233
	2016Rank in DD	1	2	3	3	

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**2005**: Although moderate in temperature, this was the coolest vintage of the last six years. It got off to a very early start (March bud break), but the weather turned cool and rainy in late May and June, leading to a late bloom and reduced crop due to poor set. A warm and dry July and August followed. Fall was cool and it rained significantly late in September. Although most winemakers fear rain just prior to harvest, in Burgundy they say a good rainstorm in early September is a basic ingredient of a great vintage. 2005 was a classic example of fall rains providing balance to the fruit after a dry summer. There was almost no damage to the fruit from splitting or rot, and harvest followed in dry conditions over the next few weeks. There is significant excitement and pleasure over the quality of wines produced in this unusual vintage. The wines are well balanced and have moderate alcohol, good acidity and supple tannins.

**2006**: Thanks to favorable weather at bloom and an extended growing season, Oregon's 2006 vintage was characterized by that rare combination of plentiful crop, a warm and dry growing season with little precipitation and modest disease pressure. A hot, dry, eastern wind just prior to harvest caused dehydration at many sites, boosting acid and sugar levels. Some panicked at the high sugar levels and picked before the grapes developed full physiological maturity. The resulting wines were rich and hedonistic. Higher than average alcohols were common. 2003 was the only vintage in recent times warmer than 2006, as measured by heat unit accumulation.

**2007**: This was a challenging Oregon vintage. Bud break and bloom occurred "on time," followed by a summer of above normal temperatures (over 100°F). September was slightly below normal, setting up the possibility of long hang times. A series of rain fronts progressed weekly across Oregon's vineyards, delaying harvest by two weeks or more. As flocks of migratory birds invaded the vineyards with each successive storm front, growers used bird netting for the first time. Harvest went in spurts in the dry windows between weekly weather events. Growers who thinned to lower yields and rigorously maintained spray schedules were rewarded with balanced and elegantly ripened fruit. It was possible, but not easy to pick with ripe tannins, layers of complex and subtle flavors and a solid backbone of acidity. Many of the white wines achieved significant critical acclaim; the best of the Pinot noir wines have benefited from bottle age and are expected to age very well.

**2008**: Hailed by many as the "best vintage of the last 20 years," Oregon's 2008 started with a very late bud break—almost a full month late. It rained just enough in September to keep the vines working steadily. The weather throughout October was perfect: moderate temperatures during the day and cool nights allowed fruit to ripen slowly and evenly, with no real disease pressure. Surprisingly, the vintage ended with very low accumulated Degree Days—a mere 1976. Extremely well-balanced wines were produced with complex fruit flavors, excellent acidity, well-developed tannins and moderate alcohols. The downside was very low yields and small quantities of wine.

**2009**: Excellent weather during bloom created unusually large clusters with very high berry counts. Vineyards thinned to one cluster per shoot still achieved record yields. Weather during harvest was warm and dry. There was a distinct difference between vineyards located above McMinnville where there was significant dehydration and loss of acidity. Vineyards below McMinnville had little dehydration, normal acidity and a later harvest window. High yields and good quality fruit will help wineries recover from the small volume of 2008.

**2010**: Overall, this was the coolest growing season in the past 30 years. After a brief period into the 70's in mid-May, there was no real warmth until mid- and late-June. There were a few brief bouts of heat into the 90's in August, but September and October were mostly in the 60's and 70's. Our saving grace was an extended period of sun in October, 13 days, which allowed the skins to mature their tannins. Low sugars at harvest resulted in moderate alcohols. The wines have good acidity and the vintage also produced very good white wines. The Pinot noirs have well-developed flavors, especially given the relative coolness of the growing season. They are very textural in the mouth, unusually so, are capable of clear expressions of site and will be great food wines. Bird predation was a huge issue near harvest time.

**2011**: A very cold spring resulted in delayed bud break and the latest bloom in Oregon's history, occurring in early July. The summer was warmer than normal producing a good canopy and lower than normal disease pressure. Veraison occurred in September and at some sites, the grapes were not fully colored until early October. Cloudy and wet weather in early October increased the disease pressure, but then the weather cleared and was sunny into early November. For most Willamette Valley sites, this was the latest harvest on record. Low sugar, solid acidity and decent flavor development produced surprisingly generous wines from the better sites, especially if picked late in October and early into November.

**2012**: A cool spring with record moisture in June resulted in a slightly delayed bloom that was interrupted by cool, wet weather. This resulted in an extended period of flowering, diminished berry fertilization and some bunch stem necrosis. Consequently, the clusters had reduction both in absolute number and in the number of berries per cluster, significantly reducing the crop. Spring was followed by a beautiful, sunny, warm and dry summer, with the longest dry period in the Willamette Valley's history, over 100 days. The lovely weather continued into October with harvest occurring in mid-month. The grapes achieved ideal ripeness and wines have lovely ripe tannins, moderate alcohols and nice acidity. This is potentially one of Oregon's best harvests.

**2013:** A Tale of Two Harvests—one very early and one normal, with rain in between. They started as one very early harvest thanks to a very consistent, warm growing season, the warmest on record up to final ripening mid-September. An unanticipated 30-year rain event of 5" then appeared the last days of September, made of remnants from a typhoon that had hit Japan days before, ushering in a spate of cool weather, interrupting the season, slowing ripening and turning it into two discrete picks, with early Pinot noir ferments already in barrel before remaining grapes were ripe and picked! Although grapes ripe during the rain were vulnerable to botrytis, earlier and later picks showed very good quality, with many considering the coolness and longer hang-time a big benefit, preserving acidity and flavors, while

minimizing alcohol. Color, texture, balance and acidity on the whole were good for the vintage. Croploads were moderate to high, except for blocks and varieties lost to the rain.

**2014**: 2014 was one of those rare vintages when everyone is excited—writers and winemakers love the quality, grape growers had no handwringing to do and yields pleased bankers, which also means customers will see reasonable prices! Wine quality is excellent, based on full ripeness, probably the cleanest fruit we've seen in decades, and restrained extractions in fermentation to compensate for the warmest growing season on record assure balance. Despite the warmth of over 2800 degree days, driven by many very hot summer days (almost double the over 90F highs we've recently seen at 29) and warmer lows, good cropload balance and harvest timing gave reasonable alcohols, averaging just under 14%. Whites are lush and gorgeously fruited. Pinot noir colors are appropriately rich but not too deep, wines not tannic or over-extracted, and all's right with the world.

**2015:** Here, have a cigar! We just had twins, one year apart. The 2015 vintage was slightly different in early growing season timing from 2014, but the final effect was the same, with big heat, big crop and big expectations. The acids are down, the alcohols are slightly over 14% on average and the work many did to minimize over-extraction resulted in more elegant wines than a hot vintage deserves. Similar to 2014. Also as in 2014, the fruit was impeccably clean and devoid of disease, with only a little sunburn being tossed from the sorting conveyor. Whites again look fully ripe, texturally rich, and yet balanced. Pinot noirs will rival 2014 for rave reviews.

**2016:** This is the year of *Earliest Ever*. The winter was warm, budbreak was early and 2016 never looked back—bloom, veraison, and harvest all early records, beginning harvest in August and done before October. Although early, the growing season wasn't as hot as the prior three, but still in the same new, warm norm. Fruit is fully ripe but not overripe, with moderate alcohols, good enough acids and intense, easily extracted, dense wines, from 15% smaller berry sizes and yields. Potentially an excellent-to-classic vintage. Finally dialed back a little.

Vintage notes provided with significant assistance from Ted Casteel, Harry Peterson-Nedry, Scott Shull and Mark Vlosssak. Heat accumulation data provided by Harry Peterson-Nedry.

	TEMPERATURE MEAN AND EXTREMES, PLUS RAINFALL				
	McMinnville, OR Airport	Day Count			
		Mean High	Max Temp	> 80F	>90F
2008	May	67	97	4	1
	June	71	99	5	1
	July	82	96	20	6
	August	80	102	14	5
	September	79	92	15	3
	October	63	75	0	0
	Cetaber			58	16
2009	May	69	89	5	0
	June	74	87	6	0
	July	86	105	23	11
	August	80	96	15	5
	September	77	95	12	2
	October	62	70	0	0
				61	18
2010	May	62	76	0	0
	June	69	82	4	0
	July	81	96	17	5
	August	80	99	14	6
	September	74	89	7	0
	October	64	80	1	0
				43	11
2011	May	61	72	0	0
	June	70	85	2	0
	July	78	90	12	0
	August	83	97	24	6
	September	81	96	17	8
	October	63	76	0	0
				55	14
2012	May	68	87	3	0
	June	69	84	3	0
	July	80	90	19	0
	August	85	102	20	9
	September	80	96	14	3
	October	65	88	2	0
				61	12
2013	May	69	86	7	0
	June	76	96	10	2

	July	86	96	23	7
	August	83	95	22	4
	September	73	96	9	2
	October	64	77	0	0
				71	15
2014	May	71	89	5	0
	June	74	86	5	0
	July	87	98	25	14
	August	87	98	26	10
	September	80	97	15	5
	October	69	89	5	0
				81	29
2015	May	71	85	4	0
	June	83	99	21	9
	July	88	106	25	12
	August	85	103	26	5
	September	76	96	9	2
	October	69	96	3	0
				88	28
2016	May	71	89	7	0
	June	77	92	9	2
	July	81	97	15	3
	August	86	102	24	13
<u> </u>	September	76	90	9	2
	October				
<u> </u>				64	20

	DEGREE DAYS BY YEAR (50F)					
	McMinnville, OR Airport					
		1-Jun	16-Aug	12-Sep	12-0ct	31-0ct
	1961-90	203	1283	1635	1936	1970
	1997	363	1462	1902	2158	2196
	1998	293	1564	2030	2332	2400
	1999	213	1231	1676	1977	2043
	2000	309	1430	1782	2149	2211
	2001	411	1445	1823	2110	2260
	2002	312	1471	1843	2138	2243
	2003	343	1610	2064	2391	2535
	2004	367	1652	2080	2342	2404
	2005	327	1486	1897	2109	2226
	2006	358	1642	2115	2376	2417
	2007	355	1504	1958	2121	2143
	2008	252	1320	1683	1936	1980
	2009	244	1426	1852	2066	2124
	2010	164	1162	1478	1795	1821
	2011	94	1101	1634	1959	2035
	2012	340	1492	1888	2224	2301
4 of top			1000			
5	2013	385	1666	2189	2364	2412
	2014	398	1766	2283	2702	2826
1 10/10	2015 2016	439 558	1941 1787	2373 2240	2698 2489	2833 2489
thru 10/10		326	1508	1939	2222	2295
	mean	101	209	234	238	259
	std dev	101	203	23 <del>4</del>	230	233
	2016Rank in DD	1	2	3	3	