STATION:	HAPPY VALLEY - BELLA CASA
COUNTY:	CLACKAMAS
STATE:	OREGON
ELEVATION:	600 FT
OBS TIME:	2400 HRS PDT
OBSERVER:	JEFFREY TAYLOR
ZIP CODE:	97086-4246

MONTH
APRIL
YEAR
2016

WEATHER OBSERVATION DATA FORM
FOR RECORDING DETAILED SURFACE OBSERVATIONS

CALENDAR DATE	TEMPERATURE (°F) 24 HRS ENDING AT OBS: MAX TEMP	MIN TEMP	MEAN TEMP	TEMP AT OBS	MAX TEMP TIME	MIN TEMP TIME	HEATING DEGREE DAYS	COOLING DEGREE DAYS	PRECIPITATION (INCHES) 24-HR AMOUNT: RAIN OR MELTED SNOW (2400 HRS)	RAIN OR MELTED SNOW (0700 HRS)	SNOW, HAIL, ICE PELLETS	AT OBS: SNOW DEPTH (nearest 1 inch)	WEATHER CONDITIONS/EVENTS (24 HRS ENDING AT OBS) MARK "X" FOR EACH: THUNDER	FOG	HEAVY FOG (Visib ≤1/4 mi)	HAIL	GLAZE	ICE PELLETS	DAMAGING WINDS	SKY COVER AVERAGE (24 HRS ENDING AT OBS): CLEAR	PARTLY CLOUDY	CLOUDY	WIND (MPH) 24 HRS ENDING AT OBS: DAILY AVERAGE	DOMINANT DIRECTION	PEAK GUST	PEAK GUST DIRECTION	PEAK GUST TIME	BAROMETRIC PRESSURE (INCHES) 24 HRS ENDING AT OBS: MAXIMUM	MAXIMUM TIME	MINIMUM	MINIMUM TIME	RELATIVE HUMIDITY (PERCENT) 24 HRS ENDING AT OBS: MAXIMUM	MAXIMUM TIME	MINIMUM	MINIMUM TIME	DEW POINT (°F) 24 HRS ENDING AT OBS: MAXIMUM	MAXIMUM TIME	MINIMUM	MINIMUM TIME	OBSERVATIONS AND OTHER COMMENTS (based on Observation time of 2400 Hrs)
1	74.1	47.4	60.8	57.3	1543	0724	4.3	0.0	0.00	0.00	0.0	0									X			0.6	WNW	7	WNW	1515	30.20	0844	30.09	1949	90	0732	39	1628	55	1206	44	0521	CLR day. Highest Max. Temp. since 75.3° 10/15/2015.
2	69.2	46.2	57.7	51.7	1512	0705	7.3	0.0	0.00	0.00	0.0	0									X			0.4	W	6	SE	1018	30.20	0904	30.08	1927	94	0734	49	1641	54	1510	38	2225	CLR day, PC at sunrise.
3	72.2	46.6	59.4	50.7	1542	0720	5.6	0.0	0.17	0.00	0.0	0		X								X		0.9	SSW	12	SW	2133	30.12	2359	29.96	1831	94	2336	32	1459	53	2138	39	0001	Mostly CLR AM, increasing clouds through afternoon, OVC by evening. Rain Hrs: 2015-2020 (T); estimated amt 2130-2400 (0.17").
4	58.1	44.0	51.1	45.8	1510	0624	14.0	0.0	0.38	0.42	T	0		X		X						X		0.9	WSW	12	ESE	1149	30.51	2353	30.12	0001	97	0735	52	1642	52	1316	39	1629	OVC AM, variably CDY PM. Rain Hrs: estimated amts 0001-0030 (0.03"), 0500-0540 (0.22"), actual amts 0838 (0.01"), 1030-1040 (T); 1223-1227 (0.11"); 1435 (0.01"); 1821-1830 (T). Max. Rain Rate: 2.65"/Hr (1224 Hrs). Hail: rice-size 1821-
5	60.1	44.6	52.4	48.2	1443	0511	12.7	0.0	0.00	0.10	0.0	0										X		0.2	NW	5	SSE	0934	30.61	1120	30.46	2055	93	0754	54	1531	49	1438	41	0001	Mostly CDY AM, PC midday, CLR PM.
6	72.8	41.7	57.3	64.8	1607	0746	7.8	0.0	0.00	0.00	0.0	0									X			0.6	NW	11	NW	2216	30.48	0004	30.06	2400	96	0815	37	1616	52	1208	40	0744	CLR day. AM valley FG but not at this station's elevation.
7	82.6	62.1	72.4	66.7	1355	0415	0.0	7.3	0.00	0.00	0.0	0									X			2.1	NNW	15	NW	1528	30.06	0008	29.82	1818	50	2301	29	1633	54	1353	41	0204	CLR day. Very warm AM & PM. Highest Max. Temp. since 85.4° on 9/12/2015; Highest Min. Temp since 62.5° on 8/29/2015. Leaves and blooms have greatly increased today.
8	83.1	56.9	70.0	56.9	1617	2358	0.0	5.0	0.00	0.00	0.0	0									X			0.9	NW	9	NW	1007	29.88	0001	29.73	1855	72	2338	30	1533	57	1501	44	0336	CLR day, PC by early evening, CLR later evening. AM Min. Temp. 58.0° (0708 Hrs).
9	64.9	49.9	57.4	52.6	1659	0518	7.6	0.0	0.00	0.00	0.0	0									X			0.4	SE	9	SE	1401	29.90	1111	29.80	1943	95	0731	68	0001	56	1354	45	0041	CLR early AM, OVC at sunrise, Clearing by Noon.
10	60.9	47.9	54.4	49.8	1640	0649	10.6	0.0	0.00	0.00	0.0	0											X	0.1	NNW	6	SW	2308	30.06	2359	29.86	0001	91	0710	64	1706	51	1622	45	0506	OVC AM, PC by late afternoon.
11	62.5	48.4	55.5	51.8	1553	0614	9.6	0.0	0.00	0.00	0.0	0											X	0.1	WNW	5	WNW	1340	30.17	1129	30.04	1934	86	0727	57	1607	50	1354	43	0323	OVC AM, PC PM.
12	60.4	46.0	53.2	46.1	1652	2231	11.8	0.0	0.15	0.00	0.0	0											X	0.9	SE	12	ESE	1106	30.21	1058	30.09	0003	96	2240	58	1658	48	1148	43	0348	OVC day, midday & afternoon variable sunshine. Rain Hrs: 1815-2215 (0.13"); 2330-2400 (0.02"). Max. Rain Rate: 0.17"/Hr (1958 Hrs). AM Min. Temp. 48.8° (0610 Hrs).
13	59.8	45.3	52.6	45.9	1518	0647	12.5	0.0	0.23	0.28	0.0	0		X	X								X	0.6	SE	17	SSE	2236	30.19	0122	29.75	1830	98	0728	50	1708	54	1027	40	1708	OVC AM w/ FG+ (Vis. <1/8 Mile), CDY PM. Rain Hrs: 0001-0315 (0.13"); 1320-1330 (T); 1855-1925 (0.03"); 2140-2235 (0.07"). Max. Rain Rate: 0.39"/Hr (0302 Hrs).
14	50.3	43.2	46.8	45.4	1719	0359	18.3	0.0	0.67	0.18	0.0	0		X									X	0.9	SE	12	S	0830	30.15	2400	29.70	0450	97	1514	87	0325	49	1524	40	0325	Mostly CDY day. Rain Hrs: 0430-0520 (0.09"); 0800-1515 (0.54"); 2005-2040 (0.04"). Max. Rain Rate: 1.24"/Hr (1405 Hrs).
15	61.0	42.1	51.6	45.9	1611	0609	13.5	0.0	0.00	0.50	0.0	0										X		0.3	NW	7	SE	1102	30.38	1241	30.15	0001	98	0824	51	1534	51	0950	40	1534	PC day, CLR by late evening.
16	70.3	40.8	55.6	55.8	1644	0619	9.5	0.0	0.00	0.00	0.0	0									X			0.3	NW	6	E	1553	30.36	0046	30.23	2350	93	0626	36	1605	51	1454	37	2106	Mostly CLR day (some high, thin clouds early evening).
17	78.8	55.1	67.0	65.5	1523	0043	0.0	2.0	0.00	0.00	0.0	0									X			1.5	NNW	13	NW	1316	30.24	0001	30.03	1826	66	0006	35	1643	55	1245	42	0123	CLR AM, PC afternoon (Cirrus), CLR evening.
18	85.8	61.1	73.5	66.5	1548	0454	0.0	8.5	0.00	0.00	0.0	0									X			1.1	NW	12	SW	0119	30.08	0844	29.97	1909	55	0502	29	1536	56	1237	42	0001	Mostly CLR day w/ some afternoon Cirrus. Highest Max. Temp. since 91.1°F on 9/11/2015.
19	86.9	56.0	71.5	65.0	1549	0638	0.0	6.5	0.00	0.00	0.0	0									X			0.2	NW	4	NW	0101	30.01	0045	29.81	1856	72	0744	29	1551	60	1630	42	0241	CLR day, some Cirrus.
20	78.9	53.5	66.2	60.2	1509	0621	0.0	1.2	0.02	0.00	0.0	0	X									X		0.6	WNW	13	ESE	1933	29.86	1000	29.74	1829	93	0727	39	1223	60	1827	47	1223	Mostly CLR until later afternoon, Mostly Cloudy evening, PC later. Thunder 1655-1830 Hrs as main part of storms moved slowly northward out of the Cascades and just to the east of here. Rain Hrs: 1815-1935 (0.02").
21	75.0	48.8	61.9	55.7	1550	0556	3.1	0.0	0.12	0.01	0.0	0		X								X		0.3	W	10	WNW	2328	29.87	0118	29.63	2034	90	0738	34	1202	54	1501	40	0318	PC day w/ increasing cloudiness after noon. Rain Hrs: 2335-2400 (0.12"). Max. Rain Rate: 1.79/Hr (2359 Hrs).
22	66.2	49.7	58.0	51.3	1655	0740	7.1	0.0	0.78	0.44	0.0	0		X	X							X		0.3	SE	12	SE	0706	29.98	2353	29.56	0556	99	1119	55	1658	58	1144	48	1603	OVC AM (brief FG+), PC afternoon. Rain Hrs: 0001-0620 (0.33"); 0705-0820 (0.39"); 1035-1050 (0.02"); 2155-2315 (0.04"). Max. Rain Rate: 2.26"/Hr (0721 Hrs).
23	61.8	48.9	55.4	51.4	1435	0338	9.7	0.0	0.12	0.40	0.0	0		X									X	0.5	SE	11	ENE	1451	30.10	1020	29.98	0001	97	0731	75	1442	57	1635	48	0309	CDY day. Rain Hrs: Sprinkles AM & into early afternoon (T); 1545-1600 (0.04"); 1714 (0.01"); 2030-2400 (0.07"). Max. Rain Rate: 0.29"/Hr (1549 Hrs).
24	55.8	43.2	49.5	43.2	1327	2357	15.5	0.0	0.67	0.37	T	0		X		X							X	0.3	SE	7	ESE	0223	30.21	2359	30.08	0426	98	0706	70	1217	53	1323	42	2352	OVC early AM, PC mid-AM, Mostly CDY PM, PC later PM. Hail (rice-size) 1226-1231 & 1542-1545 Hrs. Double Rainbow evening. Rain Hrs: 0001-0515 (0.28"); 1125-2055 (0.39"). Max. Rain Rate: 3.24"/Hr (0329 Hrs). AM Min Temp 46.5° (0557
25	61.4	40.1	50.8	44.8	1525	0305	14.3	0.0	T	0.33	0.0	0		X									X	0.3	SE	10	SW	1530	30.27	0946	30.18	1859	98	0704	46	1614	51	1406	38	1616	PC day w/ AM FG & DZ (T).
26	60.7	38.2	49.5	48.6	1341	0630	15.6	0.0	0.00	T	0.0	0											X	0.3	WSW	8	ESE	1400	30.24	0017	30.02	2400	95	0657	44	1714	46	1012	34	1714	CLR AM into afternoon, increasing clouds evening..
27	56.8	45.8	51.3	49.2	1718	0609	13.7	0.0	0.05	0.04	0.0	0		X									X	0.1	WNW	6	SE	1134	30.07	2357	29.99	0618	96	0731	67	1729	50	1055	44	0554	OVC AM, Mostly CDY afternoon, Mostly CDY evening. Rain Hrs: 0240-0520 (0.05"). Max. Rain Rate: 0.02"/Hr (0400 Hrs).
28	61.4	45.5	53.5	51.6	1426	0207	11.6	0.0	T	0.00	0.0	0											X	0.1	SSE	6	S	1318	30.15	0912	30.07	0001	96	0509	61	1638	51	1112	44	0120	OVC AM, PC early afternoon, Mostly CDY mid-afternoon, CDY evening. Sprinkles: 1800-2100 Hrs (T).
29	56.9	48.1	52.5	48.2	1547	2348	12.5	0.0	0.11	T	0.0	0		X								X		0.1	SE	7	ESE	1602	30.27	2359	30.11	0534	95	1143	85	1403	55	1547	46	0418	CDY AM into early afternoon, PC to CLR afterward. Rain Hrs: 0955-1125 (0.07"); 1505-1650 (0.04"). Max. Rain Rate: 0.52"/Hr (1009 Hrs). AM Min. Temp. 48.7° (0545 Hrs).
30	67.6	43.0	55.3	52.8	1712	0630	9.7	0.0	0.00	0.11	0.0	0		X								X		0.2	WNW	8	WSW	1802	30.38	0926	30.23	2356	96	0756	56	1736	55	1707	41	0614	CLR until sunrise, CDY soon after, PC noontime, CLR thereafter.
31																																									
SUM	2016.3	1430.1	1723.2	1589.4	**SUM**		257.2	30.4	3.47	3.18	0.0	0	1	12	2	2	0	0	0	10	14	6																				
AVERAGE	67.21	47.67	57.44	52.98	**AVERAGE**		8.3	1.0	0.116	0.106	0.0	0	TH	FG	FG+	H	GL	PL	DW	CLR	PC	CDY																				
Extreme Max	86.9	62.1	73.5	66.7	Extreme Max		18.3	8.5	0.78	0.50	0.0	0																														
Max Date	19th	7th	18th	7th	Max Date		14th	18th	22nd	15th	N/A	N/A																														
Extreme Min	50.3	38.2	46.8	43.2	Extreme Min		0.0	0.0	0.00	0.00	0.0	0																														
Min Date	14th	26th	14th	24th	Min Date		20th+	30th+	30th+	28th+	30th+	30th+																														

	WIND: DAILY AVG	DOM DIR	PEAK GUST	DIREC-TION	DATE	BAROMETRIC PRESSURE: MAX	DATE	MIN	DATE	RELATIVE HUMIDITY: MAX	DATE	MIN	DATE	DEW POINT: MAX	DATE	MIN	DATE
Extreme Max	2.1	NNW	17	SE	13th	30.61	5th	30.46	5th	99	22nd	87	14th	60	20th+	48	23rd+
Extreme Min	0.1	SE+	4	NW	19th	29.86	20th	29.56	22nd	50	7th	29	19th+	46	26th	34	26th
Average	0.5	NW	9.3			30.17		29.98		90		51		53		42	

NOTES

1. **Bold** calendar-date values indicate extremes for the month (**red** indicates maximums, **blue** indicates minimums).
2. Precipitation totals may differ between the Observation times (2400 & 0700 Hrs) due to daily/monthly carryover and gauge types.
3. Precipitation/Snow: T = Trace Amount (Liquid Equivalent <0.005"; Snowfall <0.1": Snow on Ground <0.5").
4. Weather Instrument Locations: Davis Vantage Pro2 (VP2) - Anemometer is 10 feet above ground, all other VP2 sensors and 4-inch Lake Region Rain Gauge (LR) are located 5 feet above ground.

NUMBER OF DAYS

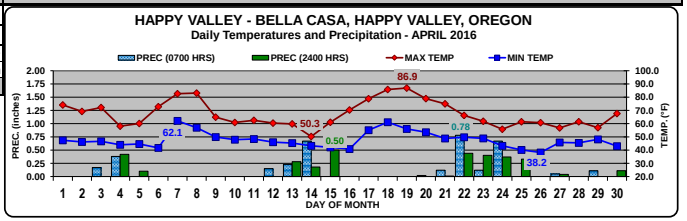
TEMPERATURE MAXIMUM		TEMPERATURE MINIMUM		PRECIPITATION AMOUNT	OBS 2400 HRS	OBS 0700 HRS	WIND PEAK GUST (MPH)		SNOW/ICE PELLETS AMOUNT	FALL	DEPTH
≥90°:	0	≤70°:	30	≥T:	14	14	≥ 5	29	≥T:	0	0
≥85°:	2	≤65°:	30	≥0.01":	12	12	≥10	14	≥0.1"	0	0
≥80°:	4	≤60°:	28	≥0.05":	11	10	≥15	2	≥0.5"	0	0
≥75°:	7	≤55°:	25	≥0.10":	10	10	≥20	0	≥1.0"	0	0
≥70°:	11	≤50°:	24	≥0.15":	7	8	≥25	0	≥2.0"	0	0
≥65°:	14	≤45°:	10	≥0.25":	4	7	≥30	0	≥3.0"	0	0
≤75°:	24	≤40°:	1	≥0.50":	3	1	≥35	0	≥4.0"	0	0
≤70°:	19	≤35°:	0	≥0.75":	1	0	≥40	0	≥5.0"	0	0
≤65°:	16	≤32°:	0	≥1.00":	0	0	≥45	0	≥6.0"	0	0
≤60°:	6	≤30°:	0	≥1.50":	0	0	≥50	0	≥8.0"	0	0
≤55°:	1	≤28°:	0	≥2.00":	0	0	≥55	0	≥10.0"	0	0
≤50°:	0	≤24°:	0	≥2.50":	0	0	≥60	0	≥12.0"	0	0
≤32°:	0	≤20°:	0	≥3.00":	0	0	≥65	0	≥20.0"	0	0

WEATHER EQUIPMENT

Davis Vantage Pro2 (VP2): All Data & 2400-Hr Precipitation. Period of Record: May 29, 2014-Current
4" Lake Region Rain Gauge (LR): 0700-Hr Precipitation. Period of Record: May 10, 2014-Current

WEATHER NETWORKS

Applied Climate Information System (ACIS): HAPPY VALLEY 1.7 ESE
APRSWXNET/CWOP: Call/CW: EW5214; NWS ID: E5214
CoCoRaHS: Happy Valley 1.7 ESE; OR-CC-66 *(0700-Hr Precipitation only)*
Global Historical Climatology Network (GHCN): US1ORCC0066
MADIS (NOAA): Station ID: E5214
MesoWest (Univ. of Utah): EW5214 Happy Valley
Weather Underground: Happy Valley - Bella Casa; KORHAPPY10



MONTHLY WEATHER SUMMARY

TEMPERATURES: Contrary to Normals for May, the coolest Temperatures waited until the end of the month when the Mean Temperature from the 21st-30th averaged 5.6° cooler than the first 20 days. Though there were 11 days with Maximum Temperatures ≥70° during the month, none occurred after the 21st. During the warmest part of the month there were 4 consecutive days with cooling degree days (17th-20th), a rarity for April. The greatest diurnal temperature range was 31.1° (6th), the least only 7.1° (on the cool, wet 14th when the Max. Temp. was only 50.3°).

PRECIPITATION: There were only 3 significant periods of precipitation, spread out enough to give sufficient dry periods during the month. With a total of 3.47" of rain, this was the first month since Sept. 2015 with ≤4.75". There were only 12 days of measurable precipitation ≥0.01" and zero with ≥1.00".

MISCELLANEOUS: The month featured only 6 Cloudy days, and 14 Partly Cloudy, and 10 Clear days. Fog was observed on 12 days, just two being heavy (visibility ≤1/4 mile). There were 2 days of rice-size hail, with 3 separate events observed (1 on the 4th & 2 on the 24th), none accompanied by thunder.