



Hawaii Crop Weather



Week ending: September 1, 2013

In Cooperation with the Hawaii Department of Agriculture

Pacific Region, Hawaii • 1428 South King Street • Honolulu, HI 96814-9931 • 1-800-804-9514 • www.nass.usda.gov

Dry Week for Many Locations



Weather Review

On August 27, U.S. Drought Monitor reported that 79.18 percent of the state was abnormally dry or drier. Drought ratings continued for the leeward coasts of Oahu and Kauai Islands. Seasonal drought outlook for the dates of August 15th to November 30th indicated drought persistence was likely on the leeward mountain slopes and leeward coasts of Hawaii, Lanai, and Maui Islands with drought development for the remaining areas of Maui County. Drought development was also rated for the leeward side of Oahu and Kauai Islands. Complete information provided by the Drought Monitor can be found on their internet informational site location at http://droughtmonitor.unl.edu/DM_state.htm?HI

Hawaii County

The windward side of the island has been mostly hot and dry with light trade winds. Leeward areas continued to be extremely dry; most rain gauges captured less than one-tenth inch of precipitation each day this week. On August 27, 2013 Honaunau, Kealahou and Kainaliu received a few light showers which resulted in about 0.5 inch of rainfall over a 24-hour period. Temperatures around the island during the day were averaging in the mid-eighties. The highest recorded temperature for the week was 88 degrees and occurred Wednesday August 26 in Kona. Landscapes and pastures began to show stress from the heat and lack of rain in South Kohala and Puna. It was reported that citrus trees in the Kapoho

area were showing signs of stress and needed moisture. Citrus trees were in the early stages of the fall harvest and they were mostly non-irrigated and depended on daily rainfall. Similarly, newly planted leafy crops in Waimea were stressed from the late summer heat and lack of rainfall. These crops were being irrigated but still showed some heat stress. Streams around the island were flowing at below-average rates for most of the week. The Waimea Irrigation System (Puukapu Reservoir) water level was marked at 49.5 feet (51.5 million gallons) on Friday, August 30, 2013, up 1.0 foot from the reading taken on Friday, August 23, 2013. **Conservation status was unrestricted.**

Honolulu County

Rainfall amounts reported by the National Weather Service's Hydronet systems of automated rain gauges reported an average of 0.09 inch. The Waimanalo Irrigation System water level was marked at 62 feet (59 million gallons) on Friday, August 30, unchanged from the reading taken on Friday, August 23. **A voluntary 10 percent water conservation status was in effect.**

Maui County

Warm and sunny summer weather conditions continued this week. Temperatures were in the high eighties and winds were the usual trades from the northeast. The breezy winds helped to bring some relief from the warm temperatures. By the end of the week, the winds increased in intensity and brought some precipitation over some windward sections of the island. This year precipitation received was notably

more than usual for this time of the year; however, the demand has continued to be high. Water officials monitoring the situation decided to issue a "drought watch" for the Upcountry area due to low inflows into the reservoirs. This was a voluntary reduction of 10% water use for the areas of Haiku, Makawao, Olinda, Pukalani, Haliimaile, Omaopio, Pulehu, Kula, Keokea, Waiohuli, Ulupalakua and Kanaio. The Molokai Irrigation System water level was marked at 18.25 feet (412.5 million gallons) on Friday August 30, down 0.50 foot from the reading taken Friday, August 23. **Conservation measures required all non-homestead water users to cutback water consumption by 20 percent.**

Kauai County

All of Kauai County continued to be rated as having no stage of drought on August 27, 2013, with the exception of southern and western leeward slopes.



Agricultural Highlights

Orchards and Vegetables

Crop harvest, sprays, and harvest activities continued after experiencing windy and rainy conditions earlier in week.

Livestock and Pasture

Pastures showed drought stress especially on the leeward slopes and coast. Ranchers were hoping for rains to bring relief soon.

Mark Hudson, State Statistician

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Monthly Trend for Selected Stations

Comparison of 2013 cumulative monthly and annual totals with average monthly totals for selected stations. ^{1/}

Station name		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
<i>Inches</i>														
Island of Hawaii														
1. Kamuela	2013	0.8	5.1	2.1	0.6	2.3 _p	1.5	2.2 _p	1.6	0.0	0.0	0.0	0.0	16.2 _p
	Average	6.6	6.0	7.9	6.9	4.0	2.2	3.7	4.1	2.2	3.3	5.8	7.3	60.0
2. Kealahou	2013	2.2	1.7	4.2	0.5	8.4 _p	3.3	4.8 _p	1.4	0.3	0.0	0.0	0.0	26.8 _p
	Average	4.7	3.4	5.6	6.2	7.7	8.2	8.7	8.3	8.2	6.2	4.4	3.4	75.0
3. Laupahoehoe	2013	4.6	22.8	4.1	1.1	5.4 _p	2.6	2.3 _p	4.7	0.0	0.0	0.0	0.0	47.6 _p
	Average	13.5	13.2	19.5	18.9	11.7	6.2	10.0	12.4	6.9	9.3	13.6	14.8	150.0
4. Mt. View	2013	9.5	28.1	7.1	4.5	12.3 _p	7.4	7.6 _p	8.6	0.0	0.0	0.0	0.0	84.9 _p
	Average	14.1	13.6	19.6	18.0	13.1	9.4	12.8	14.6	10.7	12.1	15.8	16.2	170.0
5. Pahala	2013	4.3	0.9	1.7	1.9 _p	4.6 _p	0.1	1.7 _p	1.5	0.0	0.0	0.0	0.0	16.9 _p
	Average	7.7	6.1	6.3	5.0	3.8	2.2	2.1	3.3	3.4	4.2	5.5	5.4	55.0
6. Pahoa	2013	8.4 _p	24.4	6.9	2.8	7.3 _p	4.7	6.4 _p	3.8	0.1	0.0	0.0	0.0	64.8 _p
	Average	13.9	10.9	10.5	13.9	10.5	7.1	9.8	10.6	9.2	11.5	13.3	14.6	140.0
Island of Maui														
7. Hana	2013	7.0	5.6	0.0	0.9 _p	12.7 _p	3.9	4.1	4.3	0.1	0.0	0.0	0.0	38.4 _p
	Average	8.5	5.7	9.1	7.5	5.9	4.1	5.9	5.8	6.1	7.3	8.0	6.1	80.0
8. Kula	2013	1.3	1.0	3.9	0.3	2.8 _p	1.0	1.9	0.8 _p	0.0	0.0	0.0	0.0	12.7 _p
	Average	3.5	3.0	2.5	1.6	1.1	0.8	0.8	0.8	1.1	1.5	2.3	3.3	22.3
9. Lahainaluna	2013	0.2	1.9	1.0	*	0.4 _p	*	1.2	0.4	0.0	0.0	0.0	0.0	5.1 _p
	Average	4.4	2.7	2.4	1.7	0.7	0.2	0.3	0.6	0.6	1.0	2.0	3.4	20.0
10. Wailuku	2013	2.7	3.5	4.5	0.0	3.9 _p	0.4	2.0	1.2 _p	0.0	0.0	0.0	0.0	18.1 _p
	Average	5.2	3.8	3.6	3.0	1.2	0.4	0.6	0.7	0.6	1.7	2.9	4.3	28.0
Island of Oahu														
11. Kahuku	2013	5.7	1.3	3.2	2.4	2.4 _p	1.5	2.1	2.4	0.0	0.0	0.0	0.0	20.8 _p
	Average	6.3	4.2	5.3	4.0	2.5	1.9	2.2	2.6	2.2	4.0	4.6	5.3	45.0
12. Mililani	2013	8.1	3.3 _p	2.5	5.0	3.1 _p	2.3	1.8	0.4 _p	0.2	0.0	0.0	0.0	26.6 _p
	Average	6.4	4.9	4.9	4.0	2.5	1.7	2.1	2.4	1.7	3.7	4.5	6.2	45.0
13. Waianae	2013	2.6	0.3	1.2	2.1	1.7 _p	0.1	0.1	0.0	0.0	0.0	0.0	0.0	8.1 _p
	Average	3.8	2.3	2.5	1.6	0.7	0.3	0.3	0.7	0.7	1.8	2.0	3.3	20.0
14. Waimanalo	2013	5.7	0.9	4.0	3.0	4.1 _p	1.2	0.9	2.7	0.1	0.0	0.0	0.0	22.7 _p
	Average	6.8	4.6	3.6	3.2	3.2	1.5	1.6	1.5	2.0	3.7	5.6	5.5	42.8
Island of Kauai														
15. Moloaa Dairy	2013	0.0 _p	0.0 _p	0.0 _p	0.0 _p	0.0 _p	0.0	0.0 _p	0.0 _p	0.0 _p	0.0	0.0	0.0	0.0 _p
	Average	6.9	4.7	6.2	5.0	3.9	1.7	2.7	2.6	2.2	5.0	5.4	5.6	51.9
16. Hanalei	2013	0.0 _p	0.0 _p	0.0 _p	0.0 _p	0.0 _p	0.0	1.8 _p	2.4 _p	0.1	0.0	0.0	0.0	4.3 _p
	Average	11.8	9.4	13.4	12.2	9.3	6.5	9.8	8.7	6.9	8.5	10.2	12.0	118.7
17. Omao	2013	3.8 _p	0.0 _p	0.0 _p	0.0 _p	0.0 _p	0.0 _p	2.7	0.8 _p	0.2	0.0	0.0	0.0	7.5 _p
	Average	6.9	4.5	5.5	5.2	4.2	3.4	4.7	4.6	3.8	4.7	5.9	6.7	60.0

^{1/} Rainfall stations were selected from the National Weather Service's Hydronet system of automated rain gauges. All data has not been quality controlled to date, and therefore is not certified by the National Weather Service.

M = Missing. p = Partial or incomplete. e = Estimated. * = More than zero, but less than .05 inches of rain.

Precipitation for week ending September 1, 2013
Daily, weekly, and year-to-date precipitation totals for selected Hawaii stations.^{1/}

Station name and identification number	24-Hour totals at 8 a.m.							Weekly total	Jan. 1 to date
	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
<i>Inches</i>									
Island of Hawaii									
1. Kamuela (HI86)	0.00	0.00	0.00	0.05	0.00	0.07	0.00	0.12	16.20 p
2. Kealahou (HI84)	0.00	0.49	0.06	0.08	0.01	0.02	0.31	0.97	26.79 p
3. Laupahoehoe (HI80)	0.19	0.00	0.00	0.11	0.00	0.02	0.00	0.32	47.61 p
4. Mt. View (HI81)	0.19	0.03	0.00	0.24	0.00	0.13	0.00	0.59	84.93 p
5. Pahala (HI85)	0.00	0.00	0.00	0.00	0.49	0.15	0.00	0.64	16.85 p
6. Pahoa (HI83)	0.02	0.04	0.00	0.29	0.10	0.11	0.05	0.61	64.84 p
Island of Maui									
7. Hana (HI61)	0.05	0.00	0.00	0.32	0.01	0.05	0.08	0.51	38.37 p
8. Kula (HI65)	0.00	0.00	0.00	0.00	0.00	M	0.00	0.00	12.74 p
9. Lahainaluna (HI60)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	5.07 p
10. Wailuku (HI66)	0.00	0.00	0.11	0.07	0.00	M	0.00	0.18	18.10 p
Island of Oahu									
11. Kahuku (HI09)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	20.83 p
12. Mililani (HI14)	0.00	0.00	0.00	0.00	0.00	M	0.15	0.15	26.64 p
13. Waianae (HI17)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	8.14 p
14. Waimanalo (HI13)	0.00	0.00	0.00	0.16	0.00	0.00	0.05	0.21	22.67 p
Island of Kauai									
15. Moloaa Dairy	M	M	M	M	M	M	M	0.00	0.00 p
16. Hanalei (HI45)	0.00	0.01	M	0.06	0.00	0.06	0.10	0.23	4.30 p
17. Omao (HI51)	0.01	0.01	0.00	0.01	0.00	0.01	0.18	0.22	7.46 p

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