



Hawaii Weekly Crop Weather Report

National
Agricultural
Statistics
Service

Week ending: June 17, 2007

In Cooperation with the Hawaii Department of Agriculture

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Mostly Dry Conditions Continued Across Islands



Weather Review

Mostly dry weather conditions had a variable effect on agriculture during the week ending Sunday, June 17. A high pressure system moved to the east of Hawaii bringing isolated showers and some moderate trade winds. Most of the shower activity was limited to the windward and mountain areas early in the week. Late in the week showers were more prevalent in the southern half of the State. Water reduction measures were in place in all four counties. Irrigation was required in many areas for continued crop progress. Non-irrigated crops, those dependent on natural rainfall, were in fair to poor condition. Windward area crops were faring better than those in the drier leeward areas of the islands due to the greater availability of soil moisture. Irrigated crops were in fair to good condition. Abundant sunshine and adequate irrigation was ensuring normal growth. Spraying for insects and disease continued on a regular schedule.

Hawaii County

Dry weather continued in most of Hawaii County, but most gauges did record some moisture at some point during the week. Windward sections of Puna, Hilo, and surrounding areas experienced light

but steady rainfall thru Friday. Soil moisture was replenished in many non-irrigated orchards and fields and stock water ponds did get partially replenished. The Big Island entered into its second week of an emergency drought declaration because most of the rest of the island saw only light or trace rainfall. South Kona continued to receive almost daily showers over the upper slopes and Keahole Airport received nearly an inch on Thursday, but northern sections of Hamakua and Kohala and in Ka`u to the south skies remained fairly dry. Farms with irrigation continued to water regularly in order to maintain crop progress. Water restrictions on both county and state systems were still in effect. Water hauling efforts have increased in many parts of the island. A large range fire broke out on Thursday in the South Kohala district. Pastures in the area burned quickly due to the dry conditions.

Maui County

The weather conditions throughout Maui County continued to be mostly sunny with very warm temperatures. Some windward areas did receive some precipitation, but it is unlikely that these brief passing showers would have significantly increased the ground moisture. The lack of rainfall in the Waikamoi watershed area

has prompted water officials to issue a drought warning this week. This requires a mandatory 10% cutback in water use for the Upcountry area. This area includes Haiku, Makawao, Pukalani, Haiimaile, Kula, Keokea, and Ulupalakua. Agricultural users will be given 30 days to comply. This will give farmers time to harvest fields and make necessary plans for future plantings. On Moloka'i, the hot growing conditions have required increased irrigation for crops. The Kualapu'u reservoir which stores the majority of the irrigation water and is intergraded with the distribution of water to the west side of the island was reported by officials to be able to supply sufficient water. There was some concern from agricultural water users in the Ho'olehua area as to the ability to provide enough water for crops throughout the summer since one of the wells is currently not able to contribute to the water supply. Overall, the hot growing conditions which is typical for this time of year, is requiring increased irrigation when the water supply is seasonally reduced.

Honolulu County

Weather conditions were good for crop progress on Oahu for the week. Days continued mostly sunny and dry with high temperatures, light to moderate trade winds and

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light showers by the end of the week. Windward Oahu crop growing areas experienced mostly sunny days with very light rainfall at weeks end. The Waimanalo irrigation system reservoir level was pegged at 30.75 feet and a "modified" voluntary conservation effort remained in place. Leeward and central Oahu crop growing areas were very dry for the week. The sunny days and drying winds made heavy irrigation efforts necessary. Temperatures were moderate to high. Most fruit and vine crops made good progress. Leafy crops made fair progress with continued heavy irrigation necessary for normal crop development. Spraying for the increased insect population was stepped up.

Kauai County

Weather conditions for Kauai were fair to good for crop progress for the week. Days were sunny and dry with very light showers falling in the night and early morning hours. The trade winds were at light to moderate levels due to a high pressure system north of the state. Temperatures were moderate. Most crop growing areas were dry with heavy irrigation levels necessary to ensure normal crop progress. Pastures on the island were in fair to poor condition. Orchards and fruit crops were in good condition. Leafy crops made fair to good progress. Spraying for insect and disease control was stepped up as the dry weather conditions has caused the insect population to increase.



Agricultural Highlights

Fruits

Banana

Kauai orchards were in good to fair condition. Orchards in windward districts received good overall rains

for good soil moisture. Oahu orchards were in fair to good condition. Fields in windward Oahu remained in fair condition maintaining light to moderate harvesting as BBTV continues to affect fields. Leeward and central Oahu fields made good progress with active harvesting. Irrigation levels were bumped up to heavy levels during the week due to the dry days. Soil moisture in East Hawaii orchards increased slightly with light rains occurring over several days early in the week. The crop is in fair to good condition. Field operations remain normal. BBTV incidences remain isolated in the Puna and Kona areas.

Papaya

Hawaii County orchards were in fair to good condition. Soil moisture increased this week due to light daily rainfall. Mostly overcast days with a few sunny periods during the week have been beneficial to crop progress. Harvest and spray activities were active. Oahu harvesting was at moderate levels. Mealy bugs and ring spot virus in some fields kept production lower than expected.

Vegetables

Head Cabbage

Most Maui fields were as well as can be expected considering the hot growing conditions. The heat was creating stressful field conditions especially for the lower elevation areas. The dry landscape has also encouraged wildlife feeding along the borders. Some fields were also showing signs of increased insect pressure. So far, the head cabbage crop has been able to maintain good yield. A timely spraying program has continued to be necessary to minimize loss from insect damage. The crop in Waimea was in generally good condition. Light insect damage on outer leaves was noticed. Irrigation was keeping

crop progress about normal. The crop in Volcano welcomed light but steady showers.

Sweet Corn

The young crop in East Hawaii benefited from rain early in the week. Planting has been steady and the harvest is fairly steady. Product was mostly for local sales. Harvesting was active as beneficial weather conditions allowed the plants to make good progress with good market supplies from windward and central Oahu fields. Some reports of light worm damage during the week.

Cucumbers

Pickings from most Oahu fields were at moderate to heavy levels and anticipated to continue increasing as plants remained in active harvest. Melon fly infestation and light pickle worm damage has affected crop yields in some areas during the week. Irrigation levels were heavy as the dry weather continued in most crop growing areas.

Dry Onions

The continuous dry growing conditions have begun to have a detrimental effect on the dry onion crop. The hot field conditions have slowed crop growth and development. Yields are likely to decrease because of the reduced size. The fields that were harvested and marketed a few weeks earlier have supplied the market demand and newly harvested production has not been able to move into the various markets at the same rate as in the past.

Monthly Trend for Selected Stations

Comparison of 2007 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 | 2007 | 1.4 | 3.7 | 1.3 | 0.8 | 0.4 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.2 |
| | 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 | 2007 | 2.1 | 2.5 | 1.7 | 1.6 _p | 3.3 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 12.9 _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 | 2007 | 6.7 | 12.3 | 6.0 _p | 1.2 _p | 1.1 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.7 _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 | 2007 | 18.2 | 14.1 | 11.3 | 10.3 | 3.6 | 6.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 63.4 |
| | 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 | 2007 | 1.7 | 0.4 | 4.2 | 1.2 | 0.6 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.2 |
| | 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 | 2007 | 12.2 | 13.4 | 7.0 | 7.7 _p | 2.7 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 46.9 _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 | 2007 | 1.3 | 4.0 _p | 2.6 _p | 4.1 | 2.2 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.6 _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 | 2007 | 0.4 | 1.8 | 2.4 | 0.6 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.6 |
| | 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 | 2007 | 0.2 | * | 0.2 | 0.1 | 0.0 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.5 |
| | 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 | 2007 | 0.5 | 1.3 | 3.5 | 1.8 | 0.2 | * | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.2 |
| | 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 | 2007 | 2.9 | 1.4 | 4.2 | 0.9 | 1.2 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 11.7 |
| | 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 | 2007 | 4.3 | 2.5 | 3.7 | 2.0 | 1.2 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 15.3 |
| | 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 | 2007 | 2.2 | 0.3 | 2.7 | 0.6 | 1.2 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.0 |
| | 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 | 2007 | 2.3 | 1.3 | 3.2 _p | 1.9 | 0.4 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.7 _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. Anahola | 2007 | 3.2 | 3.8 | 4.5 | 2.4 | 2.4 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.4 |
| | Average | 6.8 | 4.4 | 6.0 | 4.6 | 3.2 | 1.6 | 2.5 | 2.5 | 2.0 | 5.1 | 5.4 | 5.9 | 50.0 |
| 16. Hanalei | 2007 | 4.9 | 10.5 | 6.5 | 4.5 | 1.3 | 2.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.2 |
| | 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 | 2007 | 2.8 _p | 4.6 | 4.1 | 2.0 | 1.5 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 17.6 _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 June 17, 2007
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 | 0.09 | 0.00 | 0.43 | 0.03 | 0.00 | 0.01 | 0.56 | 8.15 |
| 2. Kealahou (HI84) | 0.00 | 0.06 | 0.41 | 0.10 | 0.13 | 0.31 | 0.39 | 1.40 | 12.91 |
| 3. Laupahoehoe (HI80) | 0.08 | 0.04 | 0.00 | 0.57 | 0.47 | 0.05 | 0.03 | 1.24 | 28.73 |
| 4. Mt. View (HI81) | 0.14 | 0.53 | 0.01 | 0.66 | 1.73 | 0.61 | 1.48 | 5.16 | 63.43 |
| 5. Pahala (HI85) | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.10 | 8.22 |
| 6. Pahoa (HI83) | 0.13 | 0.40 | 0.09 | 0.29 | 0.75 | 0.23 | 0.92 | 2.81 | 46.94 |
| Island of Maui | | | | | | | | | |
| 7. Hana (HI61) | 0.00 | 0.38 | 0.06 | 0.02 | 0.11 | 0.05 | 0.05 | 0.67 | 15.62 |
| 8. Kula (HI65) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 5.58 |
| 9. Lahainaluna (HI60) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 |
| 10. Wailuku (HI66) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 7.21 |
| Island of Oahu | | | | | | | | | |
| 11. Kahuku (HI09) | 0.00 | 0.00 | 0.00 | 0.05 | 0.01 | 0.00 | 0.06 | 0.12 | 11.67 |
| 12. Mililani (HI14) | 0.00 | 0.00 | 0.00 | 0.03 | 0.01 | 0.13 | 0.02 | 0.19 | 15.25 |
| 13. Waianae (HI17) | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.05 | 7.01 |
| 14. Waimanalo (HI13) | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.02 | 9.65 |
| Island of Kauai | | | | | | | | | |
| 15. Anahola (HI48) | 0.08 | 0.02 | 0.03 | 0.03 | 0.05 | 0.04 | 0.02 | 0.27 | 17.39 |
| 16. Hanalei (HI45) | 0.00 | 0.13 | 0.00 | 0.05 | 0.08 | 0.01 | 0.06 | 0.33 | 30.15 |
| 17. Omao (HI51) | 0.03 | 0.02 | 0.00 | 0.08 | 0.15 | 0.11 | 0.04 | 0.43 | 17.57 |

^{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.

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