

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville, TX

| DATE 1998 | B. P. 8 AM | --TEMPERATURES-- | | | | RAIN FALL | LOW RH | COMMENTS |
|--------------|---------------|------------------|----|-----|-----|--------------|-----------|--------------------------------------------|
| | | HI | LO | 8AM | ONL | | | |
| 01-Jan | 30.10 | 61 | 39 | 45 | 41 | 0.00 | 21 | fog;drizzle 11:00 AM-most of day |
| 02-Jan | 30.17 | 59 | 45 | 59 | 58 | 0.01 | 90 | MC;lt. RF 9:00 PM-midnite |
| 03-Jan | 30.00 | 68 | 59 | 61 | --- | 0.04 | 69 | cldy;drizzle early AM |
| 04-Jan | 29.97 | 65 | 61 | 62 | --- | T | 78 | lt. RF 10:00 AM-noon;occas. drizzle |
| 05-Jan | 29.91 | 73 | 61 | 62 | --- | 0.02 | 63 | MC;fog early AM |
| 06-Jan | 29.89 | 73 | 58 | 58 | --- | 0.45 | 67 | T-showers 6-9 AM;noon-3 PM;49 deg. at 2 PM |
| 07-Jan | 29.97 | 59 | 37 | 38 | --- | 0.46 | 76 | MC |
| 08-Jan | 29.89 | 51 | 33 | 35 | --- | 0.00 | 39 | clear |
| 09-Jan | 29.97 | 63 | 27 | 29 | --- | 0.00 | 16 | PC |
| 10-Jan | 30.02 | 69 | 29 | 41 | 34 | 0.00 | 12 | cldy;lt. fog;lt. RF 11:00 PM-midnite |
| 11-Jan | 30.04 | 58 | 41 | 57 | 50 | 0.03 | 60 | cldy;fog;drizzle early AM-1:00 PM |
| 12-Jan | 29.98 | 69 | 44 | 45 | --- | 0.02 | 68 | heavy fog |
| 13-Jan | 30.12 | 76 | 43 | 43 | --- | 0.00 | 18 | fog;42 degrees at 10:00 AM |
| 14-Jan | 30.03 | 50 | 42 | 46 | --- | 0.01 | 65 | fog;drizzle early AM |
| 15-Jan | 30.10 | 70 | 33 | 36 | --- | 0.00 | 27 | clear |
| 16-Jan | 29.97 | 63 | 29 | 33 | --- | 0.00 | 19 | clear |
| 17-Jan | 30.01 | 75 | 32 | 35 | --- | 0.00 | 15 | PC |
| 18-Jan | 30.10 | 72 | 35 | 39 | --- | 0.00 | 22 | PC |
| 19-Jan | 30.19 | 71 | 29 | 33 | --- | 0.00 | 14 | PC |
| 20-Jan | 29.87 | 69 | 33 | 50 | 42 | 0.00 | 16 | cldy;lt. drizzle AM;fog late PM |
| 21-Jan | 29.85 | 59 | 46 | 58 | --- | T | 86 | heavy fog AM |
| 22-Jan | 30.00 | 76 | 40 | 41 | --- | 0.00 | 37 | cldy |
| 23-Jan | 30.12 | 44 | 26 | 29 | --- | 0.00 | 77 | clear;heavy frost |
| 24-Jan | 30.08 | 66 | 27 | 30 | --- | 0.00 | 32 | clear |
| 25-Jan | 30.10 | 61 | 30 | 48 | 42 | 0.00 | 28 | PC |
| 26-Jan | 30.13 | 58 | 40 | 45 | --- | 0.00 | 45 | clear |
| 27-Jan | 30.28 | 66 | 26 | 29 | --- | 0.00 | 15 | clear |
| 28-Jan | 30.10 | 70 | 29 | 42 | 35 | 0.00 | 16 | PC |
| 29-Jan | 30.04 | 71 | 42 | 50 | --- | 0.00 | 32 | AM fog |
| 30-Jan | 29.98 | 76 | 43 | 53 | --- | 0.00 | 32 | AM fog;lt. drizzle 11:00 AM-1:00 PM |
| 31-Jan | 29.90 | 70 | 52 | 52 | --- | 0.52 | 49 | T-showers 5:30-7:00 AM,then lt. RF |

January Totals and Averages

| | |
|----------------|--------|
| Max. Temp. | 76 ° |
| Min. Temp. | 26 ° |
| Avg. High | 65.5 ° |
| Avg. Low | 39.1 ° |
| Avg. Temp | 52.3 ° |
| Total RF | 1.56 " |
| Max. RF | 0.52 " |
| Low RH | 12 % |
| Avg. Low RH | 42.1 % |
| Avg. Soil Temp | 52.6 ° |

NOTE

Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded.

Year To Date RF 1.56 "

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville, TX

| DATE 1998 | B. P. 8 AM | --TEMPERATURES-- | | | | RAIN FALL | LOW RH | COMMENTS |
|--------------|---------------|------------------|----|-----|-----|--------------|-----------|---------------------------------------------|
| | | HI | LO | 8AM | ONL | | | |
| 01-Feb | 29.82 | 63 | 48 | 49 | --- | 0.85 | 73 | PC |
| 02-Feb | 29.98 | 65 | 46 | 46 | --- | 0.00 | 43 | PC |
| 03-Feb | 30.04 | 65 | 29 | 33 | --- | 0.00 | 27 | clear |
| 04-Feb | 30.01 | 70 | 33 | 38 | 36 | 0.00 | 22 | lt. fog;RF 11:00 PM-midnite |
| 05-Feb | 29.91 | 62 | 37 | 41 | --- | 0.24 | 37 | lt. fog;lt. RF early AM and early evening |
| 06-Feb | 30.17 | 64 | 38 | 38 | --- | 0.03 | 35 | cldy;lt. fog |
| 07-Feb | 30.13 | 49 | 28 | 33 | --- | 0.00 | 52 | PC;lt. fog |
| 08-Feb | 30.04 | 62 | 33 | 39 | 35 | 0.00 | 39 | PC |
| 09-Feb | 29.91 | 74 | 38 | 42 | --- | 0.00 | 16 | clear |
| 10-Feb | 29.90 | 79 | 42 | 50 | 49 | 0.84 | 15 | cldy;T-storm 4-5 AM;hail*;lt. RF thru 10 AM |
| 11-Feb | 30.11 | 67 | 34 | 39 | --- | 0.10 | 24 | clear |
| 12-Feb | 30.04 | 68 | 39 | 45 | 41 | 0.00 | 22 | PC;lt. RF 3:00-4:00 PM |
| 13-Feb | 30.13 | 63 | 38 | 44 | --- | 0.03 | 41 | cldy |
| 14-Feb | 29.95 | 64 | 44 | 48 | 47 | T | 33 | cldy;lt. RF 7:00 AM thru most of day |
| 15-Feb | 29.82 | 52 | 34 | 36 | --- | 0.12 | 87 | cldy;lt. RF 9:00 PM-midnite |
| 16-Feb | 29.60 | 63 | 36 | 46 | 43 | 0.10 | 50 | PC;lt. RF early AM |
| 17-Feb | 29.83 | 63 | 38 | 46 | --- | T | 22 | clear |
| 18-Feb | 29.91 | 62 | 34 | 41 | --- | 0.00 | 30 | PC |
| 19-Feb | 30.01 | 65 | 34 | 43 | --- | 0.00 | 52 | clear |
| 20-Feb | 30.13 | 63 | 31 | 35 | --- | 0.00 | 35 | clear |
| 21-Feb | 29.95 | 66 | 35 | 51 | 47 | T | 26 | RF/T-showers 6:00 AM-5:30 PM |
| 22-Feb | 29.88 | 53 | 40 | 44 | --- | 0.83 | 91 | PC |
| 23-Feb | 30.02 | 72 | 37 | 43 | --- | 0.00 | 23 | lt. patchy fog |
| 24-Feb | 30.08 | 80 | 39 | 46 | --- | 0.00 | 16 | clear |
| 25-Feb | 29.78 | 78 | 46 | 60 | 60 | 0.00 | 17 | cldy;T-storms 8:00 PM-midnite;small hail |
| 26-Feb | 29.71 | 78 | 47 | 50 | --- | 0.38 | 36 | RF early AM then clear skies |
| 27-Feb | 29.89 | 66 | 29 | 38 | --- | 0.00 | 11 | PC |
| 28-Feb | 29.98 | 68 | 36 | 46 | --- | 0.00 | 14 | PC |

February Totals and Averages

| | |
|-----------------|--------|
| Max. Temp. | 80 ° |
| Min. Temp. | 28 ° |
| Avg. High | 65.9 ° |
| Avg. Low | 37.3 ° |
| Avg. Temp | 51.6 ° |
| Total RF | 3.52 " |
| Max. RF | 0.85 " |
| Low RH | 11 % |
| Avg. Low RH | 35.3 % |
| Avg. Soil Temp | 53.8 ° |
| Year To Date RF | 5.08 " |

NOTE

Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded.

NOTE: The 0.85 inches of rain recorded on 2-1-98 actually fell after 8:00 AM 1-31-98.

* 1/4 - 1/3 inch diameter

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville, TX

| DATE | B. P. | --TEMPERATURES-- | | | RAIN | LOW | | |
|--------|-------|------------------|----|---------|------|------|----------|--------------------------------------------------|
| 1998 | 8 AM | HI | LO | 8AM ONL | FALL | RH | COMMENTS | |
| 01-Mar | 30.03 | 61 | 24 | 33 | --- | 0.00 | 22 | clear |
| 02-Mar | 30.10 | 63 | 27 | 35 | --- | 0.00 | 14 | clear |
| 03-Mar | 30.10 | 68 | 32 | 44 | --- | 0.00 | 23 | MC |
| 04-Mar | 29.88 | 64 | 44 | 55 | 53 | 0.00 | 38 | lt. fog |
| 05-Mar | 29.85 | 72 | 54 | 63 | --- | 0.01 | 56 | fog/drizzle early AM-10:00 AM |
| 06-Mar | 30.00 | 78 | 47 | 48 | --- | T | 51 | cldy;lt. RF 10:00 PM |
| 07-Mar | 29.61 | 63 | 48 | 51 | 49 | 0.02 | 75 | fog/drizzle early AM;lt. RF PM and evening |
| 08-Mar | 30.00 | 77 | 36 | 36 | --- | 0.04 | 24 | PC;windy |
| 09-Mar | 30.28 | 52 | 29 | 35 | --- | 0.00 | 33 | clear |
| 10-Mar | 30.51 | 57 | 28 | 32 | --- | 0.00 | 17 | clear |
| 11-Mar | 30.48 | 55 | 27 | 34 | --- | 0.00 | 22 | PC |
| 12-Mar | 30.49 | 62 | 34 | 38 | 38 | 0.00 | 23 | cldy;lt. NE wind;drizzle starting late AM |
| 13-Mar | 30.35 | 42 | 38 | 40 | --- | 0.05 | 60 | fog;drizzle throughout day and night |
| 14-Mar | 30.22 | 54 | 40 | 54 | 54 | 0.20 | 97 | lt. drizzle throughout day & night;occas. lt. RF |
| 15-Mar | 29.98 | 63 | 54 | 60 | 57 | 0.24 | 90 | drizzle/lt. RF throughout day;T-storms late PM |
| 16-Mar | 29.78 | 63 | 49 | 52 | --- | 1.98 | 85 | T-storms thru 5:00 AM |
| 17-Mar | 29.87 | 67 | 41 | 45 | --- | 0.00 | 32 | PC |
| 18-Mar | 29.90 | 76 | 43 | 54 | --- | 0.00 | 27 | clear |
| 19-Mar | 29.98 | 80 | 49 | 55 | --- | 0.07 | 34 | PC;brief RF early AM |
| 20-Mar | 30.17 | 64 | 35 | 41 | --- | 0.00 | 20 | clear |
| 21-Mar | 30.02 | 64 | 29 | 45 | --- | 0.00 | 26 | clear |
| 22-Mar | 30.15 | 67 | 31 | 44 | --- | 0.00 | 18 | PC |
| 23-Mar | 30.10 | 74 | 44 | 56 | 47 | 0.00 | 21 | clear |
| 24-Mar | 30.01 | 80 | 54 | 58 | --- | 0.00 | 31 | cldy;lt. fog |
| 25-Mar | 30.10 | 83 | 57 | 59 | --- | 0.00 | 36 | cldy |
| 26-Mar | 30.09 | 78 | 59 | 64 | 62 | 0.00 | 48 | MC;strong SE wind in afternoon |
| 27-Mar | 29.94 | 76 | 53 | 56 | --- | 0.14 | 48 | PC;RF 5:30-6:30 AM |
| 28-Mar | ----- | 80 | 53 | 65 | --- | 0.00 | 9 | PC |
| 29-Mar | ----- | 82 | 64 | 67 | --- | 0.00 | 39 | PC |
| 30-Mar | 29.69 | 80 | 65 | 68 | --- | 0.00 | 52 | cldy;Trace of RF 6:00-7:00 PM |
| 31-Mar | 29.93 | 86 | 46 | 53 | --- | T | 17 | clear |

March Totals and Averages

| | |
|-----------------|--------|
| Max. Temp. | 86 ° |
| Min. Temp. | 24 ° |
| Avg. High | 68.7 ° |
| Avg. Low | 43.0 ° |
| Avg. Temp | 55.9 ° |
| Total RF | 2.75 " |
| Max. RF | 1.98 " |
| Low RH | 9 % |
| Avg. Low RH | 38.3 % |
| Avg. Soil Temp | 57.7 ° |
| Year To Date RF | 7.83 " |

NOTE

Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded.

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville,TX

| DATE 1998 | B. P. 8 AM | --TEMPERATURES-- | | | RAIN FALL | LOW RH | COMMENTS | |
|--------------|---------------|------------------|----|---------|--------------|-----------|----------|-----------------------------------------------|
| | | HI | LO | 8AM ONL | | | | |
| 01-Apr | 30.02 | 73 | 32 | 48 | --- | 0.00 | 10 | clear |
| 02-Apr | 29.90 | 79 | 48 | 57 | --- | 0.00 | 12 | PC |
| 03-Apr | 30.05 | 82 | 48 | 61 | --- | 0.00 | 20 | clear |
| 04-Apr | 30.01 | 79 | 41 | 55 | --- | 0.00 | 14 | PC |
| 05-Apr | 29.97 | 77 | 46 | 57 | --- | 0.00 | 20 | PC |
| 06-Apr | 29.80 | 77 | 57 | 59 | --- | 0.00 | 29 | MC;lt. drizzle PM |
| 07-Apr | 29.87 | 66 | 56 | 58 | --- | T | 80 | fog |
| 08-Apr | 29.87 | 84 | 52 | 53 | --- | 0.25 | 26 | PC;T-shower about 3:45 AM |
| 09-Apr | 30.10 | 78 | 38 | 44 | --- | 0.00 | 4 | clear |
| 10-Apr | 30.22 | 80 | 41 | 47 | --- | 0.00 | 16 | clear |
| 11-Apr | 30.23 | 80 | 43 | 54 | --- | 0.00 | 26 | clear |
| 12-Apr | 29.98 | 78 | 54 | 60 | 58 | 0.00 | 29 | PC;windy |
| 13-Apr | 29.91 | 80 | 60 | 62 | --- | 0.00 | 42 | fog |
| 14-Apr | 29.90 | 87 | 57 | 64 | --- | 0.00 | 7 | lt. fog |
| 15-Apr | 29.78 | 87 | 64 | 66 | --- | 0.00 | 35 | lt. fog |
| 16-Apr | 29.81 | 85 | 55 | 59 | --- | 0.00 | 27 | PC |
| 17-Apr | 30.00 | 78 | 50 | 52 | --- | 0.00 | 19 | PC |
| 18-Apr | 30.02 | 71 | 50 | 51 | --- | 0.00 | 31 | MC |
| 19-Apr | 30.05 | 74 | 39 | 46 | --- | 0.00 | 28 | PC |
| 20-Apr | 30.12 | 81 | 46 | 55 | 50 | 0.00 | 25 | lt. fog |
| 21-Apr | 30.30 | 78 | 52 | 52 | --- | 0.00 | 32 | MC |
| 22-Apr | 30.30 | 73 | 36 | 44 | --- | 0.00 | 18 | clear |
| 23-Apr | 30.21 | 81 | 42 | 50 | --- | 0.00 | 15 | clear |
| 24-Apr | 30.05 | 84 | 50 | 65 | 58 | 0.00 | 18 | clear |
| 25-Apr | 30.01 | 87 | 57 | 60 | --- | 0.00 | 18 | PC |
| 26-Apr | 30.00 | 78 | 60 | 65 | 62 | T | 52 | drizzle/lt. RF early AM and occas. during day |
| 27-Apr | 29.98 | 86 | 59 | 60 | --- | 0.03 | 36 | cldy;trace of RF late AM |
| 28-Apr | 30.08 | 74 | 45 | 53 | --- | T | 27 | PC |
| 29-Apr | 30.16 | 73 | 43 | 51 | --- | 0.00 | 28 | clear |
| 30-Apr | 30.10 | 78 | 46 | 57 | --- | 0.00 | 19 | PC |

April Totals and Averages

| | |
|-----------------|--------|
| Max. Temp. | 87 ° |
| Min. Temp. | 32 ° |
| Avg. High | 78.9 ° |
| Avg. Low | 48.9 ° |
| Avg. Temp | 63.9 ° |
| Total RF | 0.28 " |
| Max. RF | 0.25 " |
| Low RH | 4 % |
| Avg. Low RH | 25.4 % |
| Avg. Soil Temp | 68.9 ° |
| Year To Date RF | 8.11 " |

NOTE

Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded.

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville, TX

| DATE 1998 | B. P. 8 AM | --TEMPERATURES-- | | | RAIN | LOW | | |
|--------------|---------------|------------------|----|---------|------|------|----------|-------------------------------------------|
| | | HI | LO | 8AM ONL | FALL | RH | COMMENTS | |
| 01-May | 29.96 | 87 | 54 | 62 | --- | 0.00 | 14 | clear |
| 02-May | 30.01 | 93 | 58 | 62 | --- | 0.00 | 14 | PC |
| 03-May | 29.98 | 95 | 60 | 67 | --- | 0.00 | 20 | PC;lt. drizzle AM |
| 04-May | 29.94 | 80 | 55 | 63 | --- | T | 54 | MC |
| 05-May | 29.86 | 81 | 63 | 67 | 66 | 0.00 | 53 | MC;lt. haze |
| 06-May | 29.84 | 98 | 67 | 72 | 69 | 0.00 | 8 | MC;lt. haze |
| 07-May | 29.81 | 97 | 60 | 65 | --- | 0.00 | 25 | PC;lt. fog |
| 08-May | 29.80 | 101 | 61 | 68 | --- | 0.00 | 9 | PC;haze/smoke in air (Mexico grass fires) |
| 09-May | 29.85 | 87 | 62 | 76 | --- | 0.00 | 14 | PC |
| 10-May | 29.90 | 93 | 57 | 70 | --- | 0.00 | 7 | PC |
| 11-May | 29.90 | 94 | 59 | 72 | --- | 0.00 | 15 | PC |
| 12-May | 29.82 | 89 | 61 | 64 | --- | 0.00 | 26 | PC;lt. fog/haze |
| 13-May | 29.93 | 85 | 64 | 71 | 69 | 0.00 | 49 | MC;haze/smoke in air |
| 14-May | 29.96 | 86 | 71 | 72 | --- | 0.00 | 49 | MC;haze/smoke in air |
| 15-May | 30.06 | 87 | 72 | 74 | 73 | 0.00 | 50 | haze/smoke in air (clearing late AM) |
| 16-May | 30.08 | 93 | 67 | 70 | --- | 0.00 | 9 | PC;haze/smoke |
| 17-May | 30.10 | 87 | 66 | 67 | --- | 0.00 | 50 | PC;haze/smoke |
| 18-May | 30.14 | 89 | 59 | 66 | --- | 0.00 | 34 | PC;haze/smoke |
| 19-May | 30.16 | 90 | 59 | 65 | --- | 0.00 | 30 | PC;haze/smoke |
| 20-May | 30.15 | 92 | 63 | 65 | --- | 0.00 | 21 | PC;haze/smoke |
| 21-May | 30.02 | 94 | 65 | 67 | 66 | 0.00 | 27 | PC;haze/smoke |
| 22-May | 29.91 | 96 | 65 | 67 | --- | 0.00 | 26 | PC;lt. haze |
| 23-May | 29.95 | 94 | 67 | 69 | --- | 0.00 | 26 | MC;haze/smoke |
| 24-May | 29.90 | 89 | 69 | 70 | --- | 0.00 | 35 | PC;haze/smoke |
| 25-May | 29.95 | 89 | 68 | 71 | --- | 0.00 | 40 | MC;haze/smoke;Lt. RF 8:30-9:00 PM |
| 26-May | 29.99 | 88 | 71 | 71 | --- | 0.07 | 54 | MC;haze/smoke;lt. RF 7:00 AM |
| 27-May | 29.98 | 86 | 61 | 63 | --- | 0.61 | 55 | T-storms 3:00-6:00 AM;lt. haze PM |
| 28-May | 30.05 | 89 | 63 | 70 | 67 | 0.00 | 47 | PC;lt. haze |
| 29-May | 30.04 | 94 | 67 | 71 | --- | 0.00 | 27 | PC;lt. haze |
| 30-May | 30.02 | 97 | 63 | 71 | --- | 0.00 | 20 | PC;lt. haze |
| 31-May | 30.01 | 96 | 68 | 73 | --- | 0.00 | 21 | lt. haze |

May Totals and Averages

| | | |
|-----------------|--------|-----------------------------------------------------------------------------------------------------------------|
| Max. Temp. | 101 ° | NOTE |
| Min. Temp. | 54 ° | |
| Avg. High | 90.8 ° | Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded. |
| Avg. Low | 63.4 ° | |
| Avg. Temp | 77.1 ° | Record high temperature for date: 101 degrees; 5-7-98 |
| Total RF | 0.68 " | |
| Max. RF | 0.61 " | Record highest avg. high and avg. temps. and record lowest rainfall for May: 90.8 and 77.1 degrees; 0.68 inches |
| Low RH | 7 % | |
| Avg. Low RH | 30.0 % | |
| Avg. Soil Temp | 82.7 ° | |
| Year To Date RF | 8.79 " | |

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville, TX

| DATE 1998 | B. P. 8 AM | --TEMPERATURES-- | | | RAIN | LOW | COMMENTS | |
|--------------|---------------|------------------|----|---------|------|------|----------|---------------------------------------|
| | | HI | LO | 8AM ONL | FALL | RH | | |
| 01-Jun | 29.99 | 99 | 70 | 73 | --- | 0.00 | 20 | lt. haze |
| 02-Jun | 29.92 | 99 | 68 | 70 | --- | 0.00 | 18 | PC |
| 03-Jun | 29.89 | 97 | 70 | 73 | 71 | 0.00 | 23 | PC;haze |
| 04-Jun | 29.83 | 96 | 73 | 77 | 76 | 0.00 | 41 | MC;haze/smoke |
| 05-Jun | 29.87 | 96 | 74 | 77 | --- | 0.00 | 46 | MC;haze/smoke |
| 06-Jun | 29.93 | 86 | 58 | 61 | --- | 0.00 | 55 | PC;lt. haze |
| 07-Jun | 29.94 | 84 | 61 | 66 | 64 | 0.00 | 27 | cldy;lt. drizzle 10:00 AM-1:00 PM |
| 08-Jun | 29.96 | 76 | 66 | 74 | 73 | T | 77 | cldy;windy |
| 09-Jun | 30.00 | 96 | 74 | 76 | --- | 0.00 | 28 | MC;lt. haze |
| 10-Jun | 30.05 | 89 | 75 | 76 | --- | 0.00 | 51 | cldy;lt. haze;lt. RF 11:00 AM-1:00 PM |
| 11-Jun | 30.06 | 92 | 65 | 68 | --- | 2.39 | 41 | RF 1:30 AM-7:30 AM |
| 12-Jun | 30.04 | 89 | 68 | 77 | 70 | 0.00 | 42 | MC;haze |
| 13-Jun | 30.01 | 92 | 73 | 74 | --- | 0.00 | 51 | MC |
| 14-Jun | 29.85 | 92 | 74 | 77 | --- | 0.00 | 44 | MC |
| 15-Jun | 29.79 | 102 | 60 | 70 | --- | 0.00 | 7 | PC |
| 16-Jun | 29.90 | 100 | 70 | 75 | --- | 0.00 | 13 | PC;haze/smoke PM |
| 17-Jun | 29.95 | 97 | 72 | 75 | --- | 0.00 | 29 | MC;haze/smoke |
| 18-Jun | 30.10 | 94 | 75 | 77 | 76 | 0.00 | 45 | MC;haze/smoke |
| 19-Jun | 30.06 | 95 | 76 | 76 | --- | 0.00 | 40 | PC;haze |
| 20-Jun | | 95 | 74 | 76 | --- | 0.00 | 39 | PC |
| 21-Jun | | 98 | 71 | 73 | --- | 0.00 | 28 | PC |
| 22-Jun | 30.13 | 95 | 73 | 74 | --- | 0.00 | 29 | PC |
| 23-Jun | 30.12 | 96 | 71 | 74 | --- | 0.00 | 32 | PC |
| 24-Jun | 30.10 | 95 | 72 | 74 | --- | 0.00 | 29 | PC |
| 25-Jun | 30.08 | 94 | 71 | 73 | --- | 0.00 | 33 | PC |
| 26-Jun | 30.01 | 96 | 69 | 77 | --- | 0.00 | 32 | clear |
| 27-Jun | | 96 | 73 | 77 | --- | 0.00 | 37 | PC |
| 28-Jun | | 101 | 73 | 77 | --- | 0.00 | 33 | PC |
| 29-Jun | 30.03 | 96 | 76 | 77 | --- | 0.00 | 36 | PC;very scattered lt. showers PM |
| 30-Jun | 30.04 | 90 | 71 | 76 | --- | 0.00 | 53 | MC; 0.27 inches RF 3:15-3:30 PM * |

June Totals and Averages

| | | |
|-----------------|---------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Max. Temp. | 102 ° | NOTE Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded. Record high temperature for date: 102 degrees; 6-14-98 * 0.27 inches RF recorded on 7-1-98 since it occurred after 8 AM 6-30-98 |
| Min. Temp. | 58 ° | |
| Avg. High | 94.1 ° | |
| Avg. Low | 70.5 ° | |
| Avg. Temp | 82.3 ° | |
| Total RF | 2.39 " | |
| Max. RF | 2.39 " | |
| Low RH | 7 % | |
| Avg. Low RH | 36.0 % | |
| Avg. Soil Temp | 88.4 ° | |
| Year To Date RF | 11.18 " | |

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville, TX

| DATE 1998 | B. P. 8 AM | --TEMPERATURES-- | | | RAIN FALL | LOW RH | COMMENTS | |
|--------------|---------------|------------------|----|---------|--------------|-----------|----------|---------------------------------------------|
| | | HI | LO | 8AM ONL | | | | |
| 01-Jul | 30.10 | 93 | 74 | 77 | --- | 0.27 | 38 | PC * |
| 02-Jul | 30.10 | 98 | 70 | 76 | --- | 0.00 | 32 | PC |
| 03-Jul | 30.02 | 96 | 73 | 74 | --- | 0.01 | 25 | PC;lt. RF early AM;3:30-4:00 PM |
| 04-Jul | 30.04 | 93 | 73 | 74 | --- | 0.10 | 38 | MC;lt. RF 2:30-3:00 PM;4:00-4:30 PM |
| 05-Jul | 30.06 | 87 | 74 | 75 | --- | 0.09 | 58 | MC |
| 06-Jul | 30.09 | 95 | 72 | 74 | --- | 0.00 | 34 | MC;lt. haze |
| 07-Jul | 30.08 | 99 | 72 | 74 | --- | 0.00 | 19 | PC;lt. haze |
| 08-Jul | 30.09 | 102 | 70 | 73 | --- | 0.00 | 14 | PC;lt. haze |
| 09-Jul | 30.13 | 98 | 72 | 75 | --- | 0.00 | 29 | PC;lt. haze |
| 10-Jul | 30.15 | 97 | 73 | 75 | --- | 0.00 | 33 | PC;lt. haze |
| 11-Jul | 30.10 | 97 | 74 | 76 | --- | 0.00 | 27 | PC |
| 12-Jul | 30.08 | 99 | 75 | 77 | --- | 0.00 | 24 | PC |
| 13-Jul | 29.96 | 104 | 76 | 79 | --- | 0.00 | 22 | PC |
| 14-Jul | 29.98 | 103 | 68 | 78 | --- | 0.00 | 27 | lt. haze; Thunder shower 2:00-2:30 PM |
| 15-Jul | 30.02 | 102 | 65 | 71 | --- | 0.10 | 32 | lt. fog |
| 16-Jul | 30.18 | 100 | 69 | 74 | --- | 0.00 | 30 | PC;lt. haze;T-storm 4:30-5:00 PM;small hail |
| 17-Jul | 30.18 | 100 | 65 | 70 | --- | 0.95 | 28 | lt. haze |
| 18-Jul | 30.09 | 100 | 70 | 75 | --- | 0.00 | 21 | PC;lt. haze |
| 19-Jul | 30.12 | 100 | 72 | 74 | --- | 0.00 | 24 | PC |
| 20-Jul | 30.12 | 98 | 72 | 76 | --- | 0.00 | 28 | PC |
| 21-Jul | 30.11 | 98 | 73 | 75 | --- | 0.00 | 25 | PC;lt. haze |
| 22-Jul | 30.13 | 97 | 73 | 75 | --- | 0.00 | 22 | PC |
| 23-Jul | 30.13 | 99 | 71 | 75 | --- | 0.00 | 24 | PC |
| 24-Jul | 30.15 | 98 | 72 | 76 | --- | 0.00 | 23 | PC |
| 25-Jul | 30.18 | 99 | 73 | 75 | --- | 0.00 | 23 | PC;lt. haze |
| 26-Jul | 30.17 | 99 | 73 | 74 | --- | 0.00 | 19 | PC;lt. haze |
| 27-Jul | 30.17 | 98 | 73 | 76 | --- | 0.00 | 24 | PC;lt. haze |
| 28-Jul | 30.16 | 97 | 72 | 75 | --- | 0.00 | 25 | PC |
| 29-Jul | 30.13 | 98 | 70 | 73 | --- | 0.00 | 25 | PC |
| 30-Jul | 30.10 | 98 | 72 | 74 | --- | 0.00 | 23 | PC;lt. haze |
| 31-Jul | 30.18 | 99 | 72 | 74 | --- | 0.00 | 18 | MC;haze |

July Totals and Averages

NOTE

| | | |
|-----------------|---------|-------------------------------------------------------------------------------|
| Max. Temp. | 104 ° | Temp. & RF data are for the 24 hr period ending at 8 AM on the date recorded. |
| Min. Temp. | 65 ° | |
| Avg. High | 98.1 ° | * The 0.27 inches RF recorded on 7-1-98 actually occurred PM 6-30-98 |
| Avg. Low | 71.7 ° | |
| Avg. Temp | 84.9 ° | |
| Total RF | 1.52 " | |
| Max. RF | 0.95 " | |
| Low RH | 14 % | 7-7-98; 102 deg. record high for date |
| Avg. Low RH | 26.9 % | 7-12-98; 104 deg. record high for date |
| Avg. Soil Temp | 92.1 ° | 7-13-98; 103 deg. record high for date |
| Year To Date RF | 12.70 " | 7-14-98; 102 deg. record high for date |

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville,TX

| DATE 1998 | B. P. 8 AM | --TEMPERATURES-- | | | RAIN | LOW | COMMENTS | |
|--------------|---------------|------------------|----|---------|------|------|----------|--------------------------------------------|
| | | HI | LO | 8AM ONL | FALL | RH | | |
| 01-Aug | 30.23 | 100 | 68 | 72 | --- | 0.00 | 17 | PC;lt. haze |
| 02-Aug | 30.18 | 101 | 67 | 75 | --- | 0.00 | 20 | PC |
| 03-Aug | 30.12 | 101 | 73 | 77 | --- | 0.00 | 23 | clear |
| 04-Aug | 30.16 | 102 | 75 | 78 | --- | 0.00 | 25 | lt. haze;lt. RF about 7:00 PM |
| 05-Aug | 30.20 | 101 | 71 | 74 | --- | 0.02 | 32 | PC;haze;lt. RF 4 :00 PM and 7:00 PM |
| 06-Aug | 30.15 | 91 | 68 | 70 | --- | 0.44 | 42 | MC;lt. RF early AM and 7:30-8:30 AM |
| 07-Aug | 30.09 | 85 | 65 | 69 | --- | T | 52 | lt. haze |
| 08-Aug | 30.10 | 92 | 69 | 74 | 71 | 0.00 | 35 | PC |
| 09-Aug | 30.09 | 95 | 73 | 75 | --- | 0.00 | 24 | PC |
| 10-Aug | 30.19 | 97 | 70 | 73 | --- | 0.00 | 25 | PC;lt. haze |
| 11-Aug | 30.13 | 99 | 67 | 74 | --- | 0.00 | 22 | clear |
| 12-Aug | 30.16 | 100 | 71 | 74 | --- | 0.00 | 23 | clear |
| 13-Aug | 30.16 | 100 | 74 | 76 | --- | 0.00 | 25 | PC;T-shower 3:30-4:00 PM;lt. RF late PM |
| 14-Aug | 30.09 | 97 | 71 | 72 | --- | 0.80 | 37 | MC;lt. RF early AM, then noon-3:30 PM |
| 15-Aug | 30.08 | 84 | 61 | 68 | --- | 0.37 | 57 | MC;fog |
| 16-Aug | 30.05 | 92 | 68 | 72 | --- | 0.00 | 32 | MC |
| 17-Aug | 30.13 | 91 | 72 | 73 | --- | T | 45 | cldy;lt. RF 7:30-8:00 AM;3:00-3:30 PM |
| 18-Aug | 30.16 | 91 | 71 | 73 | --- | 0.07 | 45 | cldy;fog;lt. RF early AM and 3:00 PM |
| 19-Aug | 30.13 | 82 | 73 | 73 | --- | 0.05 | 68 | cldy;lt. fog;lt. RF early AM |
| 20-Aug | 30.18 | 92 | 68 | 71 | --- | 0.00 | 41 | PC;lt. haze;RF about 8:00-9:00 PM |
| 21-Aug | 30.20 | 94 | 69 | 70 | --- | 0.19 | 31 | PC;lt. fog/haze;lt. RF early AM;RF 7:00 PM |
| 22-Aug | 30.01 | 90 | 68 | 70 | --- | 0.12 | 44 | RF early AM then throughout day and night |
| 23-Aug | 30.02 | 73 | 70 | 73 | 72 | 3.94 | 94 | RF midnite-10:00 AM then occas. lt. RF |
| 24-Aug | 30.02 | 87 | 73 | 75 | 74 | 0.38 | 59 | lt. RF early AM |
| 25-Aug | 30.03 | 84 | 73 | 75 | --- | 0.00 | 69 | lt. fog/haze |
| 26-Aug | 30.04 | 89 | 72 | 74 | --- | 0.00 | 55 | PC;lt. fog |
| 27-Aug | 30.10 | 92 | 72 | 74 | --- | 0.00 | 47 | MC |
| 28-Aug | 30.16 | 92 | 64 | 67 | --- | 0.00 | 47 | lt. fog |
| 29-Aug | 30.14 | 93 | 67 | 69 | --- | 0.00 | 38 | PC |
| 30-Aug | 30.10 | 94 | 64 | 67 | --- | 0.00 | 29 | PC |
| 31-Aug | 30.09 | 92 | 67 | 71 | --- | 0.00 | 34 | PC;T-showers 5:00-8:00 PM * |

August Totals and Averages

| | | |
|-----------------|---------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Max. Temp. | 102 ° | NOTE Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded. 8-1-98; 101 deg. record high for date 8-3-98; 102 deg. record high for date * 0.70 inches RF recorded on 9-1-98 since it occurred after 8 AM 8-31-98 |
| Min. Temp. | 61 ° | |
| Avg. High | 92.7 ° | |
| Avg. Low | 69.5 ° | |
| Avg. Temp | 81.1 ° | |
| Total RF | 6.38 " | |
| Max. RF | 3.94 " | |
| Low RH | 17 % | |
| Avg. Low RH | 39.9 % | |
| Avg. Soil Temp | 84.4 ° | |
| Year To Date RF | 19.08 " | |

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville, TX

| DATE 1998 | B. P. 8 AM | --TEMPERATURES-- | | | RAIN FALL | LOW RH | COMMENTS | |
|--------------|---------------|------------------|----|---------|--------------|-----------|----------|-----------------------------------------------|
| | | HI | LO | 8AM ONL | | | | |
| 01-Sep | 30.00 | 91 | 65 | 68 | --- | 0.70 | 46 | lt. fog/haze |
| 02-Sep | 29.98 | 90 | 64 | 67 | --- | 0.00 | 38 | lt. fog/haze |
| 03-Sep | 29.98 | 92 | 63 | 66 | --- | 0.00 | 31 | PC;lt. haze |
| 04-Sep | 30.02 | 94 | 65 | 68 | --- | 0.00 | 32 | PC;lt. haze |
| 05-Sep | 30.03 | 96 | 67 | 69 | --- | 0.00 | 35 | lt. fog/haze |
| 06-Sep | 30.05 | 91 | 62 | 66 | --- | 0.00 | 38 | PC |
| 07-Sep | 30.08 | 91 | 66 | 70 | --- | 0.00 | 40 | PC |
| 08-Sep | 29.98 | 91 | 63 | 65 | --- | 0.00 | 45 | PC |
| 09-Sep | 29.98 | 90 | 65 | 70 | 66 | 0.00 | 41 | PC |
| 10-Sep | 29.99 | 90 | 67 | 69 | --- | 0.00 | 43 | PC;becoming mostly cloudy PM |
| 11-Sep | 29.82 | 82 | 68 | 68 | --- | 0.18 | 57 | cldy;drizzle/lt. RF 1:00 AM-late PM |
| 12-Sep | 29.81 | 71 | 68 | 69 | --- | 0.65 | 98 | cldy;occas.lt. RF AM |
| 13-Sep | 29.83 | 74 | 64 | 69 | --- | 0.07 | 84 | PC |
| 14-Sep | 29.85 | 83 | 69 | 70 | --- | 0.00 | 55 | PC;lt. fog |
| 15-Sep | 30.00 | 91 | 68 | 70 | --- | 0.00 | 44 | PC;lt. haze |
| 16-Sep | 30.01 | 89 | 70 | 71 | 71 | 0.04 | 43 | drizzle/lt. RF 6:00 AM-1:00 PM;then occas. PM |
| 17-Sep | 30.04 | 77 | 70 | 70 | --- | 0.31 | 88 | MC;lt. fog/haze;lt. RF early AM:Trace PM |
| 18-Sep | 30.04 | 81 | 68 | 70 | --- | T | 61 | MC;lt. fog/haze;Trace of RF early AM |
| 19-Sep | 30.07 | 82 | 62 | 64 | --- | 0.00 | 53 | PC |
| 20-Sep | 30.05 | 89 | 64 | 69 | --- | 0.00 | 41 | PC |
| 21-Sep | 29.96 | 90 | 69 | 73 | --- | 0.00 | 44 | MC;lt. fog/haze |
| 22-Sep | 30.03 | 93 | 70 | 73 | --- | 0.00 | 43 | MC;lt. fog |
| 23-Sep | 30.12 | 92 | 67 | 69 | --- | 0.00 | 40 | PC |
| 24-Sep | 30.10 | 90 | 65 | 66 | --- | 0.00 | 50 | lt. fog/haze |
| 25-Sep | 30.09 | 91 | 66 | 70 | 69 | 0.00 | 43 | cldy;fog |
| 26-Sep | 30.09 | 88 | 70 | 73 | 72 | T | 43 | cldy;lt. drizzle/RF 8:00 AM-10:00 AM |
| 27-Sep | 30.07 | 89 | 70 | 70 | --- | 0.01 | 46 | PC |
| 28-Sep | 30.06 | 91 | 62 | 66 | --- | 0.00 | 40 | lt. fog |
| 29-Sep | 30.02 | 94 | 64 | 67 | --- | 0.00 | 35 | clear |
| 30-Sep | 30.02 | 97 | 66 | 68 | --- | 0.00 | 34 | lt. fog |

September Totals and Averages

| | |
|-----------------|---------|
| Max. Temp. | 97 ° |
| Min. Temp. | 62 ° |
| Avg. High | 88.3 ° |
| Avg. Low | 66.2 ° |
| Avg. Temp | 77.3 ° |
| Total RF | 1.96 " |
| Max. RF | 0.70 " |
| Low RH | 31 % |
| Avg. Low RH | 47.7 % |
| Avg. Soil Temp | 77.8 ° |
| Year To Date RF | 21.04 " |

NOTE

Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded.

* The 0.70 inches RF recorded on 9-1-98 actually occurred PM 8-31-98

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville, TX

| DATE 1998 | B. P. 8 AM | --TEMPERATURES-- | | | RAIN FALL | LOW RH | COMMENTS | |
|--------------|---------------|------------------|----|---------|--------------|-----------|----------|-----------------------------------------------|
| | | HI | LO | 8AM ONL | | | | |
| 01-Oct | 30.09 | 92 | 68 | 70 | --- | 0.00 | 34 | MC;lt. fog;Thunderstorms 9:00 PM-midnite |
| 02-Oct | 29.98 | 92 | 68 | 73 | --- | 0.96 | 37 | MC;showers early AM |
| 03-Oct | 29.96 | 84 | 72 | 74 | --- | 0.00 | 58 | MC |
| 04-Oct | 29.94 | 87 | 74 | 75 | --- | 0.00 | 47 | MC |
| 05-Oct | 29.90 | 89 | 75 | 76 | --- | 0.00 | 47 | cldy;breezy;cold front/T-storms 10 PM-midnite |
| 06-Oct | 30.09 | 87 | 53 | 54 | --- | 1.83 | 57 | cldy;RF midnite-3:00 AM |
| 07-Oct | 30.30 | 70 | 41 | 45 | --- | 0.00 | 32 | clear |
| 08-Oct | 30.29 | 78 | 43 | 47 | --- | 0.00 | 20 | clear |
| 09-Oct | 30.20 | 81 | 45 | 48 | --- | 0.00 | 21 | clear |
| 10-Oct | 30.21 | 80 | 46 | 49 | --- | 0.00 | 29 | PC |
| 11-Oct | 30.25 | 78 | 49 | 56 | 53 | 0.00 | 30 | PC |
| 12-Oct | 30.29 | 79 | 56 | 61 | --- | 0.00 | 53 | PC;lt. haze |
| 13-Oct | 30.23 | 84 | 58 | 64 | --- | 0.00 | 43 | lt. fog/haze |
| 14-Oct | 30.10 | 84 | 58 | 62 | --- | 0.00 | 45 | heavy fog |
| 15-Oct | 30.02 | 81 | 62 | 64 | --- | 0.00 | 47 | MC;lt. fog/haze |
| 16-Oct | 29.99 | 82 | 64 | 69 | 68 | 0.00 | 45 | cldy;breezy;T-storms 10:00 PM-midnite |
| 17-Oct | 29.98 | 84 | 69 | 72 | --- | 1.18 | 49 | T-showers/RF midnite-2:00 PM;7:00 PM-midnite |
| 18-Oct | 30.20 | 75 | 61 | 61 | --- | 1.17 | 91 | cldy;occas. lt. RF Am and PM |
| 19-Oct | 30.23 | 67 | 53 | 53 | --- | 0.11 | 46 | cldy;drizzle early AM;occas. lt. RF late PM |
| 20-Oct | 30.23 | 59 | 53 | 58 | 56 | 0.09 | 92 | cldy;occas. lt. RF |
| 21-Oct | 30.32 | 64 | 52 | 52 | --- | 0.28 | 92 | drizzle/lt. RF early AM-10:00 AM |
| 22-Oct | 30.47 | 56 | 52 | 54 | 54 | 0.04 | 76 | MC |
| 23-Oct | 30.45 | 71 | 41 | 42 | --- | 0.00 | 38 | PC;lt. patchy fog |
| 24-Oct | 30.39 | 69 | 38 | 39 | --- | 0.00 | 25 | clear |
| 25-Oct | 30.25 | 72 | 39 | 55 | 54 | 0.00 | 38 | PC |
| 26-Oct | 30.21 | 75 | 55 | 66 | 65 | 0.00 | 59 | MC;lt. haze;lt. RF 10:00 PM |
| 27-Oct | 30.23 | 80 | 65 | 66 | --- | 0.05 | 59 | MC;lt. haze;lt. RF early AM |
| 28-Oct | 30.12 | 77 | 66 | 68 | 67 | T | 61 | MC |
| 29-Oct | 30.06 | 79 | 64 | 67 | --- | 0.00 | 60 | PC |
| 30-Oct | 30.08 | 80 | 66 | 67 | --- | 0.00 | 56 | cldy |
| 31-Oct | 30.06 | 76 | 67 | 68 | --- | 0.00 | 60 | PC;lt. RF late PM |

October Totals and Averages

| | |
|----------------|--------|
| Max. Temp. | 92 ° |
| Min. Temp. | 38 ° |
| Avg. High | 77.8 ° |
| Avg. Low | 57.2 ° |
| Avg. Temp | 67.5 ° |
| Total RF | 5.71 " |
| Max. RF | 1.83 " |
| Low RH | 20 % |
| Avg. Low RH | 49.9 % |
| Avg. Soil Temp | 70.1 ° |

NOTE

Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded.

Year To Date RF 26.75 "

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville, TX

| DATE 1998 | B. P. 8 AM | --TEMPERATURES-- | | | | RAIN FALL | LOW RH | COMMENTS |
|--------------|---------------|------------------|----|-----|-----|--------------|-----------|--------------------------------------------------|
| | | HI | LO | 8AM | ONL | | | |
| 01-Nov | 30.05 | 74 | 56 | 57 | --- | 1.79 | 73 | T-showers, then lt. RF 1:00 AM-8:00 AM |
| 02-Nov | 30.02 | 72 | 43 | 52 | --- | 0.00 | 39 | clear |
| 03-Nov | 30.02 | 75 | 46 | 53 | --- | 0.00 | 37 | PC |
| 04-Nov | 30.09 | 77 | 53 | 54 | --- | 0.00 | 38 | MC;T-showers 8:00 PM-midnite |
| 05-Nov | 30.24 | 55 | 42 | 42 | --- | 0.66 | 73 | lt. RF midnite-1:00 AM |
| 06-Nov | 30.25 | 53 | 42 | 43 | --- | 0.00 | 56 | MC;lt. haze;drizzle 1:00 PM-midnite |
| 07-Nov | 30.11 | 47 | 43 | 47 | 47 | 0.13 | 73 | drizzle throughout day |
| 08-Nov | 30.04 | 62 | 47 | 52 | 51 | 0.02 | 94 | drizzle early AM;then PC;drizzle 10 PM-midnite |
| 09-Nov | 30.01 | 68 | 52 | 66 | 61 | 0.02 | 59 | drizzle midnite-11:00 AM |
| 10-Nov | 30.10 | 73 | 54 | 56 | --- | T | 76 | clear |
| 11-Nov | 30.18 | 68 | 36 | 43 | --- | 0.00 | 15 | clear, becoming MC late PM |
| 12-Nov | 30.26 | 67 | 43 | 50 | 50 | 0.02 | 20 | drizzle 4:00 AM-most of day;lt. RF late PM |
| 13-Nov | 30.17 | 56 | 50 | 50 | --- | 0.24 | 97 | drizzle early, then lt. RF rest of day and night |
| 14-Nov | 30.10 | 57 | 50 | 54 | 52 | 0.69 | 92 | lt. RF through 4:00 PM |
| 15-Nov | 30.08 | 60 | 44 | 52 | --- | 0.29 | 91 | PC |
| 16-Nov | 30.03 | 66 | 46 | 55 | --- | 0.00 | 61 | MC;lt. fog |
| 17-Nov | 30.10 | 79 | 44 | 50 | --- | 0.00 | 33 | lt. fog |
| 18-Nov | 30.10 | 80 | 50 | 64 | 59 | 0.00 | 38 | PC;lt. fog |
| 19-Nov | 30.08 | 75 | 64 | 66 | --- | 0.00 | 58 | PC;lt. fog |
| 20-Nov | 30.27 | 79 | 49 | 50 | --- | T | 55 | cldy;lt. RF AM |
| 21-Nov | 30.21 | 58 | 49 | 50 | --- | 0.05 | 52 | PC |
| 22-Nov | 30.16 | 68 | 41 | 54 | --- | T | 37 | lt. drizzle early AM |
| 23-Nov | 30.14 | 74 | 54 | 62 | 59 | 0.00 | 55 | cldy;lt. fog |
| 24-Nov | 30.17 | 77 | 51 | 58 | --- | 0.00 | 53 | PC;lt. fog |
| 25-Nov | 30.07 | 77 | 57 | 64 | --- | 0.00 | 43 | MC |
| 26-Nov | 30.20 | 80 | 45 | 51 | --- | 0.00 | 39 | clear |
| 27-Nov | 30.18 | 78 | 50 | 65 | --- | T | 48 | PC;lt. fog;Trace of lt. RF early AM |
| 28-Nov | | 76 | 63 | 64 | --- | 0.00 | 57 | PC |
| 29-Nov | | 73 | 64 | 65 | --- | T | 64 | MC;Trace of lt. RF early AM |
| 30-Nov | 30.09 | 77 | 53 | 58 | --- | 0.00 | 54 | clear |

November Totals and Averages

| | |
|-----------------|---------|
| Max. Temp. | 80 ° |
| Min. Temp. | 36 ° |
| Avg. High | 69.4 ° |
| Avg. Low | 49.4 ° |
| Avg. Temp | 59.4 ° |
| Total RF | 3.91 " |
| Max. RF | 1.79 " |
| Low RH | 15 % |
| Avg. Low RH | 56.0 % |
| Avg. Soil Temp | 62.0 ° |
| Year To Date RF | 30.66 " |

NOTE

Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded.

USDA-ARS-Knipling-Bushland US Livestock Insects Laboratory, Kerrville,TX

| DATE | B. P. | --TEMPERATURES-- | | | RAIN | LOW | | |
|--------|-------|------------------|----|---------|------|------|----------|---------------------------------------------------|
| 1998 | 8 AM | HI | LO | 8AM ONL | FALL | RH | COMMENTS | |
| 01-Dec | 30.28 | 80 | 42 | 49 | --- | 0.00 | 15 | clear;turning MC late AM |
| 02-Dec | 30.14 | 72 | 49 | 63 | 62 | T | 48 | MC;lt. drizzle early AM |
| 03-Dec | 29.92 | 75 | 62 | 65 | --- | T | 51 | MC;lt. drizzle early AM;RF 10:00-11:00 PM |
| 04-Dec | 29.93 | 74 | 62 | 64 | --- | 0.08 | 66 | MC;lt. fog |
| 05-Dec | 29.95 | 79 | 60 | 67 | --- | 0.00 | 40 | PC |
| 06-Dec | 29.96 | 74 | 66 | 67 | --- | 0.00 | 62 | MC |
| 07-Dec | 29.90 | 77 | 48 | 59 | --- | 0.00 | 31 | cldy |
| 08-Dec | 30.28 | 59 | 35 | 37 | --- | 0.00 | 49 | clear |
| 09-Dec | 30.20 | 55 | 31 | 43 | --- | 0.00 | 51 | cldy;lt. RF 10 PM-midnite;1st freeze of season |
| 10-Dec | 30.18 | 49 | 41 | 42 | --- | 1.40 | 64 | T-showers early AM; lt. RF throughout day & night |
| 11-Dec | 30.20 | 44 | 38 | 38 | --- | 0.17 | 95 | lt. RF early AM |
| 12-Dec | 30.21 | 39 | 34 | 37 | --- | T | 86 | MC |
| 13-Dec | 30.28 | 57 | 26 | 31 | --- | 0.00 | 28 | clear |
| 14-Dec | 30.31 | 65 | 28 | 33 | --- | 0.00 | 16 | clear |
| 15-Dec | 30.34 | 66 | 28 | 33 | --- | 0.00 | 21 | PC |
| 16-Dec | 30.31 | 64 | 27 | 33 | --- | 0.00 | 23 | clear |
| 17-Dec | 30.37 | 68 | 31 | 34 | --- | 0.00 | 26 | PC |
| 18-Dec | 29.90 | 62 | 34 | 50 | 39 | 0.00 | 25 | cldy;drizzle PM |
| 19-Dec | 29.98 | 60 | 37 | 41 | --- | 0.03 | 71 | lt. drizzle early AM |
| 20-Dec | 30.15 | 70 | 41 | 52 | 46 | T | 32 | fog;occas. lt. drizzle |
| 21-Dec | 30.02 | 63 | 52 | 63 | 61 | 0.01 | 96 | fog;lt. drizzle early AM and late PM |
| 22-Dec | 30.41 | 70 | 22 | 22 | --- | T | 72 | cldy |
| 23-Dec | 30.23 | 28 | 22 | 23 | --- | 0.01 | 45 | cldy;lt. freezing drizzle AM and late PM |
| 24-Dec | 30.43 | 29 | 23 | 25 | --- | 0.03 | 93 | cldy;freezing drizzle/sleet AM |
| 25-Dec | 30.31 | 28 | 21 | 24 | --- | T | 80 | PC |
| 26-Dec | 30.11 | 48 | 19 | 25 | --- | 0.00 | 36 | clear |
| 27-Dec | 30.10 | 61 | 25 | 34 | 30 | 0.00 | 25 | PC |
| 28-Dec | 30.10 | 73 | 30 | 36 | --- | 0.00 | 17 | lt. fog |
| 29-Dec | 30.00 | 72 | 32 | 45 | --- | 0.00 | 23 | PC |
| 30-Dec | 30.11 | 73 | 29 | 36 | --- | 0.00 | 14 | PC |
| 31-Dec | 30.08 | 65 | 36 | 55 | 52 | 0.00 | 33 | MC |

December Totals and Averages

| | |
|-----------------|---------|
| Max. Temp. | 80 ° |
| Min. Temp. | 19 ° |
| Avg. High | 61.3 ° |
| Avg. Low | 36.5 ° |
| Avg. Temp | 48.9 ° |
| Total RF | 1.73 " |
| Max. RF | 1.40 " |
| Low RH | 14 % |
| Avg. Low RH | 46.3 % |
| Avg. Soil Temp | 52.1 ° |
| Year To Date RF | 32.39 " |

NOTE

Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded.