

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

| DATE 2003 | B. P. 8 AM | --TEMPERATURES-- | | | | RAIN FALL | LOW RH | COMMENTS |
|--------------|---------------|------------------|----|-----|-----|--------------|-----------|--|
| | | HI | LO | 8AM | ONL | | | |
| 01-Jan | 30.04 | 63 | 31 | 36 | --- | 0.00 | 18 | clear |
| 02-Jan | 30.23 | 71 | 31 | 32 | --- | 0.00 | 13 | clear |
| 03-Jan | 30.25 | 58 | 26 | 28 | --- | 0.00 | 26 | clear |
| 04-Jan | 30.26 | 68 | 28 | 31 | --- | 0.00 | 16 | clear |
| 05-Jan | 30.20 | 67 | 31 | 35 | --- | 0.00 | 25 | PC |
| 06-Jan | 30.20 | 72 | 35 | 53 | 43 | 0.00 | 26 | dense fog |
| 07-Jan | 30.47 | 60 | 34 | 34 | --- | 0.00 | 55 | patchy lt. fog |
| 08-Jan | 30.27 | 64 | 34 | 36 | --- | 0.00 | 26 | clear |
| 09-Jan | 29.91 | 70 | 36 | 51 | 51 | 0.00 | 35 | MC |
| 10-Jan | 30.18 | 81 | 37 | 37 | --- | 0.00 | 18 | PC |
| 11-Jan | 30.15 | 57 | 37 | 41 | 40 | 0.00 | 20 | MC;occas. lt. RF 1:00 PM-midnight |
| 12-Jan | 30.10 | 42 | 37 | 38 | --- | 0.40 | 96 | cldy;occas. lt. RF midnight-10:00 PM |
| 13-Jan | 30.32 | 42 | 38 | 39 | --- | 0.25 | 98 | cldy;hazy PM |
| 14-Jan | 30.28 | 46 | 34 | 40 | --- | 0.00 | 86 | cldy;lt.haze |
| 15-Jan | 30.23 | 63 | 31 | 39 | --- | 0.00 | 29 | dense fog;hazy PM |
| 16-Jan | 30.34 | 54 | 39 | 39 | --- | 0.00 | 56 | clear |
| 17-Jan | 30.45 | 52 | 25 | 25 | --- | 0.00 | 16 | PC |
| 18-Jan | 30.37 | 49 | 19 | 22 | --- | 0.00 | 24 | clear |
| 19-Jan | 30.21 | 59 | 22 | 29 | 27 | 0.00 | 14 | PC |
| 20-Jan | 30.17 | 64 | 29 | 56 | 51 | 0.00 | 35 | cldy;lt. haze |
| 21-Jan | 29.97 | 77 | 43 | 44 | --- | 0.00 | 22 | patchy lt. fog |
| 22-Jan | 30.08 | 84 | 37 | 38 | --- | 0.00 | 13 | PC;lt. haze * |
| 23-Jan | 30.45 | 56 | 30 | 30 | --- | 0.00 | 43 | cldy |
| 24-Jan | 30.40 | 43 | 20 | 23 | --- | 0.00 | 38 | clear early;then mostly cloudy by 8 AM |
| 25-Jan | 30.25 | 42 | 23 | 37 | 35 | 0.01 | 47 | occas. drizzle/lt. RF 1 AM-midnight |
| 26-Jan | 30.30 | 42 | 37 | 41 | 39 | 0.04 | 98 | cldy;lt. drizzle early AM |
| 27-Jan | 30.33 | 44 | 40 | 41 | --- | T | 86 | cldy;lt. patchy fog;lt. drizzle early AM |
| 28-Jan | 30.10 | 60 | 41 | 53 | 47 | T | 47 | dense fog;lt. drizzle early AM |
| 29-Jan | 30.08 | 60 | 51 | 54 | --- | 0.00 | 67 | cldy |
| 30-Jan | 30.20 | 61 | 42 | 43 | --- | 0.00 | 31 | cldy |
| 31-Jan | 30.07 | 63 | 39 | 43 | --- | 0.00 | 36 | dense fog |

January Totals and Averages

| | |
|-----------------|--------|
| Max. Temp. | 84 ° |
| Min. Temp. | 19 ° |
| Avg. High | 59.2 ° |
| Avg. Low | 33.5 ° |
| Avg. Temp | 46.4 ° |
| Total RF | 0.70 " |
| Avg. RF (30 YR) | 1.39 " |
| Low RH | 13 % |
| Avg. Low RH | 40.6 % |
| Avg. Soil Temp | 48.0 ° |
| Year To Date RF | 0.70 " |
| Avg. RF (30 YR) | 1.39 " |

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

* 84 degrees record high temp. for Jan. 21

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

| DATE 2003 | B. P. 8 AM | --TEMPERATURES-- | | | | RAIN FALL | LOW RH | COMMENTS |
|--------------|---------------|------------------|----|-----|-----|--------------|-----------|--|
| | | HI | LO | 8AM | ONL | | | |
| 01-Feb | 30.01 | 71 | 32 | 36 | --- | 0.00 | 15 | PC |
| 02-Feb | 29.97 | 36 | 36 | 54 | 46 | 0.01 | 26 | cldy;lt. drizzle early AM |
| 03-Feb | 29.74 | 68 | 53 | 54 | --- | 0.00 | 56 | PC;patchy lt. fog |
| 04-Feb | 30.18 | 74 | 29 | 31 | --- | 0.00 | 13 | PC |
| 05-Feb | 30.00 | 62 | 31 | 46 | 39 | 0.00 | 18 | cldy;occas. lt. drizzle 1 PM-midnight |
| 06-Feb | 29.88 | 52 | 45 | 46 | --- | 0.11 | 54 | cldy;occas. lt. drizzle midnight-9 AM |
| 07-Feb | 30.32 | 62 | 32 | 32 | --- | T | 30 | cldy;lt. fog;lt. snow 3-6 PM;snow 11 PM-midnight |
| 08-Feb | 30.25 | 35 | 29 | 30 | --- | 0.18 | 68 | occas. snow midnite-5A;lt. drizzle 8 A-midnite * |
| 09-Feb | 30.19 | 37 | 30 | 37 | 35 | 0.09 | 98 | cldy;lt. fog;lt. drizzle early AM |
| 10-Feb | 30.12 | 66 | 33 | 35 | --- | 0.00 | 18 | lt. haze |
| 11-Feb | 30.09 | 66 | 35 | 43 | 37 | 0.00 | 15 | MC |
| 12-Feb | 30.10 | 72 | 43 | 55 | 48 | 0.00 | 28 | dense fog |
| 13-Feb | 30.08 | 69 | 55 | 62 | 61 | 0.04 | 62 | lt. fog/drizzle 2 AM-midnight |
| 14-Feb | 29.85 | 66 | 62 | 63 | --- | 0.15 | 94 | drizzle midnight-9:45 AM;T-showers 9:45-10 AM |
| 15-Feb | 29.92 | 77 | 56 | 56 | --- | 0.08 | 48 | lt. drizzle early AM |
| 16-Feb | 29.95 | 64 | 33 | 34 | --- | 0.00 | 60 | PC |
| 17-Feb | 30.00 | 54 | 27 | 34 | --- | 0.00 | 33 | clear |
| 18-Feb | 30.03 | 68 | 34 | 51 | 45 | 0.00 | 22 | MC;lt.fog |
| 19-Feb | 30.01 | 69 | 51 | 58 | 58 | T | 46 | dense fog;lt. drizzle early AM |
| 20-Feb | 30.00 | 63 | 44 | 45 | --- | 0.97 | 53 | T-Showers 2:30-9 AM;occas. drizzle/lt. RF |
| 21-Feb | 29.65 | 49 | 45 | 48 | --- | 0.43 | 98 | drizzle early;T-showers 7-8 AM;then drizzle |
| 22-Feb | 29.86 | 50 | 43 | 45 | --- | 0.31 | 94 | MC |
| 23-Feb | 30.01 | 69 | 44 | 49 | --- | 0.00 | 14 | MC |
| 24-Feb | 30.08 | 73 | 33 | 33 | --- | 0.00 | 8 | drizzle 10 AM-3 PM;freezing drizzle/rain 3 PM-MN |
| 25-Feb | 30.21 | 33 | 20 | 21 | --- | 0.10 | 98 | occas. freezing drizzle throughout day;0.1" ice |
| 26-Feb | 29.90 | 28 | 21 | 28 | 27 | T | 96 | cldy;fog; occas. drizzle early AM |
| 27-Feb | 29.86 | 39 | 28 | 35 | 34 | T | 94 | dense fog |
| 28-Feb | 29.92 | 73 | 35 | 41 | 40 | 0.00 | 18 | dense fog |

February Totals and Averages

| | |
|-----------------|--------|
| Max. Temp. | 77 ° |
| Min. Temp. | 20 ° |
| Avg. High | 58.8 ° |
| Avg. Low | 37.8 ° |
| Avg. Temp | 48.3 ° |
| Total RF | 2.47 " |
| Avg. RF (30 YR) | 1.84 " |
| Low RH | 8 % |
| Avg. Low RH | 49.2 % |
| Avg. Soil Temp | 51.4 ° |
| Year To Date RF | 3.17 " |
| Avg. RF (30 YR) | 3.23 " |

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

* 2.5 inches snow between 3 PM 2-7-2003 and 5 AM 2-8-2003; approx. 2 inches on ground

* 2-24-03 freezing by 10 AM;25 deg by midnight

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| DATE 2003 | B. P. 8 AM | --TEMPERATURES-- | | | | RAIN FALL | LOW RH | COMMENTS |
|--------------|---------------|------------------|----|-----|-----|--------------|-----------|--|
| | | HI | LO | 8AM | ONL | | | |
| 01-Mar | 29.92 | 51 | 41 | 48 | 47 | 0.01 | 69 | dense fog;occas. drizzle through noon |
| 02-Mar | 29.90 | 57 | 48 | 48 | --- | 0.03 | 91 | occas. drizzle/lt. RF early AM-midnight |
| 03-Mar | 29.90 | 49 | 42 | 43 | --- | 0.05 | 98 | fog;drizzle/lt. RF midnight-1:00 PM |
| 04-Mar | 29.80 | 57 | 42 | 46 | --- | 0.06 | 56 | fog |
| 05-Mar | 29.73 | 68 | 46 | 55 | 54 | 0.01 | 34 | lt. drizzle 1 AM-9 AM;46 deg. by noon |
| 06-Mar | 29.90 | 59 | 36 | 39 | --- | T | 55 | PC;patchy lt. fog |
| 07-Mar | 29.98 | 76 | 36 | 46 | --- | 0.00 | 16 | PC |
| 08-Mar | 30.01 | 79 | 46 | 48 | --- | 0.00 | 14 | MC;dense fog |
| 09-Mar | 30.04 | 73 | 47 | 55 | --- | 0.00 | 39 | MC;fog |
| 10-Mar | 30.06 | 78 | 51 | 55 | --- | 0.00 | 36 | cldy;fog/haze |
| 11-Mar | 29.94 | 77 | 50 | 57 | --- | 0.00 | 30 | cldy;lt. fog/haze;mist/lt. drizzle 1 PM-midnight |
| 12-Mar | 29.89 | 63 | 57 | 63 | 63 | 0.04 | 92 | cldy;l.t fog;drizzle midnight-1 PM |
| 13-Mar | 29.98 | 70 | 62 | 65 | --- | 0.01 | 88 | MC;lt. fog/haze |
| 14-Mar | 30.05 | 84 | 51 | 56 | --- | 0.00 | 22 | PC;lt. fog |
| 15-Mar | 30.08 | 81 | 53 | 58 | --- | 0.00 | 17 | PC;lt. RF 4-5 PM |
| 16-Mar | 30.01 | 71 | 53 | 58 | --- | 0.04 | 62 | PC |
| 17-Mar | 29.58 | 77 | 58 | 58 | --- | 0.00 | 37 | MC;dense fog;drizzle 8-11 AM |
| 18-Mar | 29.50 | 77 | 48 | 48 | --- | 0.44 | 46 | MC;Thunder showers 4 AM-8:30 AM |
| 19-Mar | 29.57 | 71 | 43 | 58 | --- | T | 14 | PC |
| 20-Mar | 29.80 | 71 | 48 | 54 | --- | 0.00 | 16 | PC |
| 21-Mar | 29.97 | 60 | 35 | 46 | --- | 0.00 | 47 | clear |
| 22-Mar | 30.01 | 73 | 46 | 50 | 49 | 0.32 | 22 | cldy;T-storms 3-5AM;lt. RF - 8AM;T-storms 3-5PM |
| 23-Mar | 30.00 | 61 | 37 | 48 | --- | 0.33 | 53 | fog |
| 24-Mar | 29.96 | 76 | 48 | 55 | 50 | 0.00 | 26 | PC |
| 25-Mar | 29.86 | 73 | 55 | 63 | 62 | T | 41 | fog;lt. drizzle early AM;T-Storms to the SE 5-6 PM |
| 26-Mar | 30.04 | 82 | 51 | 55 | --- | 0.00 | 30 | PC |
| 27-Mar | 29.78 | 76 | 41 | 56 | --- | 0.00 | 14 | clear |
| 28-Mar | 29.89 | 81 | 47 | 47 | --- | 0.00 | 28 | MC;windy |
| 29-Mar | 30.25 | 59 | 44 | 45 | --- | 0.00 | 31 | PC; 29 degrees by midnight |
| 30-Mar | 30.30 | 54 | 24 | 38 | --- | 0.00 | 22 | clear |
| 31-Mar | 30.31 | 69 | 33 | 49 | --- | 0.00 | 12 | clear |

March Totals and Averages

| | |
|-----------------|--------|
| Max. Temp. | 84 ° |
| Min. Temp. | 24 ° |
| Avg. High | 69.5 ° |
| Avg. Low | 45.8 ° |
| Avg. Temp | 57.7 ° |
| Total RF | 1.34 " |
| Avg. RF (30 YR) | 2.17 " |
| Low RH | 12 % |
| Avg. Low RH | 40.6 % |
| Avg. Soil Temp | 58.8 ° |
| Year To Date RF | 4.51 " |
| Avg. RF (30 YR) | 5.40 " |

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

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| DATE 2003 | B. P. 8 AM | --TEMPERATURES-- | | | | RAIN FALL | LOW RH | COMMENTS |
|--------------|---------------|------------------|----|-----|-----|--------------|-----------|--|
| | | HI | LO | 8AM | ONL | | | |
| 01-Apr | 30.19 | 73 | 48 | 54 | --- | 0.00 | 17 | PC |
| 02-Apr | 30.05 | 75 | 54 | 56 | --- | 0.00 | 32 | MC |
| 03-Apr | 29.92 | 76 | 56 | 63 | 61 | T | 40 | cldy;lt. drizzle 2 AM-7 AM |
| 04-Apr | 29.80 | 80 | 62 | 64 | --- | 0.00 | 44 | cldy;hazy |
| 05-Apr | 29.85 | 86 | 55 | 65 | --- | 0.00 | 10 | MC;hazy |
| 06-Apr | 29.95 | 83 | 65 | 66 | --- | T | 31 | MC;lt. drizzle early AM |
| 07-Apr | 29.98 | 87 | 49 | 56 | --- | 0.00 | 8 | PC;lt. fog;Thunder about 7 PM |
| 08-Apr | 30.21 | 84 | 43 | 45 | --- | 0.15 | 31 | PC;Thunder/lt. RF 6-7 AM |
| 09-Apr | 30.31 | 64 | 30 | 35 | --- | 0.00 | 18 | clear |
| 10-Apr | 30.18 | 72 | 34 | 39 | --- | 0.00 | 10 | PC |
| 11-Apr | 29.96 | 73 | 39 | 53 | 52 | 0.00 | 16 | PC |
| 12-Apr | 29.99 | 78 | 53 | 57 | 55 | 0.00 | 44 | PC |
| 13-Apr | 30.02 | 81 | 57 | 59 | --- | 0.00 | 32 | MC |
| 14-Apr | 30.08 | 82 | 59 | 61 | --- | 0.00 | 30 | MC;hazy |
| 15-Apr | 29.99 | 79 | 60 | 61 | --- | 0.00 | 42 | cldy;mist/lt. drizzle 7 AM- 1 PM |
| 16-Apr | 29.83 | 79 | 61 | 65 | 64 | 0.04 | 46 | MC;lt. fog;lt. drizzle 2-6 AM |
| 17-Apr | 29.92 | 88 | 47 | 51 | --- | 0.00 | 8 | PC;lt. fog/haze after 9 AM |
| 18-Apr | 29.81 | 81 | 51 | 65 | 64 | 0.00 | 36 | cldy;lt. fog/haze |
| 19-Apr | 29.85 | 80 | 65 | 67 | 66 | 0.00 | 60 | MC |
| 20-Apr | 29.96 | 84 | 56 | 57 | --- | 0.00 | 48 | PC |
| 21-Apr | 30.09 | 81 | 52 | 59 | --- | 0.00 | 22 | PC |
| 22-Apr | 29.92 | 77 | 59 | 63 | 62 | 0.00 | 27 | fog/mist 6-10AM,then occas. drizzle thru midnite |
| 23-Apr | 29.79 | 67 | 62 | 66 | --- | 0.02 | 97 | occas. lt. drizzle thru thru 5 PM;thunder 8-9 PM |
| 24-Apr | 29.72 | 74 | 66 | 68 | --- | T | 79 | PC;patchy fog/haze; 51 degrees by midnight |
| 25-Apr | 29.78 | 90 | 44 | 61 | --- | 0.00 | 10 | PC |
| 26-Apr | 29.82 | 86 | 46 | 56 | --- | 0.00 | 20 | PC |
| 27-Apr | 29.88 | 89 | 56 | 61 | 59 | 0.00 | 25 | MC |
| 28-Apr | 29.90 | 84 | 61 | 62 | --- | 0.00 | 31 | MC;lt. haze |
| 29-Apr | 29.89 | 82 | 62 | 65 | --- | 0.00 | 45 | cldy;hazy |
| 30-Apr | 29.82 | 80 | 65 | 67 | --- | 0.00 | 65 | cldy;hazy |

April Totals and Averages

| | |
|-----------------|--------|
| Max. Temp. | 90 ° |
| Min. Temp. | 30 ° |
| Avg. High | 79.8 ° |
| Avg. Low | 53.9 ° |
| Avg. Temp | 66.9 ° |
| Total RF | 0.21 " |
| Avg. RF (30 YR) | 2.22 " |
| Low RH | 8 % |
| Avg. Low RH | 34.1 % |
| Avg. Soil Temp | 67.9 ° |
| Year To Date RF | 4.72 " |
| Avg. RF (30 YR) | 7.62 " |

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 | | |
|--------|-------|------------------|----|---------|------|------|----------|--|
| 2003 | 8 AM | HI | LO | 8AM ONL | FALL | RH | COMMENTS | |
| 01-May | 29.80 | 86 | 67 | 69 | --- | T | 50 | cldy;lt. drizzle 2-5 AM;lt. haze |
| 02-May | 29.89 | 83 | 69 | 71 | --- | 0.00 | 62 | cldy;lt. fog/haze |
| 03-May | 29.90 | 89 | 69 | 70 | --- | T | 45 | cldy;drizzle 6-11 AM;hazy PM |
| 04-May | 29.85 | 83 | 69 | 72 | --- | 0.03 | 59 | cldy;hazy |
| 05-May | 29.62 | 86 | 72 | 73 | --- | 0.00 | 62 | cldy;fog |
| 06-May | 29.69 | 96 | 71 | 74 | --- | 0.00 | 8 | MC;lt. fog/haze;Thunder 7:45 AM |
| 07-May | 29.80 | 89 | 71 | 74 | --- | 0.00 | 48 | MC;lt. haze |
| 08-May | 29.65 | 90 | 73 | 74 | --- | 0.00 | 52 | MC;lt. haze |
| 09-May | 29.79 | 92 | 73 | 74 | --- | 0.00 | 44 | MC;haze |
| 10-May | 29.85 | 86 | 73 | 73 | --- | 0.00 | 55 | MC;hazy;lt. drizzle about 2 PM |
| 11-May | 29.90 | 85 | 69 | 71 | --- | 0.02 | 65 | cldy;lt. drizzle 2-9 AM |
| 12-May | 30.09 | 82 | 65 | 65 | --- | T | 32 | cldy;occas. lt.drizzle 7:45-11:00 AM |
| 13-May | 29.99 | 76 | 63 | 69 | 66 | 0.02 | 76 | cldy;fog;drizzle 5:00-9:00 AM |
| 14-May | 29.82 | 88 | 67 | 69 | --- | T | 45 | MC;lt. haze |
| 15-May | 29.79 | 94 | 69 | 71 | 70 | 0.00 | 34 | cldy;hazy |
| 16-May | 29.75 | 94 | 71 | 74 | 72 | 0.00 | 35 | MC;lt. haze |
| 17-May | 30.02 | 100 | 62 | 69 | --- | 0.00 | 10 | clear * |
| 18-May | 29.96 | 93 | 63 | 68 | --- | 0.00 | 25 | PC;lt. haze PM |
| 19-May | 29.81 | 95 | 66 | 71 | --- | 0.00 | 34 | lt. fog;hazy |
| 20-May | 30.05 | 98 | 70 | 71 | --- | 0.00 | 24 | cldy;lt. haze AM, then clearing;64 deg. by 11 AM |
| 21-May | 30.15 | 79 | 58 | 61 | --- | 0.00 | 53 | MC;lt. drizzle/RF 2-3 PM |
| 22-May | 30.11 | 75 | 59 | 63 | --- | T | 57 | cldy |
| 23-May | 30.06 | 79 | 63 | 70 | --- | 0.00 | 62 | lt. fog/haze |
| 24-May | 30.04 | 91 | 66 | 70 | --- | 0.00 | 37 | PC;lt. haze |
| 25-May | 29.94 | 91 | 68 | 68 | --- | T | 35 | cldy;occas. drizzle/lt. RF 7:45-11:00 AM |
| 26-May | 29.97 | 88 | 62 | 65 | --- | 0.60 | 44 | PC;Thunder-storms 2-5 AM |
| 27-May | 30.08 | 82 | 65 | 66 | --- | 0.00 | 50 | cldy;lt. haze |
| 28-May | 30.19 | 81 | 58 | 66 | --- | 0.00 | 55 | lt. haze |
| 29-May | 30.06 | 88 | 55 | 64 | --- | 0.00 | 28 | PC;lt. haze |
| 30-May | 29.90 | 95 | 58 | 68 | --- | 0.00 | 24 | lt. haze |
| 31-May | 29.89 | 96 | 63 | 72 | --- | 0.00 | 25 | clear |

May Totals and Averages

| | | |
|-----------------|---------|--|
| Max. Temp. | 100 ° | NOTE: Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded. |
| Min. Temp. | 55 ° | |
| Avg. High | 88.1 ° | |
| Avg. Low | 66.0 ° | |
| Avg. Temp | 77.1 ° | |
| Total RF | 0.67 " | * 5-16-2003;100 degrees record for date |
| Avg. RF (30 YR) | 4.22 " | NOTE: Avg. temp. of 77.1 degrees ties record for warmest May set in 1998 |
| Low RH | 8 % | |
| Avg. Low RH | 43.1 % | |
| Avg. Soil Temp | 79.7 ° | NOTE: Rainfall of 0.67 inches sets new record low rainfall for month of May |
| Year To Date RF | 5.39 " | |
| Avg. RF (30 YR) | 11.84 " | |

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| DATE | B. P. | --TEMPERATURES-- | | | RAIN | LOW | | |
|--------|-------|------------------|----|---------|------|------|----------|--|
| 2003 | 8 AM | HI | LO | 8AM ONL | FALL | RH | COMMENTS | |
| 01-Jun | 29.87 | 98 | 64 | 72 | --- | 0.00 | 24 | PC;hazy |
| 02-Jun | 29.80 | 94 | 72 | 74 | --- | 0.00 | 32 | PC;lt.haze;T-Showers 5-6 PM |
| 03-Jun | 29.80 | 93 | 67 | 72 | --- | 0.28 | 45 | cldy;hazy |
| 04-Jun | 29.79 | 91 | 63 | 65 | --- | 0.89 | 47 | PC;lt. haze;T-Storms midnight-3 AM;strong winds |
| 05-Jun | 29.85 | 93 | 63 | 63 | --- | 1.45 | 39 | T-Storms 7:15-8:00 AM, then lt. RF thru 10:30 AM |
| 06-Jun | 29.85 | 90 | 62 | 65 | --- | 0.30 | 45 | MC;RF 5:00-6:00 AM |
| 07-Jun | 29.95 | 82 | 56 | 64 | --- | 0.00 | 47 | PC |
| 08-Jun | 30.03 | 90 | 64 | 72 | 68 | 0.00 | 42 | MC;lt. RF 9:00 AM;Thunder |
| 09-Jun | 29.94 | 85 | 68 | 71 | --- | T | 40 | MC;hazy |
| 10-Jun | 29.90 | 91 | 65 | 65 | --- | 1.17 | 46 | T-Storms 4:00-7:00 AM, then lt. RF thru 8:45 AM |
| 11-Jun | 29.83 | 87 | 65 | 75 | 73 | 0.04 | 48 | MC;lt. haze |
| 12-Jun | 29.76 | 91 | 74 | 75 | --- | T | 58 | lt. fog;lt.drizzle 7:45 AM-noon |
| 13-Jun | 29.76 | 90 | 75 | 76 | --- | 0.02 | 59 | cldy;lt. haze;T-Storms 2:30-4 PM;6-8 PM |
| 14-Jun | 29.81 | 79 | 60 | 65 | --- | 0.73 | 90 | PC |
| 15-Jun | 29.85 | 90 | 58 | 63 | --- | 0.82 | 45 | T-Storms 3-5A;lt. RF to 7A;strong winds;small hail |
| 16-Jun | 29.99 | 82 | 61 | 67 | --- | 0.00 | 53 | PC;lt. haze |
| 17-Jun | 29.98 | 86 | 61 | 69 | --- | 0.00 | 40 | PC |
| 18-Jun | 29.93 | 87 | 61 | 69 | --- | 0.00 | 42 | PC;lt. haze |
| 19-Jun | 29.90 | 90 | 66 | 71 | --- | 0.00 | 33 | PC;lt. haze |
| 20-Jun | 29.90 | 90 | 66 | 71 | --- | 0.00 | 38 | hazy |
| 21-Jun | 29.89 | 90 | 68 | 74 | --- | 0.00 | 36 | PC;lt. haze |
| 22-Jun | 29.85 | 92 | 73 | 75 | --- | 0.00 | 38 | PC;lt. haze |
| 23-Jun | 29.83 | 91 | 75 | 77 | --- | 0.00 | 42 | PC;lt. haze |
| 24-Jun | 29.86 | 92 | 74 | 76 | --- | T | 40 | cldy;drizzle/lt. RF 6:00-6:30 AM |
| 25-Jun | 29.92 | 92 | 75 | 77 | --- | 0.00 | 45 | PC |
| 26-Jun | 29.96 | 93 | 71 | 74 | --- | 0.00 | 43 | PC;lt. haze |
| 27-Jun | 30.02 | 92 | 71 | 71 | --- | 0.00 | 40 | cldy |
| 28-Jun | 30.05 | 85 | 67 | 72 | --- | 0.00 | 53 | PC;T-Storms 5:00-6:30 PM |
| 29-Jun | 30.03 | 91 | 68 | 72 | --- | 0.28 | 40 | PC |
| 30-Jun | 30.02 | 88 | 65 | 71 | --- | 0.00 | 46 | lt. haze |

June Totals and Averages

| | |
|-----------------|---------|
| Max. Temp. | 98 ° |
| Min. Temp. | 56 ° |
| Avg. High | 89.5 ° |
| Avg. Low | 66.6 ° |
| Avg. Temp | 78.1 ° |
| Total RF | 5.98 " |
| Avg. RF (30 YR) | 3.82 " |
| Low RH | 24 % |
| Avg. Low RH | 44.5 % |
| Avg. Soil Temp | 80.6 ° |
| Year To Date RF | 11.37 " |
| Avg. RF (30 YR) | 15.66 " |

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 2003 | B. P. 8 AM | --TEMPERATURES-- | | | RAIN FALL | LOW RH | COMMENTS | |
|--------------|---------------|------------------|----|---------|--------------|-----------|----------|---|
| | | HI | LO | 8AM ONL | | | | |
| 01-Jul | 29.99 | 91 | 66 | 73 | --- | 0.00 | 31 | PC;lt. haze |
| 02-Jul | 29.92 | 91 | 69 | 72 | --- | 0.00 | 40 | PC;hazy;occas. lt. RF 7:00-8:00 PM;Thunder |
| 03-Jul | 29.88 | 91 | 68 | 73 | --- | T | 36 | PC;lt. haze;lt. RF 6:00-7:00 PM;Thunder |
| 04-Jul | 29.92 | 89 | 69 | 72 | --- | T | 44 | MC;Thunder;lt. RF 8:30-10:00 AM |
| 05-Jul | 29.95 | 85 | 70 | 72 | --- | 0.11 | 56 | cldy;T-showers 7:00 AM-4:00 PM;lt. RF 8-9 PM |
| 06-Jul | 29.96 | 74 | 66 | 73 | --- | 1.38 | 86 | MC;lt. RF 8:00-11:00 AM |
| 07-Jul | 29.98 | 85 | 72 | 74 | --- | 0.11 | 54 | MC;lt, RF 5-7 AM;12:30-1 PM;8-8:30 PM |
| 08-Jul | 30.03 | 87 | 71 | 73 | --- | 0.15 | 54 | MC;lt. RF 11 A;T-Showers 12:15-12:45 P;3:15-4 P |
| 09-Jul | 30.03 | 84 | 72 | 73 | --- | 0.55 | 67 | MC;lt. haze |
| 10-Jul | 30.02 | 85 | 73 | 73 | --- | T | 63 | MC;drizzle 6:00-6:30 AM |
| 11-Jul | 30.02 | 91 | 72 | 74 | --- | 0.00 | 57 | PC |
| 12-Jul | 30.05 | 92 | 68 | 74 | --- | 0.00 | 56 | PC |
| 13-Jul | 30.04 | 93 | 66 | 72 | --- | 0.00 | 48 | PC;lt. patchy fog |
| 14-Jul | 30.00 | 93 | 68 | 73 | --- | 0.00 | 51 | lt. patchy fog |
| 15-Jul | 29.99 | 94 | 66 | 72 | --- | 0.00 | 34 | PC;lt. haze |
| 16-Jul | 30.00 | 90 | 71 | 72 | --- | 0.73 | 32 | occas. RF/T-Showers 2 AM-9 AM |
| 17-Jul | 30.17 | 81 | 71 | 74 | --- | T | 83 | PC;lt. fog/haze;lt. Rf around noon |
| 18-Jul | 30.12 | 89 | 68 | 72 | --- | T | 46 | PC;lt. fog/haze |
| 19-Jul | 30.12 | 91 | 68 | 72 | --- | 0.00 | 40 | MC |
| 20-Jul | 30.10 | 92 | 70 | 73 | --- | 0.00 | 40 | MC |
| 21-Jul | 30.03 | 90 | 70 | 72 | --- | 0.00 | 40 | MC |
| 22-Jul | 29.99 | 92 | 72 | 74 | --- | 0.00 | 38 | MC |
| 23-Jul | 30.00 | 93 | 73 | 74 | --- | 0.00 | 43 | PC;patchy lt. fog/haze;T-Storms 2:30-4:00 PM * |
| 24-Jul | 30.03 | 92 | 67 | 74 | --- | 0.21 | 48 | cldy;patchy lt. fog/haze |
| 25-Jul | 30.04 | 93 | 72 | 73 | --- | 0.00 | 40 | MC;lt. fog/haze |
| 26-Jul | 30.13 | 91 | 71 | 73 | --- | 0.00 | 44 | MC;lt. haze |
| 27-Jul | 30.16 | 90 | 71 | 74 | --- | 0.00 | 43 | MC;lt. haze |
| 28-Jul | 30.09 | 91 | 71 | 73 | --- | 0.00 | 44 | MC;lt. fog/haze;occas. lt. RF 8:00-11:00 AM |
| 29-Jul | 30.03 | 89 | 68 | 70 | --- | T | 46 | PC;lt. haze |
| 30-Jul | 30.03 | 92 | 70 | 74 | --- | 0.00 | 40 | PC;lt. haze |
| 31-Jul | 30.04 | 94 | 72 | 74 | --- | 0.00 | 35 | PC;lt. haze |

July Totals and Averages

| | |
|-----------------|---------|
| Max. Temp. | 94 ° |
| Min. Temp. | 66 ° |
| Avg. High | 89.5 ° |
| Avg. Low | 69.7 ° |
| Avg. Temp | 79.6 ° |
| Total RF | 3.24 " |
| Avg. RF (30 YR) | 2.72 " |
| Low RH | 31 % |
| Avg. Low RH | 47.7 % |
| Avg. Soil Temp | 82.2 ° |
| Year To Date RF | 14.61 " |
| Avg. RF (30 YR) | 18.38 " |

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

* 7-23-03; temp dropped to 67 deg. during storms

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

| DATE 2003 | B. P. 8 AM | --TEMPERATURES-- | | | RAIN FALL | LOW RH | COMMENTS | |
|--------------|---------------|------------------|----|---------|--------------|-----------|----------|--|
| | | HI | LO | 8AM ONL | | | | |
| 01-Aug | 30.03 | 94 | 69 | 72 | --- | 0.00 | 38 | MC;lt.haze |
| 02-Aug | 30.05 | 95 | 72 | 74 | --- | 0.00 | 31 | MC;lt.haze |
| 03-Aug | 30.04 | 94 | 72 | 73 | --- | 0.00 | 39 | MC;lt.haze |
| 04-Aug | 29.99 | 91 | 71 | 72 | --- | 0.00 | 44 | cldy;hazy |
| 05-Aug | 29.96 | 94 | 70 | 72 | --- | 0.00 | 36 | PC;lt. haze |
| 06-Aug | 29.99 | 96 | 69 | 73 | --- | 0.00 | 34 | lt. haze |
| 07-Aug | 29.98 | 99 | 68 | 74 | --- | 0.00 | 30 | lt. haze |
| 08-Aug | 29.95 | 102 | 69 | 73 | --- | 0.00 | 28 | PC;T-Storm 5:00-6:00 PM;gusty winds |
| 09-Aug | 29.94 | 106 | 67 | 72 | --- | 0.56 | 26 | MC;T-Storm 6:00-7:00 PM;small hail;gusty winds |
| 10-Aug | 30.03 | 99 | 72 | 73 | --- | 0.10 | 36 | MC;lt. fog |
| 11-Aug | 30.00 | 92 | 67 | 71 | --- | 0.00 | 42 | lt. fog/haze |
| 12-Aug | 29.92 | 96 | 65 | 67 | --- | 0.00 | 34 | PC;lt. RF 11:00-11:30 AM;T-Shower 1:30-2:00 PM |
| 13-Aug | 30.03 | 85 | 61 | 64 | --- | 0.55 | 46 | PC;lt. haze;T-Shower 6:00-7:00 PM |
| 14-Aug | 30.18 | 86 | 64 | 66 | --- | 0.25 | 37 | MC;lt. fog/haze |
| 15-Aug | 30.26 | 81 | 64 | 69 | --- | 0.00 | 58 | PC |
| 16-Aug | 30.13 | 89 | 69 | 74 | 71 | 0.00 | 34 | MC |
| 17-Aug | 30.04 | 91 | 68 | 71 | --- | 0.00 | 43 | PC |
| 18-Aug | 30.00 | 95 | 70 | 73 | --- | 0.00 | 37 | lt. haze |
| 19-Aug | 30.04 | 96 | 70 | 73 | --- | 0.00 | 38 | PC;lt. haze |
| 20-Aug | 30.03 | 94 | 72 | 73 | --- | 0.00 | 38 | MC |
| 21-Aug | 30.02 | 94 | 73 | 74 | --- | 0.00 | 38 | MC |
| 22-Aug | 30.01 | 95 | 70 | 71 | --- | 0.00 | 35 | MC |
| 23-Aug | 30.06 | 93 | 67 | 70 | --- | 0.00 | 36 | PC;lt. RF 2:30-3:00 PM |
| 24-Aug | 30.08 | 90 | 66 | 70 | --- | 0.05 | 41 | PC;T-Showers 5:00-6:00 PM |
| 25-Aug | 30.05 | 91 | 67 | 71 | --- | 0.02 | 44 | PC;T-Showers 7:00-8:00 PM |
| 26-Aug | 30.03 | 93 | 70 | 72 | --- | 0.06 | 40 | PC;lt. RF 4:00-5:00 PM;Thunder |
| 27-Aug | 30.02 | 91 | 67 | 71 | --- | T | 44 | PC |
| 28-Aug | 29.99 | 96 | 71 | 74 | --- | 0.00 | 36 | PC |
| 29-Aug | 29.97 | 95 | 73 | 74 | --- | 0.00 | 36 | PC |
| 30-Aug | 29.97 | 96 | 73 | 74 | --- | 0.00 | 36 | PC;T-Storms 10 PM-midnight |
| 31-Aug | 29.93 | 95 | 70 | 71 | --- | 0.19 | 38 | cldy;lt. RF midnight-1 A;3-4 A;T-Storms 9 A-Noon |

August Totals and Averages

| | | |
|-----------------|---------|--|
| Max. Temp. | 106 ° | NOTE: Temperature and rainfall data are for the 24 hour period ending at 8:00 AM on the date recorded. |
| Min. Temp. | 61 ° | |
| Avg. High | 93.7 ° | |
| Avg. Low | 68.9 ° | |
| Avg. Temp | 81.3 ° | |
| Total RF | 1.78 " | NOTE: 106 deg. 8-8-2003; record high for date |
| Avg. RF (30 YR) | 2.22 " | |
| Low RH | 26 % | NOTE: 0.14 inches RF recorded on 9-1-2003 actually fell after 8:00 AM on 8-31-2003. |
| Avg. Low RH | 37.8 % | |
| Avg. Soil Temp | 82.8 ° | |
| Year To Date RF | 16.39 " | |
| Avg. RF (30 YR) | 20.60 " | |

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

| DATE | B. P. | --TEMPERATURES-- | | | RAIN | LOW | | |
|--------|-------|------------------|----|---------|------|------|----------|--|
| 2003 | 8 AM | HI | LO | 8AM ONL | FALL | RH | COMMENTS | |
| 01-Sep | 29.98 | 83 | 69 | 70 | --- | 0.14 | 64 | PC * |
| 02-Sep | 30.04 | 83 | 63 | 67 | --- | 0.00 | 53 | PC |
| 03-Sep | 30.02 | 84 | 64 | 66 | --- | 0.00 | 49 | PC |
| 04-Sep | 30.04 | 88 | 66 | 70 | --- | 0.00 | 46 | PC;lt. fog |
| 05-Sep | 30.02 | 85 | 70 | 72 | --- | 0.00 | 48 | MC;T-Showers 12:30-1:30 PM;lt. RF 5:00-6:00 PM |
| 06-Sep | 30.04 | 87 | 62 | 65 | --- | 0.54 | 52 | PC |
| 07-Sep | 30.00 | 89 | 60 | 65 | --- | 0.00 | 38 | PC;lt. haze |
| 08-Sep | 29.97 | 90 | 65 | 66 | --- | 0.00 | 36 | PC;hazy |
| 09-Sep | 29.96 | 86 | 65 | 67 | --- | 0.00 | 44 | MC;lt. fog/haze |
| 10-Sep | 29.93 | 91 | 67 | 73 | 72 | 0.11 | 43 | MC;lt. fog;lt. RF 5:00-5:30 AM |
| 11-Sep | 29.92 | 91 | 73 | 74 | --- | 0.00 | 45 | cldy;drizzle 9-11 AM;T-Storms 9:00 PM-midnight |
| 12-Sep | 29.86 | 90 | 61 | 63 | --- | 1.29 | 48 | PC;lt. RF midnight-3:00 AM |
| 13-Sep | 29.90 | 83 | 55 | 63 | --- | 0.00 | 34 | PC |
| 14-Sep | 30.05 | 88 | 63 | 73 | 71 | 0.00 | 30 | MC;T-Showers/lt. RF 10:00 AM-2:00 PM |
| 15-Sep | 30.16 | 78 | 62 | 63 | --- | 0.07 | 65 | PC;lt. haze |
| 16-Sep | 30.05 | 86 | 63 | 67 | --- | 0.00 | 44 | MC;lt. fog |
| 17-Sep | 29.95 | 87 | 67 | 70 | 69 | 0.00 | 40 | MC;lt. fog/haze;lt. RF 4:30 PM;9 PM;Thunder |
| 18-Sep | 29.92 | 83 | 70 | 70 | --- | 0.10 | 60 | MC;occas. drizzle/lt. RF midnight-11 AM;Thunder |
| 19-Sep | 30.06 | 84 | 62 | 62 | --- | T | 55 | cldy;lt. fog |
| 20-Sep | 30.06 | 79 | 62 | 66 | --- | 0.00 | 50 | PC;lt. fog;occas. drizzle/lt. RF 11 AM-midnight |
| 21-Sep | 29.94 | 72 | 66 | 68 | --- | 0.07 | 71 | cldy;lt. fog;occas. drizzle/lt. RF midnight-2 PM |
| 22-Sep | 30.00 | 70 | 57 | 59 | --- | 0.02 | 76 | PC;lt. fog |
| 23-Sep | 30.08 | 85 | 57 | 59 | --- | 0.00 | 40 | PC;lt. fog/haze |
| 24-Sep | 29.98 | 84 | 59 | 68 | 66 | 0.00 | 45 | cldy;lt. fog/haze |
| 25-Sep | 29.98 | 79 | 68 | 70 | 69 | 0.00 | 66 | cldy;lt.haze |
| 26-Sep | 29.86 | 82 | 66 | 66 | --- | 0.02 | 60 | MC;drizzle/lt. RF 6:00-10:00 AM;3:00-8:00 PM |
| 27-Sep | 29.91 | 74 | 61 | 67 | --- | 0.21 | 75 | heavy fog AM |
| 28-Sep | 30.10 | 85 | 64 | 65 | --- | 0.00 | 56 | PC |
| 29-Sep | 30.14 | 85 | 51 | 54 | --- | 0.00 | 25 | clear |
| 30-Sep | 30.16 | 82 | 49 | 52 | --- | 0.00 | 29 | clear |

September Totals and Averages

| | |
|-----------------|---------|
| Max. Temp. | 91 ° |
| Min. Temp. | 49 ° |
| Avg. High | 83.8 ° |
| Avg. Low | 62.9 ° |
| Avg. Temp | 73.4 ° |
| Total RF | 2.57 " |
| Avg. RF (30 YR) | 3.85 " |
| Low RH | 25 % |
| Avg. Low RH | 49.6 % |
| Avg. Soil Temp | 74.9 ° |
| Year To Date RF | 18.96 " |
| Avg. RF (30 YR) | 24.45 " |

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

* 0.14 inches RF recorded on 9-1-2003 actually fell after 8 AM on 8-31-2003.

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

| DATE | B. P. | --TEMPERATURES-- | | | RAIN | LOW | | |
|--------|-------|------------------|----|---------|------|------|----------|---|
| 2003 | 8 AM | HI | LO | 8AM ONL | FALL | RH | COMMENTS | |
| 01-Oct | 30.20 | 83 | 47 | 50 | --- | 0.00 | 27 | clear |
| 02-Oct | 30.12 | 82 | 49 | 52 | --- | 0.00 | 32 | PC |
| 03-Oct | 30.01 | 81 | 52 | 55 | --- | 0.00 | 38 | PC;lt. fog/haze |
| 04-Oct | 29.96 | 80 | 55 | 66 | 61 | 0.00 | 33 | fog;drizzle 9-11 AM;occas. drizzle 3-5 PM |
| 05-Oct | 29.95 | 74 | 66 | 68 | --- | 0.03 | 81 | heavy fog |
| 06-Oct | 29.95 | 83 | 67 | 71 | --- | 0.00 | 58 | cldy;lt. haze;T-Storms 9:15-10:30 AM;5:30-6:00 PM |
| 07-Oct | 29.98 | 86 | 65 | 67 | --- | 0.34 | 50 | PC;lt. patchy fog |
| 08-Oct | 29.96 | 82 | 67 | 69 | --- | 0.00 | 52 | MC;lt. fog/haze;occas. RF 1:30 PM-midnight |
| 09-Oct | 29.84 | 77 | 69 | 70 | --- | 1.17 | 69 | cldy;lt. fog;occas. RF/drizzle midnight-9:00 AM |
| 10-Oct | 29.81 | 81 | 66 | 66 | --- | 0.03 | 70 | cldy |
| 11-Oct | 29.87 | 76 | 66 | 67 | --- | 0.00 | 73 | fog;drizzle 9-11A;T-Storms 11A-8P;then occas. RF |
| 12-Oct | 30.01 | 70 | 65 | 65 | --- | 2.53 | 96 | cldy;lt. RF midnight-3 AM |
| 13-Oct | 29.97 | 72 | 62 | 64 | --- | T | 75 | cldy;lt. haze;drizzle/lt. RF 11 AM-Noon |
| 14-Oct | 30.01 | 78 | 62 | 63 | --- | 0.01 | 70 | PC |
| 15-Oct | 30.10 | 75 | 43 | 44 | --- | 0.00 | 30 | PC |
| 16-Oct | 30.02 | 78 | 44 | 64 | 53 | 0.00 | 31 | MC;lt. haze |
| 17-Oct | 30.08 | 83 | 59 | 65 | --- | 0.00 | 49 | PC;patchy lt. fog/haze |
| 18-Oct | 30.20 | 80 | 44 | 47 | --- | 0.00 | 43 | PC |
| 19-Oct | 30.14 | 84 | 46 | 48 | --- | 0.00 | 23 | PC |
| 20-Oct | 30.13 | 86 | 48 | 50 | --- | 0.00 | 26 | lt. fog/haze |
| 21-Oct | 30.15 | 84 | 46 | 48 | --- | 0.00 | 32 | lt. fog/haze |
| 22-Oct | 30.16 | 87 | 48 | 49 | --- | 0.00 | 24 | lt. fog/haze |
| 23-Oct | 29.96 | 90 | 49 | 51 | --- | 0.00 | 23 | clear |
| 24-Oct | 29.90 | 92 | 49 | 49 | --- | 0.00 | 20 | PC |
| 25-Oct | 29.98 | 84 | 49 | 66 | 57 | 0.00 | 26 | MC |
| 26-Oct | 30.24 | 79 | 47 | 48 | --- | 0.07 | 46 | cldy;occas. drizzle/lt. RF 4:30 AM-7:00 PM |
| 27-Oct | 30.09 | 54 | 42 | 44 | --- | 0.03 | 45 | PC |
| 28-Oct | 29.83 | 74 | 39 | 51 | --- | 0.00 | 18 | clear |
| 29-Oct | 29.82 | 81 | 41 | 51 | --- | 0.00 | 21 | PC |
| 30-Oct | 29.80 | 80 | 51 | 63 | 61 | T | 30 | fog;mist/lt. drizzle 6:00 AM-10:00 AM |
| 31-Oct | 30.14 | 79 | 63 | 72 | 70 | T | 56 | cldy |

| | |
|-----------------|---------|
| Max. Temp. | 92 ° |
| Min. Temp. | 39 ° |
| Avg. High | 79.8 ° |
| Avg. Low | 53.7 ° |
| Avg. Temp | 66.8 ° |
| Total RF | 4.21 " |
| Avg. RF (30 YR) | 3.86 " |
| Low RH | 18 % |
| Avg. Low RH | 44.1 % |
| Avg. Soil Temp | 68.7 ° |
| Year To Date RF | 23.17 " |
| Avg. RF (30 YR) | 28.31 " |

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 | | |
|--------|-------|------------------|----|-----|-----|------|-----|---|--|
| 2003 | 8 AM | HI | LO | 8AM | ONL | FALL | RH | COMMENTS | |
| 01-Nov | 29.98 | 86 | 68 | 69 | --- | 0.00 | 47 | cldy | |
| 02-Nov | 30.06 | 81 | 66 | 68 | --- | 0.01 | 50 | cldy;lt.drizzle 6:00 AM-10:00 AM | |
| 03-Nov | 29.98 | 81 | 68 | 69 | --- | 0.07 | 57 | lt. fog;drizzle/lt. RF 5:00 AM-9:00 AM | |
| 04-Nov | 29.86 | 80 | 66 | 67 | --- | T | 60 | MC | |
| 05-Nov | 29.93 | 78 | 67 | 67 | --- | T | 61 | cldy;mist/lt. drizzle 6:00 AM-8:00 AM | |
| 06-Nov | 30.11 | 79 | 53 | 53 | --- | 0.00 | 58 | cldy;breezy;occas. lt. mist | |
| 07-Nov | 30.19 | 54 | 45 | 45 | --- | 0.06 | 83 | lt. fog;drizzle/lt. RF 2 A-Noon;then occas. lt. drizzle | |
| 08-Nov | 30.26 | 46 | 44 | 45 | --- | 0.07 | 90 | lt. fog;occas. drizzle/lt. RF throughout day | |
| 09-Nov | 30.34 | 50 | 45 | 50 | 49 | 0.07 | 91 | lt. fog;occas. lt. drizzle throughout day | |
| 10-Nov | 30.20 | 57 | 50 | 55 | 54 | 0.08 | 91 | fog;occas. drizzle/lt. RF midnight-11:00 AM | |
| 11-Nov | 30.08 | 65 | 55 | 64 | 59 | T | 91 | cldy;lt. fog | |
| 12-Nov | 30.02 | 75 | 64 | 67 | 66 | 0.01 | 64 | fog;mist/drizzle 2:00 AM-11:00 AM | |
| 13-Nov | 30.30 | 80 | 57 | 57 | --- | T | 55 | cldy | |
| 14-Nov | 30.20 | 64 | 54 | 54 | --- | 0.00 | 34 | cldy;drizzle/lt. RF 9:00 AM-3:00 PM | |
| 15-Nov | 29.98 | 64 | 54 | 64 | 64 | 0.05 | 80 | cldy;occas. drizzle/lt. RF 4:00 AM-2:00 PM | |
| 16-Nov | 29.99 | 69 | 56 | 65 | --- | 0.06 | 90 | fog;occas lt. drizzle throughout day | |
| 17-Nov | 29.84 | 74 | 65 | 69 | 67 | 0.01 | 75 | lt. fog;drizzle 6-7 A;occas. lt.RF 1-8 P (Thunder) | |
| 18-Nov | 29.80 | 72 | 53 | 58 | --- | 0.10 | 66 | clear | |
| 19-Nov | 30.23 | 67 | 30 | 37 | --- | 0.00 | 18 | clear;(1st freeze of season) | |
| 20-Nov | 30.10 | 76 | 31 | 38 | --- | 0.00 | 13 | lt. patchy fog | |
| 21-Nov | 29.93 | 74 | 38 | 52 | 42 | 0.00 | 19 | clear | |
| 22-Nov | 29.83 | 76 | 52 | 61 | 58 | 0.00 | 38 | PC | |
| 23-Nov | 29.80 | 79 | 61 | 65 | 63 | 0.00 | 40 | PC;34 degrees by midnight | |
| 24-Nov | 30.32 | 69 | 21 | 29 | --- | 0.00 | 27 | clear | |
| 25-Nov | 29.92 | 55 | 29 | 39 | 34 | 0.00 | 15 | PC | |
| 26-Nov | 29.81 | 61 | 39 | 52 | 48 | 0.00 | 42 | PC;lt. haze | |
| 27-Nov | 29.93 | 76 | 41 | 46 | --- | 0.00 | 30 | PC | |
| 28-Nov | 30.48 | 68 | 26 | 30 | --- | 0.00 | 16 | clear | |
| 29-Nov | 30.35 | 61 | 22 | 31 | --- | 0.00 | 17 | clear | |
| 30-Nov | 30.12 | 62 | 31 | 48 | 43 | 0.00 | 15 | PC | |

November Totals and Averages

| | |
|-----------------|---------|
| Max. Temp. | 86 ° |
| Min. Temp. | 21 ° |
| Avg. High | 69.3 ° |
| Avg. Low | 48.4 ° |
| Avg. Temp | 58.9 ° |
| Total RF | 0.59 " |
| Avg. RF (30 YR) | 2.56 " |
| Low RH | 13 % |
| Avg. Low RH | 51.1 % |
| Avg. Soil Temp | 61.8 ° |
| Year To Date RF | 23.76 " |
| Avg. RF (30 YR) | 30.87 " |

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 2003 | B. P. 8 AM | --TEMPERATURES-- | | | | RAIN FALL | LOW RH | COMMENTS |
|--------------|---------------|------------------|----|-----|-----|--------------|-----------|--|
| | | HI | LO | 8AM | ONL | | | |
| 01-Dec | 30.28 | 69 | 48 | 59 | 57 | 0.00 | 46 | MC;occas. lt. drizzle 10:00 AM-Midnight |
| 02-Dec | 30.31 | 68 | 55 | 56 | --- | 0.01 | 61 | MC;lt. fog/haze |
| 03-Dec | 30.05 | 68 | 50 | 51 | --- | 0.00 | 44 | MC;patchy lt. fog |
| 04-Dec | 30.10 | 72 | 37 | 41 | --- | 0.00 | 21 | PC |
| 05-Dec | 30.32 | 71 | 40 | 43 | --- | 0.00 | 28 | MC;30 degrees by midnight |
| 06-Dec | 30.38 | 53 | 23 | 28 | --- | 0.00 | 22 | clear |
| 07-Dec | 30.07 | 61 | 28 | 38 | 34 | 0.00 | 16 | PC |
| 08-Dec | 29.85 | 63 | 38 | 50 | 46 | 0.00 | 35 | PC |
| 09-Dec | 29.81 | 75 | 50 | 57 | 56 | 0.00 | 34 | PC |
| 10-Dec | 30.15 | 64 | 34 | 37 | --- | 0.00 | 15 | clear |
| 11-Dec | 29.99 | 60 | 28 | 41 | --- | 0.00 | 20 | PC |
| 12-Dec | 29.84 | 61 | 41 | 52 | 48 | 0.00 | 26 | cldy;lt. fog/haze;drizzle 10:00 AM-3:00 PM |
| 13-Dec | 30.03 | 61 | 31 | 32 | --- | 0.08 | 92 | clear |
| 14-Dec | 30.06 | 59 | 24 | 29 | --- | 0.00 | 29 | clear |
| 15-Dec | 29.82 | 69 | 29 | 49 | 45 | 0.00 | 18 | cldy;lt. fog/haze |
| 16-Dec | 30.22 | 65 | 38 | 40 | --- | 0.00 | 14 | clear;breezy;25 degrees by midnight |
| 17-Dec | 30.36 | 54 | 19 | 23 | --- | 0.00 | 18 | clear |
| 18-Dec | 30.28 | 66 | 23 | 31 | 25 | 0.00 | 12 | clear |
| 19-Dec | 30.40 | 63 | 25 | 29 | --- | 0.00 | 25 | clear |
| 20-Dec | 30.26 | 65 | 24 | 33 | --- | 0.00 | 16 | clear |
| 21-Dec | 30.14 | 64 | 33 | 54 | 47 | 0.00 | 26 | MC |
| 22-Dec | 29.92 | 71 | 54 | 60 | 58 | 0.00 | 36 | MC |
| 23-Dec | 30.16 | 76 | 43 | 44 | --- | 0.00 | 22 | PC;28 degrees by midnight |
| 24-Dec | 30.13 | 60 | 24 | 27 | --- | 0.00 | 24 | PC |
| 25-Dec | 30.05 | 60 | 27 | 42 | 38 | 0.00 | 26 | MC |
| 26-Dec | 30.10 | 56 | 42 | 56 | 53 | T | 70 | cldy;lt.fog/drizzle 4:00 AM-8:00 AM |
| 27-Dec | 29.95 | 66 | 56 | 62 | 61 | 0.00 | 66 | cldy;lt. haze |
| 28-Dec | 29.99 | 72 | 50 | 51 | --- | 0.05 | 58 | cldy;lt. RF 3-4 AM;drizzle/lt. RF 11 AM-2 PM |
| 29-Dec | 30.11 | 56 | 28 | 29 | --- | 0.02 | 21 | PC |
| 30-Dec | 30.19 | 57 | 19 | 25 | --- | 0.00 | 12 | clear |
| 31-Dec | 30.13 | 61 | 25 | 48 | 43 | 0.00 | 14 | cldy;hazy |

December Totals and Averages

| | |
|-----------------|---------|
| Max. Temp. | 76 ° |
| Min. Temp. | 19 ° |
| Avg. High | 64.1 ° |
| Avg. Low | 35.0 ° |
| Avg. Temp | 49.6 ° |
| Total RF | 0.16 " |
| Avg. RF (30 YR) | 2.07 " |
| Low RH | 12 % |
| Avg. Low RH | 31.2 % |
| Avg. Soil Temp | 52.8 ° |
| Year To Date RF | 23.92 " |
| Avg. RF (30 YR) | 32.94 " |

NOTE

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