29-Un3G29C
4:1994-4
c.1

NEVADA CLIMATE SUMMARY

Office of the
State Climatologist
Offices: 226 and 322
Mackay Science
(702) 784-1723
(702) 784-6995

APRIL 1994
VOLUME 13, NUMBER 4

Nevada State Library
and Archives
MAY 1 8 2005
STATE PUBLICATIONS

John W. James
State Climatologist
Mackay Science Hall
University of Nevada-Reno
Reno, Nevada 89557

SYNOPSIS

April was a mixed weather bag, as parts of the State (North, East, and Central) were unusually wet, while other areas were unusually dry. For example, in Central Nevada Austin had over 4 inches of precipitation, or about 3&1/2 times normal, while several locations in Southern Nevada had no precipitation, and Reno with only .03", had the 7th driest April in 125 years of record.

Above normal temperatures were the rule Statewide, with departures from normal temperatures in the 2-5 degree range. Laughlin reached 105 on the 21st, only 1 degree below the alltime State high of 106 set at Laughlin and Cottonwood Cove in 1989.

Water Year precipitation (Oct. 1st,1993-May 1st, 1994) ranges from only a little over 1/2 of normal in the West and South to over 3/4 of normal in the Northeast, and a little above normal in the Central and Eastern portions of the Silver State.

TEMPERATURE

With the exception of February the first four months of 1994 have all averaged above normal in Nevada. April was headed for a very warm place in the record book until the last week of the month turned unusually cool. Record breaking or near record breaking temperatures were recorded from the 16th to the 20th, with 80 degree readings over most of the State. At Gabbs it was 90 degrees on the 20th, for a new early season mark. At Rye Patch the 88 degrees recorded on the 17th broke the old April record of 87 set in 1956. Records began in 1935. In addition to the 105 degrees at Laughlin it was also 103 degrees at Bunkerville, Callville Bay, and Cottonwood Cove.

On the cool side, the mercury fell to 6 degrees at Boies Ranch north of Wells, with 8 degrees at Kyle Canyon and 9 degrees at Lee Canyon in the Spring Mountains near Las Vegas. It was also 9 degrees at Charleston, San Jacinto had 11, and Ruth and 9 Mile Ranch 12 degrees. The State April record is -12 degrees at Ruth in 1963.

PRECIPITATION

From two to almost four times normal precipitation fell over much of the Northeast and Central Nevada, while some locations in the South had none (e.g. Searchlight, Desert NWR, Las Vegas, and Spring Valley James), and the West suffered through one of the driest April's on record. The wettest reporting site was Jarbidge, where Wm.Penn Fisher recorded 4.42" (twice normal) and 23" of snow. At Austin Edna Cooley logged 4.02", (and 25.5" of snow) for the wettest April since 1978 when 5.78" fell. Austin also had 19.5" of snow on the 24th. very near the record 24 hour total for any month of 22" recorded in April 1978. The 2.01" precipitation total on the 24th was the greatest 24 hour total for April in the 105 year record, and the second greatest for any month (2.04" was logged in October 1946).
(Note: A new Climatological Summary for Austin is included in this report).

Other wet locations were Jarbidge 4N with 3.83", Emigrant Pass 3.37", Owyhee 3.30", Lamoille 3.05", Gund Ranch 2.94", Battle Mountain 2.48", and Kingston Canyon where Toppie Watson had 2.36". Phamy Parker had 2.01" and 17" of snow at Manhattan.

SUNSHINE, WIND & EVAPORATION

The percentage of possible sunshine was above normal in the dry West and South, but below normal in the remainder of the State.

Wind speeds averaged near normal, with no very high speeds recorded. Peak gusts in the 45-55 mph range were recorded in the Reno area near month's end.

Evaporation was below normal in the wet and cloudy areas, but near or a little above normal in the West and South. Overton had 10.24", Pahrump 9.77", Honey Lake 6.04", Fallon 5.78" and Shoshone 4.70"

John W. James
State Climatologist

This month we continue our salute to Nevada's volunteer weather observers with Pershing and Nye counties:

PERSHING

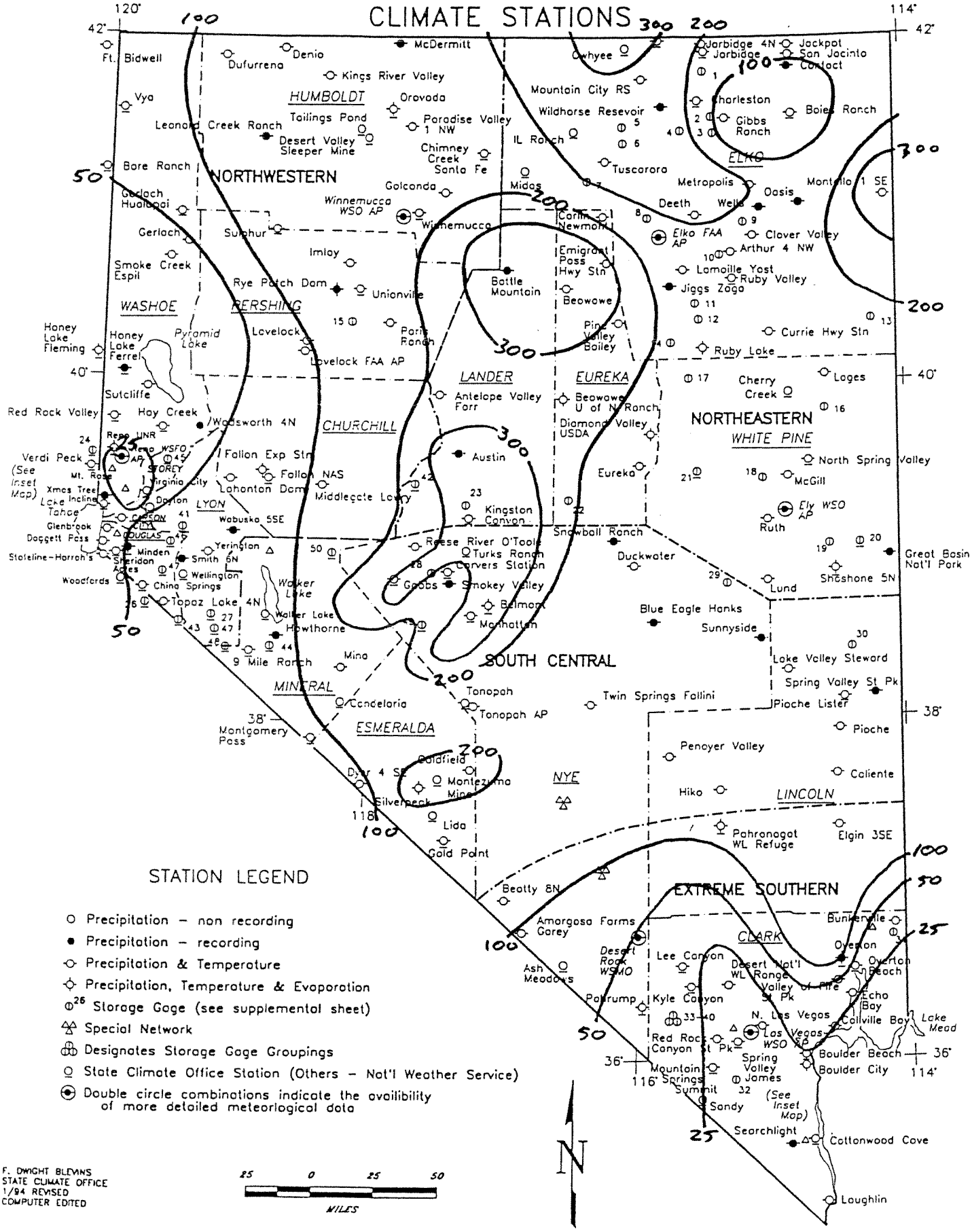
Sulphur - Hycroft Resources & Development Inc.
Imlay - Dolores Montes
Lovelock - Larry McMasters
Lovelock AP - Metro Monitoring Services
Paris Ranch - Peg Ware
Rye Patch - Harold A. Barrick Sr.
Unionville - H. L. Jones

NYE

Snowball Ranch - Richard McKay
Duckwater - Vacant
Reese River O'Toole - Lilly O'Toole
Carver's Station - Reeve "Mac" Duhme
Gabbs - Lorraine Clifton
Big Smoky Valley - Nevada Division of Transportation
Belmont - Thomas H. Kniefel
Manhattan - Euphemia Parker
Tonopah - Denny Morphew
Tonopah AP - Aerographers (Gerald Turner)
Twin Springs Fallini - Joe B. Fallini Jr.
Beatty - Effie Spicer-Taylor
Amargosa - Jean Garey
Pahrump - M. C. Fedderson
Desert Rock WSMO - National Weather Service
Sunnyside - Nevada Dept. of Wildlife
Blue Eagle Hanks - Carole Hanks
Round Mountain - Round Mountain Gold Corp.
Ash Meadows - Ash Meadows NWR
Rochester - Couer Rochester Mine

PERCENTAGE OF NORMAL
PRECIPITATION
APRIL 1994

NEVADA
CLIMATE STATIONS



STATION LEGEND

- ○ Precipitation – non recording
- ● Precipitation – recording
- Precipitation & Temperature
- Precipitation, Temperature & Evaporation
- Storage Gage (see supplemental sheet)
- Special Network
- Designates Storage Gage Groupings
- State Climate Office Station (Others – Nat'l Weather Service)
- Double circle combinations indicate the availibility of more detailed meteorlogical data

F. DWIGHT BLEVINS
STATE CLIMATE OFFICE
1/94 REVISED
COMPUTER EDITED

OFFICE OF THE NEVADA STATE CLIMATOLOGIST

CLIMATOLOGICAL SUMMARY

STATION: AUSTIN, NEVADA

MEANS: 1951-90
EXTREMES: 1889-93

titude 39° 30' N
ngitude 117° 05' W
ev. (Ground) 6543

Month	TEMPERATURE (F°) MEANS: Daily Maximum	Daily Minimum	Monthly	EXTREMES: Record Highest	Year	Record Lowest	Year	Mean Degree Days **	PRECIPITATION TOTALS (INCHES): Mean	Greatest Daily	Year	SNOW, SLEET: Mean	Maximum Monthly	Year	Greatest Daily	Year	MEAN NUMBER OF DAYS: Precipitation .10" or more	TEMPERATURES MAX.: 90° and Above	32° and Below	MIN.: 32° and Below	0° and Below	Month
(a)	40			105		100				100			100		100							(a)
Jan.	40.7	18.5	29.6	65	1951	-25	1922	991	1.17	1.64	1982	12.1	32.4	1982	18.6	1982	4	0	6	29	2	Jan.
Feb.	43.7	21.1	32.4	70	1986	-18	1933	913	1.12	1.60	1978	9.9	38.7	1969	16.8	1978	4	0	3	25	1	Feb.
Mar.	48.1	24.4	36.3	78	1912	-6	1971	891	1.59	1.76	1981	14.9	59.8	1946	19.0	1946	5	0	2	25	0	Mar.
Apr.	56.4	30.5	43.4	83	1981	3	1936	647	1.60	2.00	1978	11.0	43.0	1967	22.0	1978	4	0	0	17	0	Apr.
May	65.7	37.6	51.6	91	1927	10	1896	414	1.50	1.57	1932	4.9	30.2	1933	12.0	1933+	4	0	0	9	0	May
Jun.	76.4	45.5	61.0	98	1889	24	1894	131	0.98	1.57	1928	0.4	8.0	1928	8.0	1928	3	2	0	2	0	Jun.
Jul.	87.1	53.7	70.4	105	1931	31	1902	0	0.59	1.99	1925	0.0	0.0	1989	0.0	1989	2	11	0	0	0	Jul.
Aug.	84.4	52.6	68.5	100	1928	30	1943	5	0.62	1.36	1989	0.0	0.0	1989	0.0	1989	2	8	0	0	0	Aug.
Sep.	75.9	44.6	60.3	97	1950	18	1965	142	0.62	1.65	1976	0.5	9.0	1948	9.0	1948	2	1	0	2	0	Sep.
Oct.	63.8	35.6	49.7	86	1989	2	1935	474	0.99	2.04	1946	2.6	27.4	1971	20.0	1971	3	0	0	10	0	Oct.
Nov.	49.9	26.1	38.0	75	1980	-7	1931	811	1.02	1.18	1965	6.6	32.7	1985	13.0	1944	3	0	2	22	0	Nov.
Dec.	42.9	20.6	31.8	70	1919	-20	1932	1030	1.18	1.19	1983	10.9	35.0	1936	10.4	1983	4	0	5	27	1	Dec.
YEAR	61.4	34.3	47.8	105	JULY 1931	-25	JAN 1922	6449	12.80	2.04	OCT 1946	66.6	59.8	MAR 1946	22.0	FEB 1978	40	22	18	168	4	YEAR

(a) Average length of record, years
T Trace, an amount too small to measure
** Base 65°

+ Also on earlier dates, months, or years
* Less than one-half

CLIMATE OF AUSTIN

Austin is located at an elevation of 6600 feet in west-east oriented Austin Canyon in the northern part of the Toiyabe Range. The Reese River Valley is a short distance to the west and a few hundred feet below the town. Mountain summits several thousand feet higher are nearby in the Toiyabes. Just a short distance to the east, Austin Summit on U.S. Highway 50 is about 1000 feet higher than the town.

Due to it's location far inland from any maritime moisture sources Austin enjoys a semi-arid climate, with about 13" of precipitation in an average year. During the winter half-year, with a Pacific Ocean moisture pool, Austin precipitation is enhanced due to its west facing location, where orographic lifting and thus increased instability of the air masses are extant. In addition, at times, especially in late winter and spring, low pressure areas stalled in the Great Basin circulate in moisture on southerly winds. Most of Austin's eposodic storms have occurred because of this. Examples would be April 1978 and March 1946, when about 22 inches of snow fell in one day. In fact, in March 1946 the weather observer measured a total of 60" of snowfall, still a record for any month. The annual average snowfall is 66", with twice that amount falling in the Winter of 1945-46.

The 13 inch annual precipitation total is marked by a spring period about 2-3 times wetter than the drier summer. March (1.59"), April (1.60") and May (1.50") constrast to July (.59"), August (.62"), and September (.62"). However, precipitation of .10" or more falls on only 40 days in an average year so that sunshine is abundant every month. Summer thunderstorms have at times brought heavy short-term rainfall and resultant flash flooding. An example of this would be July 1925, when 1.99" fell in one day!

Year-to-year precipitation is highly variable, with as much as 22.37" falling in 1983, and as little as 5.84" in 1926. This can also be noted in monthly amounts, where April, the wettest month, has a high of 5.96" in 1978, compared to a low of only .03" in 1959.

In a canyon location temperatures can vary greatly over short distances, with for example, north facing slopes cooler in the daytime, expecially during the winter low-sun angle period. Also canyon bottoms are cooler than the warmer slopes as heavy cold air flows downhill into them. In addition, canyons develop up-slope winds during the day and downslope breezes at night, thus mixing the air and making extreme temperatures and large diurnal variations more unusual than at valley sites. Thus, at Austin winter-time daytime highs are generaly in the low 40's, with nighttime lows only in the low 20's. Both these figures are much warmer than valley sites (e.g., Elko, high 30's and mid teens). Rare absences of the canyon wind effect in combination with arctic air masses have brought Austin's coldest temperatures (e.g., -25 in January 1922).

In addition to the breezes, summer temperatures are moderated greatly by the 6600 foot elevation, so that daytime highs are usually only in the 80's with nights in the low 50's. Only rarely does the mercury approach 100 degrees, with the infamously hot month of July 1931 reaching 105 degrees! Still, the usual low humidity makes even that extreme tolerable. At the other end of the scale, freezes have occured every month, with 24 degrees in June (1894), 31 in July (1902), and 30 in August (1943) the rare chilly cases. Normally the last Spring 32 degree reading can be expected about June 5, with the first Fall freeze around September 22, for a 110 day growing season.

John W. James
Nevada State Climatologist