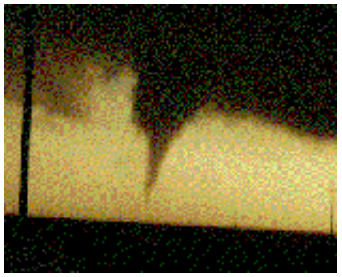
The West Texas TWISTER



SUMMER 1999 NATIONAL WEATHER SERVICE FORECAST OFFICE LUBBOCK TEXAS

Our Thanks to Spotters

The NWS in Lubbock says "thank you" to all the spotters who took time to serve their communities this severe weather season, which was a much more active season than in recent years.
Spotter reports are important in the NWS warning decision process, and help us in our mission to save lives and protect property. So to all the amateur radio operators, firefighters, law enforcement officers, and others who helped, we say,

THANKS!!

An Active Spring Weather Season

Photo taken near Oklahoma City, OK; Vehicle wrapped around pole.

Changes coming to our Web page!!

Sometime in August, our web address will change. As soon as the URL or web address is finalized, we will announce the new links on our web page.

(Continued on Page 2)

NWS Changes

Significant changes occurred within the NWS on July 15. Our neighboring offices in San Angelo, Midland, and El Paso assumed forecast responsibility for their general areas. The NWS in Lubbock now issues forecasts, as well as warnings, for 24 counties centered on the South Plains.

The "West Texas Zone Forecasts" and the "State Forecast Discussion" changed formats on the same day. They have new product identifiers and/or WMO headers; if you used to receive these products but are currently having problems getting them, please call Larry Vannozzi at 806-745-3916, extension 223.

What's In This Edition...

The Two Worst Storms of 1999?

Two storms stand out from this year's active severe weather season. One affected Levelland and southwest Lubbock, while the other affected much of Lynn County.

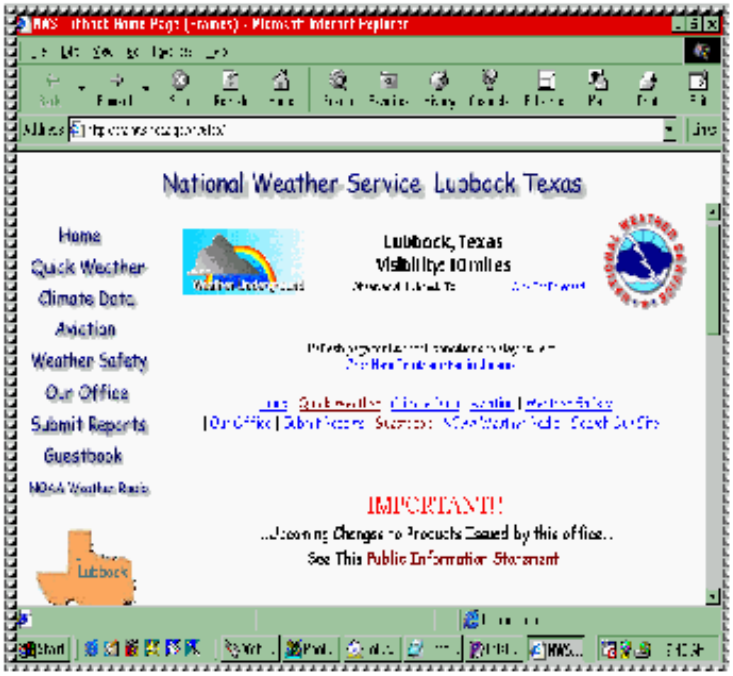
On May 25, a severe storm emerged from New Mexico and moved east across Cochran County to Levelland to southwest Lubbock, and eventually moved southeast into Lynn County (just north and east of Tahoka). By 12:30 a.m. on the 26th, it dumped a tremendous amount of baseball-sized hail across the City of Levelland, and caused millions of dollars in property and crop damage. About an hour later, it dropped similar sized hail on the southwest fringe of the City of Lubbock. It continued moving southeast into Lynn County and caused additional serious crop damage.

Just two weeks later another monster storm occurred. This one moved from Brownfield across southern Lynn County and into Borden County. Although baseball-sized hail fell in some places, this storm made its real impact by causing an estimated 110-120 mph wind. Hundreds of utility poles were snapped or blown over, and many trees were severely damaged. Barns, storage sheds, and a few mobile homes were destroyed. Two people near O'Donnell were injured when debris hit them while they were heading for shelter. Others escaped injury by fleeing their mobile homes (which were destroyed) for better shelters.

Changes Coming to our Web Page...

(continued from Page 1)

The change is a result of our switchover to a different Internet Service Provider. We have been connected in the past through Texas Tech and the Texas Education Network (TheNet). After August 31, we will be connected via a frame relay network to our NWS Regional Office. Most weather data and graphics that exist now on our web site will still be available. Some of the real-time weather products will not. We will work hard to minimize any delays or data interruptions. Stay Tuned!



Don't Forget Our Internet Address at:

cra.nws.noaa.gov/nwslbb/

Access to:

- **Satellite and Radar Imagery**
- **Watches and Warnings**
- **Aviation Products**
- **Climate Information and much more!!**

A Wet First Half of '99

After a near-record dry February, something unusual happened - it rained, rained again, and rained some more. By the end of June, most South Plains area towns' rainfall totals were 5 to 6 inches ABOVE normal for the first half of the year. What was the wettest location during January-June? Paducah - they had 19.95 inches, and barely edged Crosbyton, which received 19.89 inches. The totals in the accompanying chart show that most areas received more rain in the first 6 months of this year than they received in all of 1998. In fact some areas have already received their annual average rainfall!!

Rainfall Totals from January through June 1999

ABERNATHY	14.76	MATADOR	17.15
BIG SPRING	6.38	MORTON	14.45
BROWNFIELD	12.48	MULESHOE	10.26
CROSBYTON	19.89	MULE.REFUGE	17.86
DIMMITT	18.26	OLTON	15.85
FLOYDADA	14.13	PADUCAH	19.95
FRIONA	13.75	PLAINVIEW	11.68
HEREFORD	15.00	POST	14.27
JAYTON	17.73	SEMINOLE	13.06
LAMESA	10.49	SILVERTON	13.46
LEVELLAND	17.54	SNYDER	11.97
LITTLEFIELD	17.73	SPUR	15.67
LOCKETTVILLE	11.76	TAHOKA	12.94
LUBBOCK ARPT	13.84	TULIA	11.64

Much Cooler than Last Year...

Supercell Location: Miami, Texas Photo Date: June 19, 1980 Credit: NOAA Photo Library

In addition to being wetter than usual, South Plains towns have been much cooler over the past few months. In May, our average daily high temperature was only 80 degrees, MUCH lower than the 91 degree average high from May of last year. In June, the average high was 9 degrees lower than the average high in June 1998. What a difference a year makes!

National Weather Service Systems Recognized by Smithsonian

Did You Know??

- Today's 3-4 day forecast is as accurate as the 2 day forecast was 15 years ago. We're working to make the 6-10 day forecast as accurate as the forecast for tomorrow.
- The NWS maintains the largest meteorological telecommunications switching center in the world, sending and receiving 400,000 meteorological bulletins each day.
- The NWS is the primary source of weather forecasts for the nation, and the only official source for severe weather watches and warnings.

Two National Weather Service information technology systems were recognized as laureates in the Computerworld Smithsonian Awards program April 12 at the Smithsonian Castle in Washington, D.C.

The NWS's Advanced Weather Interactive Processing System (AWIPS), and the El Nino forecasting system used by the NWS National Centers for Environmental Prediction were recognized along with other award program nominees.

The Computerworld Smithsonian Award program honors the use of information technology to create positive social and economic change. Mary Glackin, Director of the AWIPS Program Office, and Ming Ji, a physical scientist with the Climate Prediction Center, accepted the laureate medals on behalf of NWS employees and the systems during a ceremony at the Smithsonian Institution Castle in Washington, D.C.

AWIPS is providing significant improvements in weather and flood-related services to protect life and property. The system gives NWS forecasters access to satellite imagery, Doppler radar data, automated weather observations and computer-generated numerical forecasts, all in one workstation.

Supercomputers, data storage devices and telecommunications systems were at the heart of the NWS's El Niño forecasting efforts. NOAA scientists used highly sophisticated numerical models that turn data from global observing systems such as ships, buoys and satellites to prepare climate forecasts for the coming seasons. The numerical models, improved forecast techniques and understanding of the ocean-atmosphere interaction, allowed the NWS to issue forecasts six months in advance for the record-breaking rains in California and the southeast.

Case studies of the climate forecasting system and of AWIPS are now part of the permanent research collection on information technology at the Smithsonian's National Museum of American History. Both systems are in contention for further honors in the Computerworld Smithsonian Awards Program.

One of the new Advanced Weather Workstations at the Lubbock NWS office.

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In This Issue...	**Mid-year 1999 Precip Stats, Changes in NWS Products, 2 Worst Spring Storms, and more...**

Heat Index Chart

Relative Humidity (%)

°F	40	45	50	55	60	65	70	75	80	85	90	95	100
110	136												
108	130	137											
106	124	130	137										
104	119	124	131	137									
102	114	119	124	130	137								
100	109	114	118	124	129	136							
98	105	109	113	117	123	128	134						
96	101	104	108	112	116	121	126	132					
94	97	100	103	106	110	114	119	124	129	135			
92	94	96	99	101	105	108	112	116	121	126	131		
90	91	93	95	97	100	103	106	109	113	117	122	127	132
88	88	89	91	93	95	98	100	103	106	110	113	117	121
86	85	87	88	89	91	93	95	97	100	102	105	108	112
84	83	84	85	86	88	89	90	92	94	96	98	100	103
82	81	82	83	84	84	85	86	88	89	90	91	93	95
80	80	80	81	81	82	82	83	84	84	85	86	86	87

Air Temperature

Heat Index (Apparent Temperature)

With Prolonged Exposure and/or Physical Activity

Extreme Danger
Heat stroke or sunstroke highly likely

Danger
Sunstroke, muscle cramps, and/or heat exhaustion likely

Extreme Caution
Sunstroke, muscle cramps, and/or heat exhaustion possible

Caution
Fatigue possible

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