



The Dryline

Serving the Texas & Oklahoma Panhandles Since 1892



Record Turnout for the Annual Spotter & Cooperative Observer Appreciation Day



The Amarillo National Weather Service held its 5th annual Spotter and Cooperative Observer Appreciation Day on Saturday, August 13th. A total of 150 people attended this year's event, which included spotters, observers, emergency managers, local media, as well as several of the Amarillo NWS staff. The appreciation picnic is just one way the NWS in Amarillo recognizes and shows their gratitude for its many volunteers, partners, and valued customers. It is also a great way for the spotters and cooperative observers to learn more about NWS operations, meet the NWS staff, and get to know each other.

CLIMATE CORNER

The record high temperature for November is 87 degrees set on November 8th, 1980.

The record low temperature for November is 0 degrees set on November 28th, 1976.

The record precipitation for November is 5.09 inches set in 1905.

IN THIS ISSUE!

1. The Lake Meredith Story
2. Weather 101
3. The NWS Amarillo Forecast Area
4. In Your Community
5. Winter Outlook

The Story Behind Lake Meredith

By Steve Ippoliti

Lake Meredith has been a source of recreation and water supply for the Texas Panhandle for 40 years. The lake, created by the construction of an earth dam on the Canadian River, can hold up to 785 billion gallons of water. The maximum depth of the lake is 114 feet. The highest level the lake has achieved is 101.85 feet in April, 1973. The lake averages a depth of approximately 85 feet. However, drought conditions have lowered the lake levels over the last several years. In June, 2004 the lake reached its record low of only 58.41 feet. Fortunately, drought conditions have subsided over the past year and the lake level has once again risen to its current level of 63.43 feet.

But what are the primary factors that contribute to the lake level? According to Chad Pernell, the Deputy General Manager of the Canadian River Municipal Water Authority, there are several factors. The first is the inflow of water from the Canadian River. "June saw the largest inflow since the year 2000", stated Mr. Pernell. Inflow can vary depending on rainfall, snowmelt, and soil moisture. If the soil is dry, whatever rain occurs will be soaked up before it reaches the lake. Rainfall is the major source of inflow, but is highly unpredictable. Will rain develop? If so, exactly where and how much rain will fall? Mr. Pernell states that "we may watch for a large storm to provide high inflow and it does nothing. Whereas a small storm we are not watching provides a large amount of inflow". The most effective area for rainfall to occur seems to be just west of Boys Ranch, which lies in the Canadian River watershed.



The second factor is evaporation. With hot summer temperatures, considerably more water is evaporated than replaced. This can cause the lake level to drop at a substantial rate.

The last main factor is water consumption. The lake provides a source of water to not only local towns, but also for Amarillo and Lubbock. The more populated these cities become, the higher the consumption and the lower the lake level. Fortunately, Lake Meredith is not the sole source of water for these communities. It is supplemented by well water. This is necessary for two reasons. First of all, Lake Meredith has a high salt content. Lake salts can be as high as 510 milligrams per liter. Federal guidelines require drinking water to contain less than 300 milligrams per liter. This is accomplished by the blending of the two sources. The second reason is taste. The lake contains a high quantity of algae. This can cause a musty odor and taste. Again, through the process of blending, this problem is eliminated.

For more information about Lake Meredith and the Canadian River Municipal Water Authority, visit WWW.CRMWA.COM.

...Weather 101...

Weather is created by differential heating of the earth's surface. In other words, the sun heats the ground at a different rate than a body of water, and there is more heating at the equator than at the poles.

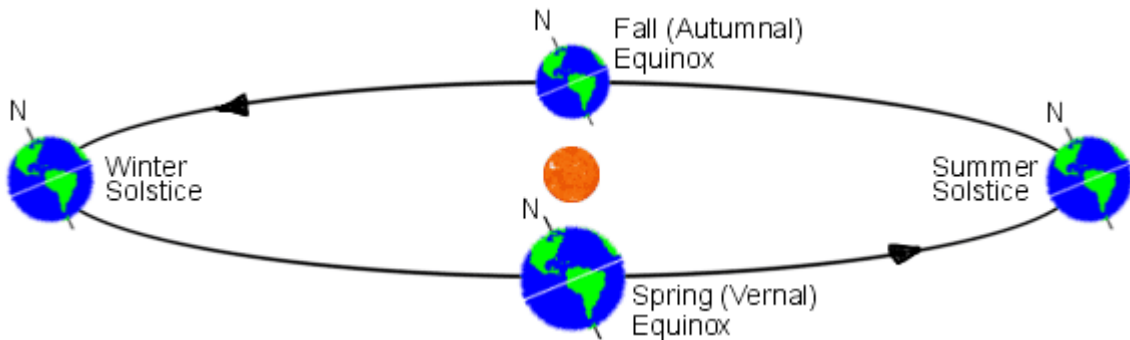
With the Earth's axis tilted at 23.5°, the Northern Hemisphere receives more energy from the Sun in Summer than the Southern Hemisphere. In Winter, while the Earth is actually closer to the Sun than during Summer, the Northern Hemisphere is tilted away from the Sun's direct radiation. There is also more land mass in the Northern Hemisphere than in the Southern Hemisphere compounding the differences in heating.

These differences in the heating of the earth's surface create the wind that, in turn, carries heat energy from the equator toward the poles, and creates the weather around the world.

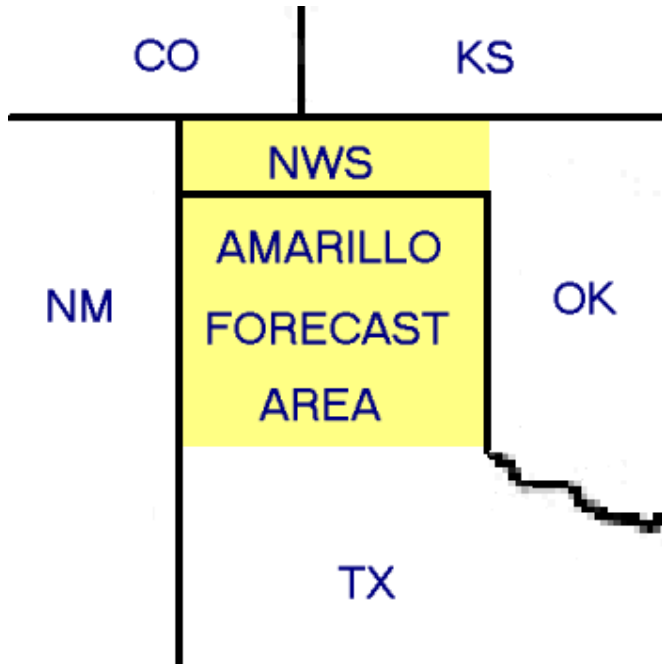
The earth's atmosphere is in constant motion trying to establish an equilibrium around the globe, i.e., the same weather and temperature at the poles as at the equator.

Every cloud, thunderstorm, tornado, hurricane or any other type of weather that occurs, whether fair or foul, is the earth's attempt at establishing equilibrium. However, due to the differential heating at the surface, combined with the rotation of the earth, equilibrium can never occur.

Meteorologists, using physics and mathematics, are able to model the motion of the atmosphere with a good degree of accuracy that enables high speed computers to produce forecast weather maps.



...The NWS Amarillo Forecast Area...



The Amarillo NWS Forecast Area includes the top 20 counties of the Texas panhandle and the 3 counties of the Oklahoma panhandle.

The National Weather Service (NWS), under the National Oceanic and Atmospheric Administration (NOAA), and the Department of Commerce (DOC), is responsible for providing weather service to the nation. It is charged with responsibility for observing and reporting the weather, and with issuing forecasts and warnings of weather and floods in the interest of national safety and economy. Current legislation provides for...

1. Public weather service
2. River and flood service
3. Climatological service
4. Basic weather service such as the observing, communications, and processing activities needed to support the other services.

Within the framework outlined above, and in very broad terms, the priorities for service to the nation are...

The National Weather Service provides weather, hydrologic, and climate forecasts and warnings for the United States, its territories, adjacent waters and ocean areas, for the protection of life and property and the enhancement of the national economy. NWS data and products form a national information database and infrastructure which can be used by other governmental agencies, the private sector, the public, and the global community. It is accomplished by providing warnings and forecasts of hazardous weather, including thunderstorms, flooding, hurricanes, tornadoes, winter weather, tsunamis, and climate events. The NWS is the sole United States OFFICIAL voice for issuing warnings during life-threatening weather situations.

National Weather Service Mission

1. Protection of life
2. Protection of property
3. Promotion of the nation's welfare and economy.

In Your Community...

The National Weather Service in Amarillo has participated in numerous outreach events since our last Dryline issued in July 2005. We would love to participate in an event in Your Community!! To schedule the NWS in your next community event, please email Steve Drillette at steve.drillette@noaa.gov or call 806-335-1121.

Ongoing thru May 2006	Kids Weather Hour Texas Panhandle Schools	NWS Meteorologists answer kids questions live on NOAA Weather Radio each Friday at 9 am. For more info, visit www.srh.noaa.gov/ama
Aug 4, 2005	Severe WX Safety Program TXDOT - Pampa, TX	WCM Steve Drillette gave a one hour severe weather safety program to the staff at TXDOT in Pampa.
Aug 13, 2005	Spotter & Cooperative Observer Appreciation Picnic NWS - Amarillo, TX	Approximately 150 spotters, cooperative observers, and NWS partners attended the annual appreciation picnic. To view photos go to www.srh.noaa.gov/ama
Aug 22-25, 2005	FEMA Course Oklahoma City, OK	WCM Steve Drillette attended the FEMA Exercise Design Course..
Sep 9, 2005	Bell Helicopter Tour Amarillo, TX	Several NWS staff toured the Bell Helicopter plant.
Sep 14-15, 2005	Chamber of Commerce BBQ Amarillo, TX	Amarillo NWS staff participated in the annual Chamber of Commerce BBQ and cookoff.
Oct 3, 2005	Rotary Club Amarillo, TX	WCM Steve Drillette gave a Winter Weather Safety Program to a local Rotary Club.
Oct 14, 2005	Federal Law Enforcement Amarillo, TX	MIC Jose Garcia gave a presentation on winter weather products and safety.
Oct 15, 2005	TCRA Rodeo - National Center Amarillo, TX	NWS Amarillo Staffed a booth at the Texas Cowboys Rodeo Association annual rodeo.
Oct 15, 2005	History Day - Fannin M.S. Amarillo, TX	Amarillo NWS staff participated in History Day at Fannin Middle School.

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In Your Community...

Oct 20, 2005	Cub Scout Pack 25 Amarillo, TX	Local Cub Scout troop toured the Amarillo NWS Office and watched the upper air balloon release.
Oct 21, 2005	Leadership Amarillo & Canyon Amarillo, TX	St Andrews Middle School toured the NWS office as part of their Leadership Amarillo program.
Oct 23, 2005	Health Fair - St Thomas Church Amarillo, TX	NWS Amarillo staffed a booth at the Health Fair held at St. Thomas Catholic Church.
Oct 26, 2005	St Mary's Elem Catholic School Amarillo, TX	ITO Scott Plischke presented a weather program to the 2 nd grade at a local elementary school.
Oct 26, 2005	Chamber of Commerce Teachers & Students Tour Day Amarillo, TX	Several Amarillo area students and teachers toured the NWS office as part of the annual Chamber program.

Upcoming Scheduled Events

Nov 4, 2005	Career Day - Southlawn Elem. Amarillo, TX	NWS Amarillo will participate in Career Day activities at a local elementary school.
Nov 16, 2005	Career Day - Bonham M.S. Amarillo, TX	NWS Amarillo will participate in Career Day activities at a local middle school.
Nov 28, 2005	Canyon Cub Scouts Canyon, TX	WCM Steve Drillette will present a severe weather program to approximately 200 Cub Scouts.
Dec 6, 2005	Winter Weather Awareness Day	Local events to be determined. For information on Winter WX Awareness and Safety visit www.nws.noaa.gov/om/winter/

Winter Outlook

Oct. 12, 2005 — [NOAA](#) announced the 2005-2006 U.S. Winter Outlook today for the months December, January and February. NOAA forecasters expect warmer-than-normal temperatures in most of the U.S. The precipitation outlook is less certain, showing equal chances of above, near or below normal precipitation for much of the country. For the rest of the story [click here](#).

