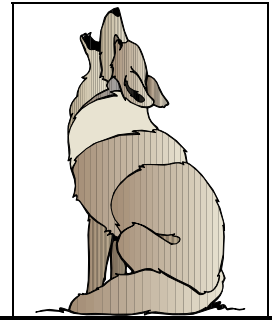


Coyote Crier



June 2002
Volume 1, Issue 1

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Editors:
Nicole Kempf
Pamela Wollack

Re-vamping of the SKYWARN Spotter Network! By Pamela Wollack and Nicole Kempf

This story can fit 175-225 words.

The purpose of a newsletter is to provide specialized information to a targeted audience. Newsletters can be a great way to market your product or service, and also create credibility and build your organization's identity among peers, members, employees, or vendors.

First, determine the audience of the newsletter. This could be anyone who might benefit from the information it contains, for example, employees or people interested in purchasing a product or requesting your service.

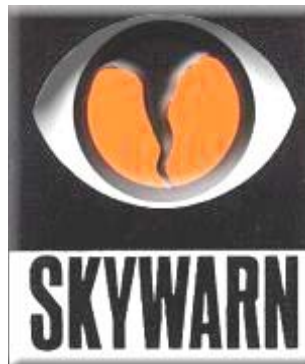
You can compile a mailing list from business reply cards, customer information sheets, business cards collected at trade shows, or membership lists. You might consider

purchasing a mailing list from a company.

If you explore the Publisher catalog, you will find many publications that match the style of your newsletter.

Next, establish how much time and money you can spend on your newsletter. These factors will help determine how frequently you publish the newsletter and its length. It's recommended that you publish your newsletter at least quarterly so that it's considered a consistent source of

information. Your customers or employees will look forward to its arrival.



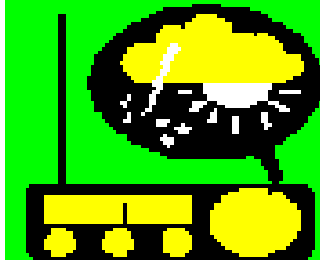
SKYWARN image courtesy of Todd L. Sherman/KB4MHH
All rights reserved ©1996-2002.

What to report:

- Your spotter number (found on the address label of your Coyote Crier)
- What you have seen
- Where you saw it (to your southeast, near the wash, etc.)
- When you saw it (if it's not occurring right now)
- What it is doing (movement, getting stronger/weaker, damaging buildings, etc.)

What you should report:

- Tornado:** Either on the ground or aloft (a funnel cloud)
- Heavy Rain:** A **half an inch or more**, especially if it fell in less than an hour
- Hail:** **Pea size** (1/4 inch) or larger
- High Wind:** Estimated or measured **50 mph or greater**
- Flooding:** **Any** kind of flooding
- Snow:** **One inch** or more (2 inches or more if above 5000 ft.)
- Visibility:** **Less than one mile** for any reason (fog, dust, snow)
- Death/Injury:** **Any** weather-related reason
- Damage:** **Any** weather-related reason (most often from wind)
- Earthquake:** **Any** tremor



New Voices Debut on NOAA Weather Radio

By Chris Rasmussen

The National Weather Service in Tucson has recently implemented two new voices to broadcast weather information on its NOAA Weather Radio network. The NWS carried out an extensive evaluation of computer speech programs, and reviewed over 19,000 public internet survey comments, before making its selection on a lifelike male and female weather radio voice. Advances in artificial speech technology have made it possible to provide a service that is more understandable and audibly pleasing than its previous computerized voice, which was first implemented as part of the Console Replacement System in 1998. These voices will be customized and continually monitored to ensure that words and geographical names are understandable to listeners. Feedback is suggested. Therefore, if a word or phrase is being mispronounced on a continuous basis, please feel free to contact the NWS office in Tucson.

Although the NOAA Weather Radio broadcast will sound different, it will still continue to effectively provide current weather conditions, quality forecasts and other significant weather information to listeners across all of Southeast Arizona. Messages are repeated every 3 to 6 minutes and are routinely updated every 1 to 3 hours, more frequently during rapidly changing weather

conditions. During severe weather, NWS personnel can interrupt the routine broadcast and insert special warning messages concerning imminent threats to life and property. Your NOAA Weather Radio can mean the difference between life and death during a severe thunderstorm, tornado or flash flood, @ said retired general Jack Kelly, director of the National Weather Service.

Examples of the new and old voices can be found at the following internet address:

www.nws.noaa.gov/nwr/newvoice.htm

Mark Trail image courtesy of North American Syndicate, Inc., World Rights Reserved

MARK TRAIL CHAMPIONS NOAA WEATHER RADIO- THE VOICE OF THE NATIONAL WEATHER SERVICE



Is El Nino Back?

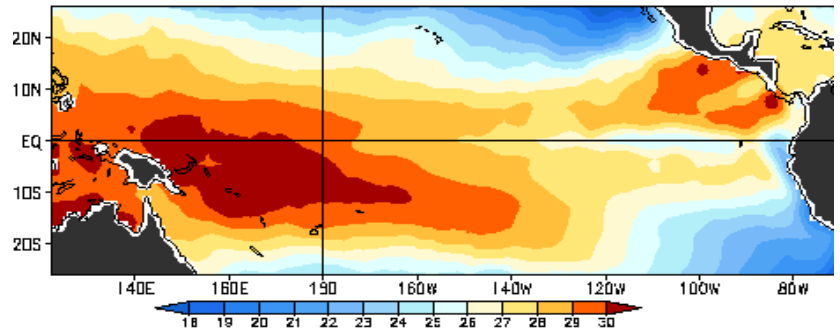
By Pat Holbrook

El Nino has been out of the news for several years (the last one occurred in 1998) but scientists at the Climate Prediction Center (CPC) have announced that El Nino may reappear in the Pacific. El Nino is the warming of sea surface temperatures across the tropical Pacific ocean. The picture to the right is the observed sea surface temperatures in the tropical Pacific during the month of April as well as the sea surface temperature anomaly (warm anomalies are shaded). An anomaly is the difference between the actual temperature at any particular location and the long term temperature average. A warm anomaly is shown off the west coast of Peru and if the anomaly expands westward to the warm anomaly that is already present in the central Pacific, the El Nino will be established. CPC updates these maps weekly on their web page along with other neat information about El Nino

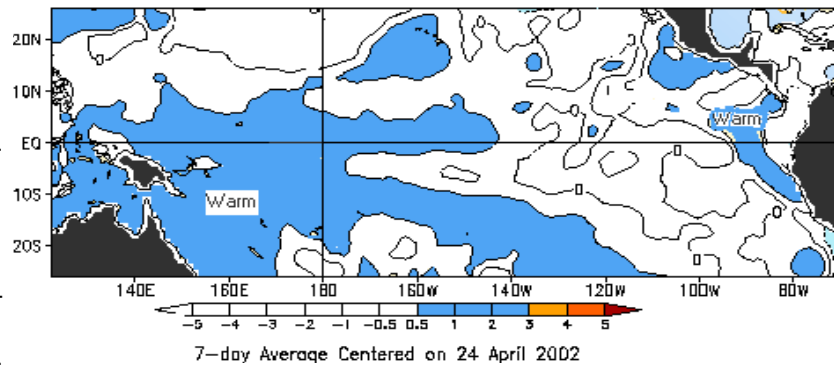
and La Nina (http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/).

If the El Nino forms, then what can southeast Arizona expect for the monsoon season and upcoming winter precipitation? Our research indicates the relationship between El Nino and monsoon season precipitation is poor. Part of the reason is that El Nino affects the location of the jet stream and during the monsoon season the jet stream is always displaced well north of Arizona. The other reason is that the source of our monsoon moisture is from flow around high pressure that sets up to the east of Arizona. The location of this high may be affected by weather patterns other than El Nino. Currently the CPC is forecasting below normal precipita-

Observed Sea Surface Temperature (°C)



Observed Sea Surface Temperature Anomalies (°C)



tion for our monsoon season. Keep a weather eye to the south because large thunderstorm complexes during the last two weeks of June in northern Mexico indicate an active monsoon season; lack of thunderstorms would indicate a drier than normal monsoon.

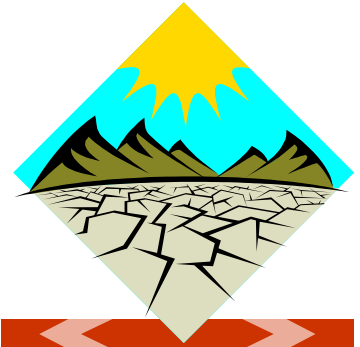
The good news is that southeast Arizona generally has above normal precipitation during an El Nino winter. The winter precipitation generally begins in October. Some degree of caution has to be exercised at this point

since the CPC computer models used to predict the El Nino seem split between El Nino and neutral conditions (although the official forecast is for El Nino). Since we are in the cold phase of the Pacific Decadal Oscillation (PDO), a long term temperature pattern in the Pacific ocean, winter time precipitation generally is less than if El Nino occurred during the warm phase of the PDO. We'll have more on PDO in the next Coyote Crier!

For more information,
visit us on the web at:
www.wrh.noaa.gov/Tucson

Drought Summary and Extended Range Outlook

By Erik Pytlak



Recent conditions

Due to a spotty thunderstorm season in 2001, a dry winter, and a very dry spring, all of southeast Arizona is classified under **extreme drought** conditions by the Departments of Agriculture and Commerce. Streamflow on the Gila River is within the lowest 10 percentile at several gaging stations, or at about 25-30% of normal flow for May. The Blue and San Francisco rivers were near daily record lows during

the first half of May, records which in most cases were set during the drought of 1973-74. Total discharge through the Gila river system is expected to hold near 25-30% of normal through the end of May.

Streamflow in the upper San Pedro basin has not been as adversely affected as the Gila system, mainly because of base flow from recent wet periods in 2000 and 2001. However, streamflows there have recently

fallen to below 50% of normal. Little if any flow is evident in the headwaters of the Santa Cruz basin.

The most noticeable affect of the latest dry spell has been on area forests and rangeland. All fire weather reporting stations in southeast Arizona indicate **very high to extreme** fire danger. Fire restrictions are in place on many public, federal and state lands.

Outlook for:

June - Above normal temperatures and near normal rainfall.

June to August - Above normal temperatures and near normal rainfall.

September to November - Near normal temperatures and above normal precipitation.

Rainfall across southeast Arizona

By John Glueck

This table shows precipitation totals for three periods
 1) the 2001-2002 water year (Oct. 2001 to April 2002)
 2) the last 12 months (May 2001 to April 2002)
 3) the 2002 calendar year through April 30th.
 % of normal are based on 1971-2000 normals.

Selected locations across southeast Arizona	2001-02 water year	% of normal	Last 12 months	% of normal	2002	% of normal
	Oct. '01 - Apr. '02		May '01 - Apr. '02		January - April	
Tucson	2.02"	34%	5.07"	42%	0.68"	23%
Nogales	3.04"	38%	10.93"	57%	0.61"	16%
Oracle	4.60"	32%	13.74"	55%	1.27"	15%
Safford Ag. Center	0.86"	17%	3.59"	37%	0.32"	14%
Willcox	2.85"	45%	10.75"	81%	0.86"	29%
Sierra Vista	2.61"	50%	8.47"	60%	1.50"	57%
Douglas	2.48"	48%	9.25"	67%	1.34"	65%
Benson	2.39"	47%	12.09"	85%	0.67"	28%
Clifton	3.59"	53%	13.96"	105%	1.43"	43%
Duncan	2.09"	35%	6.02"	49%	0.76"	28%
Sasabe	2.02"	23%	9.59"	53%	0.02"	<1%
Organ Pipe Cactus N. M.	1.26"	23%	5.48"	55%	0.04"	1%
Mt. Lemmon	5.48"	31%	20.53"	66%	1.70"	15%
Kitt Peak	3.82"	33%	11.52"	48%	1.11"	19%
Chiricahua N. M.	4.65"	48%	17.25"	82%	1.98"	42%
Coronado N. M.	4.52"	44%	19.97"	94%	2.43"	47%



Thunderstorm Safety Awareness Week June 10-14

By Erik Pytlak

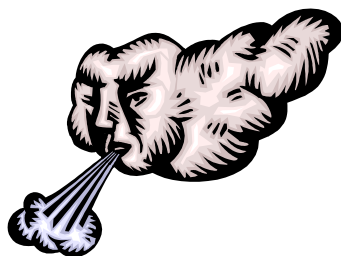
Governor Jane D. Hull is expected to declare June 10-14 Thunderstorm Safety Awareness Week in Arizona. The National Weather Service is very pleased to be working on the awareness campaign with several county and city governments, numerous media outlets, the American Red Cross, and several local utilities and private companies. The NWS and its spotter network is just the first line of defense in preparation and warning for severe weather. Once the warning goes out, county and city governments swing into action by placing high water barricades in strategic locations, put police, fire, and other first responders on alert, and dispatch crews to storm damage as quickly as possible. Television and radio station relay our warnings and give you the latest information on the developing storm. If the storms damage homes or knock out power, the Red Cross swings into action to provide emergency shelter, while utilities work long hours to get power flowing again. Private companies like Vaisala-Global Atmospheric, Inc. (GAI) provide lightning-detection information so that golf courses, ballparks, and meteorologists can track thunderstorms more accurately.

However, even with so many agencies and organizations keeping people safe, it ultimately comes down to individuals to protect their own personal safety, and the safety of their family. That makes June 10 to 14 a perfect time to review what to do when



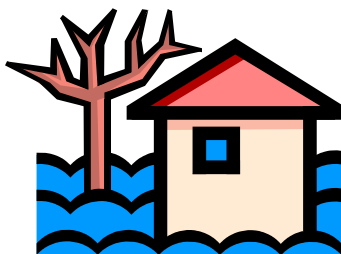
In the event of ANY thunderstorm:

- C Any thunderstorm, no matter how weak, can kill. Lightning can strike more than 10 miles away from a parent thunderstorm.
- C Always move indoors, or at least into an enclosed, all-metal vehicle
- C Never stand under a tree, near water, under bleachers, or under open structures like picnic shelters
- C Don't use appliances or a corded phone unless absolutely necessary
- C Don't bathe, take a shower, or do dishes. Lightning can easily travel through pipes.
- C If you are caught in the open, crouch near the ground as far away from trees, tall objects, or other people as possible. Don't lie flat.
- C If someone is struck, come to their aid. A person who has been struck does not carry an electrical charge. Prompt aid, including CPR, can save their life.



In the event of high winds, or when a Severe Thunderstorm Warning or Dust Storm Warning is issued:

- C If there is time, secure loose outdoor objects. Flying debris can be deadly in a severe storm.
- C Stay away from windows and trees.
- C If a dust storm blocks your view, pull off the road and turn off your lights. People will tend to follow car lights ahead of them and may confuse you with a moving vehicle B causing a rear end collision.
- C If a power line is downed, don't touch it. Don't call 911, either, unless it is in danger of starting a fire. Call the utility instead.



In the event of a flash flood, or when a Flash Flood Warning is issued:

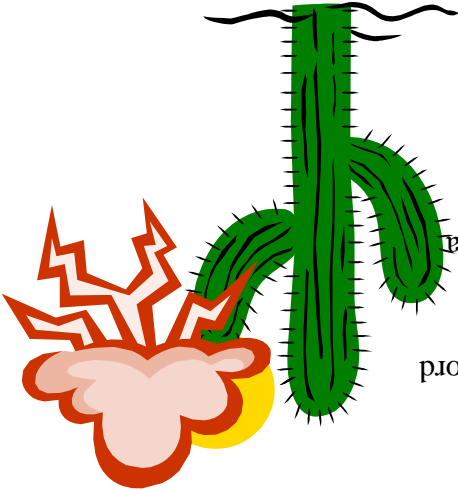
- C Never, EVER drive into a flooded roadway, even if driving a sport-utility vehicle. A car or truck makes a lousy boat, and they can float in only 1 to 2 feet of rushing water.
- C If your vehicle stalls in high water, get out of it immediately! Don't wait for the water to get so deep that it causes your vehicle to overturn, or makes it impossible for you to get out through your car door or window.
- C Don't let kids play near washes or storm drains.
- C Don't try to walk across a flowing stream or wash. Only 6 inches of rushing water can sweep you off your feet.

" The National Weather Service (NWS) 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. "

National Weather Service Mission Statement

SKYWARN Training Schedule 2002

<i>Date</i>	<i>Time</i>	<i>Location</i>
June 5	6pm-8pm	Graham County Administration Bldg., Safford
June 6	10am-noon	Duncan Town Hall, Duncan
June 10	7pm-9pm	Oscar Yrun Community Center, Sierra Vista
June 11	6pm-8pm	Santa Cruz County Bldg. 2150 N. Congress Dr., Nogalas
June 26	6pm-8pm	Bisbee City Hall, Bisbee
June 27	6pm-8pm	U of A Campus, ENRB Rm. 254, Tucson



The National Weather Service
520 N. Park Ave., Suite 304
Tucson, AZ 85719

The
Coyote Crier



Spotter News for Southeast Arizona

The National Weather Service SKYWARN Weather Spotter Program.