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National Weather Service Birmingham

Winter Weather? What's That?

By: Krissy Scotten

For those of us that always hope for a white winter (not White Christmas...I don't want to limit my hope), we all have been hoping for a long time here in Birmingham. Well, I guess some people would say that we had enough winter on March 13, 1993 to satisfy us for another century. What is it about snow that makes us Alabamians so crazy about it? I think it has a lot to do with withdrawals; we haven't seen it in awhile. Well since we are still waiting for the next winter weather event...let's go over a few important winter weather products and information.



NWS Office during the 1993 Superstorm

Winter 2005-2006

Volume 1 Issue 3

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NWS Winter Products

Winter Storm Watch and Winter Storm Warning

- ◆ When conditions are favorable (watch) or imminent and/or occurring (warning) for hazardous winter weather.
 - ⇒ Snow **2+ inches in 12 hours**
 - ⇒ Freezing Rain (ice) **greater than 0.05 inches**
 - ⇒ Sleet **greater than 0.50 inches**
- ◆ Watch issued 12 to 48 hours in advance with confidence > 50%

Winter Weather Advisory

- ◆ When winter weather conditions cause significant inconveniences, but does not meet warning criteria.
 - ⇒ Snow **0.25 to 2 inches in 12 hours**
 - ⇒ Freezing Rain (ice) **less than 0.05 inches**
 - ⇒ Sleet **less than 0.50 inches**

Wind Chill Advisory

- ◆ When cold temperatures and breezy winds combine to create a wind chill below zero degrees for an hour or more.

Wind Chill Warning

- ◆ When cold temperatures and breezy winds combine to create a wind chill below -10 degrees for an hour or more.

Special points of interest:

- Winter began December 21st, 2006 at 1235 PM CST
- Groundhog Day February 2nd, 2006
- Spring begins March 20th, 2006 at 1226 PM CST

2006 Awareness Weeks Schedule

By: Jason B. Wright

National Weather Service (NWS) offices across the state, along with the Alabama Emergency Management Agency (AEMA), city and county governments, and charitable service organizations such as the American Red Cross, participate in weather awareness week campaigns every year. These weeks are used to highlight the dangers associated with these particular weather events along with educating the public on proper safety precautions that need to be taken.

Dates for awareness weeks through June 2006 are listed below:

Severe Weather Awareness Week

February 19-24, 2006

Flood Safety Awareness

March 20-24, 2006

Hurricane Awareness Week

May 21-27, 2006

Lightning Awareness Week

June 18-24, 2006

We're on the WEB!
www.srh.noaa.gov/bmx

Severe Weather Safety Video

By: Mark Rose

Severe weather has a profound impact on the lives of citizens in Alabama every year. Meteorologists have an important role not only in warning the public of impending severe weather, but also teaching them about severe weather safety so they can make quick, life-saving decisions. Opportunities abound for safety talks, but there are only a handful of meteorologists available, and most talks are small group presentations which may involve 25 people or less. There needs to be a method to reach larger groups without the presence of a meteorologist. The most effective way to accomplish this is to create a presentation in DVD format.

A professional video company has agreed to produce the video in conjunction with Wes Wyatt, a meteorologist with WVUA-7 in

Tuscaloosa, and me. Wes and I completed a video project last year for several fire departments in the Birmingham metropolitan area. However, we need the resources of a professional video company to produce a video with high quality graphics, interactive features, and closed-captioning for the hearing impaired.

A safety video will have its greatest impact in our schools. Though the video will be valuable for all ages, it will be tailored towards a younger audience. By making this video available to all school systems across the state, it could be part of the weather curriculum in the elementary schools. Many kids are alone during the afternoon until parents come home from work. The peak time for severe weather is in the mid to late afternoon

hours. It is imperative that children know what actions to take when a severe weather warning is issued. This video will provide them with the resources to know what to do.

The cost to produce this video is \$6,000. Video Visions, Inc., has agreed to produce the video with no payment until it is complete. Unfortunately, the National Weather Service does not have the funds to pay for the video. If any agency is interested in financially supporting this project to help it become a reality, please let me know. Once the video is complete, I will work with other local and state agencies to cover the expense to re-produce and distribute the DVD's. The video will not be copyrighted, so you will be able to make additional copies.



If you have any questions about this project, feel free to contact me through e-mail at

Mark.Rose@noaa.gov

Picture: Greg Gilchrist (left) from the Vestavia Hills Fire Department and Meteorologist Mark Rose standing in front of the Vestavia Hills Fire Department Fire House Simulation Trailer.

Central Alabama EMA's Go Back to School

By: John Sirmon and Krissy Scotten

More than fifty Emergency Managers from across Central Alabama attended the EMA Weather 101 School on December 6. Officials from the Alabama State EMA office and more than half of the counties from NWS Birmingham's County Warning Area were represented!

Emergency Managers' offices become mini-weather centers during hazardous weather conditions. They are often flooded with calls from the public seeking detailed information about nearby storms. Emergency Managers need to provide accurate information to help ensure the safety of the citizens in their county. During EMA Weather 101 School, NWS Birmingham provided them with skills and knowledge of how and where to find critical weather information.

NWS Birmingham also took the opportunity at EMA Weather 101 School to learn how to better serve Emergency Managers. This feedback has already improved operating procedures at NWS Birmingham. The goals of Emergency Managers and the National Weather Service are very similar; such interaction can only aid both parties to make certain that lives and property are protected during dangerous weather conditions.

The overwhelming response and the positive feedback from area Emergency Managers will likely result in continuing the Weather 101 School on an annual basis. EMAs...be looking for Weather 201 next year!



EMA Weather 101 School Class of 2005

Presenters and topics included:

NWS Birmingham Meteorologists

Jim Stefkovich, NWS Products

Krissy Scotten, Winter Weather Forecasting

John Sirmon, Radar Interpretation

Jim Westland, Wind Damage vs. Tornado Damage

Michael Scotten, Alabama's Wacky Weather Forecasting

Darone Jones, Web 101

Mark Rose, Fire Weather

Mark Linhares, Damage Assessment

Alabama Department of Environmental Management Mets

Geoff Healan and Joe Sims, Air Quality Forecasts



Warning Coordination Meteorologist Jason B. Wright discusses the gravity wave phenomenon with Dallas County EMA Director Brett Howard.



Meteorologist-In-Charge Jim Stefkovich holds a roundtable discussion during the working lunch about various topics such as NOWCASTS.

NWS Birmingham thanks the Alabama Gas Company Southern Operations for the use of their meeting room and facility for the EMA Weather 101 School. Also, NWS Birmingham thanks Publix of Helena and Wal-Mart of Alabaster, Calera, and Pelham for generously donating food which contributed to the resounding success of this event.

Where Alabama Weather Begins

By: Faith Borden

What does customer service mean to you? Long after an experience passes, ever wonder why you only remember excellent or poor customer service?

I got the opportunity to visit our Regional Headquarters in Fort Worth, Texas, the first week of December. While at Regional Headquarters, I got to observe everyday operations and see what it was like at a level above a forecast office like ours in Birmingham. Regional Headquarters strive to serve us, the field offices. In most other organizations, the office or departments at the bottom of the office pyramid structure serves the one above itself, all the way up to the top, the CEO/president/director. This is backwards thinking when customer service is your main goal. Who would better know the customer's needs than the ones that work closest with them? Along with observing regional operations, I also gave a presentation on customer service and the importance of improving customer service throughout our agency.

The entire Birmingham office staff knows the importance of excellent customer service, so we have been revisiting our office vision and goals. We work the closest with the Na-

tional Weather Service customers, and we want to ensure that we are meeting your needs. We realize that the world of weather is ever changing, and the National Weather Service is not the only place available to receive weather information.

"To us, excellent customer service is meeting the needs of our customers. "

So, we need to find out from all of you, our customers, what weather information you use regularly and what you need. Here are some ways you can reach us: go to our webpage <http://www.srh.noaa.gov/bmx/>, and send our webmaster an email sr-bmx.webmaster@noaa.gov; call us on the telephone (205) 664-3010 X 229; or drop our Warning Coordination Meteorologist (Jason B. Wright) an email: jason.b.wright@noaa.gov. If you have a weather question, please call and ask us, as we are here to serve. To us, excellent customer service is meeting the needs of our customers. That would be you! We want you to remember the service we gave you because of the excellent job we did. We truly believe "Alabama weather begins" at our office; your one stop source for all weather information pertaining to Central Alabama.

Groundhog Day

By:
Jessica Smith



Every year on February 2nd, Punxsutawney Phil (above) emerges from his hole on Gobbler's Knob in Punxsutawney, Pennsylvania, to predict the weather for the next six weeks. If the groundhog sees his shadow, he quickly retreats back to his burrow for another six weeks of winter. If he does not see his shadow, he stays above ground because spring is near. Have you ever wondered where this tradition of weather prediction comes from?

Its roots actually began several decades ago with the European Christian celebration of Candlemas. February 2nd marked the commemoration of the purification of the Virgin Mary 40 days after the birth of Jesus. This day was also important because it marked the half-way point between winter and spring. The saying "*For as the sun shines on Candlemas Day, so far will the snow*

swirl in May" expressed these early Europeans' beliefs—if it were sunny on Candlemas, there would be continued winter weather, but if it were cloudy, rainy, or snowy, the rest of winter would be mild. The Germans were actually the ones that added an animal to the tradition. The hedgehog was chosen because it was believed that a hibernating animal could predict the arrival of spring by its emergence from the ground.

Many of these Germans came to America and settled in Pennsylvania. Groundhogs were very common in that part of the country, and to the early settlers, the groundhog resembled the familiar hedgehog. Thus, the American tradition of the weather-predicting groundhog began. Every year since 1886, Punxsutawney Phil has emerged from his hiding spot to provide his famous forecast. Locals and thousands of visitors gather during the early morning hours to await Punxsutawney Phil's prediction. He speaks his forecast into the ear of his keeper, who then announces it to all.

Will this weather prediction ever be in jeopardy? How long will Punxsutawney Phil continue predicting our weather? Luckily for us, each year at the Groundhog Picnic, Punxsutawney Phil takes a sip of a secret concoction known as groundhog punch. It is said that this magical drink adds an additional seven years to his life. So what will Punxsutawney Phil predict this February 2nd? Only time will tell.



From the movie "Groundhog Day" Phil the Weatherman (Bill Murray) says, "There is no way this winter is *ever* going to end as long as that groundhog keeps seeing his shadow. I don't see any way out of it. He's got to be stopped. And I have to stop him." *Well let's hope he is stopped and doesn't see his shadow this year!*



**Mark's Wacky
Weather World**
"SNOWROLLERS"

Have you ever started building a snowman by forming a snowball and then rolling it across a flat, snow-covered surface? Well, Mother Nature thought she might help you out in this endeavor. Behold the snowroller! You ask, "What on Earth is a snowroller"?



Well, it's not the preferred communication method used by UFO's in the winter when they can't make crop circles. A snowroller is just as it sounds, it is a ball of snow that is rolled up with no human intervention.

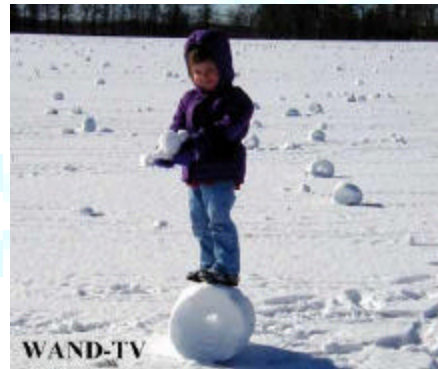


*Photo by Paul White
Petersburg, IL*



*Photo by Karen Thompson
Buffalo, IL*

Several weather elements must line up in order for a snowroller to be formed. First off, there must be a layer of snow or ice already on the ground that has become hard and crusty on its surface. This is commonly produced by melting and refreezing of snow. Second, a few inches of new snow must fall onto the already hardened surface. This new snow fall will not stick to the old surface. Surface temperatures need to be around 32 degrees for the new snowflakes to stick together. Finally, strong winds must be present.



The winds will pick up small pieces of the new "sticky" snow and bounce them along the ground. As these small pieces bounce, they gradually pick up more snow until they are too heavy for the wind. The pieces of snow then start rolling and form into a tubelike shape. As the snowroller gains mass, the roller leaves a noticeable trail in its path.



Aaron Allison

The end result is a snow ball like structure. Snowrollers can range in size from a golf ball to a trash-can or larger. These snow balls can weigh many pounds. Snowrollers are hollow on the inside.

If you ever encounter a snowroller or any other unusual weather phenomenon, please forward your accounts, stories or pictures to...

Mark.Linhares@noaa.gov

In the Hot Seat: General Forecaster ANGEL MONTANEZ



Originally From: Carolina, Puerto Rico

School: Florida State University - 2002 (B.S.)

Interests at the Office: Computers, Computers, Computers

Offices Worked: NWS Tallahassee, NWS Mobile, and NWS Birmingham

Favorite Part About Your Job is: Linux and satisfying customers

Most Memorable Weather Event Worked: November 24, 2004 Thanksgiving Tornado Outbreak across Central Alabama. This was my first real tornado event of my career since I have always worked at coastal offices where major tornadic events are rare.

Interest in Weather Started Because: my family was on vacation in Tampa, Florida when I was in 7th grade. For a day trip, we decided to travel up to Tallahassee. On our way, I saw several trees down which turned out to be a tornado path. From then on, I became obsessed with tornadoes, but not with hurricanes (especially after Hurricane Hugo).

What Do You Like About Birmingham: Four Seasons. In Puerto Rico, it is not so hot, hot, disgustingly hot, and not so hot (again). Plus in Birmingham, there is always a slim chance for snow in winter unlike Puerto Rico.

What's Next Career Wise: Eventually become a lead forecaster in the Southeast.

Knuts and Bholts By: Tom Miller

NEERING LABORATORY (EITech shop.)

As an **Electronics Technician**, I enjoy (not!) reading the electronic forms that are necessary to track the work we do. In this form (filled out by forecasters when a piece of equipment has broken) it is sometimes amusing to read the MAINTENANCE DESCRIPTION block...

Here's an example of one:

"High Priority. System did a cold start. Report processing is off for pressure sensor. AOMC* said they downloaded a bunch of stuff from there, but they are not authorized to deal with the pressure sensor. News to me!"

These notes are always fresh to read, as it brings this deadpan template to life with the notion that forecasters want to know more about what goes on here in the ELECTRONICS ENGI-

We EITechs would enjoy for AOMC* to do their thing (download new data) and return the equipment back to full readiness, but someone has determined that fooling around with the pressure sensors from their end is a bad thing (and too convenient for the local technicians). What they intend is the local technician return to the ASOS* system and verify (and correct if necessary) any discrepancy with pressure sensors. This is such a concern that the ASOS* system has two backup pressure sensors which are used to verify each other.

Pressure is a BIG deal; but I make sure they work and are doing the job properly to serve you folks better. For more information on the importance of pressure, please refer your questions to John.DeBlock@noaa.gov.

*ASOS-Automated Surface Observing System

*AOMC-ASOS Observing and Monitoring System.

Would you like to become an NWS Storm Spotter?

By: Jason B. Wright

Technology plays a critical role in severe weather, but the most valued reports come from the storm spotter. Storm spotters come from all walks of life, joined by their interest in weather and serving their community. Spotters are associated with SKYWARN, a volunteer program developed many years ago by the NWS to train and organize spotters in every community. Spotters are organized around local emergency management agencies, amateur radio clubs, and law enforcement agencies.



Spotters are critical because they provide timely information on the actual weather that is occurring at

the ground. Satellite imagery and Doppler radar provide NWS meteorologists with large amounts of information about the storm and its structure, but does not provide the specifics about what is actually occurring at the ground. This is where spotters become the eyes and ears for the community.

Storm spotters go through training provided by the NWS to gain knowledge of storm structure, especially the most severe thunderstorms of Alabama tornadoes, information on tornado safety, and reporting procedures.

Storm spotter classes will begin during the last few days in February through April. If you are interested in scheduling a storm spotter class in your area, and you can secure an audience of at least 20-30 people, please contact Warning Coordination Meteorologist Jason B. Wright at either (205) 664-7954 or Jason.B.Wright@noaa.gov.