Under the Big Sky E-Letter
April 14, 2009

Severe Weather Awareness Week: Next week, April 20-24, 2009, is Montana Severe Weather Awareness Week. The above amazing photo was taken by Don Moore, the Science and Operations Officer with the NWS Billings office. The Montana NWS offices have put together a website that has themes for each day during the week:

MONDAY	Severe Weather Terminology
TUESDAY	Severe Weather Climatology
WEDNESDAY	Severe Weather Safety
THURSDAY	Lightning Safety
FRIDAY	Your Weather Information Sources

Supercell photo by Kay and Wally Braun in Richland County

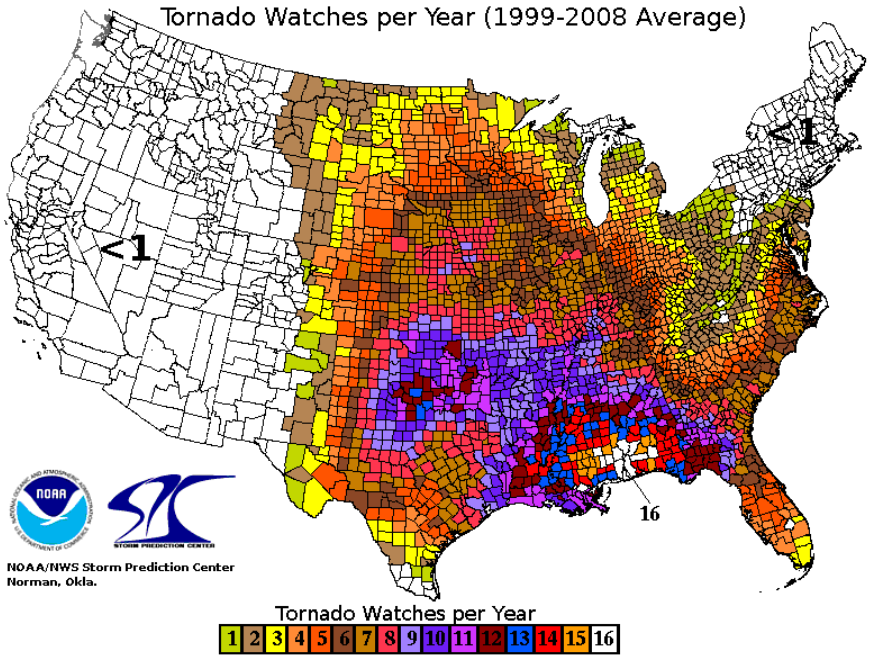
Take a few minutes and check out the information on the website below!

http://www.wrh.noaa.gov/byz/severe/index.php?wfo=ggw

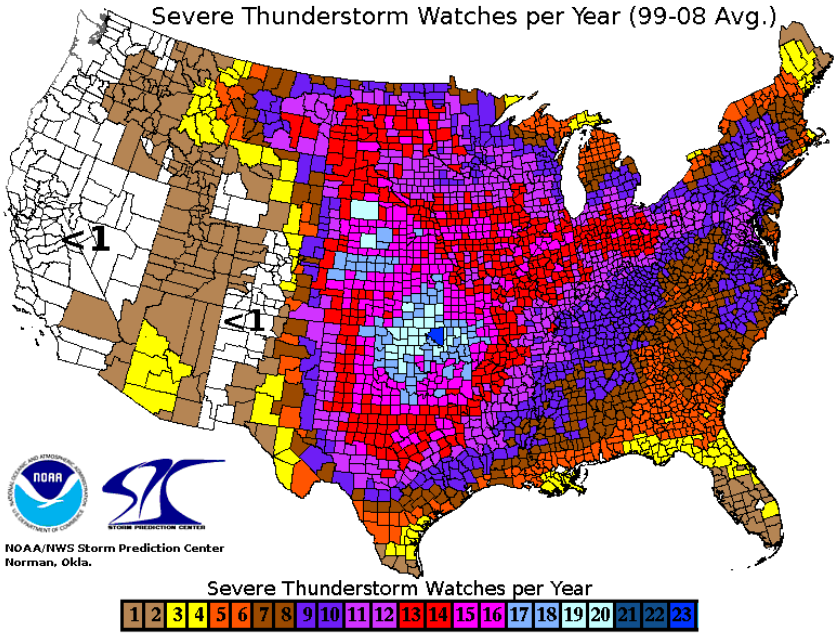
Some interesting facts about severe weather in eastern Montana include the following:

1. There have been two F3 tornadoes in eastern Montana. The first was in Roosevelt County on June 7, 1946. It killed one person, and injured another. The second was in Wibaux County on July 17, 1952. It killed one person, injured two and caused at least $250,000 in damage.
2. The June 16, 2007 hailstorm left a hail swath on satellite that was 280 miles long and 12 miles wide at its widest point near Glasgow, MT. That storm caused over $30 million dollars in property and crop damage.
3. A thunderstorm producing damaging high winds of up to 120 mph moved across McCone, Richland, eastern Roosevelt and Sheridan Counties on July 13, 2005. It caused widespread damage across that region, including damaging grain elevators and blowing 14 railroad cars off the track near Brockton.
4. The largest reported hailstone in Montana was 6 inches on July 11, 1965 in Rosebud County and another 6 inch report on June 3, 1971 in Powder River County.

Severe Thunderstorm and Watch Climatology: The Storm Prediction Center put together climatology for the average number of watches per year for the last ten years. Below are the graphics for the average number of tornado and severe thunderstorm watches. You can also see more severe weather statistics for the nation at: http://www.spc.noaa.gov/wcm/



Northeastern Montana sees about one to three tornado watches per season. The maximum is actually in Louisiana, not near the typical boundaries of "tornado alley."



Northeastern Montana sees about eight to twelve severe thunderstorm watches per season.

Weather Spotter receives national award: Tessa Shumway lives in Terry, MT. When it comes to disasters and response for the American Red Cross in southeastern Montana, she's the "go to" person that those counties rely on. She recently received the National Disaster Response and Preparedness Award in Washington, DC for all her work she's done to help serve her community. Way to go Tessa! http://www.kulr8.com/features/spiritofmontana/41950852.html

Drought Newsletter: The National Drought Mitigation Center has issued the spring edition of their DroughtScape newsletter. The D0 (below normal precipitation) area has been expanded recently to include more of northeast Montana. In fact, this week will be expanded to also include Daniels and Sheridan Counties. The newsletter can be seen at: http://drought.unl.edu/droughtscape/2009Spring/droughtscapespring2009all.pdf

The actual Drought Monitor can be seen at: http://drought.unl.edu/DM/MONITOR.html

High Plains Weather Workshop: Three of the NWS Glasgow staff attended this workshop in Rapid City last week, including myself, Bill Martin our Science and Operations Officer, and Andrew Zimmerman one of our general forecasters. It was colder there on Monday than it was here in northeast Montana, and while the roads were good, the recent blizzard caused snow drifts over the tops of cars from SW ND into NW SD all the way to Rapid City! The workshop highlighted new technologies and services in the future and had university students and personnel from UND and the SDSMT, NWS offices and other researchers attending. I gave a presentation on the Cold Advisory for Newborn Livestock System that we developed, and even did a TV interview about it while there.

Skywarn Training sessions: We do have more being scheduled, just not exact dates yet. If you have a location you'd like to see it at, please let me know.

Date	Location	Time	Where
~~April 13~~	~~Sidney~~	~~2-4 pm and a repeat from 6-8 pm~~	~~USDA ARS Facility Conference Room~~
April 27	Plentywood	6-8 pm	Jubilee Room at the County Building
May 18	Wibaux	6-8 pm	Wibaux Fire Department
May 21	Glendive	6-8 pm	TBD

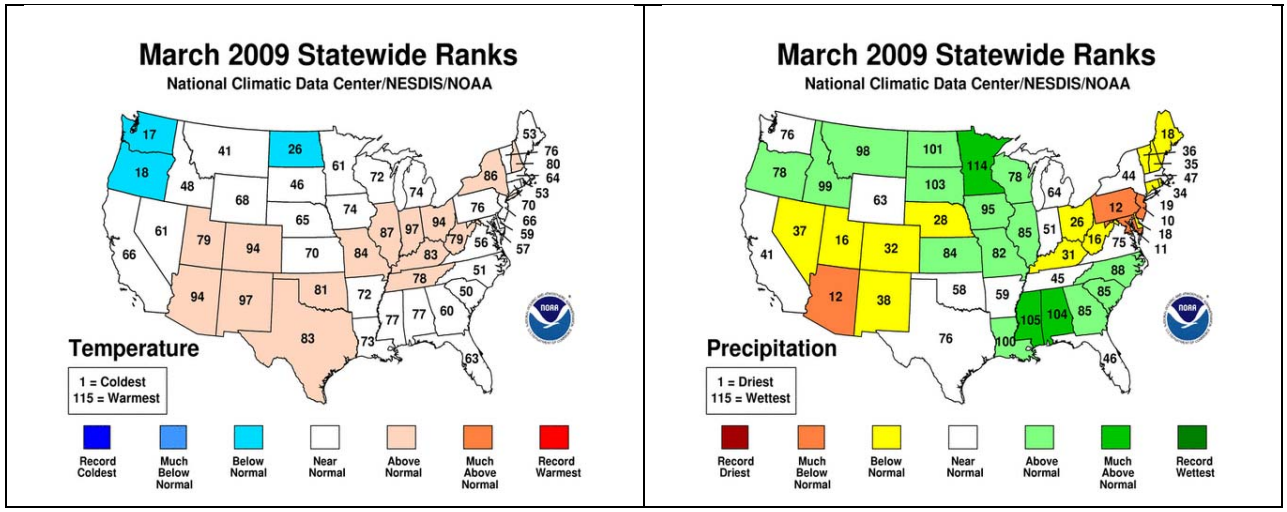
NASA Weather Website: NOAA has been working with NASA to update an educational website on weather. It's a great site for grades 4-8 to take a look at: http://scijinks.jpl.nasa.gov/weather/

NOAA News:

New NOAA Administrator sworn in: Dr. Jane Lubchenco (a former professor from Oregon State University) was recently sworn in as the ninth NOAA Administrator (NOAA is the parent agency above the National Weather Service). She is the first female to serve in this position, and her background is in environmental sciences. One of her main focus areas will be looking at establishing a National Climate Service.
http://www.noaanews.noaa.gov/stories2009/20090409_lubchenco.html
http://www.noaanews.noaa.gov/stories2009/20090319_lubchenco.html

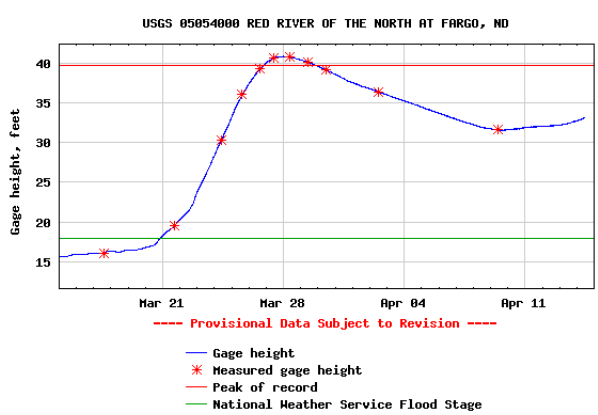
Ice-Free Arctic Summer Likely Sooner Than Expected: Summers in the Arctic may be ice-free in as few as 30 years, not at the end of the century as previously expected. The updated forecast is the result of a new analysis of computer models coupled with the most recent summer ice measurements.
"The Arctic is changing faster than anticipated," said James Overland, an oceanographer at NOAA's Pacific Marine Environmental Laboratory and co-author of the study, which will appear April 3 in *Geophysical Research Letters*. "It's a combination of natural variability, along with warmer air and sea conditions caused by increased greenhouse gases." For more of the story, go to:
http://www.noaanews.noaa.gov/stories2009/20090402_seaice.html

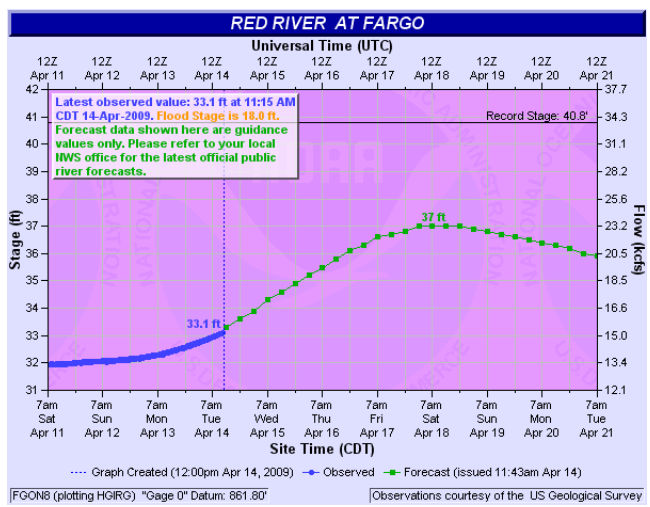
March Temperatures near average for US: Eastern Montana was below normal for temperatures in March, but when you look at Montana as a whole, we were about normal for the month. Minnesota had its wettest March on record. For more information on the weather in March, go to:
http://www.noaanews.noaa.gov/stories2009/20090410_marchstats.html



Vortex 2: A group of researchers from the academic community, and NOAA's National Severe Storms Lab are embarking on the Vortex 2 tornado research project from May 10 through June 13. The original Vortex occurred in the early 1990's, and it was the precursor to some of the technology they tried to show in the movie "Twister." The Vortex 2 project will include several mobile radars, people deploying weather instrumentation, Unmanned Ariel Vehicles, and those recording the events with photo and video equipment. In all, about 50 people will be deployed on severe weather days chasing storms that could produce tornadoes to better understand the conditions under which they form, and perhaps improve on tornado detection, allowing for more lead time of warnings.
http://www.msnbc.msn.com/id/30092360/ and
http://www.noaanews.noaa.gov/stories2009/20090406_tornado.html

Other Weather in the News: While Fargo has been able to hold up against the second crest, thankfully it isn't expected to be as high as the record setting one that occurred around March 28. Here is the USGS plot for Fargo for the last 30 days (the green line is flood stage, the red line is the previous flood of record) and the NWS forecast –green dotted line- for the next week:





Other areas in North Dakota are now experiencing more issues with the flooding as well, especially east of the Missouri River. Valley City is recommending evacuations, and Jamestown has people filling sandbags along the lake. Even I-94 was closed for awhile because the water came up over the interstate between Bismarck and Jamestown. We visited there this weekend, and there is still a lot of snow left on

the ground in some areas from Bismarck to Minot to Williston. There have also been some issues with the Red River flooding homes in Manitoba, Canada.

Fort Peck Lake Humor for the week: This joke is courtesy of Glasgow weather spotter and pilot Bob Lipscomb. He came in the office recently and mentioned that Fort Peck Lake is getting a name change. When I asked him what it was going to be called, he said, " why it'll be changed to: **Lake "Wind Advisory"** I tried it out on the Fort Peck Lake MT Fish Wildlife and Parks guys at the State Walleye's Unlimited Banquet, and they got a good laugh from it as well. They are also patiently waiting for the ice to thaw on the lake so they can go and harvest the walleye eggs! We've had ice now on Fort Peck for 112 days, and it looks like it will be a few more weeks before it's gone. The record length of ice on Fort Peck Lake is 144 days, from Nov 29, 1955 through April 21, 1956. May 9th is the latest date that the ice melted off of the lake and that occurred in 1950. Thanks go to the Fort Peck USACE for sharing their freeze up and ice out data with the NWS!