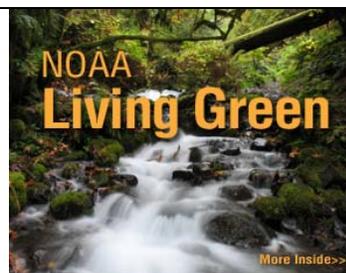


***Under the Big Sky
Green Edition
April 18, 2008***



Skywarn/CoCoRaHS 2008 Training Calendar

Date	Time	Location
4/7/08	2-4 pm	Sidney USDA ARS Facility
4/7/08	6-8 pm	Sidney USDA ARS Facility
4/9/08	6-8 pm	Zortman School
4/10/08	6-8 pm	Scobey-Nemont Friendship Room
4/14/08	6-8 pm	Fort Peck Interpretive Center
4/15/08	6-8 pm	Glendive County Courthouse Basement meeting room
4/29/08	6-8 pm	Jordan Senior Center
5/5/08	6-8 pm	Opheim School Gymnasium
5/6/08	6-8 pm	Beach/Wibaux at the Beach Ambulance Building
5/13/08	6-8 pm	Malta Library

Earth Day is April 22, 2008: There is a lot of information available on the internet about how to be more “Earth Friendly.” Some of the great websites with useful information include:

<http://www.earthday.gov/>

<http://www.epa.gov/epaoswer/non-hw/reduce/grn-mtgs/gm-bklt.pdf>

<http://ww2.earthday.net/>

<http://www.betruegreen.com/>

<http://earth911.org/>

<http://www.obviously.com/recycle/>

My own family has tried to reduce our amount of waste since seeing how “green” our European counterparts were on our trip to Germany last summer. We use cloth bags when shopping (and at least one grocery store gives you 5 cents back for each bag used!). We are recycling our aluminum cans, and we have donated a lot of good quality used clothing the kids have grown out of to charitable organizations. We’ve also opted out on the majority of the junk mail and catalogs we get by visiting websites that will help remove your name from mass mailing lists. A great website for that is: <http://www.ecocycle.org/junkmail/index.cfm>

The NWS Glasgow office recycles as well. We have blue plastic bins that we collect paper in. We also try and minimize how much paper we use. I have also started printing not just front and back, but 4 pages per sheet, not just two. ***That’ll last as long as my eyesight holds up!*** We recycle cans as well, and turn off lights in areas not being utilized, and either turn off or put our computers in hibernate mode when we are not in the office. We collect old batteries and send them to a special location to be disposed of. Our electronics waste now goes to a great recycling program held each year in Sidney, MT.

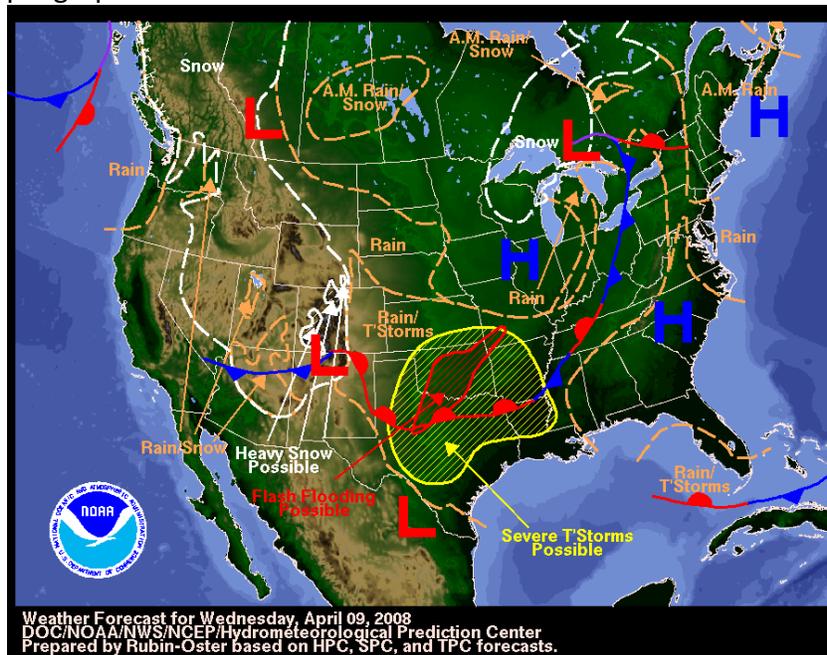
The USDA Agricultural Research Station in Sidney, Montana started a program a few years ago called, "Erase Your E-Waste." Last year in September, they collected e-waste in Sidney and in Williston, collecting over 9 tons of material! They will be doing this again in September, so you may consider gathering up all that old stuff that is piling up at home, at your relatives' house, or at work, and bring it to one of the locations in the 2008 Erase Your E-Waste campaign. For more information, you can visit:

<http://www.ars.usda.gov/Main/docs.htm?docid=8445>

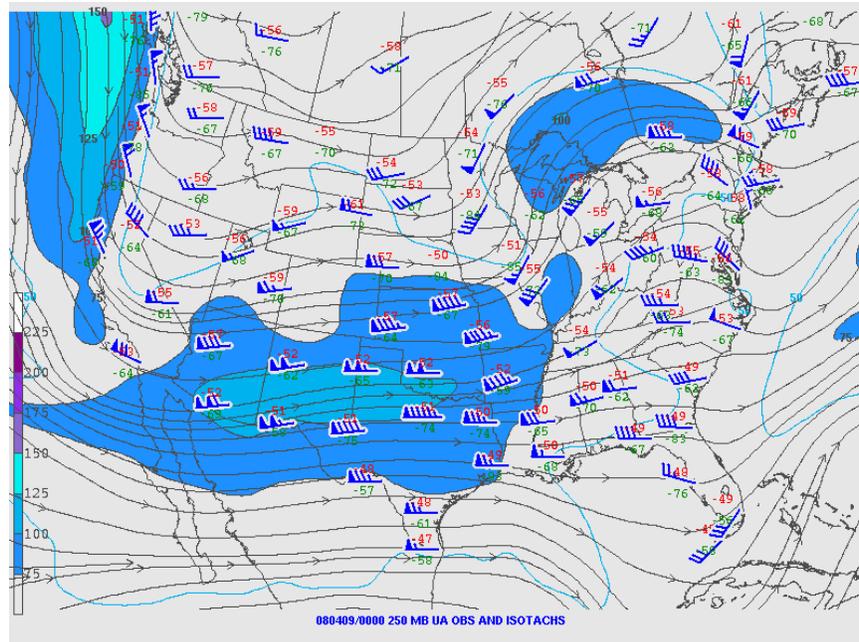
According to event organizer Jackie Couture, "electronics put heavy metals and toxins such as lead, chromium, cadmium, mercury, beryllium, nickel, zinc, and brominated flame retardants into the environment. E-cycling allows us to manage this avalanche of outdated electronics and the toxic substances they contain. And the great thing about e-cycling is that 98.5% of e-waste materials can be reused in some other fashion, meaning longer landfill life as well as a healthier environment!"

Questions for the Newsletter: I've had a lot of you suggest topics for the newsletter at recent Skywarn spotter talks. I have enough material to last several more newsletters, and I will spread them out over the next few weeks. Thank you for those who have let me know they enjoy the newsletter! It's one of the fun things I've been able to incorporate into my duties to help bring you more information. We now have over 220 people on the mailing list!

Getting Weather Maps: One of our weather spotters asked about how to get current weather maps on the web. She wanted to know where to get one showing warm fronts and cold fronts, and in the upper levels of the atmosphere showing where the jet stream is. The Hydrometeorological Prediction Center is a NWS center located in Camp Springs, MD. They provide some of this information on their website. <http://www.hpc.ncep.noaa.gov/> You can see the current weather map, and forecast maps out to 7 days. They also show broad areas of precipitation, winter weather impact graphics, and excessive rainfall areas. Here is an example graphic:



The Storm Prediction Center is best known for issuing outlooks for severe thunderstorms and tornados, as well as the watch boxes. But, they also have a great webpage for upper air weather maps. That information is available at: <http://www.spc.noaa.gov/obswx/maps/> The maps are available twice a day, at 12z (6 am MDT) and 00z (6 pm MDT). The graphic below is an example that shows the jet stream (usually seen at 300 or 250 millibars).



Now, I probably should explain what 250 millibars mean. In our atmosphere, we have pressure. The pressure is greater at the surface of the earth than it is as you rise to the top of the atmosphere. So, pressure decreases as you go up, which allows our weather balloons to get very large before they burst at about 100,000 feet. They can get to be the size of a two story house, and they start out about 5' by 6' when we release them. Sea Level is about 1013 mb. As you go up in terrain it decreases. Glasgow is at about 930 mb. Below is an example of a "sounding" from the weather balloon released at Glasgow, MT on June 16, 2007 between 5-7 pm. The green line is the dewpoint temperature as the balloon goes up, and the red line is the observed temperature. Where the two come together indicates increased humidity, and is usually the height we would find cloud layers at. The black numbers on the bottom are the temperature in Celsius and the blue dotted line that moves from the bottom left to the top right are the -20 Celsius and the 0 Celsius lines. The black numbers on the left side of the graph show the millibar level, and you can see that in this example there was a lot of moisture at 700 mb, which is around 9,800 feet. The line on the right side of the graph is to show the wind speed and direction as the balloon goes up.

You can see the upper air balloon soundings at: <http://www.spc.noaa.gov/exper/soundings/>

Visit from U.S. Senator Jon Tester's field rep: Penny Zimmerman, the Glendive field director for U.S. Senator John Tester visited the NWS Glasgow office. We gave her a tour of our facility, explained the role of the National Weather Service, and what we do locally here in northeast Montana. We also discussed the problem with not having good radar coverage over eastern Montana.

Upcoming NWS Glasgow events: Our meteorologist in charge will be heading to Billings next week for the Montana Governor's Preparedness Summit. I'm heading to Colorado for a conference held by the American Meteorological Society on Planned and Inadvertent Weather Modification. We'll let you know about the things we learned and did at those conferences in the next newsletter. Also, two of our staff members will be talking to school age children about weather safety at the Fort Peck Tribes Annual Earth Day program held in Poplar. This event is organized by Fort Peck Tribes Environmental Education Specialist Vina Smith. Last year they had over 700 students go through in two days, and she's expecting more than a 1,000 of them this year.

NOAA/NWS happenings:

Tour the hurricane center from your home: The National Hurricane Center is probably the best known NWS center in the country due to the publicity it receives during hurricane season. You can now take a virtual tour of the center. They have amazing briefing areas, and incredible computer systems. The public affairs officer for the National Hurricane Center, Dennis Feltgen, actually started his career with the NWS here in Glasgow, MT about 6 years ago, but he also had a 25 year career in broadcasting before joining the NWS. For more information on the tour, visit: http://www.noaanews.noaa.gov/stories2008/20080409_nhctour.html

Misc:

20/20 highlights weather this Friday night: The ABC news program 20/20 will be doing an hour long program on Friday April 18th titled, "Your Weather: Myths, Lies and Downright Stupidity" and it will include topics such as How to Survive a Tornado, Weather Forecasting and several others. You can get some of the highlights at: <http://www.abcnews.go.com/2020>

Dose of laughter:

Q: What happens when the fog lifts in California??

A: UCLA

The Michaels family owned a small farm in Canada, just yards away from the Montana border. Their land had been the subject of a minor dispute between the United States and Canada for generations. Mrs. Michaels, who had just celebrated her ninetieth birthday, lived on the farm with her son and three grandchildren.

One day, her son came into her room holding a letter. "I just got some news, Mom," he said. "The government has come to an agreement with the people in Washington. They've decided that our land is really part of the United States. We have the right to approve or disapprove of the agreement. What do you think?"

"What do I think?" his mother said. "Jump at it! Call them right now and tell them we accept! I don't think I could stand another one of those Canadian winters!"