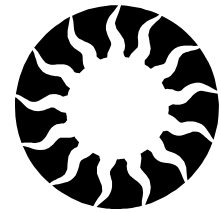


Weather Watcher

www.wrh.noaa.gov/Spokane



Idaho Receives National Recognition for Becoming StormReady

Through tremendous efforts from their local emergency managers and the National Weather Service, ten Idaho counties and 39 cities in the state have earned a distinctive title - they are tops in the nation at enabling their citizens to be "StormReady".



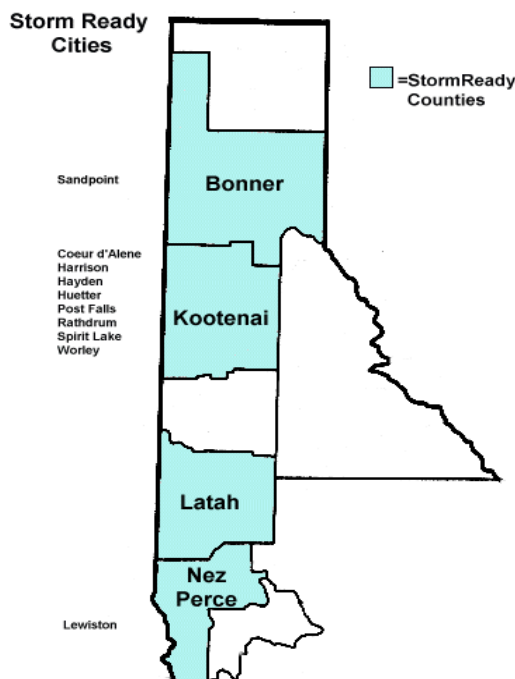
NWS StormReady is a voluntary preparedness program. It uses a grassroots approach to help communities develop communication methods and safety skills necessary to save lives and property during severe weather threats ranging from tornadoes to mudslides to blizzards.

Local StormReady Advisory Boards, made up of county emergency managers, representatives from the Idaho Bureau of Disaster Services and the National Weather Service, have reviewed plans in these locations that ensure skills and procedures are in place to help their communities deal with the impact of severe weather before, during, and after a storm. The counties in north Idaho that have earned this recognition are Bonner, Kootenai, Latah, and Nez Perce. The cities include Sandpoint, Coeur d'Alene, Harrison, Hayden, Huetter, Post Falls, Rathdrum, Spirit Lake, Worley, and Lewiston.

On June 14th, local officials from all across Idaho were invited to attend a recognition ceremony held during the Idaho Governors' Conference for Emergency Management in Coeur d'Alene, ID. Greg Mandt, Director of the Office of Climate, Water, and Weather Services at the NWS, and Jim Campbell, NWS Western Region Deputy Director, spoke and presented the

awards. NWS Spokane Meteorologist In Charge, John Livingston and Warning Coordination Meteorologist, Ken Holmes were also in attendance. Recipients received StormReady certificates for their counties and communities, in addition to special road signs to post signifying this achievement.

Collectively these Idaho locations have also set a national record for the most locations in a single state to achieve this recognition. Previously, Illinois held the state record for the most locations with twelve meeting the criteria. Nationally, there are 172 communities or counties that can claim the title of "StormReady". ☀
Ken Holmes & Marilu Trainor, Western Region Public Affairs



www.stormready.noaa.gov

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Editor's Notes

Summer is here! A time filled with outdoor activities and vacations. It is also a time to keep an eye to the sky. Thunderstorms can develop within minutes and threaten your area. Lightning is hazardous, not only can it strike and harm you, it can also lead to fire starts in our dry forests and grasslands. So be cautious!

If there is something you would like to see in the next newsletter or if you have comments about a previous issue, please contact the editor, Robin Fox.

The main purpose of this publication is to keep our readers informed about our services and programs, and to recognize those who help us accomplish our mission, including weather spotters, coop observers, media and emergency management.

All articles are written by the NWS staff. A special thanks to Charles Ross, Ron Miller, Ken Holmes, Jonathan Fox, Gary Bennett, and Tracy Cox for their contributions. ☀

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Fire Weather forecasting does not always involve fire!

The fire desk at the Spokane Weather Office has been asked to provide active support to projects outside the realm of fire this spring. It turns out that the health of some of our forests is being threatened this year by a pair of insect invaders, the Douglas Fir Tussock Moth (DFTM) and the Western Spruce Budworm (WSB). Routine weather information is being provided to support the aerial application of biological chemicals which controls the spread of these destructive insects. The ideal time for application is the few hours around sunrise, when it is cool, damp and calm. If these attempts of control are successful, the spraying efforts will cease at the beginning of July. So what are these insects and why is it important to control the spread of them?

The DFTM is a periodic invader of the Douglas Fir trees over portions of Washington and Idaho. The insect, in its larval or caterpillar stage, often can lead to widespread defoliation of the fir trees if its numbers are sufficient. Although these insects do not directly kill the trees, if the defoliation is severe the tree will die within a year. Data gathered in moth traps last fall by the Forest Service indicates the potential is high for such an invasion this year. About 35,000 acres of the Okanogan forest near Twisp and about 75,000 acres of forests over portions of north Idaho are the areas most at risk. The DFTM is controlled with the aerial application of TM-BioControl-1. TM-BioControl-1 is a highly perishable insecticide made from a natural virus of the Tussock Moth.

The WSB is an insect quite similar to the DFTM. Like the DFTM, this insect also feeds on the foliage of local coniferous trees. In this case, the WSB feeds on Englemann Spruce, Western Larch and Douglas Fir trees. Its numbers are also pre-

dicted via moth traps set earlier in the year. This spring and summer the main threat to area forests is concentrated on Yakama Indian lands over portions of Yakima and Klickitat counties in east-central Washington. This insect is controlled with the application of a naturally occurring bacteria, *Bacillus thuringiensis*, or B.t. It is specific to moths and butterflies and quite effective in controlling the Budworm population without having any adverse effects on the environment.

Beginning, June 17th, the NWS Spokane will provide onsite weather support to the Forest Service DFTM spray project in the Okanogan Forest. Support for the large project could last up to a month. Visit www.fs.fed.us/r6/nr/ffd/dftmweb/project01.htm and ext.nrs.wsu.edu/info/fhn/esprbdw.html for more information. ☀ *Jonathan Fox*



Douglas Fir Tussock Moth in caterpillar stage

**Remember, to make a Weather Spotter Report, please call the NWS Spokane
(509) 244-0435**

What a difference a couple years can make....

Two years ago this spring, mountain snowpacks were at an all time high and the potential for spring snowmelt flooding loomed large. Thanks to a cool and dry spring, the snow melted in an orderly fashion and flooding was minimal. Similar to that spring, the flooding has been minimal this year. The biggest difference between these years lies in the amount of mountain snowpack which feeds area rivers and lakes every spring and summer. This year mountain snowpacks have averaged roughly 50% of normal. This has resulted in the lowest snowpack since the drought year of 1976-77. Due to the low snowpack, the water supply forecasts for the region are at near record low levels. Many rivers and streams are flowing at or near their lowest levels on record for this time of year. As of early June, most rivers and streams have seen their peak runoff for the snowmelt season and will slowly recede through the summer months. Indications are that rivers and streams will only be flowing at 30-60 % of their normal runoff through the dry summer months. ☀ *Charles Ross*

The Dry Weather Continues...

The Inland Northwest was hoping for a wet spring to help offset the very dry winter we just completed. Unfortunately, this was not the case. While precipitation amounts were below normal at all three sites, it was not by a staggering amount. In fact, Spokane's precipitation was fairly close to the normal value for the 3 months combined. The main story was that the precipitation wasn't above normal, and so the drought continues. The total precipitation for the water year (Oct 1st -May 31st) is as follows: While these numbers are rather bleak, they are still consid-

	2000/01	Norm	%	Rank	1976/77
Wenatchee	3.87"	6.77"	57%	5th of 42 years	1.65"
Lewiston	7.36"	9.59"	77%	16th of 120 years	4.97"
Spokane	7.86"	13.01"	60%	4th of 120 years	5.67"

erably better than the extreme drought winter of 1976/77. In general, the entire Inland Northwest only received about 60-75% of the normal precipitation during this past winter. The spring of 2001 had few highlights. March was pretty much normal for both temperatures and precipitation. By

Spring Weather Statistics

Wenatchee Airport	Mar	Apr	May	Total
Average High Temp	52.7	59.4	72.9	61.7
Departure from Normal	-0.2	-2.5	+2.0	-0.2
Average Low Temp	33.8	39.4	47.6	40.3
Departure from Normal	+0.7	-0.5	+0.8	+0.3
Total Precip	0.72	0.49	0.02	1.23
Lewiston Airport	Mar	Apr	May	Total
Average High Temp	56.0	58.0	73.9	62.6
Departure from Normal	+1.9	-4.0	+3.1	+0.3
Average Low Temp	34.2	38.7	46.5	39.8
Departure from Normal	-0.5	-1.0	0.0	-0.5
Total Precip	0.85	1.65	0.67	3.17
Departure from Normal	-0.24	+0.52	-0.64	-0.36
Spokane Airport	Mar	Apr	May	Total
Average High Temp	48.7	53.1	68.9	56.9
Departure from Normal	+1.1	-3.9	+3.0	+0.1
Average Low Temp	29.6	34.2	41.8	35.2
Departure from Normal	-0.3	-0.8	-0.2	-0.4
Total Precip	1.37	1.71	0.80	3.88
Departure from Normal	-0.12	+0.53	-0.61	-0.20
Total Snow	2.2	2.5	0.0	4.7
Departure from Normal	-1.4	+0.7	-0.2	-0.9

April, a definite cool and wet pattern was in place. Daytime highs were 2.5-4° below normal, but the low temperatures were about normal. This is indicative of cool weather due to clouds rather than cold air masses moving into the area. Spokane and Lewiston both had precipitation on 21 of the 30 days in April, while Wenatchee had 14 wet days in the month. The lone warm spell came at the end of the month where Lewiston topped out at 81° on the 25th. Wenatchee and Spokane both made it into the upper 70s during this time. This warm spell ended with strong thunderstorms on the afternoon of the 27th. One-inch sized hail fell over northern Whitman county (south of Spokane) and several power outages occurred in the Spokane metro area.

May was considerably drier and warmer than April. Average daytime highs jumped about 13-15°. This was in large part due to a somewhat abnormal warm spell just before the Memorial Day weekend. Lewiston hit 96° on the 23rd, with Wenatchee and Spokane reaching 93° and 90° respectively. High temperatures in the 90s aren't exactly rare for May, especially in Lewiston and Wenatchee. But they have been hard to come by of late. Lewiston hadn't seen a 90° day in May since 1994. Spokane has had 90° in May only 18 out of 121 years, the last one being in 1993. As in April, the warm weather came to an end with strong thunderstorms on the 27th, this time on the Camas Prairie southeast of Lewiston. ☀ *Ron Miller*

Outdoor Lightning Safety

National Lightning Awareness Week June 18-22

Although anywhere outdoors involves risk during a lightning storm, certain locations are more vulnerable than others. These include: near the water, such as when involved in boating, fishing or just lying on the beach; near trees, such as on the golf course or near picnic grounds; on high places such as house roofs during construction or working on antennae; in other open areas, such as a farmer's field or hiking trail; near vehicles or planes such as police, airport baggage handlers and heavy equipment operators. It is a good idea to seek safe shelter when thunderstorms approach. ☀

Staff News

Summer student Intern, Laurie Koch, recently graduated from University of Arizona in Tucson with a Bachelor of Science degree in Meteorology. She has accepted a Meteorologist Intern position in Eureka, CA. Best of Luck to Laurie in her new career! ☀ *Robin Fox*

Trivia Answer:
The Kootenai River in extreme north Idaho.

Fire Season Outlook 2001



Palouse Falls during peak flow this spring. It is located on the Whitman and Franklin county border in eastern Washington .

The spring rains have helped replenish just some of precipitation lacking from the winter. The fine fuels of grasses and shrubs have renewed growth, while the larger fuels of trees have slowed their drying. The weather so far this June has kept these fuels from curing too quickly. The moist, westerly flow has led to showery conditions, lingering mountain snow and cool daytime temperatures. Northeast Washington and the Idaho Panhandle have already reached their normal precipitation levels for the month of June, while the east slopes of the Cascades still lag behind. Unfortunately, precipitation amounts since October still reflect the current deficit, as rainfall amounts are well behind everywhere in eastern Washington and north Idaho. At this point, it will be difficult to catch up.

The weather in June is one key factor to how the fire weather conditions will pan out. If the cool and showery conditions can linger later into the month, this will prolong the curing of the grasses and shrubs and in turn delay the start of the fire weather season, especially for northeast Washington and the Idaho Panhandle. On the east slopes of the

Cascades, grasses and shrubs have already cured or dried out on the south facing slopes, with other areas in the process of drying out. Once fully cured, the grassy slopes will be prone to fire starts from lightning storms or human intervention. After the high wildfire season commences, there are many other factors that will determine it's outcome, including: the amount of lightning storms and where, along with how hot and dry the summer is. Visit www.wrh.noaa.gov/Spokane/fire.htm for more information on fire weather and the latest forecasts. ☀

Robin Fox & Gary Bennett

Summer Outlook

The seasonal outlook expects a warmer than normal July with near normal rainfall. Typical warm and dry conditions are anticipated for the months of August and September. For more, visit www.cpc.ncep.noaa.gov ☀

Weather Watcher



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TRIVIA: What is the only Inland NW river that starts and ends in Canada ?