

# The Weather Watcher

## of the Inland Northwest

[www.weather.gov/Spokane](http://www.weather.gov/Spokane)

### New Severe Hail Size

In an effort to better represent hail that produces damage and to reduce user complacency, all NWS offices across the Western U.S., including the National Weather Service in Spokane, have adopted a new severe hail size criterion of 1" diameter for Severe Thunderstorm Warnings. The new size criterion went into effect June 1st. Previously, the hail size criterion for severe thunderstorms was 3/4" or penny-sized.

This change was in response to research conducted across other portions of the country that demonstrated significant property damage does not occur until hailstones reach 1" in diameter. The Severe Thunderstorm Warning wind criterion will remain the same at 58 mph (50 knots).

Information for organized strong, but less than severe, thunderstorms will be provided by a Special Weather Statement (SPS)

that will be headlined as a Significant Weather Advisory. Weather Forecast Offices will continue to collect and disseminate reports of hail 3/4" in diameter or larger using the Local Storm Report (LSR). The LSR is automatically highlighted in the top news section of the NWS Spokane webpage and plotted by the NWS Storm Prediction Center at: <http://www.spc.noaa.gov/climo/online/>

As always, weather spotters should report hail of any size as the information is very important to our warning operations. For more details and to hear an informational podcast on this topic, please visit

<http://www.wrh.noaa.gov/otx/outreach/review/features/OneInchHail2009.php>

⊗ Kerry Jones

**SPOTTER REPORTS: 509-244-0435 or [espotter.weather.gov](mailto:espotter.weather.gov)**

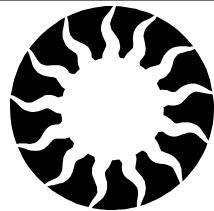
### Wild Spring Storms

On the afternoon of June 6th, the NWS Spokane office received several spotter reports and photographs of at least four landspout tornadoes in northern Lincoln County. This amazing image of twin tornadoes below was captured by Dawn Nelson near Wilbur, Washington.



A landspout tornado is used to identify a non-supercell tornado that is essentially the land-based equivalent of a waterspout. They typically form when pre-existing horizontal circulations are tilted upward and stretched by an existing or rapidly developing thunderstorm updraft. However, a large number of landspout tornadoes are observed in the absence of thunderstorms and beneath lines of towering cumulus clouds often before precipitation is detected by radar. They are usually seen as a narrow uniform funnel. Although rare, damage associated with these features can be significant. Fortunately, these tornadoes remained over the fields and no damage was reported. More information on the tornadoes can be found at [http://www.wrh.noaa.gov/otx/photo\\_gallery/Jun6\\_Creston\\_tornadoes.php](http://www.wrh.noaa.gov/otx/photo_gallery/Jun6_Creston_tornadoes.php).

⊗ Robin Fox



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#### Editor's Notes

*Thunderstorm season is here! Play it safe. Lightning can strike as far as 10 miles from the area where it is raining. That's about the distance you can hear thunder. At the first clap of thunder, seek safe shelter immediately and wait at least 30 minutes after the last clap of thunder before you to go back outside. National Lightning Awareness Week is June 21-27.*

*We have made a change to the newsletter distribution. Since each newsletter issue is available online, we have limited mailing paper copies. If you would like a paper copy, please contact us and we will keep you on the mailing list.*

*For any questions or comments on the newsletter, please contact Robin or Kerry at (509) 244-0110 extension 223 or email [nws.spokane@noaa.gov](mailto:nws.spokane@noaa.gov).*

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

*All articles are written by the NWS staff. A special thanks to Ron Miller, Kerry Jones, and Robert Tobin for their help on the included articles.*

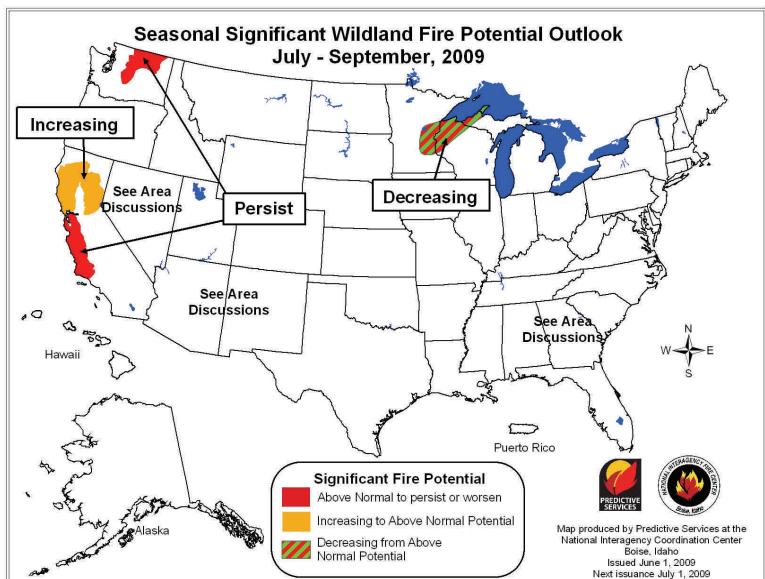
## Spotter News

The spring weather spotter training sessions are wrapping up. Hopefully, some of you got a chance to attend a session. Besides training current weather spotters, it gives the National Weather Service a chance to recruit more weather enthusiasts. We are happy to say that spotter enrollment is up and we have gained over 100 more spotters since January. The National Weather Service Spokane has about 860 weather spotters across eastern Washington and north Idaho.

Keep up the great work! The pictures and reports from the past several weeks have been terrific, from the tornadoes and landspouts to the flooding and hail. Remember if you need to review the spotter checklist, you can find it online at <http://www.wrh.noaa.gov/otx/spotter.php>. ☺ Robin Fox

## Spring Weather Statistics

| Wenatchee Water Plant | Mar   | Apr   | May   | Total |
|-----------------------|-------|-------|-------|-------|
| Avg High Temp         | 49.9  | 63.6  | 73.3  | 62.3  |
| Departure from Norm   | -5.0  | -1.0  | +0.2  | -1.9  |
| Avg Low Temp          | 30.8  | 39.3  | 47.3  | 39.1  |
| Departure from Norm   | -3.1  | -1.5  | -1.3  | -2.0  |
| Total Precip          | 1.14  | 0.35  | 0.35  | 1.84  |
| Departure from Norm   | +0.50 | -0.16 | -0.16 | +0.18 |
| Total Snowfall        | 0.5   | 0.0   | 0.0   | 0.5   |
| Departure from Norm   | -0.4  | 0.0   | 0.0   | -0.4  |
| Lewiston Airport      | Mar   | Apr   | May   | Total |
| Avg High Temp         | 48.8  | 61.3  | 73.5  | 61.2  |
| Departure from Norm   | -5.0  | -0.3  | +3.6  | -0.6  |
| Avg Low Temp          | 32.5  | 39.4  | 47.2  | 39.7  |
| Departure from Norm   | -3.1  | -1.2  | +0.3  | -1.6  |
| Total Precip          | 2.12  | 0.82  | 0.86  | 3.80  |
| Departure from Norm   | +1.00 | -0.49 | -0.70 | -0.19 |
| Total Snowfall        | 1.7   | T     | 0.0   | 1.7   |
| Departure from Norm   | +0.6  | -0.1  | T     | +0.5  |
| Spokane Airport       | Mar   | Apr   | May   | Total |
| Avg High Temp         | 41.7  | 55.1  | 68.0  | 54.9  |
| Departure from Norm   | -6.9  | -2.4  | +1.8  | -2.5  |
| Avg Low Temp          | 27.5  | 35.4  | 43.4  | 35.4  |
| Departure from Norm   | -2.9  | -0.1  | +0.8  | -0.7  |
| Total Precip          | 2.43  | 1.29  | 0.93  | 4.65  |
| Departure from Norm   | +0.90 | +0.01 | -0.67 | +0.24 |
| Total snowfall        | 9.5   | 3.9   | 0.0   | 13.4  |
| Departure from Norm   | +5.9  | +3.0  | -0.2  | +8.7  |



## 2009 Fire Season Outlook

The winter of 2008/2009 differed greatly across the Inland Northwest. While areas across eastern Washington and north Idaho received above normal precipitation, the Cascade Mountains north of Interstate 90 received below normal precipitation.

A cool March and April rapidly turned very warm and dry in May. This allowed snow to melt faster than normal and allowed fuels to dry and cure well of normal. June is expected to have normal to slightly below normal temperatures and near normal precipitation, and July and August will be warm and dry as usual. Most of the precipitation in July and August is from thunderstorms. The majority of the long term forecasts indicate a normal to slightly below normal convective season for the summer of 2009.

So what can we expect? For most of eastern Washington and north Idaho we can expect about normal fire conditions with a few fires getting large. The area of concern will be the Cascade Mountains north of I-90 and east across the Okanogan Highlands along the Canadian border. In these areas we expect above normal fire starts and above normal acreages burned. Overall, it all depends on how much lightning and fireworks that Mother Nature delivers. ☺ Bob Tobin

## Zeros are Important Too

Another zero in the rain gauge? Don't despair, send it in! It's summertime in the Inland Northwest. Hot and dry weather can create ideal conditions for wildfires by drying out grasses and shrubs known as the fuels. Then thunderstorms arrive. Lightning is the main cause for wildfires. Knowing how much rain falls from a thunderstorm is important. Sometimes the rain can be a downpour and other times just a sprinkle. All this information is useful for weather forecasters. For more information of fire weather, please visit the National Interagency Fire Center at <http://www.nifc.gov/>. ☺

## Spring 2009

**A**fter a fairly cold and snowy winter, Inland Northwest residents were hoping to be treated to an early warm spring. Unfortunately the equatorial Pacific were slowly decaying, the effects of La Niña lasted for much of the spring.

**March** started off on the wet side with a moist Pacific storm system arriving during the first few days. The Spokane airport recorded 0.85" of precipitation over the first 3 days of the month, while Omak had 0.68" and Coeur d'Alene had 0.84" in that same period. Temperatures were generally warm during this event so the majority of the precipitation fell as rain in the lower elevations. But then a cold Canadian air mass moved into the Pacific Northwest causing well-below normal temperatures. Everyone stayed below freezing on the 10<sup>th</sup> and 11<sup>th</sup>. Coeur d'Alene failed to even reach 20° for a high on the 10<sup>th</sup>. By the morning of the 11<sup>th</sup>, numerous sites were setting record low temperatures. Priest Lake dropped all the way to -13°F while the Coeur d'Alene airport dropped to -11°F. After this cold snap, temperatures returned to near-normal readings for March, but the weather remained wet with measurable precipitation on more days than rainfall. By the end of the month, yet another cold front developed. While not nearly as frigid as the mid-March event, this storm brought significant spring snow to many locations. A spotter in Palouse, Washington measured 6.3" of snow on the morning of the 29<sup>th</sup>. Sandpoint picked up 4.2" and the Spokane Airport received 3.9". This latest addition of snowfall pushed the official Spokane seasonal total into first place on the list of snowiest winters ever! There would be a few more light snowfalls to reach the final seasonal total of 97.7", which topped the previous snowy winter of 93.5" in 1949/50. As a whole, the month of March was wetter than average and much cooler than normal, with daytime temperatures an average of 5 to 7° below average.

The cool and snowy spring weather persisted into the first few days of **April**. The Spokane Airport added to its seasonal total with 1.4" and 2.4" of snow on the 1<sup>st</sup> and 2<sup>nd</sup>. But the heavy snow was over the Palouse. Moscow picked up 7" of snow, Troy received 6.5", and the town of Palouse had 6" of new snow. Inland Northwest

residents were now truly wondering if this winter would ever end. They got their answer as temperatures rebounded quickly to above-normal short-lived as usual with a cool wet Pacific storm system moving through during the middle of the month. But even warmer weather ensued as most locations warmed into the 70s with the Columbia Basin reaching the mid 80s. The Wenatchee Airport set daily high temperature records on both the 20<sup>th</sup> and 21<sup>st</sup> with highs of 83° and 84° respectively. While April was still a bit cooler than normal, the two warm and dry episodes during the month meant drier conditions for many locations.

This warmer and drier weather trend continued into the month of **May**. The first part of the month saw near-normal temperatures and with measurable precipitation on more days than rainfall. On the evening of the 6<sup>th</sup>, a few thunderstorms developed. A funnel cloud was spotted near Odessa, and then a tornado actually touched down north of Davenport causing mainly tree damage. Strong thunderstorm winds also caused some damage south of Deer Park. The cool and measured 6.3" of snow on the morning of the wet weather ended by mid-month as temperatures began to climb. On the 18<sup>th</sup> the mercury climbed into the 80s in most locations. Strong snowfall pushed the official Spokane seasonal total into first place on the list of snowiest winters ever! There would be a few more light snowfalls to reach the final seasonal total of 97.7", which topped the previous snowy winter of 93.5" in 1949/50. As a whole, the month of March was wetter than average and much cooler than normal, with daytime temperatures an average of 5 to 7° below average.

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**Want to report precipitation? Check out CoCoRaHS at <http://www.cocorahs.org>**

### Summer Outlook

**A**ccording to the National Weather Service's Climate Prediction Center, the summer of 2009 looks to be hot and dry with a better chance of above normal temperatures and below normal precipitation across the Inland Northwest. Visit <http://www.cpc.ncep.noaa.gov/> for more details.

**Answer:** It is a small non-supercell tornado that develops from a boundary layer circulation beneath a towering cumulus cloud.

## Remember your Summer Spotter Checklist

**Tornado or Funnel Cloud**

**Strong Winds:**  
30 mph+ or damage

**Hail:** pea size or larger

**Heavy Rain:**  
Showery: 1/2" + in 1 hr  
Steady Rain: 1" + in 12 hrs or 1.5" + in 24 hrs

**Any Flooding**

**Reduced Visibility:**  
under a mile due to rain, dust...

**Travel Problems or Any Damage:** due to severe or hazardous weather.

## Lightning Safety

**S**ummer is the peak season for one of the nation's deadliest weather phenomena—lightning. Lightning is major cause of storm related deaths. In the United States, an average of 62 people are killed each year by lightning. Only about 10% of people who are struck by lightning are killed, leaving 90% with various degrees of disability.

To date, in 2009, 14 people have been killed and in 2008, 28 people died due to lightning strikes. Hundreds of others were permanently injured. People struck by lightning suffer from a variety of long-term, debilitating symptoms, such as memory loss, attention deficits, sleep disorders, numbness, dizziness, stiffness in joints, irritability and fatigue to name a few. Lightning is a serious danger.

Remember, stay safe when you hear thunder and see lightning. Go indoors to an enclosed building or vehicle. Avoid open fields or the open water. Stay clear from tall isolated trees or poles. For more information on lightning safety, visit <http://www.lightningsafety.noaa.gov/>. ☀ Robin Fox

## World Wide Weather on the Web

**A**fter significant weather events or receiving amazing weather pictures, the NWS Spokane likes to post a story on the web page. This April, we posted a story about snow rollers on the Camas Prairie after we received terrific pictures from Tim Tevebaugh near Craigmont.

This web page became very popular in the web world through April. It received more hits per day than the NWS Spokane usually receives in a month. The page was directly linked to a number of other web pages in the world, including New Zealand, Belgium, Korea, Poland, plus several blogs in Spanish and Chinese.

Tim has had a lot of attention from our sharing his photos with interviews from various news agencies. According to Tim, "I've been contacted by Ripley's Believe it or Not, the National Review, Discovery Channel Canada, Sun Magazine, World Entertainment News Network, and several others. The gal from the National Review told me she saw the photos on a London newspaper site. They even showed up on a witchcraft site!" For more information to visit the site, visit [http://www.wrh.noaa.gov/otx/photo\\_gallery/snow\\_rollers.php](http://www.wrh.noaa.gov/otx/photo_gallery/snow_rollers.php) ☀ Ron Miller

## The Weather Watcher

Of the Inland Northwest



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**Trivia: What is a landspout?**