

Hurricane Hazel

Richmond had sustained winds of 68 mph with a maximum gust recorded at 79 mph and a barometer reading of 28.75 inches a new record at that time. More than 50 homes lost roofs in the Richmond area but only 1.15 inches of rain fell as the storm was traveling northward at a speed of 50 mph. Hazel was also unusual in terms of her forward speed. We all know that hurricanes usually weaken quickly once they move onshore, but Hazel was moving so fast she outpaced her collapse rate. By the time Hazel pushed into Virginia during the afternoon of October 15, she was moving nearly 50 mph. The storm caused \$15 million in damage in Virginia and eventually spread destruction as far north as Canada. Canadians count Hazel as one of their all-time greatest natural disasters. This was one of the fastest forward speeds recorded for hurricanes. Most move at speeds no faster 20-30 mph. The record speed was recorded in the New England hurricane of 1938 which had a forward speed of 75 mph. Hazel lashed Suffolk in southeastern Virginia with a 108 mph gust. 100+ mph gusts were recorded in Norfolk and 98 mph in Washington, D.C.

Oct. 15, 1954, Hurricane Hazel: In Hampton, winds gusted to 130 mph, in Blackstone to 92 mph and in Richmond to 79 mph. Damage in Norfolk alone reached \$3.5 million with 1,800 homes and businesses damaged. Hundreds of thousands of trees blew down, taking with them half the state's phone and electric lines. Shenandoah Valley turkey growers lost 150,000 to 250,000 turkeys when poultry sheds were wrecked.

Two things I believe are true about Hazel.

1) The forward speed of Hazel (and probably the New England Hurricane you referenced) contributed to the high wind, especially east of the center.

2) A hurricane book we have in the office indicates that Hazel became extratropical (lost its tropical characteristics) by the time it got into southern Virginia.

There was a strong upper level trough to the west that it would have contributed to cold air aloft becoming entrained into Hazel and would have helped to produce hail.

The same may have happened with the New England hurricane.

Norfolk had its strongest winds on record from Hazel (rather than a strong hurricane near the coast).

Interestingly, I gave a presentation to a group of senior citizens in Verena about a month ago.

It was obvious they were all around at the time of Hazel.

Only a couple of them remembered Hazel (or were able to associate a past event with that name).

Lyle

Below is what Rick Schwartz had to say about hail in hurricanes! I hadn't heard of hail in Hurricanes until I read his book!

The energy with our Mid-Atlantic "inland" hurricanes is incredible!

When we get the next, it will provide plenty of material for study and understanding.

I certainly plan to study it closely, as we can reasonably expect two or three big wind events of Hazel magnitude before this century ends.

The following excerpt of the hurricane of 1896 was contained in the Sept. 30, 1896, issue of the Reading (PA) Eagle: "Hail in the Coal Regions; Heavy Damage"

"Pottsville: Never before in the history of Schuylkill County did the winds blow with such great velocity as that which arose at about 10 pm.

Tuesday and continued uninterruptedly for nearly six hours.

The wind came from the east and was accompanied by rain and in some localities, notably at Ashland, by hail.

The winds finally veered, coming from the south ... " (nothing more on hail) Excerpt from the Richmond (VA) Dispatch "Trees Uprooted--Small homes blown away--Heavy Rain" "Cobham, Va., September 29.

A terrible windstorm struck this section last night about 10 o'clock.

Trees are uprooted all over the country, and fences and small homes blown down.

Telephone wires are down and all communication is cut off.

The rain, which had been falling steadily all day, poured in torrents and was accompanied with hail.

Never before to our recollection has such a storm visited these parts..." "The temperature dropped 20 degrees in a few hours..."

Date: Wed, 15 Dec 2010 15:47:49 -0500

Richard,

I had never heard of the large temperature drop with Hurricane Hazel.

I also had never read of hail with a hurricane. It must be very rare. If you only know of the two cases.

Yes, I would be interested in the newspaper clipping!! We are getting ready for the snow tomorrow. The weather service has just issued a winter storm warning for our area tomorrow.

From: RICHARD SCHWARTZ To: wwkoontz@verizon.net

Sent: Wednesday, December 15, 2010 2:11 PM

Subject: RE: Hail seems rare but I'm sure there were isolated pockets of hail during Hazel.

I checked my file and found references to hail during the great hurricane of 1896.

If you want, I can e-mail you the newspaper excerpts on the 1896 hail.

Interestingly, there was a > large temperature plunges in conjunction with the hail events, just like with Hazel.

Date: Sun, 12 Dec 2010 13:37:52 -0500 Rick, I know you have researched many hurricanes and I have a question I have been wanting to ask you.

I have never read of hail during a hurricane and even a lot of lightning in a hurricane would be very unusual.

But in the records of KDCA on October 15, 1954 they have a trace of snow recorded.

Well you know that the NWS records hail in the snow column.

Well this date was when Hurricane Hazel hit the Washington, DC area so they indicated that hail fell on this date.

Have you heard of hail during hurricanes ? If so how rare is it ?

Your comments would be appreciated!!

Lowell L. Koontz

April 13, 2011 11:56 AM

Subject: Re: Octobers Snows

I can tell you that October 10, 1979 was ice pellets at the Richmond Airport.

That day, it snowed around 1-3 inches at Fredericksburg and around an inch in the DC area.

Big Meadows had something like 10 inches.

It was a heavy wet snow.

A co-worker > driving (a volkswagen beetle I believe) up I-95 toward Washington said it was accumulating so fast on the windshield, it was hard to keep it clear, it kept caking up.

If he was driving an old beetle, I imagine that contributed to his problem, probably not much power in those wipers and the windshield is small.

Hail in a hurricane is practically unheard of.

I think these are sleet and snow events.

Washington has had a few other events of "accumulating" snow in October besides 1979.

When I have the chance to look at your attachments, I'll get back to you. Lyle

April 13, 2011 10:41 am I have been doing some research to determine whether the traces of snow in October were hail or snow.

The October 15 of 1954 trace was hail that occurred in hurricane Hazel; this was also recorded in KDCA records as a trace. > >> >>> >> >>