PERSISTANT COLD FREEZES LOCAL WATERWAYS

January 2004 was cold, snowy and dry. The warmth of the first 5 days were quickly forgotten.

New Years arrived on a mild note with temperatures in the 40’s and lower 50’s across the region. By the 3rd and the 4th temperatures rose into the 60’s and lower 70’s across all but the northern and far western regions. Greg Keefer of Hagerstown 1 E reported a daily record of 66 on the 3rd.

The evening of the 23rd and the morning of the 24th, an Alberta Clipper was forecasted to drop a dusting to an inch. Another storm followed on the 26th with temperatures in the 40’s and lower temperatures in the 30’s. As the Alberta Clipper hit, temperatures during the snow event were between 13F and 11F here at Manchester 1 SW, Carroll County, MD. Greg Keefer of Hagerstown 1 E reported a daily record of 76.

By 9:15, there was a light dusting on the cars and the driveway. Between 9:30 - 10, the snow picked up and the visibility lowered. By 10:30 I had 1/2” of new snow and the snowing was moderately to heavy. By 11 1/1” of snow had fallen and the visibility was 1/8 mile. By 2 AM of the 24th, 4.1 inches of snow had fallen, by 2:30, 4.4”; and by 7 AM, 6.0”. At 7 AM the snow had stopped. By 8:30 light to moderate snow began again and continued until a little after 1 PM.

The areas of heavy snow over south central Pa and north central MD remained stationary during the snow event thus the heavier snowfalls. Plus, even though there was very little moisture with the Alberta Clipper, temperatures during the storm were only between 13F and 11F here at Manchester 15SW giving ratios of 30 to 1. The 30 to 1 ratio was the same with melted gage precipitation and the core sample.

After a low of zero and a high of 18 on the 27th, it was time for the next “bigger” storm to hit. The second storm began around the same time as the Alberta Clipper did, at around 8:45 PM. But at 6:58, the snow stopped and did not start again until 9:58. It was a very light snow with small flakes. Light snow continued until between 10:30 to 11, then snow suddenly became heavy! At 11:08, 0.3” snow had fallen, by 11:23, almost 1” snow. At 11:44, very heavy snow was falling and the visibility was down to 1/16 mile! By 11:52, 1.8” snow had fallen. Between 11:45 to 11:55, 1/2” snow fell in 10 minutes (snowfall rate of 6”/hr) and between 11:45 to 12:00 AM, 3/4” snow fell in 15 minutes (snowfall rate of 3”/hr). These snowfall rates were brief however. By 1:08 AM of the 26th, I had 4.0” of new snow and by 2:04 6.0” of new snow, (snowfall rate of almost 2”/hour between 11PM and 2AM.) At 2:20 heavy snow was still falling and the visibility was 1/16 mile. At 5:23 AM, the snow had tapered off and the visibility was over 2 miles. I had 7.3” of snow from this storm. This storm was wetter with the melted precipitation of 0.63” taken from a core sample. Light snow, drizzle, freezing drizzle and light freezing fog would continue for the rest of the day and night of the 26th into the 27th.

On the 27th, there was rime ice on the trees and bushes making them all white along with 1/8” to 1/4” of glaze ice which was very hard to scrape off the car. Moderate to heavy snow fell again at 4 to 5 PM then light snow fell the rest of the evening. Another 2.5” snow fell for the day.

On the 28th, there was still rime ice and glaze on the trees and bushes. Winds 20 -40 mph blew and drifted the snow to drifts to 25” deep in the back yard. 16.5” snow fell in 5 days from the 23rd to the 27th.

EXTREMES REPORTED BY ACON OBSERVERS

<table>
<thead>
<tr>
<th>MAXIMUM TEMPERATURE</th>
<th>MINIMUM TEMPERATURE</th>
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<tbody>
<tr>
<td>Jug Bay Wetlands</td>
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<td>Oxon Hill</td>
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<td>Forest Glen</td>
<td>73</td>
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<td>WARMEST AVG. TEMP.</td>
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<tr>
<td>Ridge</td>
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<td>Hollywood</td>
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<td>Frostburg</td>
<td>20.8</td>
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<tr>
<td>MAXIMUM PRECIPITATION</td>
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<td>MAXIMUM SNOWFALL</td>
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<tr>
<td>Frostburg</td>
<td>23.5</td>
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Gary Gallaher of Bear 2 SW, DE
Nighttime winds prevented the temperature from falling rapidly at nights with snow cover. 20 days with the maximum temperature 32. The record for any month is 21 days set in January 1977. 9 consecutive days with the maximum temperature 32 or below is the greatest for any January since 1970. 13 days with maximum temperature in the 20’s tied January’s record set in 1977. 10 days with measurable snowfall broke the January record of 9 set in 1979.

27th - Lightning and a period heavy freezing rain and sleet around ~ 7 PM.

Nate Mullins of LaVale
24th - Dry powdery 4.0” of snow melted down to 0.14” water.

Dave Bryant of St Margarets
Very mild the first five days. Beginning late on the 6th the weather turned much colder which lasted till months end.

Al Kreinik of Parkton 5 SW
18th - Snow, sleet, freezing rain and rain.
28th - Drifting and blowing snow. Some roads partially blocked.

Joe Manfre of Baltimore 2SE
6th - Much colder in the PM.

Marty Sharrow of Owings Mills
6th - Heavy afternoon snow squall, windy, colder.

Herb Close of Manchester 1 SW
This was the third snowiest Jan and the second coldest January on record.

Ralph Hartsock of Westminster 4 SSE
10th - Early dusting of snow, cold, clearing and much colder.
15th - Coating of snow, much colder, wind advisory.
31st - Sunny and bitter cold.

Greg Klein of Westminster 5 SSE
10th - Exceptionally cold day with high of 12 and low of -1.

Bobby Miller of Millers 4 NE
Record 21 days with max temperature 32 degrees or below.
3rd - Balmly. Some dandelions and forsythias in bloom!
10th - Sub zero. First sub zero temperatures in two consecutive Januaries since 1984 & 1985.

Manuel Farfan of Frederick 4 N
18th - Snow overnight changed to sleet and freezing rain, then to rain after 9 AM and then changed back to snow around 1 PM but no additional accumulation. Windy late at night with falling temps

Rebecca Harvey of Eagle Rock
30th - 24” of snow on the ground.

Rich Giannola of JHU/APL
27th - Anemometer wind propeller freezes at 3:45 AM and does not thaw until 1:30 PM on the 28th.

Rob Cohen of Potomac 4 N
Record 17 days with maximum temperature 32 or below.
Old record of 16 days set in February 1979.

Rich Giannola of Olney 1 S
27th - Freezing drizzle / rain leaves a 1/4” coating by mid afternoon.

Stan Rossen of Glenmont 1 NNE
1st - The New Year arrived under clear skies with the temperature at exactly freezing.
27th - The very light snow grains continued past 12:40 A.M., but by 1:00 A.M. had changed back to light freezing drizzle. The freezing drizzle continued, moderately at times, throughout the night and much of the day until a light mix of freezing rain and ice pellets arrived before 4 P.M. The mix continued past 5 P.M when it changed over to snow leaving a .1” coating of ice pellets on top of the ice that covered the snow. The snow fell moderately for a short time early on before tapering. It eventually tapered to flurries that lingered past 9:30 P.M. before finally ending nearly 50 consecutive hours of precipitation. The snow added another .8” on top of the ice.

Kevin Shaw of Gaithersburg 2 WNW This was the coldest January since 1994. I had 19 days with maximums of 32 or less, which is an all-time record. Precipitation was predictably below normal, with the greatest amount on the 26th.

Joe Terry of Forest Glen
Very cold and dry. Driest month since February 2002. After a warm start persistent cold dominated. One prolonged snow / ice event this month.
4th - Unusually warm, 73 deg. Max dewpoint 60 degrees.
25th - Moderate to heavy evening snow fell at 1.5” per hour.
27th - Ice pellets changed to freezing drizzle as temps warmed to near 30. 0.1” of ice accumulation. Colder late with precipitation changing to ice pellets then snow. 48 hours of near continuous frozen or freezing precipitation.

Bill Hudelson of South Bowie
14th - Mostly broken overcast, 6 flakes of snow.

Brian Smith of Oxon Hill
31st - A truly ugly month is over forever!

Floyd Abell of Hollywood
17th - Variable clouds - evening sleet & freezing rain - slippery areas.

Greg Keefer of Hagerstown 1 E
3rd - Record high of 66. Old record was 65 set in 2000.
10th - Very cold morning low of 3 degrees. Wind chills to -20 overnight.
25th - Very cold morning low of 2 degrees. Afternoon high of 15. Snow began around 7 PM. 3” fell by midnight.
31st - Mostly sunny but cold and continued windy caused blowing and drifting snow.

Jim Vaughn of Smithsburg 2 NE
Set new January wind record of 14 days where the wind gusted to 40+ mph for any month (old record 12 days set in December 2002). It was the fourth coldest and fifth snowiest January, and the driest month is nearly 2 years.

Lance Shaffer of Sterling 4 N VA
2nd - Rain early AM.
30th - Sun returns with gusty winds.

Dave Lesher of Davis 3 SE WV
Snow depth ranged from 0” on the 4th to 23” on the 30th & 31st.

Compiled by Gary Gallaher, MD/DE ACON Data Collector and Report Writer, from data received from dedicated observers. Without your observations each month this report will not be possible.
JANUARY 2004 WEATHER PICTURES

CHRISTINA RIVER AND CHURCHMANS MARSH FROM I-95 SOUTHBOUND BETWEEN EXITS 4 & 5 (CHRISTIANA MALL AND NEWPORT, DELAWARE)

CHRISTINA RIVER LOOKING NORTHWEST TOWARDS THE WILMINGTON DE SKYLINE

I-495 BRIDGE OVER CHRISTINA RIVER, WILMINGTON, DELAWARE.

ICE FLOWS ON THE DELAWARE AND CHESAPEAKE CANAL NEAR THE DELAWARE / MARYLAND LINE

ICE FLOWS ON THE CHESAPEAKE AND DELAWARE CANAL IN CHESAPEAKE CITY, MD. SCHAFFER CANAL HOUSE IS IN THE BACKGROUND.

TWO ICE FISHERMAN ON THE NORTHEAST RIVER, NORTHEAST, MD. ICE 12" THICK

LOOKING NORTHWEST ACROSS THE FROZEN UPPER CHESAPEAKE BAY TOWARDS THE MOUTH OF THE SUSQUEHANNA RIVER FROM NEAR TURKEY POINT IN ELK NECK STATE PARK. DISTANCE ~7 MILES.

BOHEMIA RIVER FROM MD RT 213 BRIDGE LOOKING WEST CECIL COUNTY, MARYLAND

DUCKS ON THE SASSAFRAS RIVER AT FREDERICKTOWN, MD

ALL PICTURES ON THIS PAGE TAKEN BY GARY GALLAHER, BEAR 2 SW DE, ON JANUARY 31, 2004