

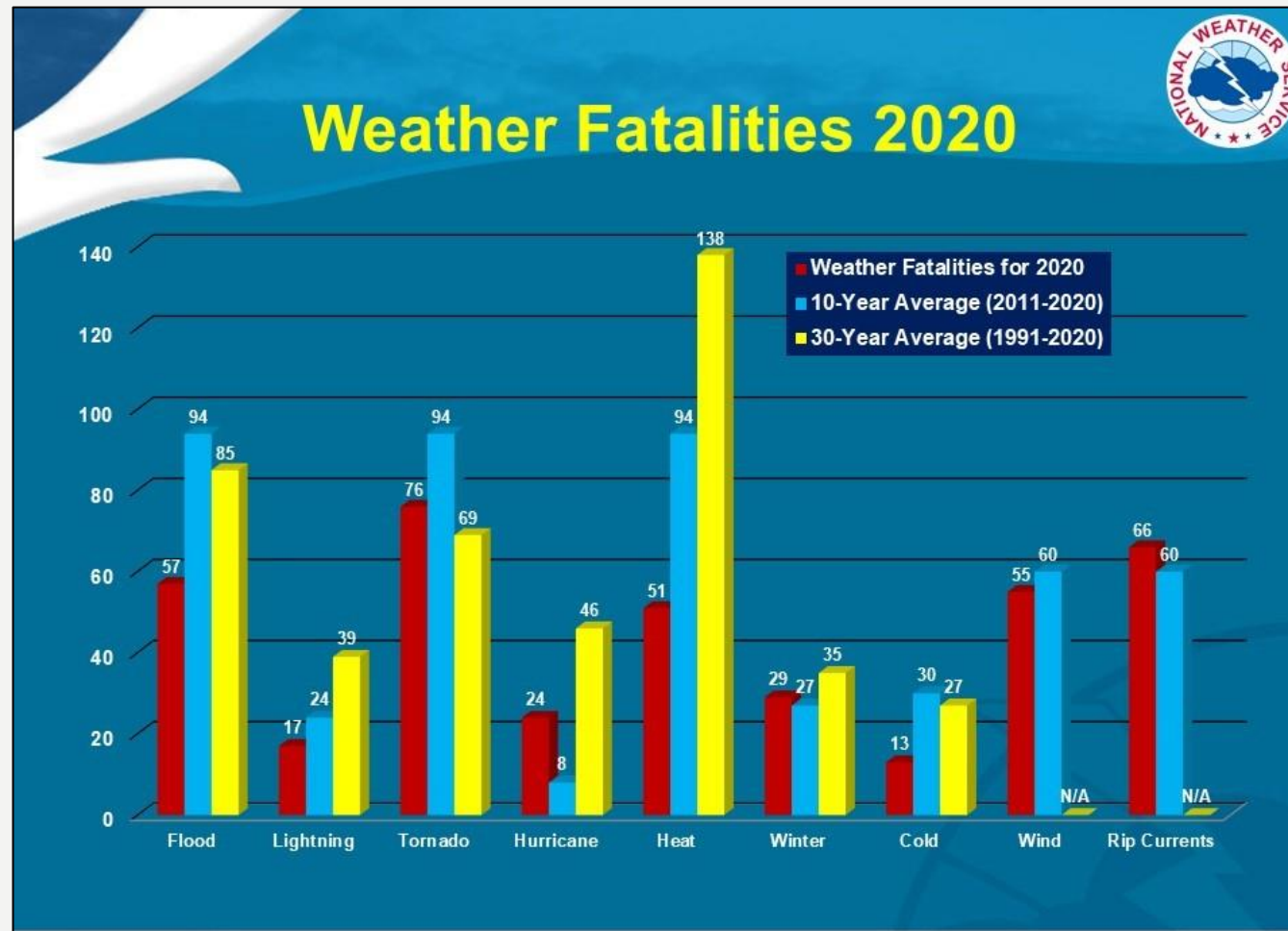
THE HEAT IS ON!

Virginia Enzor

Deputy AUXCOMM Coordinator Statewide
Central Carolina SKYWARN Emergency coordinator

What is extreme heat?

Extreme heat is a period of high heat and humidity with temperatures above 90 degrees for at least two to three days. In extreme heat your body works extra hard to maintain a normal temperature, which can lead to death.



Recipe for Record Heat

Large-scale high pressure moves in from the hot, dry southwest

Westerly circulation keeps the air mass warm and dry

Drought conditions limit evapo-transpiration

High pressure to our west gives clear weather



August 1983 NC Heat Wave

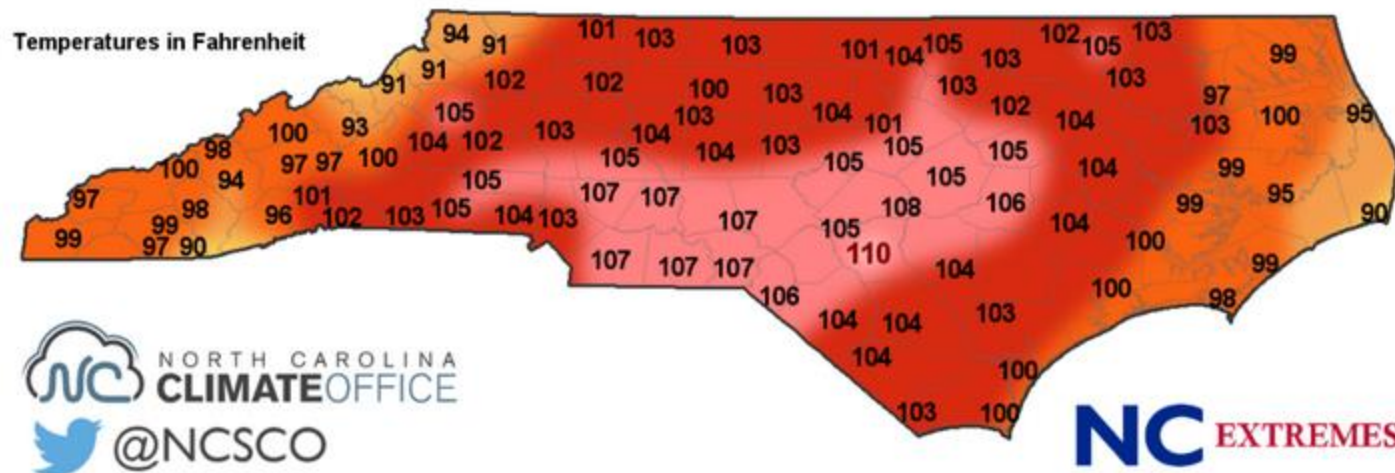
Highest temperatures observed during the August 1983 heat wave

Asheville, NC	100*	Fayetteville, NC	110*	Columbia, SC	107
Hickory, NC	102	Wilmington, NC	100	Florence, SC	103
Charlotte, NC	103	New Bern, NC	100	Myrtle Beach, SC	100
Greensboro, NC	100	Hatteras, NC	90	Georgetown, SC	103
Raleigh, NC	101	Greenville-Spartanburg, SC	103	Charleston, SC	100

* red highlight indicates all-time record high temperature for this location

<https://www.weather.gov/ilm/heatwaves>

Maximum Temperatures from August 21-24, 1983



<https://climate.ncsu.edu/blog/2015/08/nc-extremes-our-history-of-record-heat/>

How hot was it?

Gadsden AL Times

An elderly man in North Carolina died Sunday after he collapsed from the heat while riding his motorcycle, state police reported today. The man fell from his vehicle and rolled into a ditch.

Lexington NC Dispatch

How hot was it this weekend?
So hot that you could see the heat — rising in shimmering waves above the asphalt.
So hot that people brave enough to venture onto the sidewalks of downtown Lexington took second glances bank clocks that read as high as 107 degrees.
At Lanier's Hardware, candles on a sale table outside melted into a pool of liquid wax. Many shoppers



Tina @KaraTStarbuck · 22h

Melting blinds and melting pavement in my neighbourhood right now! #Yeg
🔥 #Edmonton 🇨🇦 #HEATWAVE



Portland Streetcar
@PDXStreetcar



In case you're wondering why we're canceling service for the day, here's what the heat is doing to our power cables.



7:07 PM · Jun 27, 2021



Marcus Hunke @MarcusHunke · 10m
How how it is in Edmonton? This hot:

#yegwx #heatwave



USD @usd0705 · Jun 30

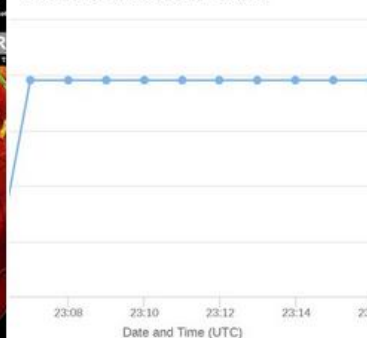
More than 233 dead as record-breaking #HEATWAVE grips #Canada
temperatures soar to 49.6°C in #Lytton #BritishColumbia

#HeatWave2021

#LyttonBC #BCHeat #ClimateCrisis #CanadaHeatWave #ClimateAction



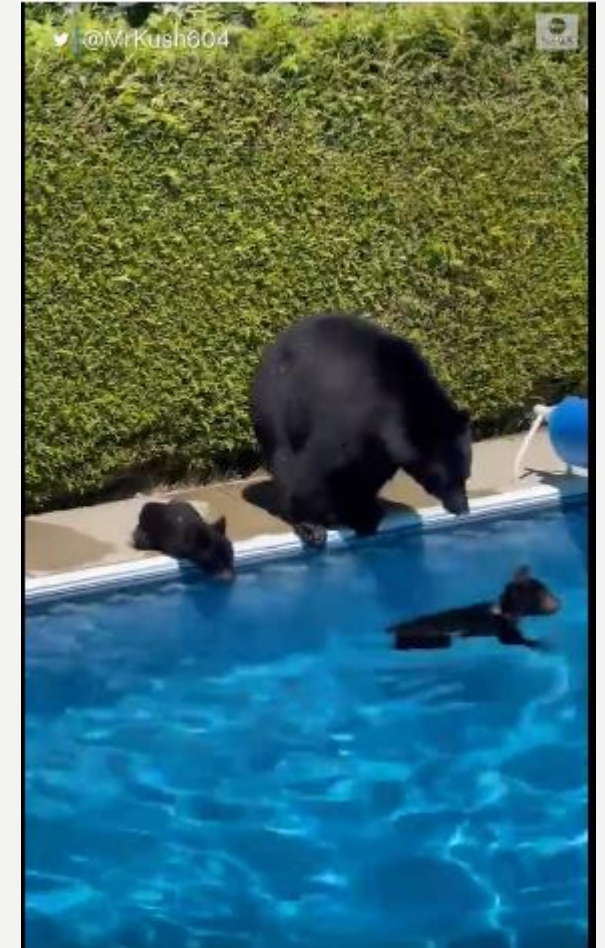
LYTTON RCS, 1114746, VLY



Temperature / Air Temperature / Maximum / -1 h, 1 h



Pacific Northwest & Canada Heat Wave Late June 2021



Even the bears were trying to
cool down swimming pools!

EXCESSIVE HEAT WATCH

An Excessive Heat Watch is issued when **dangerous heat is possible**.

Reschedule outdoor activities in the coming days. Make sure that children, the elderly, and pets have a place to cool off during the heat.

Be Prepared.



weather.gov

EXCESSIVE HEAT WARNING

An Excessive Heat Warning is issued when **dangerous heat is happening or about to happen**.

Avoid heavy activity & direct sunlight. Stay hydrated, find a cool indoor place, and check on children, elderly & pets.

Take Action!

IF YOU ARE UNDER AN EXTREME HEAT WARNING

Find air conditioning, if possible.

Check on family members and neighbors.

Avoid strenuous activities.

Drink plenty of fluids.

Watch for heat cramps, heat exhaustion, and heat stroke.

Never leave people or pets in a closed car.

Wear light clothing.

Heat Related Deaths **ARE** Preventable *LOOK BEFORE YOU LOCK*



weather.gov/heat

nhtsa.gov

The temperature in your car can quickly become deadly!

Outside Temperature 80°



Time Elapsed:
10 Minutes



Time Elapsed:
20 Minutes



Time Elapsed:
30 Minutes



Time Elapsed:
60 Minutes

38 kids die each year being left in an unattended vehicle.
88% are under age 3.
54% were forgotten by the caretaker.
100% of these deaths could be prevented.



STOP

Press the back of your hand firmly against the asphalt for 7 seconds to verify it will be comfortable for your dog.

Hot Asphalt Awareness

When the air temperature is this, asphalt has been measured at this.*

<u>Air Temperature</u>	<u>Asphalt Temperature</u>
77 ⁰	- 125 ⁰
86 ⁰	- 135 ⁰
87 ⁰	- 143 ⁰

*These temperature correlations represent worst scenario variables: direct sun, no wind, very low humidity, and high radiant energy.

At 125° F, skin destruction can occur in 60 seconds.

An egg can fry in 5 minutes at 131° F.



Data Source: Berens J. Thermal contact burns from streets and highways. Journal of the American Medical Association; 214 (11): 2025-2027.

Know the signs of heat illness!

HEAT CRAMPS

Signs

Muscle pains or spasms in the stomach, arms or legs

Actions

Go to a cooler location.

Remove excess clothing.

Take sips of cool sports drinks with salt and sugar.

Get medical help if cramps last more than an hour.

HEAT EXHAUSTION

Signs

Heavy sweating, paleness, muscle cramps, tiredness, weakness, dizziness, headache, fainting, nausea, vomiting

Actions

Go to an air-conditioned place and lie down.

Loosen or remove clothing.

Take a cool bath.

Take sips of cool sports drinks with salt and sugar.

Call your healthcare provider if symptoms get worse or last more than an hour.

HEAT STROKE

Signs

- Extremely high body temperature (above 103 degrees) taken orally
- Red, hot and dry skin with no sweat
- Rapid, strong pulse
- Dizziness, confusion or unconsciousness

Actions Call 9-1-1 or get the person to a hospital immediately. Cool down with whatever methods are available until medical help arrives.

QUESTIONS?

North Carolina actually has 12 seasons

Winter
Fool's Spring
Second Winter
Spring of Deception
Third Winter
The Pollening
Actual Spring
Summer
Hell's Front Porch ← NC Heat Waves
False Fall
Second Summer
Actual Fall

Sources:

Summer Weather Safety

https://www.weather.gov/media/wrn/presentations/Summer_Safety_Presentation_2021.pdf

Be Prepared for Extreme Heat

https://www.ready.gov/sites/default/files/2021-01/ready_extreme-heat_info-sheet.pdf

Extreme Heat Safety Social Media Toolkit

<https://www.ready.gov/extreme-heat-safety-social-media-toolkit>

Heat Safety Tips and Resources

<https://www.weather.gov/safety/heat>

Heat Cramps, Exhaustion and Stroke

<https://www.weather.gov/safety/heat-illness>

https://energyeducation.ca/encyclopedia/Heat_wave

Historic Heatwaves in the Carolinas

<https://www.weather.gov/ilm/heatwaves>

<https://www.weather.gov/hazstat/>

NC Extremes: Our History of Record Heat

<https://climate.ncsu.edu/blog/2015/08/nc-extremes-our-history-of-record-heat/>

<https://www.npr.org/2021/06/29/1011269025/photos-the-pacific-northwest-heatwave-is-melting-power-cables-and-buckling-roads>