



The Ozark Ambassador

National Weather Service Springfield, Missouri



Preparing For Fall 2025

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Ozark Ambassador Team

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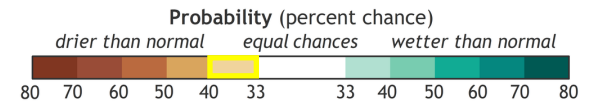
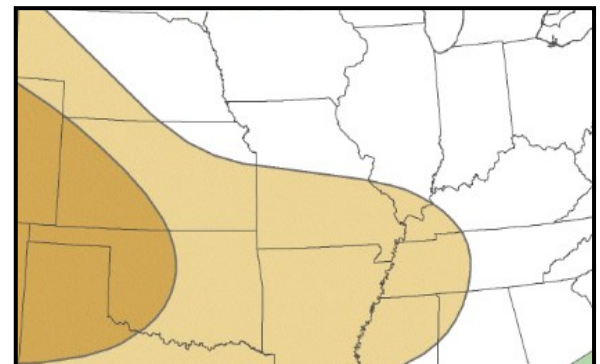
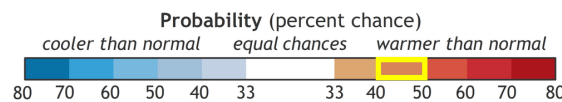
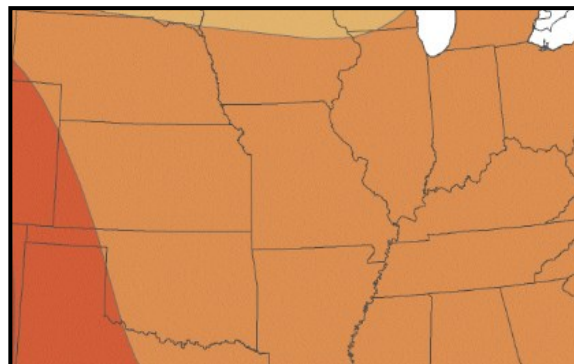
Warning Coordination Meteorologist

Kyle Perez

Weather-Ready Nation Ambassador Leader

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Fall Outlook



The Fall 2025 outlook slightly favors above normal temperatures and below normal precipitation. For more information visit: [Climate Prediction Center](https://climatepredictioncenter.com).

Fall 2025

When does Fall Begin?

The Start of Astronomical vs. Meteorological Fall

- ★ Based on the position of the sun relative to the Earth
 - Begins on the Autumnal Equinox, when the sun is directly overhead at the equator and the length of days and nights are equal
- ★ Varies annually, sometime September 21-23

- ★ Based on annual temperature cycles and lasts for the 3 months between the hottest and coldest quarters of the year
 - September, October, November
- ★ Consistently September 1st every year
- ★ Used for recordkeeping

Fall Outdoor Safety

Schools and Sports


Your chance of being struck by lightning greatly increases when remaining outdoors during a thunderstorm.

Lightning can strike from up to 10 miles away.

When Thunder Roars, Go Indoors!

See a Flash, Dash Inside!

Some of the activities people were doing when they were recently struck by lightning include:

 Golfing	 Boating	 Running
 Grilling	 Walking	 Construction
 Riding	 Gardening	 Swimming

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Weather-Ready for Outdoor Sports?



Heat

Wear light, loose-fitting clothing, stay hydrated and take breaks in the shade. During excessive heat, avoid heavy activity and direct sunlight.



Air Quality

Stay inside during air quality alerts. Children, seniors, and those with health problems are especially at risk.



Lightning

If you hear thunder or see lightning, go immediately to an enclosed building or hard-topped vehicle.



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Outdoor Recreation

Weather-Ready for Boating?



Strong Winds

Dangerous wind can arrive well before the rain. Reduce speed and head to shore if alerted to high wind. Always wear a life jacket when on a boat.



Lightning

If you hear thunder or see lightning, it's time to stay in the cabin or head to shore.



Fog

If fog forms, slow down and turn on your lights. Listen for other boats around you or check radar.



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Weather-Ready for Nature?



Flash Flooding

Heavy rainfall can cause flooding in a flash. Use caution when hiking in canyons or camping near streams and rivers.



Excessive Heat

Bring extra water and remain hydrated. Use sunscreen and wear light, loose-fitting clothing. Take breaks in the shade.



Lightning

If you hear thunder or see lightning, go immediately to an enclosed building or hard-topped vehicle (if possible). Avoid isolated tall trees or ridge tops.



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Know Before You Go!

A clear sky doesn't mean that you're out of the woods.

Check **weather.gov** to know if extreme heat, storms, or other hazards could be on the horizon.



Understanding Droughts

Drought Impacts

Drought Impacts



Agriculture

Farms, ranches, and grazing lands suffer, and increases the cost of their products



Public Health

A decrease of water can lead to an increase of illness, disease, mortality rates, and adverse mental health



Ecosystems

Harms fish, wildlife, and plants, as well as the benefits these ecosystems provide



Wildfire Management

Dry, hot, and windy weather combined with dried out vegetation can lead to more large-scale wildfires



Manufacturing

Interruptions in the water supply can result in a reduction of productivity or closure of facilities



Energy

Production of all types of energy requires water, and drought can severely impact energy systems and prices

Drought Intensity

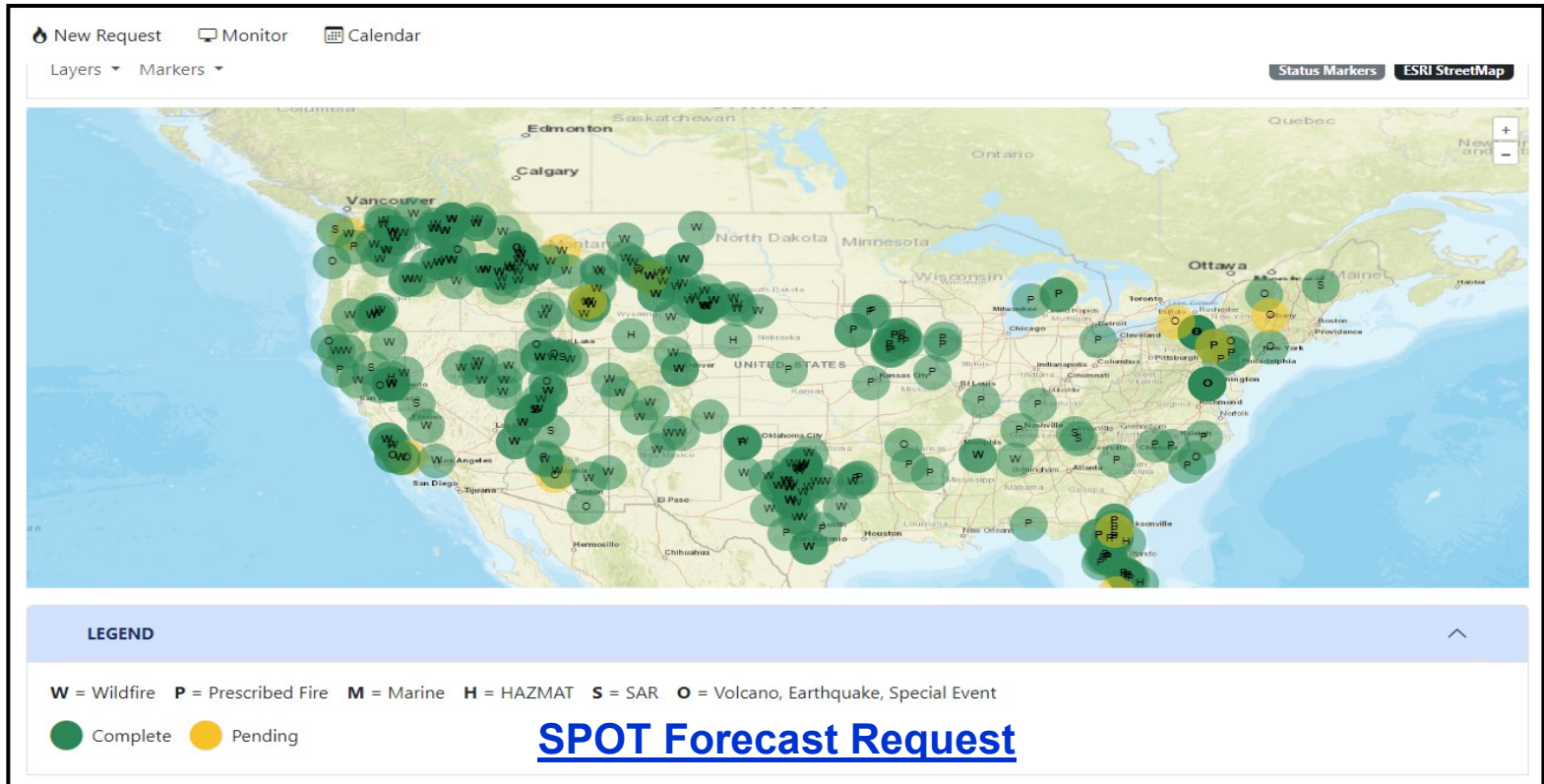
Drought Intensity Classification

	D0	Abnormally Dry	Going into drought, short-term dryness slowing planting, growth of crops and pastures; fire risk above average. Coming out of drought, some lingering water deficits, pastures or crops not fully recovered.
	D1	Moderate Drought	Some damage to crops, pastures, fire risk high; streams, reservoirs or wells low, some water shortage developing or imminent, voluntary water use restrictions requested.
	D2	Severe Drought	Crop or pasture loss likely, fire risk very high, water shortages common, water restrictions imposed.
	D3	Extreme Drought	Major crop/pasture losses, extreme fire danger, widespread water shortages or restrictions.
	D4	Exceptional Drought	Exceptional and widespread crop and pasture losses, exceptional fire risk, shortages of water in reservoirs, streams and wells causing water emergencies.

For more information check out the [National Drought Mitigation Center](#) and [National Integrated Drought Information System](#).

Fire Weather

New SPOT Forecast Request



The NWS issues SPOT forecasts for prescribed burns or wildfires. The forecast provides hourly forecasts of various fire weather forecast parameters. Check out the new SPOT forecast page at the new link: spot.weather.gov/. Additional information and resources on the SPOT forecast page can be found at: weather.gov/fire/training.

Fire Prevention Safety



Avoid burning fires outside.



Properly extinguish cigarettes.



Do not burn trash or yard waste.

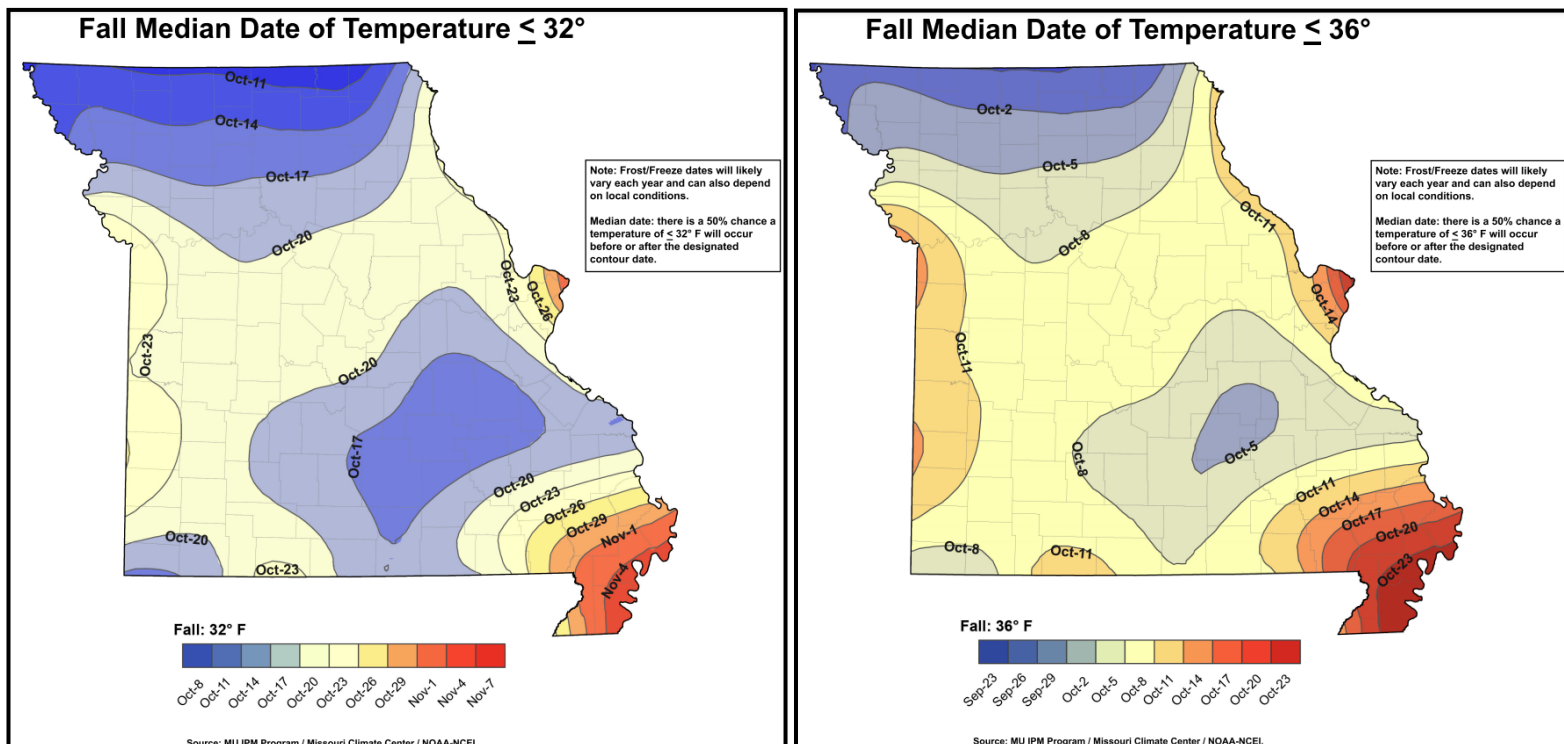


Avoid burning hot charcoals in a BBQ grill.



Frost and Freeze

Missouri Temperature Climatology



Frost and freeze dates vary depending on location each year. In general, as low temperatures approach 36 degrees or lower, the chance for frost increases. This varies from early to late October across the area. The NWS Hazard Simplification Project is consolidating **Hard Freeze** and **Freeze Watch/Warning** into **Freeze Watch/Warning** beginning this Fall.

Freeze Warning

Temperatures of **32°F or colder** for several hours over a widespread area during growing season. A **hard freeze** is when temperatures are **below 28°F** .

Plants left outdoors may be killed.

Frost Advisory

Temperatures of **33 to 36°F** with clear skies and light winds over a widespread area during growing season, which would promote the development of frost.

Plants left outdoors may be damaged.

Fog Safety

Driving in Dense Fog

When driving in dense fog, you have little time to see hazards or other vehicles in the road. At freeway speeds, you only have a few seconds to react to objects that become visible in the road.

Reaction Time at 60 MPH

100 ft visibility - 1.1 seconds

100 yard visibility - 3.4 seconds

1/8 mile visibility - 7.5 seconds

1/4 mile visibility - 15.0 seconds



weather.gov/fog

VALLEY FOG

① Air cools at higher elevations as the ground radiates heat into the atmosphere and space.

WARMER
COOLER

③ A cool, stable layer forms near the ground, which limits turbulent mixing and traps the cool, moist air.

② Cooler air drains downslope into the valley.

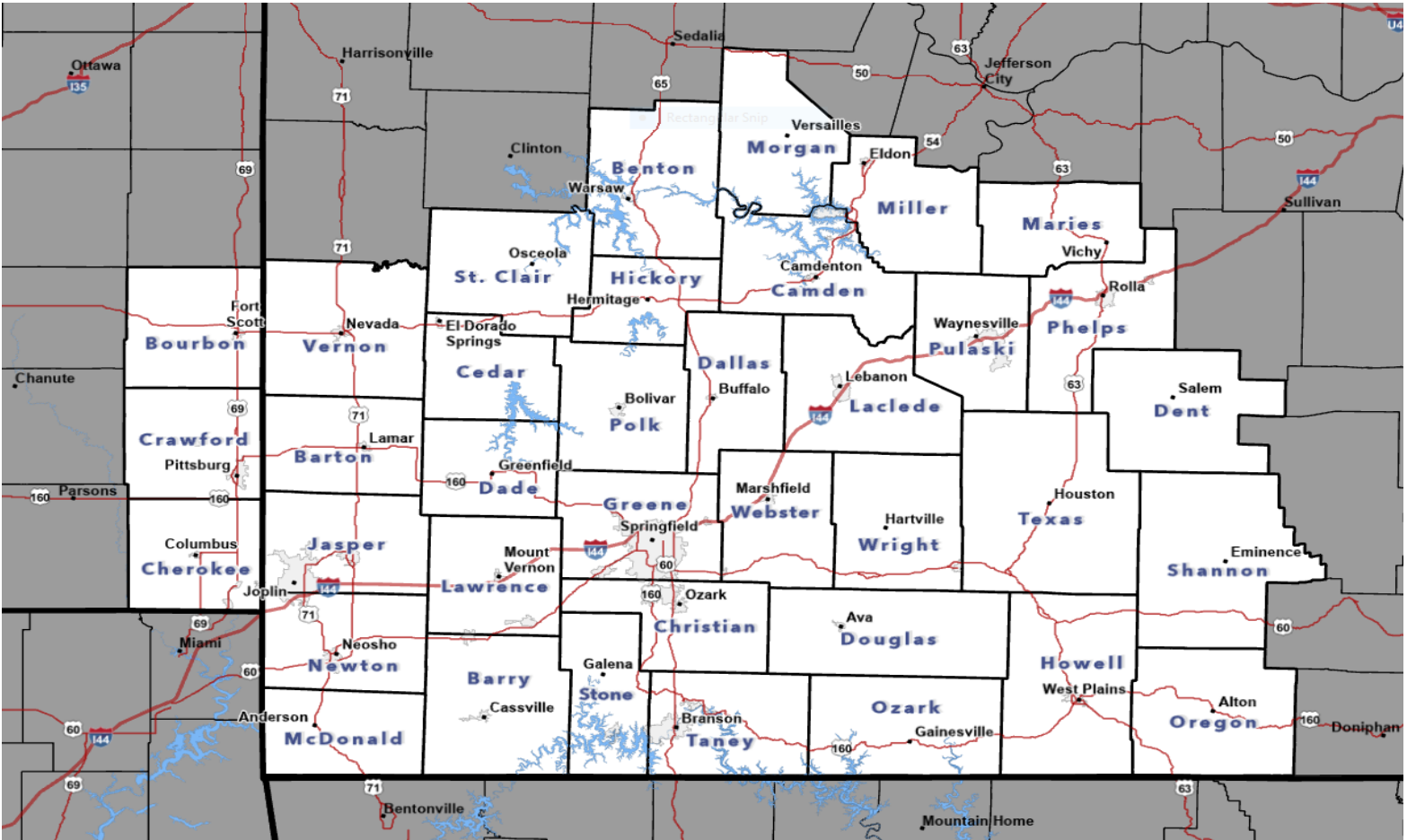
vapor → liquid
condensation

④ The air near the ground continues to cool until water vapor molecules are changed into small droplets of liquid water.

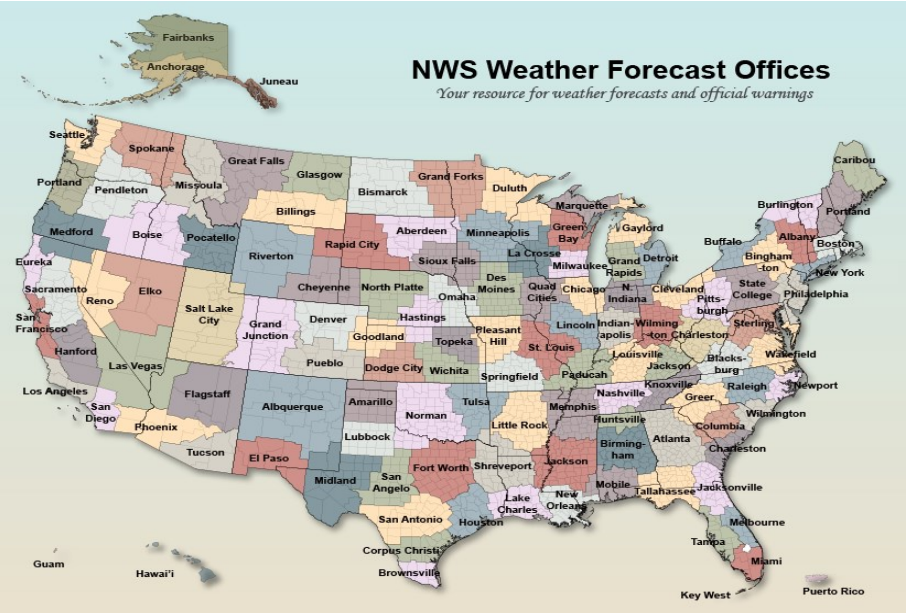


Knowing Your Location

NWS Springfield, MO County Warning Area (CWA)



NWS Springfield, Missouri County Warning Area (CWA) consists of three counties in extreme southeastern Kansas and thirty-four counties in southwestern Missouri and the Missouri Ozarks. Make sure you know where you located on the map!




Surrounding NWS Offices
Pleasant Hill (Kansas City), MO
St. Louis, MO
Paducah, KY
Little Rock, AR
Tulsa, OK
Wichita, KS


Remaining Weather-Aware


STORM PLANNING TIMELINE

A few days out

If the forecast calls for severe weather in a few days, start preparing now.


 Make sure that you have emergency supplies


 Know your safe places


 Have a family communication plan

The day before

The day before, forecast accuracy continues to improve.


 Adjust plans


 Make sure your phone can receive WEAs


 Ensure your shelter is clean and accessible

The day of

Remain vigilant and aware of any active Watches. A Warning may be issued at a moment's notice!

 Remind your family of the communication plan

 Know how to evacuate and/or get to safety from wherever you are

 When a Warning is issued, you may only have seconds to take action!

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Wireless Emergency Alerts (WEA)

can alert you when weather threatens!



WEAs are emergency messages sent by government authorities to your mobile phone, reserved for life-threatening situations.



Keep WEAs enabled on your phone. It could save your life or the lives of others.

 **TORNADO WARNING!**

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Sending Storm Reports

Reporting Severe Weather

Hail



Diameter of the largest stones. Looking for reports of near or above severe limits (1.00 in).

Wind



Measured speed and/or damage. Include tree or limb diameter, tree health, uprooted or snapped.

Tornado



Confirming funnel clouds, rotating wall cloud, or damage. Tell us why you can confirm it is rotating or on the ground?

Flood



Washed out or flooded roads, rain measurements. Are businesses or homes being impacted?

Reports that come in as the storm is in progress are much more valuable than reports that come in hours after the storm is done. Can trigger or keep warnings active. NWS relays storm reports through warnings.

Measuring Hail



Peas
 $\frac{1}{4}$ "



Penny
 $\frac{3}{4}$ "



Quarter
1"



Golf ball
 $1\frac{3}{4}$ "



Tennis ball
 $2\frac{1}{2}$ "



Baseball
 $2\frac{3}{4}$ "



Grapefruit
 $4\frac{1}{2}$ "

Compare the hail to common, everyday objects.

Remember to include measured hail size, a picture, time it occurred, and approximate location!

Make sure to compare to an object that is consistent in size, i.e. NO marbles!

Ways to Send Reports

Building a Weather-Ready Nation

Becoming a Weather-Ready Nation Ambassador

What do Weather-Ready Nation Ambassadors Do?

Promote Preparedness and Resiliency:

- ✓ Follow our social media and share our hazardous weather and safety posts.

Collaborate with the NWS:

- ✓ Let us know how we can help you and your community become more weather ready.

Serve as an example:

- ✓ Educate employees on workplace preparedness and encouraging personal preparedness at home.



[Click here to Learn More about Becoming an Ambassador](#)

Scan the QR code to Apply today!

Following the NWS and Fall Safety Resources



Office: (417) 863-8028



contact.sgf@noaa.gov



weather.gov/springfield



[@NWSSpringfield](https://www.facebook.com/NWSSpringfield)



[@NWSSpringfield](https://twitter.com/NWSSpringfield)



[Youtube.com/NWSSpringfield](https://www.youtube.com/NWSSpringfield)



Fall Weather Safety Resources

weather.gov/safety

Additional Webpage Resources

[Weather Story](#)

[DSS Packet](#)

[GHWQ](#)

[Point and Click Forecast](#)

[National Preparedness Month](#)

[Weather Prediction Center](#)

[Storm Prediction Center](#)

[Climate Prediction Center](#)

[National Hurricane Center](#)

[Aviation Weather Center](#)

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