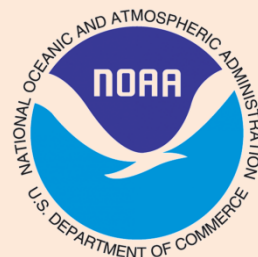


National Weather Service Spotter Newsletter Spring 2018





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2018 Spring Skywarn Spotter Training Schedule

Please check the top news section on the NWS Detroit homepage for updates and additions.

Date	Time	County	Address
February 22, Thursday	7 PM - 9 PM	Washtenaw	Saline Alternative High School - 7265 North Ann Arbor Street, Saline, MI 48176
March 1, Thursday	7 PM - 830 PM	Midland	TBD (Midland)
March 3, Saturday	10 AM - Noon	Macomb	Macomb ISD - 44001 Garfield, Clinton Township, MI 48036
March 7, Wednesday	7 PM - 830 PM	Oakland	Oakland County Executive Office Building - 2100 Pontiac Lake Road, Waterford, MI 48328
March 9, Friday	7 PM - 830 PM	Wayne	Wyandotte Copeland Center - 2306 4th St., Wyandotte, MI 48183
March 10, Saturday	10 AM - Noon	Wayne	Garden City Presbyterian Church - 1841 Middlebelt Rd, Garden City, MI 48135
March 13, Tuesday	Aftn - TBD	Washtenaw	Kipke center conference Room - 401 E Stadium Blvd, Ann Arbor, MI 48104
March 17, Saturday	9 AM - 1030 AM	Shiawassee	Owosso Township Hall 410 S Delaney Rd Owosso, MI
March 20, Tuesday	7 PM - 830 PM	Tuscola	Tuscola County Medical Care Facility Business Annex - 1285 Cleaver Rd (M-24), Caro, MI 48723
March 21, Wednesday	7 PM - 830 PM	Livingston	Hamburg Township Fire Department - 3666 East M-36, Pinckney, MI 48169
March 22, Thursday	7 PM - 830 PM	Monroe	Dundee Fire Department, 820 Dundee Azalia Rd, Dundee, MI 4813, USA
March 24, Saturday (2 Talks)	10 AM - 1130 AM 1 PM - 230 PM	Oakland	Oakland County Executive Office Building - 2100 Pontiac Lake Road, Waterford, MI 48328
March 26, Monday	7 PM - 830 PM	Oakland	Southfield Library - 26300 Evergreen Road, Southfield, MI 48076
March 27, Tuesday	7 PM - 9 PM	Sanilac	Firebird Theater - 280 E Sanilac Road, Sandusky, MI 48471
March 28, Wednesday	7 PM - 9 PM	Wayne	Livonia Library - 32777 Five Mile Road, Livonia, MI 48154
March 29, Thursday	7 PM - 830 PM	Saginaw	Saginaw Twp Fire Station No. 2, 3211 McCarty Rd, Saginaw, 48603
April 5, Thursday	7 PM - 830 PM	Lapeer	Pix Theater - 172 W Nepessing St., Lapeer, MI 48446
April 7, Saturday	10 AM - 1130 AM	Washtenaw	Washington Street Education Center - 500 Washington Street, Chelsea, MI 48118
April 12, Thursday	630 PM - 8 PM	Oakland	City Hall auditorium - 1000 Rochester Hills Drive, Rochester Hills, MI 48309
April 18, Wednesday	7 PM - 9 PM	Oakland	The Charter Township of Commerce Township - 2009 Township Drive, Commerce Township, MI 48390
April 19, Thursday	630 PM - 8 PM	Huron	Huron Expo Center 170 W Soper Rd, Bad Axe, MI 48413, USA
April 23, Monday	7 PM - 9 PM	St Clair	St. Clair County Building - 200 Grand River Ave., Port Huron, MI 48060
April 24, Tuesday	7 PM - 830 PM	Genesee	Genesee County Building Third Floor Auditorium - 1101 Beach Street, Room G-25, Flint, MI 48502
May 10, Thursday	7 PM - 9 PM	Oakland	Ortonville Old Town Hall - 476 Mill St., Ortonville, MI 48462

Upcoming Events

Detroit Boat Show (NWS will have a booth at this event). February 17 – February 25

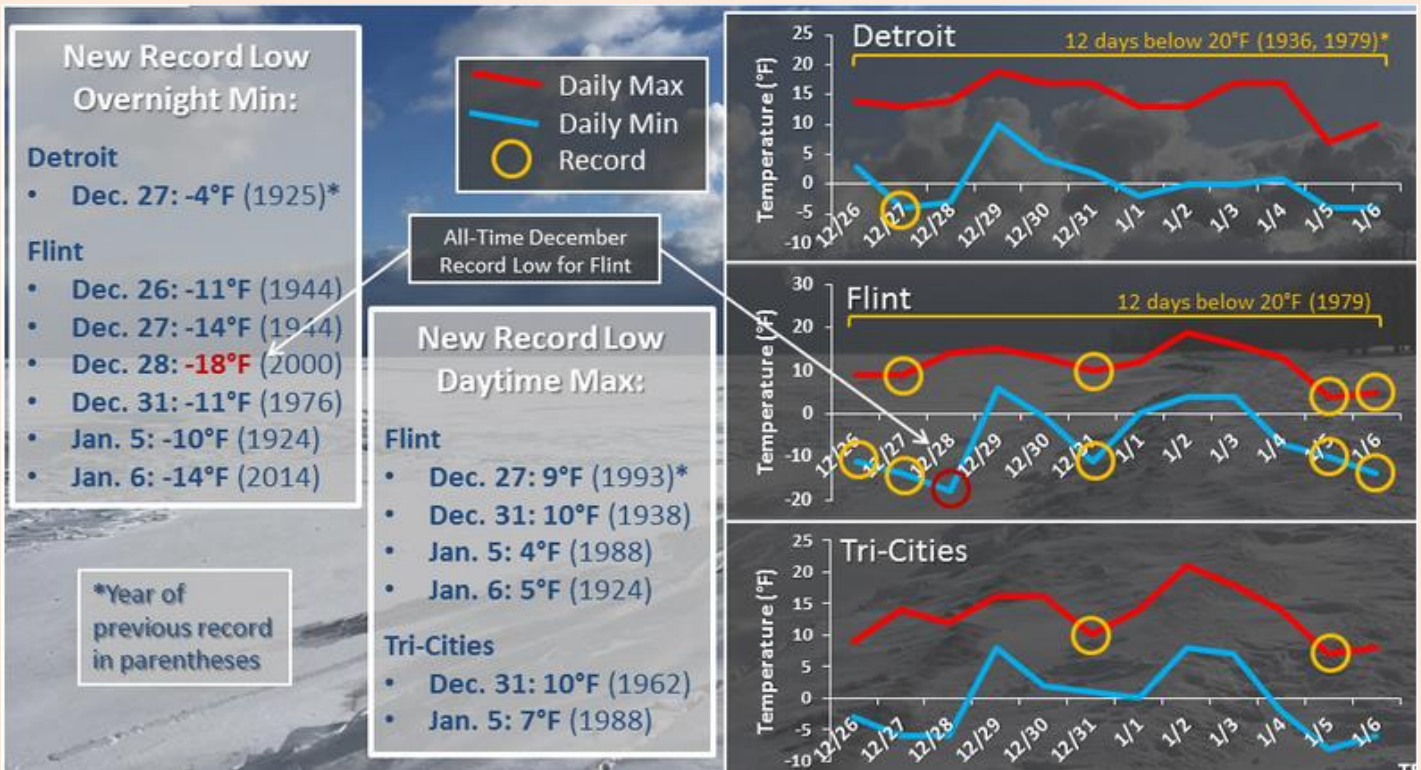
<http://detroitboatshow.net/>

WeatherFest at Southfield Public Library May 14 from 130 to 630 p.m

Also Severe Weather Awareness Week April 8 to 14 with the Statewide Tornado Drill on April 11.

2017/2018 Arctic Air Outbreak

Thus far, the most memorable part of this winter was the prolonged cold snap which lasted from mid-December through early January. A deep polar low established itself across eastern Canada and the Great Lakes region, forcing arctic air from the poles all the way across the eastern US (even into parts of Florida). The worst of the cold actually arrived with a Christmas Eve snowfall and lasted through the first six days of January. Much of Southeast Michigan had 12 consecutive days in which high temperatures did not break 20 degrees, a record at both Flint and Detroit. This period saw numerous record low nighttime temperatures and even a couple record low daytime highs. Flint even broke the record low temperature for the entire month of December. There were also multiple wind chill advisories in effect through this period as the cold temperatures combined with the winds led to sub zero wind chill readings. Wind chill readings dropped to 20 to 30 degrees below zero on January 5th, prompting wind chill warnings over much of the area and forcing the closure of area school districts. The image below highlights some of these temperature records at Detroit, Flint and the Tri-Cities (Saginaw).



NWS Decision Support Services

Timely and relevant forecasts, watches and warnings are major strengths of the National Weather Service. The agency's ability to respond quickly to natural disasters with public statements relevant for the protection of life and livelihoods and the advancement of the Nation's economy is unparalleled. However, new and evolving needs in society call for the NWS to shift to the impact-based decision support services (IDSS) approach.

IDSS are forecast advice and interpretative services the NWS provides to help core partners, such as emergency personnel and public safety officials, make decisions when weather, water and climate impacts the lives and livelihoods of the American people. This support may be needed in response to a particular event or routinely to support high-value decision making. NWS staff across the U.S. work hand-in-hand with partners at local, state and national levels to ensure these decision-makers have the most accurate, reliable and trustworthy weather, water and climate information. The NWS accomplishes this task not only through a commitment to science and technology, but by building trust through deep relationships with key decision-makers across the nation. Deep relationships are developed with those core partners which NWS has a legal mandate to support or whose actions involve national security concerns; who have a high degree of authority for public safety; and who have the capability to amplify NWS messaging to other NWS partners.



NWS Detroit Meteorologist at Fermi Nuclear Exercise

In addition to the production and rapid dissemination of accurate and consistent forecast information, the NWS is evolving by continuously working with these key decision makers to answer these questions:

1. What weather, water and climate events have a high impact?
2. How and what events affect core partners' key decisions?
3. How should uncertainty information be communicated to decision-makers?

These questions are not answered when impactful weather is ongoing but instead are addressed well before the storm arrives through frequent interaction, simulation exercises, and more effective communication. Furthermore, the answers to these questions are constantly being refined with each passing event and as NWS personnel build deeper relationships with key decision makers.

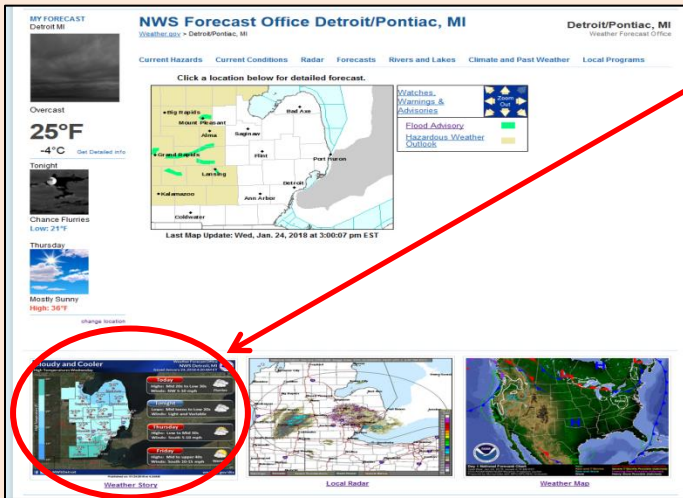
When impactful events do occur, the method of communication comes in several forms but generally falls into three categories: remote support with forecast advice through various means (such as phone calls, email or online webinars), on-site support at an emergency operations center, or on-site support at an incident or event (such as NWS deployment to a wildfire). The information being communicated to emergency personnel and public safety officials includes detailed information beyond just the most likely scenario. This includes expressing forecast confidence, probabilities of different scenarios occurring, and distinguishing more commonplace weather events from the truly historical or extreme weather and water event.



NWS Meteorologist Briefing FEMA

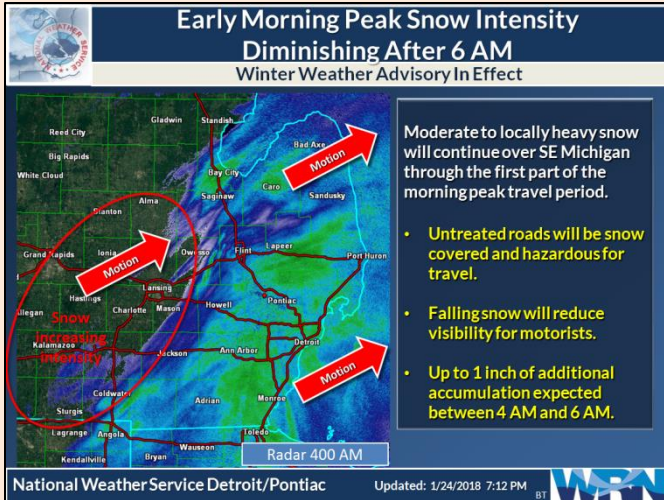
The NWS Weather Story Web Page

I am sure most of you have noticed more detailed weather information now contained on the weather story web page, linked at the bottom left of the NWS Detroit home page. During relatively quiet weather conditions this page will generally be a graphical description of the main weather headlines. On the other hand, during more active weather this page will highlight near-term forecast conditions as well as providing more detailed information regarding the expected hazardous weather conditions. This often involves multiple graphical pages. The near term forecast, or graphicast, will highlight timing of precipitation and radar trends. When hazardous weather is forecast, the graphical weather story will give details with respect to timing and location of the weather and potential severity.

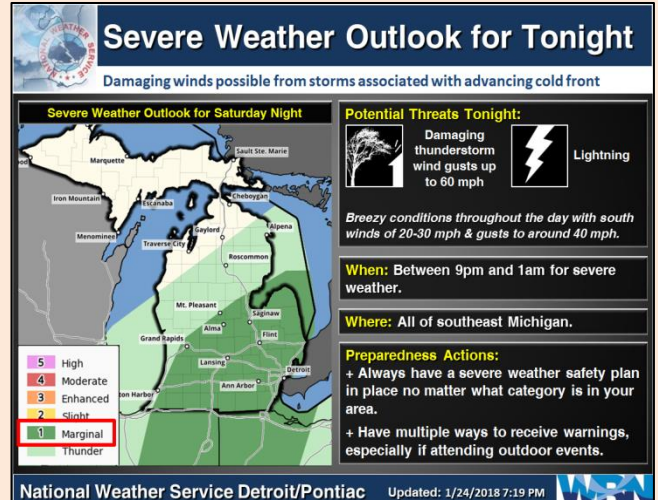


The image to the left is a clip from the NWS Detroit homepage. Note the link to the weather story in the bottom right.

Below are some examples of graphical forecast information during more active weather conditions.



Near Term Forecast For Ongoing Snow



Severe Thunderstorm Potential

Weather Ready Nation Ambassadors Program

NOAA's Weather-Ready Nation is about readying your community for extreme weather, water, and climate events.

The devastating impacts of extreme events like record breaking snowfall, violent tornadoes, destructive hurricanes, widespread flooding, and devastating drought can be reduced by taking advanced action, which is why the Weather-Ready Nation initiative is so important.

What is NOAA doing to build a Weather-Ready Nation?

NOAA's National Weather Service is transforming its operations to help America respond. Offices now provide forecast information in a way that better supports emergency managers, first responders, government officials, businesses and the public make fast, smart decisions to save lives and property and enhance livelihoods.

NOAA's Office of Oceanic and Atmospheric Research and National Environmental Satellite, Data, and Information Service are moving new science and technology into National Weather Service operations that will improve forecasts and ultimately increase weather-readiness.

While we at NOAA are taking steps towards building a Weather-Ready Nation, ***we can not do it alone!***

What can you do to help us build a Weather-Ready Nation?

Become a Weather-Ready Nation Ambassador! Building a Weather-Ready Nation requires action from other government agencies at the national, state, and local levels, America's Weather Industry, emergency managers, researchers, the media, nonprofits, and businesses. Any organization committed to serving as an example and engaging their stakeholders to make this country ready, responsive, and resilient can be an Ambassador.

Weather-Ready Nation can help start a dialog within our local communities that will ultimately reduce the risk of being adversely impacted by extreme weather and water events and increase community resilience (the ability to recover) for future extreme events.

Whether talking about preparedness and resilience in your home, office, at community centers, within schools or local businesses, on your website, or on social media, you will be helping to spread the word, inspire others to take action, and helping our great nation become more weather-ready.

By becoming a **WRN Ambassador**, your organization can serve a pivotal role in affecting societal change by:

- Promoting Weather-Ready Nation messages
- Collaborating with NOAA
- Sharing your success stories
- Serving as an example



For more information:

https://www.weather.gov/media/wrn/WRN_Ambassador_Flyer.pdf

How to Become a Weather Ready Nation Ambassador:

<https://www.weather.gov/wrn/amb-tou>

Frequently Asked Questions:

<https://www.weather.gov/wrn/amb-faqs>

Severe Weather Reporting Guidelines

What to report:

- Wind gusts of 40 MPH or greater (remember winds greater than **58 MPH** are severe)
- Hail 1/2 inch diameter or greater (remember hail **one inch in diameter** or larger is severe)
- Tornadoes or funnel clouds
- Post storm damage (even if the storm has long passed)
- Water that covers roads of at least a foot deep or that threatens property
- Rainfall rates greater than an inch per hour
- Waterspouts

- When reporting either wind or hail, please tell us whether it is **Measured** or **Estimated**.
- **Time** the event occurred (not what time you are reporting)
- We need the **location** of where the event occurred.

Distance and direction from nearest town or

Major street intersections

Latitude and Longitude (if available)

How to Report:

- Facebook: [NWSDetroit](#)
 - Twitter: [@NWSDetroit](#)
 - County Net
 - Winlink: K8DTX@winlink.org
 - Toll Free Number (answered 24/7) 800-808-0006
- For more info on How to Report: <https://www.weather.gov/crh/stormreports?sid=dtx>

Wind Scale



MPH	Description
25-31	Large branches in motion; whistling heard in telephone wires
32-38	Whole trees in motion; inconvenience felt walking through the wind
39-54	Twigs break off trees; wind generally impedes progress
55-72	Damage to chimneys, TV antennas; pushes over shallow-rooted trees
73-112	Peels surfaces off roofs; windows broken; light mobile homes overturned; moving cars pushed off road
113-157	Roofs torn off houses; cars lifted off ground

(Bold = Severe Warning Criteria)

Hail Correlation



Pea	0.25 inch	Half Dollar	1.25 inches	Baseball	2.75 inches
Plain M&M	0.50 inch	Ping Pong	1.50 inches	Large Apple	3.00 inches
Penny	0.75 inch	Golf Ball	1.75 inches	Softball	4.00 inches
Nickel	0.88 inch	Lime	2.00 inches	Grapefruit	4.50 inches
Quarter	1.00 inch	Tennis Ball	2.50 inches	CD/DVD	4.75/5 inches