



## National Weather Service Aberdeen, South Dakota



July 2015

### Inside this issue:

Summer Weather Safety 1

Flood Safety 2

Weather and Boating Safety 3

How to Respond to Excessive Heat Events 4

Lightning Safety 5

The Importance of Storm Reports 6

Three Month Outlook—August through October 7

### Summer Weather Safety

Summer brings many different types of weather to the Northern Plains of the United States. Some of the weather we see during this time of year is pleasant, but some of it can be downright dangerous. This edition of the Sky-scanner will focus primarily on how to keep yourself and your family safe during some of the more extreme and hazardous weather that may occur during the remainder of the summer months.



## Flood Safety

Sometimes floods develop slowly and forecasters can anticipate where a flood will happen days or weeks before it occurs. Often times flash floods can occur within minutes and sometimes without any sign of rain. Being prepared can save your life and give you peace of mind. Here are some things to consider to help in your preparation.

[Create a Communications Plan](#)

[Assemble an Emergency Kit](#)

[Know Your Risk](#)

[Sign up for Notifications](#)

The Advanced Hydrologic Prediction Service provides RSS feeds for observed forecast and alert river conditions to help keep the public informed about local water conditions.

[Prepare Your Home](#)

[Prepare Your Family/Pets](#)

[Charge Your Essential Electronics](#)

[Leave](#)

For further information, see [www.floodsafety.noaa.gov](http://www.floodsafety.noaa.gov).



## Weather and Boating Safety



Before going boating, fishing, diving or enjoying other water sports, check the forecast from [weather.gov](http://weather.gov) or your favorite weather source..

- If severe weather is predicted, stay home or go earlier than normal. Be prepared to head to shore quickly. Monitor storms via:
  - NOAA Weather Radio
  - [Mobile.weather.gov](http://Mobile.weather.gov)
  - Apps that have radar/lightning data
- If you are caught out in a storm and can't get back in time, here's what to do:
  - Divers should get out of the water and get to safety. If that is not possible, dive as deep as possible for the duration of the storm or as long as possible.
  - Stop all activities when there is lightning or when weather conditions look threatening. The first lightning strike can come out of a clear blue sky many miles ahead of an approaching thunder storm cloud.
  - If your boat has a cabin, stay in the center of the cabin. If you don't have a completely enclosed cabin, stay low.
  - Keep arms and legs in the boat. Do not dangle them in the water. Water conducts electricity from lightning.
  - Disconnect electronic equipment, including the radio, throughout the duration of the storm.
  - Lower, remove or tie down the radio antenna and other protruding devices if they are NOT part of a lightning protection system.
  - If someone is struck by lightning, perform CPR immediately if needed. Victims do not carry an electrical charge after being struck. There is no danger to you in offering emergency aide..
  - If a boat has been struck by lightning, or is suspected of having been struck, check the electrical system and the compasses to ensure that no damage has occurred.

Consider downloading the NWS mobile site at [mobile.weather.gov](http://mobile.weather.gov) or another weather app. Be sure your app offers forecasts and NWS watches, warnings and advisories. Some more advanced apps, offer radar data and lightning information, which can be vital for boaters caught out when the weather changes.



## How to Respond to Excessive Heat Events

- Slow down: reduce, eliminate or reschedule strenuous activities until the coolest time of the day. Children, seniors and anyone with health problems should stay in the coolest available place, not necessarily indoors.
- Dress for summer. Wear lightweight, loose fitting, light-colored clothing to reflect heat and sunlight.
- Eat light, cool, easy-to-digest foods such as fruit or salads.
- Drink plenty of water (not very cold), non-alcoholic and decaffeinated fluids, even if you don't feel thirsty. If you on a fluid restrictive diet or have a problem with fluid retention, consult a physician before increasing consumption of fluids.
- Use air conditioners or spend time in air-conditioned locations such as malls and libraries.
- Use portable electric fans to exhaust hot air from rooms or draw in cooler air.
- Do not direct the flow of portable electric fans toward yourself when room temperature is hotter than 90°F. The dry blowing air will dehydrate you faster, endangering your health.
- Minimize direct exposure to the sun. Sunburn reduces your body's ability to dissipate heat.
- Take a cool bath or shower.
- Do not take salt tablets unless specified by a physician.
- Check on older, sick, or frail people who may need help responding to the heat. Each year, dozens of children and untold numbers of pets left in parked vehicles die from hyperthermia. Keep your children, disabled adults, and pets safe during tumultuous heat waves.

For more heat health tips, go to the [Centers for Disease Control and Prevention](#)



## Lightning Safety



### Lightning: What You Need to Know

- **NO PLACE** outside is safe when thunderstorms are in the area!!
- If you hear thunder, lightning is close enough to strike you.
- When you hear thunder, *immediately* move to safe shelter: a substantial building with electricity or plumbing or an enclosed, metal-topped vehicle with windows up.

**Stay in safe shelter at least 30 minutes after you hear the last sound of thunder.**

### Indoor Lightning Safety

- Stay off corded phones, computers and other electrical equipment that put you in direct contact with electricity.
- Avoid plumbing, including sinks, baths and faucets.
- Stay away from windows and doors, and stay off porches.

**Do not lie on concrete floors, and do not lean against concrete walls.**

### Last Resort Outdoor Risk Reduction Tips

If you are caught outside *with no safe shelter anywhere nearby* the following actions *may* reduce your risk:

- Immediately get off elevated areas such as hills, mountain ridges or peaks
- Never lie flat on the ground
- Never shelter under an isolated tree
- Never use a cliff or rocky overhang for shelter
- Immediately get out and away from ponds, lakes and other bodies of water
- Stay away from objects that conduct electricity (barbed wire fences, power lines, windmills, etc.)

## The Importance of Storm Reports

When thunderstorms develop across central and eastern South Dakota and west-central Minnesota, we rely on three main sources of information in order to make warning decisions: radar data, environmental data, and ground truth in the form of storm reports. While monitoring radar and the environment is done from inside our office, we depend entirely on outside sources for storm reports. As a result, trained spotters, emergency managers, law enforcement, and the general public among others are all very valuable to operations. Radar and environmental data yields a treasure trove of information that can provide enough justification for warning decisions in nearly all situations, but a storm report can calibrate or fine-tune thinking. This helps ensure the best possible service with longer lead times and more accurate warning information.

Not sure what's worthy of a phone call or a Facebook post? Just remember we'd rather have information as opposed to not having it, even if the report doesn't meet severe criteria (58 mph wind, 1.00" hail, or tornadoes). For example, if you see penny sized hail falling outside and decide to let your local Weather Service office know, we will compare the **time and location** of your report with radar data. If the storm intensifies, we have more confidence that severe hail will occur. For more on why, what and how to report, see the graphic below

# We **LOVE** Your Weather Reports!

## WHY?

- ✓ They help us verify our forecasts and warnings
- ✓ We can let neighboring towns know what's headed their way
- ✓ Reports are archived for use in scientific research, which can lead to a better understanding of thunderstorms

## WHAT kind of reports?

- ✓ Tornado, funnel cloud, OR rotating wall cloud
- ✓ Hail of any size: measure w/ ruler or compare to coin size
- ✓ High wind: estimated OR damage
- ✓ Flooding (beyond typical locations)



## HOW?

As soon as safely possible:



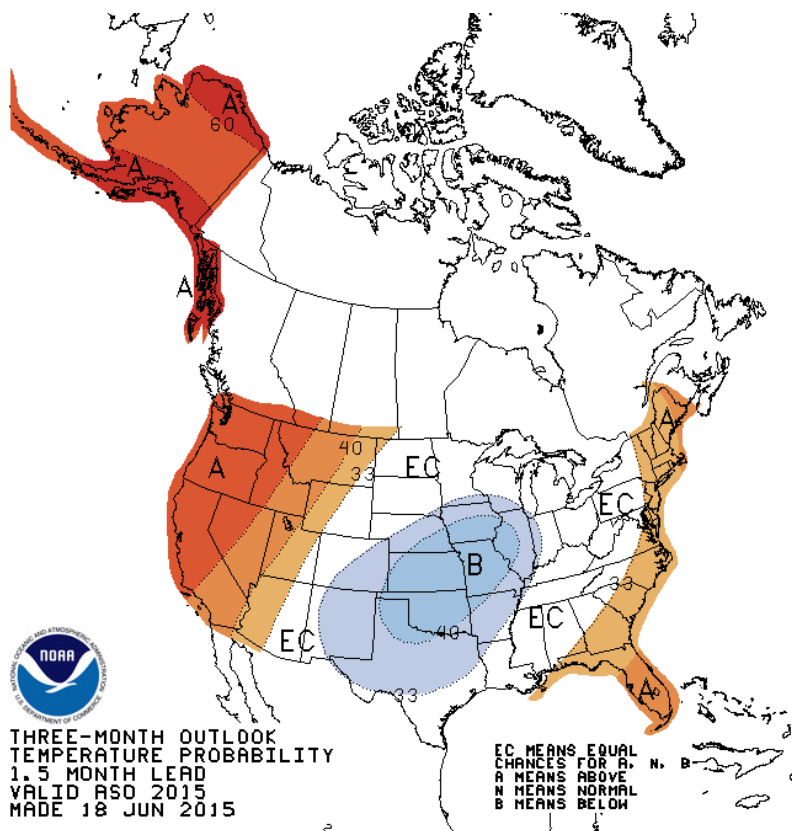
Post a report on our Facebook page OR Tweet us a report by mentioning @NWSAberdeen in your tweet – pictures are always encouraged!



Contact us via email at [abrreports@noaa.gov](mailto:abrreports@noaa.gov) or via our direct phone number at 1-800-697-1107

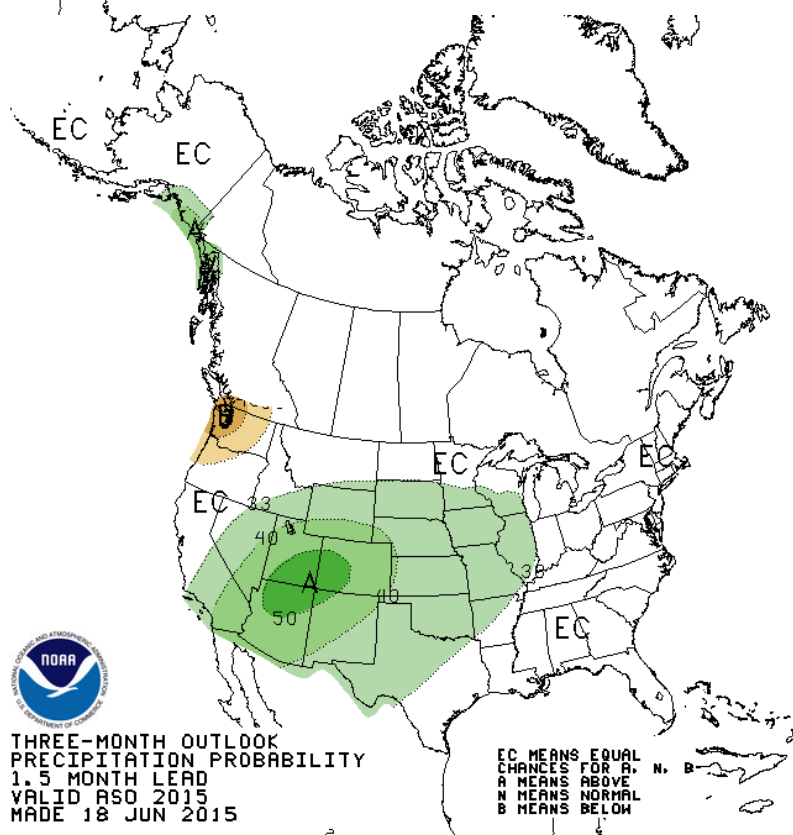


### Three Month Outlooks—August through October



Temperature Outlook for August through October

Precipitation Outlook for August through October



# Heat Index Chart

Temperature (°F)

Relative Humidity (%)	Temperature (°F)															
	80	82	84	86	88	90	92	94	96	98	100	102	104	106	108	110
40	80	81	83	85	88	91	94	97	101	105	109	114	119	124	130	136
45	80	82	84	87	89	93	96	100	104	109	114	119	124	130	137	
50	81	83	85	88	91	95	99	103	108	113	118	124	131	137		
55	81	84	86	89	93	97	101	106	112	117	124	130	137			
60	82	84	88	91	95	100	105	110	116	123	129	137				
65	82	85	89	93	98	103	108	114	121	128	136					
70	83	86	90	95	100	105	112	119	126	134						
75	84	88	92	97	103	109	116	124	132							
80	84	89	94	100	106	113	121	129								
85	85	90	96	102	110	117	126	135								
90	86	91	98	105	113	122	131									
95	86	93	100	108	117	127										
100	87	95	103	112	121	132										

**Likelihood of Heat Disorders with Prolonged Exposure or Strenuous Activity**

■ Caution   
 ■ Extreme Caution   
 ■ Danger   
 ■ Extreme Danger

**NATIONAL WEATHER SERVICE**

824 Brown County 14 South  
Aberdeen, SD  
57401

Phone: 605-225-0519

**OFFICIAL BUSINESS**

PENALTY FOR PRIVATE USE, \$300

Summer afternoon-summer  
 afternoon; to me those have  
 always been the two most  
 beautiful words in the Eng-  
 lish language.  
 ~ Henry James

