



FRESHWATER

FRESHWATER'S WORK FOR CLEAN AND SAFE DRINKING WATER

About 75 percent of Minnesota's drinking water comes from groundwater and is supplied from public water systems or private wells. However, high nitrate in private drinking water wells from agriculture, particularly in southeastern Minnesota, highlights the urgent need for legislative action to better manage and protect vulnerable drinking water sources.

Freshwater works to ensure everyone in Minnesota has access to safe drinking water, regardless of where they live. We collaborated with the Minnesota Department of Health to develop a Drinking Water Action Plan aimed at guiding future policies and programs across the state. Furthermore, we are actively engaging with legislators, partner organizations and state agency leaders to support clean water policies that prevent pollution of groundwater and surface waters.

Visit freshwater.org for more on our work to protect and improve the quality of Minnesota's drinking water.

JANUARY PHENOLOGY

Jim Gilbert's Nature Notes

50th edition phenology by Jim Gilbert is based on 2024 field notes with consideration of information from many other years. Observations are from the Lake Waconia, Lake Minnetonka and Twin Cities area unless noted.

First week of January

During January in the Northern Hemisphere, the Sun is low in the sky. Days are warmer and longer in the spring, summer and fall because the Sun is higher in the sky, concentrating more heat on each acre of land and water.

White-tailed deer bucks are dropping their antlers. The first bucks began shedding them in December and others won't lose their antlers until March.

2024: Many late freeze-ups for Minnesota lakes included: Budd and Hall Lakes at Fairmont, Little McDonald and Paul Lakes near Perham and Green Lake at Spicer. Mille Lacs Lake finally froze-over on January 4, Lake Hendricks in Lincoln County on January 8 and Lotus Lake in Chanhassen on January 10.

Second week of January

Watching nuthatches, blue jays and woodpeckers at a feeding station doesn't warm the day, but their actions warm the heart. Birdfeeder birds are around day after day, a reminder that life outlasts every winter. Think about land hibernating frogs – wood frogs, chorus frogs, spring peepers and gray tree frogs – lying frozen yet still alive, and they will survive.

2024: Very late lake freeze-ups included Grindstone Lake in Pine County on January 12 and Lake Minnetonka in Hennepin County on January 13 (latest on record for this lake). On January 14, the Twin Cities area had -10 degrees, along with beautiful sundogs that morning.

Third week of January

Three woodpecker species – downy, hairy and pileated – are heard drumming in response to the lengthening amount of daylight. They hammer on signal posts – usually resonant tree trunks and limbs – to announce territories and attract mates. Also, listen for the “whi, whi, whi,” spring song of the white-breasted nuthatch, and blue jays in their noisy groups vocalizing their special “pump-handle” spring call, also known as the “speelunker” call. All are great sounds of nature.

Meanwhile, at night, great horned owls – the earliest nesting birds in Minnesota – continue duet hooting as they set up nesting territories. By the end of the month the first eggs, typically two in a clutch, have been laid, usually in an old nest of a large bird such as red-tailed hawk, great blue heron or American crow, and sometimes on top of a leafy squirrel nest.

Fourth week of January

If you are able, embrace this month of frozen elegance and go outside where you can feel the crunch of snow, gaze at tree silhouettes and listen for quiet sounds such as the whistled “fee-bee” song of the black-capped chickadee, telling us that one season slides slowly into the next. In a clear, sweet whistle, the chickadee gives two notes of equal length, the second tone lower in pitch than the first, making a “fee-bee” sound.

January 27, 2024: At Somerskogen Sugarbush in Minnetrista, the first sugar maple trees were tapped and many dripped sap. The Gunflint Mail Run Sled Dog Race was called off for the second time in a month because of the lack of snow.

January 29, 2024: With a record high temperature of 50 degrees in the Twin Cities, runners were out in shorts and T-shirts. Ice fishing houses were nearly gone from southern Minnesota lakes.

January 31, 2024: Sunny with a record high of 55 degrees in the Twin Cities. Marshall and Canby reported highs of 60 degrees, and International Falls a new record high of 53 degrees, their first time hitting 50 degrees in January.

LISTEN FOR ...



First northern cardinal “what-cheer, cheer, cheer...” spring song:

| | |
|------|---------|
| 2024 | Jan. 31 |
| 2023 | Feb. 7 |
| 2022 | Jan. 11 |
| 2021 | Jan. 8 |
| 2020 | Feb. 2 |
| 2019 | Jan. 25 |
| 2018 | Jan. 13 |
| 2017 | Jan. 21 |
| 2016 | Jan. 8 |
| 2015 | Jan. 8 |



DARCY SIME | FROSTY DEER | ALBERT LEA, MN



One January that I will never forget was in 2014, which was smack dab in the middle of the worst winter in the previous 40 years. The Winter Misery Index for winter of 2013-14 in Twin Cities was 207 points, or in the high end of the “severe winter” category. This index attempts to weigh the relative severity of winters, assigning points to severe cold days, big snowfalls and duration. That January we had it double-barreled, snow and cold, with 22.7 inches of snow falling on 18 days and 20 mornings below zero with an average temperature of a frigid 8 degrees. Let’s hope for nothing like that this January!

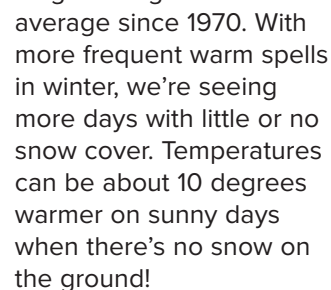


Weather Blog:
[mprnews.org/
updraft](http://mprnews.org/updraft)

MPRnews

Losing our cool?

On Climate Cast on MPR News, I report on the latest science, news and solutions every week. NOAA data show it's been harder to keep consistent snow cover on the ground during recent Minnesota winters. NOAA and Climate Central data show winters in the Twin Cities area have warmed an astounding 6.4 degrees on



Learn more at: mprnews.org/podcasts/climate-cast

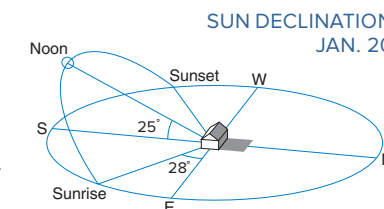
MY NATURE NOTES

ASTRONOMY

Ron Schmit

Morning sky

Mercury starts the year leaving the morning sky and diving behind the Sun on 1/21. Though the stars of winter hold center stage in the evening sky, the late January sunrise gives us an opportunity to view what's to come: among the constellations of spring, Arcturus sits high in the south. This red giant is the fourth brightest star in the sky, 25 times the Sun in size and 37 light years away. Its name means "Guardian of the Bear" and it follows Ursa Major in the sky.



Evening sky

Venus, Mars and Mercury huddle around the Sun mid-month, reaching conjunction on 1/6, 1/9 and 1/21. Mercury ends the month in the evening sky, just 0.74° south of Venus on 1/28, though both are lost in the glare of sunset. The Moon meets Saturn on 1/22. Jupiter begins the year in retrograde, which started on 11/11/2025. It gets a visit from a Supermoon on 1/3 and a regular Moon on 1/30. Jupiter reaches Opposition on 1/10.

Highlights

This year marks the 50th anniversary of the Weatherguide! In cosmic terms, 50 years is a fraction of a blink. The light we see from stars in the night sky has traveled for hundreds (if not thousands) of years. For one star, however, that light has travelled exactly 50 years: Delta Aquilae. The Bayer Designation identifies stars in a constellation by brightness using a Greek letter followed by the genitive form of its parent constellation's Latin name. Delta is the fourth letter of the Greek alphabet. Since this star is the fourth brightest in Aquila, it gets the "Delta" tag: δ . Another name for the star is Deneb el Okab: Arabic for "the tail of the eagle." On 1/1 at 6 p.m., Delta Aquilae will be 12° above the western horizon and 8° directly below bright Altair (Alpha Aquilae). The star's light you will see left when our calendar was first published. Traveling at light speed, that makes it 293,900,000,000,000 miles or 472,986,000,000,000 km away!



Image: Stellarium

SPECIES HIGHLIGHT by Jim Gilbert



DANA STERNER | SUNSET MALLARD | MINNEAPOLIS, MN

Mallard duck (*Anas platyrhynchos*)

At least some wild mallard ducks are here in Minnesota year-round. This male mallard with its glossy green head, yellow bill and chestnut colored breast looks especially handsome in the blue open water. Mallards are dabbling ducks, tipping forward to feed on aquatic plants and insects, snails and even small fish in shallow waters of ponds, lakes, small streams and rivers. No doubt the best known and most abundant wild duck in the Northern Hemisphere, the mallard is the ancestor of almost every breed of domestic duck.