



FRESHWATER

OUR RESEARCH AND PUBLIC POLICY WORK

For more than 50 years, Freshwater has conducted research, convened experts, published reports and advocated for science-based approaches to conserving and protecting water.

We bring water policy recommendations to state agencies, local government and the Minnesota Legislature to promote effective, bipartisan solutions. We collaborate with engineers to plan resilient water infrastructure; with landowners to adopt practices that prevent runoff; and with citizens to inspire grassroots leadership and action.

Find our reports, publications and more at freshwater.org.

AUGUST PHENOLOGY

Jim Gilbert's Nature Notes

First week of August

Deer flies and mosquitoes are not as bothersome as in July. Watermelons, muskmelons and other garden melons are ripe. Both common and great ragweeds – the hayfever plants – begin blooming and shedding pollen into the air from their green flowers. Canada goldenrod also begins blooming, with its golden-yellow flowers that do not shed pollen or cause symptoms of hayfever in us humans.

Common milkweed pods are now up to about three inches long. Monarch butterfly eggs are laid from about July 10 to August 10; the quality of milkweeds and weather conditions will determine the size of the last generation. Adult monarchs from this last generation are the ones that migrate to Mexico for the winter.

Second week of August

The nests of the bald-faced hornet – the original paper-maker – are growing, layer by layer. These nests look like gray footballs up in trees. Look for orb spider webs, especially on dewy mornings.

Watch for more ruby-throated hummingbirds visiting area flower gardens and sugar water feeders. These are early migrants coming from up-north. Sandhill cranes can be seen on recently harvested wheat fields in LeSueur County and area.

The harvest of sweet corn for canning and freezing is underway in southern Minnesota.

Lake Superior water temperature is 50 to 60 degrees on the surface, and down 50 feet is in the 40s.

Third week of August

Recently fledged American goldfinches come to feeders with their parents. Bur oak, white oak and red oak acorns have started falling. Wild grapes are ripe. Cultivated grapes are in their ripening stages.

The best time to seed a lawn in Minnesota is between August 15 and September 10. Petunias, geraniums, cosmos, marigolds, snapdragons and zinnias are some of the showy blooming annuals.

During warm nights, the chirping of snowy tree crickets sounds like sleigh bells. The peak for monarch butterfly migration in far northern Minnesota is between August 18 and the 30th.

Fourth week of August

Showy blooming wildflowers include wild cucumber vine, Jerusalem artichoke and Canada goldenrod.

White snakeroot is also in bloom, a common woodland wildflower with leaves and stems that contain trematol, which is poisonous to livestock and is excreted in cow's milk. If consumed by humans it causes milk sickness, the disease from which Lincoln's mother, Nancy Hanks, died.

Giant sunflowers bloom nicely in gardens. Zestar and SweeTango apples plus Chestnut crabapples are ripe. Gray squirrels are still gathering green black walnuts.

Watch for migrating common nighthawks. Snapping turtle eggs begin to hatch. The peak for monarch butterfly migration from Duluth west to Detroit Lakes is from August 24 to September 5.

LOOK FOR...



First common ragweed shedding pollen

2024	Aug. 5
2023	July 31
2022	Aug. 5
2021	July 27
2020	July 31
2019	Aug. 3
2018	Aug. 3
2017	Aug. 4
2016	July 31
2015	Aug. 1



CATHERINE WYLAND | MONARCH | SAINT PAUL, MN



BEN'S WEATHER NOTES

This is one of the best months to enjoy those lazy days outside. While severe weather is still possible, August is one of the sunniest, least windy months of the year. Peak storm season is fading as the muggiest days are now behind us.

Many are counting down until the State Fair. School is right around the corner, but there is still plenty of time to run up to the cabin or go for a dip in a lake, which typically peaks in temperature toward the end of summer. Watch out for that thermocline where the colder, more dense water lingers!

You'll start to notice days getting shorter as we lose nearly 90 minutes of daylight. The rate of daylight loss increases deeper into the month. As the sun goes down on the 12th, look up to see one of the best meteor showers of the year. The Perseids can bring 60+ meteors per hour streaking across the sky. A great way to wrap up a summer day!



Belinda Jensen
Chief Meteorologist

Bobby Jensen *Gardening Expert* **Laura Betker** *Meteorologist*

- ▶ **Harvest and preserve**
Pick and store tomatoes, peppers, cucumbers and beans for future use.
- ▶ **Plant fall cover crops**
Add clover or rye to enrich the soil for next season.
- ▶ **Deadhead flowers**
Remove spent blooms to encourage continued flowering.
- ▶ **Prepare for fall crops**
Continue planting spinach, radishes and lettuce for a late-season harvest.
- ▶ **Plan for next year**
Take notes on what worked well and what needs improvement.

MY NATURE NOTES

ASTRONOMY

Ron Schmit

Morning sky

Mercury reaches Greatest Western Elongation on 8/2, then races all the way back toward the Sun, reaching Superior Conjunction on 8/27. On the way, it passes the Moon on 8/11, then just 0.56° north of Jupiter on 8/15. Rising just after 2 a.m. on 8/8, Mars joins the Moon in the early morning and heads into Gemini. A New Moon on 8/13 marks the start of the Draconid meteor shower. Viewing is best in early morning.

Evening sky

The Moon passes Saturn on 8/3 to start the month and on 8/30 to end the month. On 8/15, Venus reaches Greatest Eastern Elongation – a full 46° from the Sun – and yet is very low on the horizon. At the end of civil twilight, it is only 9.5° above the horizon. This time of year, the ecliptic is very low in the sky. The crescent Moon joins it to celebrate the occasion. Venus ends the month slowly slipping in the west-south-west.

Highlights

The two-week interval between solar and lunar eclipses happens again this month, but this time we get to see them both (just barely). On 8/12, a total solar eclipse will occur in Greenland, Iceland and Spain. In Minnesota we will see a partial solar eclipse right around noon. The Moon will start to cover the Sun at 11:55 a.m. taking a very thin slice off the upper left side of the Sun. When maximum occurs at 12:13 p.m., only 2.5 percent of the Sun will be covered. Then the Moon begins to slide away, ending at 12:31 p.m. Make sure you use eclipse glasses for safe viewing. Two weeks later, on 8/27, we will have a partial lunar eclipse. The Moon will start to pass into the Earth's shadow at 9:34 p.m., reaching maximum eclipse at 11:04 p.m. when 96 percent will be covered, and will end at 12:52 a.m. During a total lunar eclipse, we often see color in the unlit portion, but with part of the Moon still fully lit, the contrast will make color harder to see.



Image: Stellarium

SPECIES HIGHLIGHT by Jim Gilbert



MARK PAULSON | SUNLIT BLACK-EYED SUSANS | ORONO, MN

Black-eyed Susan (*Rudbeckia hirta*)

A showy roadside wildflower, the black-eyed Susan has quite a long summer blooming season. Each big, single, slender-stemmed blossom has 10 to 20 long golden-yellow rays and a dark chocolate-colored central cone with disk-type flowers. Flower heads are about two to three inches wide and stand one to three feet tall above a rough hairy stem with hairy leaves. The black-eyed Susan is a "55 mile-per-hour plant," one that can be identified from a fast-moving automobile when in bloom. However, to appreciate its real beauty a person should walk in a prairie, field, open forest or roadside ditch among hundreds of these bright blossoms. They are true prairie wildflowers that have become a favorite for perennial gardens.