



SIGHTS AND SOUNDS AT DUSK

At the end of June, the days feel like they will never end. These summer evenings are accentuated by amazing seasonal sights and sounds that Minnesotans look forward to all year long.

At dusk, flashes of natural light can be seen throughout Minnesota as firefly activity peaks. Male fireflies flash signals to females over meadows and along the edges of woodlands and wetlands.

Frogs, crickets and birds produce a symphony of sounds. Frogs can be heard near ponds and lakes. Crickets produce long humming sounds and songbirds can be heard singing. The symphony often reaches a crescendo around dusk and fades as day turns to night.

Find a place to sit in your backyard, a park or along a shoreline. Sit quietly and relax. Watch the sunset and take in the natural sights and sounds. What messages do you receive? Document these messages in words and pictures in a journal.

For more outdoor learning resources, visit jeffersfoundation.org.

FRESHWATER

ADVANCING GROUNDWATER GOVERNANCE

Groundwater is complex, unseen and often misunderstood. Even here in Minnesota – known for an abundance of natural lakes, rivers and streams – the aquifers that supply drinking water and support aquatic ecosystems are vulnerable to overuse and contamination. Freshwater recently completed the second phase of a multi-year project to advance groundwater governance in the Great Lakes region.

Currently, groundwater knowledge and policies vary significantly across Minnesota, Wisconsin, Michigan, Illinois, Indiana, Ohio, and 35 Tribal governments, creating barriers to sustainable and equitable groundwater use. Freshwater is working towards a governance model that begins with the voices of those sharing the water to identify collaborative solutions to address current and future groundwater challenges.

Learn more at freshwater.org/groundwatergovernance.

JUNE PHENOLOGY

Jim Gilbert's Nature Notes

First week of June

On the first day of June summer arrives, marking the beginning of what historically are the warmest 92 days of the year according to meteorologists. Smooth wild rose begins blooming. Young black-capped chickadees and eastern bluebirds are fledging. Monarch caterpillars can be seen on milkweeds. In central and northern Minnesota and Wisconsin, recently hatched common loons ride on the backs of their parents, who catch fish and floating insects for them.

Second week of June

Eastern cottonwood trees shed much seed on cotton carriers. Japanese tree lilac, northern catalpa and staghorn sumac have begun blooming. Eastern tiger swallowtail butterflies are on the wing.

Now blooming along the bog boardwalk at the University of Minnesota Landscape Arboretum is our Minnesota state flower, the showy pink and white lady's-slipper. It's the largest and most impressive orchid found in the state.

The Sun and warm air are making the many Minnesota and Wisconsin lakes perfect for swimming, with readings close to 70 degrees, the cut-off temperature for safe water activities. The long hours of sunlight also promote nesting behavior in birds, including the Baltimore orioles, purple martins, tree swallows, ruby-throated hummingbirds and many warblers.

Third week of June

Northern catalpa trees keep blooming. Gardeners pick buckets of ripe strawberries. Some field corn is up about a foot. Delphinium is tall and blooming. Tawny daylily begins blooming. First deer flies are on the wing.

June is rose month, when we can experience the most blossoms from many types of roses. It's the combination of elegance and charm that has made roses as a group the best-known and most popular ornamental plants in the world.

Canada juneberry trees have delicious ripe fruit that is relished by us humans and a number of birds such as American robins and cedar waxwings.

Fourth week of June

New cattail flower heads are dark brown and very showy in marshlands. The first monarch butterflies of the new generation, since arriving in Minnesota, are on the wing. Common milkweeds are blooming.

Annabelle hydrangeas have huge rounded clusters of white flowers and garden hollyhocks start blooming. Garden raspberry picking begins.

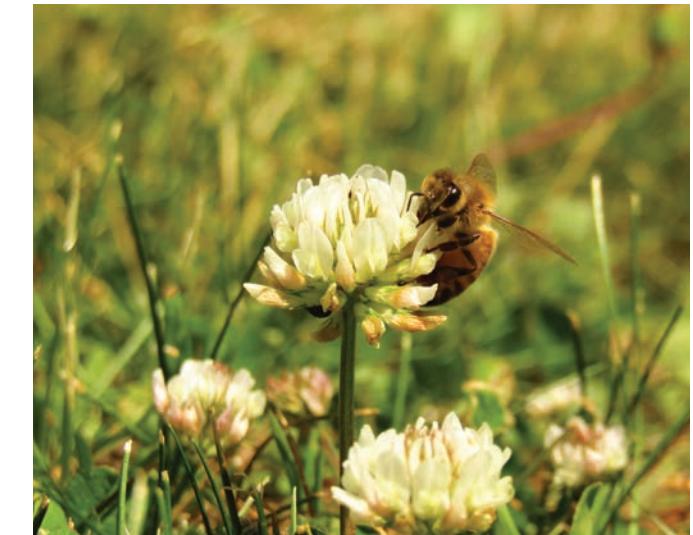
American robins are vocal until 9:40 p.m. Fireflies are on the wing. Look for these tiny lights over meadows and grassy ditches, often near wetlands.

LOOK FOR ...



Garden roses at June peak of bloom (U of M Landscape Arboretum)

2024	June 19
2023	June 18
2022	June 22
2021	June 14
2020	June 16
2019	June 24
2018	June 19
2017	June 23
2016	June 20
2015	June 24



PETER DRAGANOWSKI | HONEY BEE AT WORK | SAINT PAUL, MN

TRADITIONAL ACTIVITIES FOR SUMMER (NIIBIN) by John Roterman

In the summers, Ojibwe often fished using nets (wewebanaabiiwin) and planted gardens using the three sisters method of planting squash, corn and beans together. The corn stood tall to hold up the beans and the squash set a protective perimeter around the garden. This is when harvesting of strawberries, blueberries and other berries took place (jaagawinzo), along with gathering of traditional plants for medicine. Ojibwe also built sturdy canoes from birch bark and cedar in the summer.



BEL'S WEATHER BLOG

June is a month that really shines! The sun is up from around 5:30 in the morning until 9:00 in the evening for 20 solid days. That is fifteen-and-a-half hours of sun, peaking at its highest point in the Minnesota sky at 69 degrees. Perfect timing for summer fairs, farmer's markets and festivals. It's astonishing to consider that we get almost seven hours more daylight around the summer solstice in December.

Seasonal lag means that we don't see the average hottest temperatures in June. July will bring the warmest temperatures on average a full month after we see the strongest solar energy. The average high temperature this month climbs to 80 degrees by June 17.



Belinda Jensen
Chief Meteorologist

Bobby Jensen
Gardening Expert

Laura Betker
Meteorologist

- ▶ **Plant warm-season vegetables**
Tomatoes, peppers, beans, squash and melons can now go in the ground.
- ▶ **Mulch garden beds**
Help retain moisture and suppress weeds with straw, leaves or wood chips.
- ▶ **Control weeds early**
Regular hoeing or hand-pulling prevents weeds from taking over.
- ▶ **Fertilize and water regularly**
Provide nutrients to actively growing plants, and water deeply during dry spells.
- ▶ **Watch for pests**
Check for signs of aphids, slugs and cutworms, and take action early.



Belinda Jensen
@BelindaKARE11
Chief Meteorologist

MY NATURE NOTES

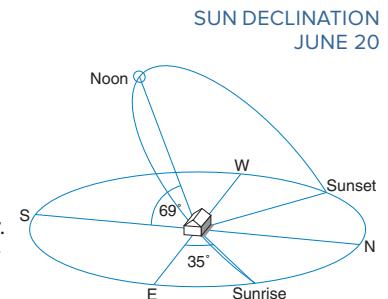
ASTRONOMY

Ron Schmit

Morning sky

Saturn is now easy to see in the east before sunrise. It meets the Moon on 6/10. Finally, we can see Mars clearly in the eastern predawn sky. It gets a visit from the Moon on 6/12. In the early hours of 6/21, the Sun stops its movement north and begins its trek southward: the Summer Solstice. At noon the Sun will reach its maximum 68.5° above the horizon. Though days get shorter, plenty of warm weather is ahead.





Evening sky

Venus continues to climb higher in the sky, catching up to Jupiter on 6/9 and passing just 1.64° north. Mercury reaches Greatest Eastern Elongation on 6/15. Look for it on 6/16 and 6/17, west-north-west in the evening sky at 9:30 p.m. when it is joined by the Moon, with Jupiter and Venus close by. As the month passes, the spring constellations are replaced by those of summer, and the relative sparseness of the vernal sky is superseded by the richness of the galactic plane.

Highlights

Did you know that you can see Venus during the daytime? It is the brightest thing in the sky after the Sun and the Moon. The trick is knowing where to look. Using a pointer lined up at Venus, you will be amazed at how easy it is to see, but when the pointer is removed, you will lose sight of it – equally amazing! It is difficult for our eyes to focus on such a tiny spot in all that blue. Well, on 6/17 you'll have a great chance because you'll have some help: the Moon. The Moon is actually going to drive right over the top of Venus. Simply find the Moon at 2 p.m. and right next to it will be a bright star. That's Venus! Disappearance starts at 2:14 p.m., so make sure to get out there before it's gone. The Moon phase will be a crescent, so the eastern limb of the Moon will be dark. You likely won't notice it's there until Venus disappears. Venus will reappear at 3:36 p.m. By the time the pair sets at 11:30 p.m., they will be 4° apart. The Moon moves quickly through the sky.



Image: Stellarium

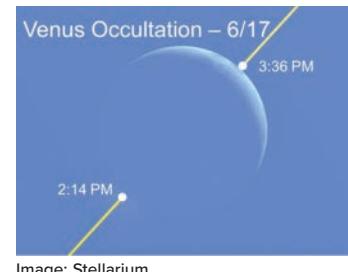


Image: Stellarium

SPECIES HIGHLIGHT by Jim Gilbert



DOMINIQUE BRAUD | TRUMPETER SWAN AND CYGNETS | GRANTSBURG, WI

Trumpeter swan (with cygnets) (*Cygnus buccinator*)

Trumpeter swans with their trumpet-like calls are the largest waterfowl. They are entirely white with a black bill, and black legs and feet. Immatures are gray-brown. These birds use their long necks to feed on aquatic plants and insects. Trumpeter swans once nested throughout Minnesota. By the 1880s, these swans had disappeared from the state; there were no game laws to limit the massacre. In 1966 a reintroduction program was started in Carver Park Reserve by the Hennepin County Park Reserve District. Today the statewide population is probably over 50,000 – a great success story for the magnificent trumpeter swan. About 10 percent of these Minnesota swans have become migrants, most of them flying to Arkansas for the winter. The other 90 percent are year-round residents.