



CURIOUS ABOUT COLOR CHANGE

This month, find a maple tree in your neighborhood, local woodland or park. Document how the color of its leaves changes over time. If there aren't maples nearby, observe other deciduous tree species such as paper birch or cottonwood.

Are you curious about how long it takes a green maple leaf to turn red or another species such as birch or cottonwood to turn yellow? Find a tree with some leaves starting to change color. Mark a green leaf and observe daily to record the changes.

Use paints or colored pencils to add a splash of color to the color change data you collect. Consider producing a "time lapse" picture, using data and observations made during the week as leaves changed color before your very eyes.

For more outdoor learning resources, visit jeffersfoundation.org.

FRESHWATER

HELP PROTECT WATER IN YOUR COMMUNITY

The Minnesota Water Stewards certification program offers a great opportunity to join a network of energized volunteer leaders to tackle water challenges in your community. Stewards learn about Minnesota's water science and water issues, and they explore how to engage friends and neighbors in work for healthy water.

After 12 years and more than 500 Minnesota Water Stewards certified, mainly in the Twin Cities metropolitan area, Freshwater is now expanding this successful leadership training program to a statewide audience. Recognizing that local water issues call for local solutions, we are also developing customized training and action steps to meet specific regional and cultural needs such as private well education, natural shorelines and more.

Learn more at freshwater.org/minnesota-water-stewards.

SEPTEMBER PHENOLOGY

Jim Gilbert's Nature Notes

First week of September

Autumn Joy sedum and panicle hydrangea are blooming and showy in perennial gardens. Wild grapes are at peak ripeness. Barn swallows line up on utility wires, staging for migration. The peak for monarch butterfly migration from the Twin Cities west to Granite Falls is August 29 to September 10.

Second week of September

Many First Kiss, Honeycrisp and Sweetango apples are ripe for picking. Japanese silver grass, a landscape plant, is tall and very showy with silvery tops. The black and blue salvia is a great garden flower to attract ruby-throated hummingbirds.

At the University of Minnesota Landscape Arboretum, the dahlia garden has fantastic flowers, and 25 mushroom species may be seen on a woodland hike. On the restored prairie, Indian grass, big bluestem, showy goldenrod and stiff goldenrod are blooming.

Migrating white pelicans are numerous. The peak for monarch butterfly migration from Caledonia and Austin west to Luverne is September 3 to 15.

Third week of September

The velvet on white-tailed deer antlers has disappeared. Concord grape harvest is now at peak. Field corn plants are maturing and turning yellow and brown. Common milkweed pods are opening and shedding their seeds on silvery parachutes. Poison ivy leaves display some red, orange and yellow fall colors.

On a sunny day with northwest winds, hundreds and sometimes thousands of hawks and other migrants can be seen moving over Hawk Ridge in Duluth.

Fourth week of September

Both butternuts and black walnuts are falling. Apples being harvested include Red Baron, McIntosh and Minjon. In southern Minnesota, dark-eyed juncos begin to arrive and farmers start combining soybeans.

Minnesota's best fall leaf colors may be seen along the Gunflint Trail and other far northeastern locations. The moose rutting season occurs from mid-September to mid-October.

Fifth week of September

In gardens, ever-bearing strawberries and fall-bearing raspberries continue to produce ripe fruit. Apple growers start harvesting Keepsake, Fireside, Connell red, SnowSweet and Haralson. It's the peak of the fall color season in northern Minnesota and Wisconsin, where black bears have begun going into hibernation.

September 2024: Driest September on record for the Twin Cities and area. Warm weather during the month helped to ripen the late tomato crop and kept lake water temperatures in the low to mid-70s, making late-in-season swimming enjoyable.

LOOK FOR ...



Last Baltimore oriole leaves to winter in Central America (from Minnetonka):

2024	Sept. 10
2023	Aug. 31
2022	Sept. 10
2021	Sept. 7
2020	Sept. 7
2019	Sept. 10
2018	Sept. 16
2017	Sept. 15
2016	Sept. 14
2015	Sept. 9



DAVID MORRIS | BOUNDARY WATERS CAMPSITE | BWCA, MN

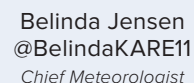
TRADITIONAL ACTIVITIES FOR FALL (DAGWAAGIN) by John Roterman

In the autumn it was time for the Ojibwe to gather their crops from the summer gardens and harvest the wild rice (manoomin) from the water. The wild rice was then winnowed using birch bark baskets and danced upon to separate the seed from the chaff. It was then roasted over fire and stored for the long winter to come. Tanning hides was a common fall activity as well.



September is typically a spectacular month; it is the driest since April with plenty of late summer heat to soak in. Temperatures do slip from the upper 70s for highs and nearly 60 for the low to the mid 60s for highs and lows that will fall into the 40s. This decline in temperatures and daylight do trigger the amazing autumn colors that will emerge throughout the month and into October, cascading from north to south.

Belinda Jensen
@BelindaKAR
Chief Meteorologist



Apples ripen, tomatoes are plentiful and the last of the sweet corn is harvested from the fields. Nineteen of the 30 days are typically sunny to partly cloudy, and ten of the 30 days have some rain. The sun is also 20 percent less intense by the end of the month. Our earliest snowfall on record occurred this month when a trace fell on the 15th back in 1916. The earliest measurable snow was 0.4 inch on the 24th in 1985. Enjoy this beautiful month!

GARDENING TIPS FROM GROW WITH KARE



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

- ▶ **Harvest remaining crops**
Finish gathering tomatoes, squash and root vegetables before frost.
- ▶ **Begin fall cleanup**
Remove dead plants, weeds and diseased material to prevent problems next year.
- ▶ **Plant garlic and spring bulbs**
Now is the time to get garlic, tulips and daffodils in the ground.
- ▶ **Compost garden waste**
Add leaves, grass clippings and spent plants to your compost pile.
- ▶ **Protect perennials**
Mulch around perennials and shrubs to prepare for winter.

MY NATURE NOTES

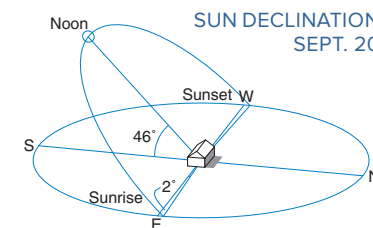
ASTRONOMY

Ron Schmit

Morning sky

Find Mars and the Moon high in the eastern sky on 9/6. The Moon then passes Jupiter on 9/8, which now appears in the east before dawn.

Saturn and the Moon will appear together on 9/27, in the south at 1:30 a.m. and low in the west as sunrise approaches. Before dawn near the end of the month, you will be surprised by how bright the stars appear. The Winter Circle is now in the south, ready to take over the night with some of the brightest stars in our sky.



Evening sky

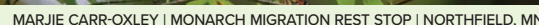
Mercury is moving farther from the Sun, but not getting any easier to see. By month's end, it is less than 6° above the horizon at sunset and setting before dark. Venus gets a visit from the Moon on 9/14, then dips below the west-south-west horizon by month's end, not to be seen again until dawn in November. Sunset changes quickly in September, nearly an hour sooner by month's end. Fall begins 9/22 at 7:05 p.m.

Highlights

Near the equinox, the changing position of the North Pole relative to the Sun creates some interesting dynamics. The Earth orbits 360° around the Sun in 365 days, which means the sky moves west each night by 0.9863° . However, if you track the position of the stars each night relative to the Sun, some strange effects occur. Along the southern horizon is the smallest of the zodiac constellations: Capricornus, the Sea Goat. It's often identified as Pan, the god with a goat's horns and legs. He saved himself from the monster Typhon by giving himself a fish's tail, then diving into a river to swim away. Go out at sunset this month, and you will notice Capricornus hardly moves. Though the sky moves almost 1° each day, sunset is changing by almost two minutes per day, which equates to a little less than 1° in the other direction. So, although Capricornus is moving west, the Sun setting earlier nearly nulls out that change, making Capricornus slow to a crawl.



SPECIES HIGHLIGHT by Jim Gilbert



Monarch butterfly (*Danaus plexippus*)

Monarch butterflies begin aggregating in groups about mid-August; that is, they gather by the dozens and often by the hundreds or more to roost at night and in stormy weather. This is the beginning of the monarch migration to Mexico for the winter. The clusters of butterflies we see in August and September are the second and third generations of the monarchs that returned to Minnesota in May and June. Monarchs continue their travels through the state during September and October, stopping to sip nectar from flowering plants and to rest. At an average flight speed of 11 miles per hour, the first ones reach their wintering sites in the mountain forests west of Mexico City close to November 1. The monarch has been the official Minnesota state butterfly since 2000.