

## JULY

- Early
- Common milkweed flowers have a fragrant scent.
  - Look on plant stems for spittle-bug nests (larval plant-hoppers).
  - In prairie openings look for the yellow blossoms of black-eyed Susan and gray-headed coneflower and the purple blossoms of purple prairie clover and prairie phlox. Water lilies are in bloom in the wetlands.
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- Mid/Late
- Look for the purple blossoms of wild bergamot and vervain and the yellow flowers of coreopsis.
  - Listen for the cicada's high pitch "czzzing" sound.
  - Monarch caterpillars feed on common milkweed.

## AUGUST

- Mid
- Look for the first purple blooms of blazing star and the yellow blossoms of goldenrod.
  - Look for the "turkey-foot" inflorescence of big bluestem and the golden "headdress" of Indian grass as well as the feathery tufts of little bluestem.
- Later
- Note the drying of grasses and foliage as the fall color change subtly begins.

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Produced by the Friends of Sherburne NWR in partnership with the US Fish and Wildlife Service

## SEPTEMBER

- Early
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- Watch for flocks of migrating white pelicans spiraling high in the sky.
  - Migrant monarch butterflies headed for Mexico can be seen nectaring at flowers during the day to refuel.
  - Look for the purple and white blossoms of asters along the Wildlife Drive and the Blue Hill Trail.
- Mid
- The autumnal equinox, the astronomical first day of fall, occurs between September 19 and 21 signaling equal length of days and nights.
  - Hummingbirds, orioles, warblers, swallows, and other migrant birds go south to winter where food is more available.
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- Late
- Expect the first light frost. Watch as fall colors become prominent.
  - Don't be surprised to see a few snow flurries mixed with rain as fall weather begins to set in.
  - Plan to attend Sherburne's Wildlife Festival!

## OCTOBER

- Early
- The first hard freeze can occur any day.
  - Sandhill cranes gather in numbers to roost in wetlands at night and feed in upland fields by day in preparation for migrating to Florida in late November.
- Mid
- Fall colors are at their peak—maples, sumac, oaks, aspen. Enjoy the beauty!
  - See numerous bald eagles and hawks migrating south.
- Late
- Snow flurries and sleet are possible.
  - Many trees have dropped their leaves. Exceptions are the buckthorn, northern pin oak, and northern red oak.
  - Comma, question mark, and mourning cloak butterflies begin hibernation.

## NOVEMBER

- Early
- A skin of ice may be seen on Buck Lake on the Blue Hill Trail on chilly mornings.
  - During the nine-day firearms deer hunting season, many hunters are at the refuge.
- Mid
- Buck Lake begins to freeze over.
  - Crows, blue jays, pileated woodpeckers, chickadees, finches, owls, nuthatches, and a few hardy robins stay at the refuge through the winter and may be seen on the Blue Hill and Mahnomen trails.
- Late
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- The first significant snowfall is possible around Thanksgiving.
  - Sandhill cranes begin migration to Florida as ice covers the wetlands.

## DECEMBER

- Early
- Deciduous trees, except northern pin and northern red oak, are bare; perennial plants have gone dormant for the winter leaving dried stalks, leaves, and maybe some seeds for the birds.
  - Chipmunks, wood chucks, and other hibernators look for dens and burrows.
- Mid/Late
- The winter solstice, the astronomical first day of winter, occurs between December 19 and 21 and marks the shortest day of the year—8 hours and 46 minutes of daylight. On December 25 we gain back our first minute of daylight.
  - Some of our coldest nights can occur as the year comes to an end.

# NATURE'S CALENDAR

at

## Sherburne National Wildlife Refuge

The study of the annual calendar of changes in nature is called phenology. Here are some things to look and listen for on your visits to the refuge throughout the year. Use the following as a guideline to learn what you may find at different times of the year. A long winter, early spring, cold summer, or abbreviated fall can affect timing of natural events, especially bloom times. Watch how one season gradually blends into the next.

Helpful companions to this list are: *Native Wildflowers of Sherburne National Wildlife Refuge* (a full-color brochure available for \$1 from the Eagle's Nest Nature Store in the refuge headquarters), the Sherburne National Wildlife Refuge *Wildlife Drive Wildflowers and Grasses* and the *Bird Checklist* (refuge brochures available free of charge). Enjoy!



For more information:

The Sherburne National Wildlife Refuge  
<http://www.fws.gov/refuge/sherburne>

The Friends of Sherburne National Wildlife Refuge  
[www.exploresherburne.org](http://www.exploresherburne.org)  
 or <http://www.facebook.com/SherburneRefugeFans>



## JANUARY

- Early
- Daylight lengthens as earth's northern hemisphere tilts toward the sun.
  - Chickadees begin to sing, "Spring's here."
  - Listen for downy, hairy, red-bellied, and pileated woodpeckers drumming on trees to advertise territory and attract mates.
  - Blue jays seem to cry, "Spelunker."
- Mid
- Remaining northern pin oak and northern red oak leaves gradually drop.
  - Look for mouse, vole, and bird tracks in the snow.
  - Sunset comes at 5 PM.
  - Expect significant snowfalls.
- Late
- A "January thaw" is possible.
  - On warm days look for snow fleas on the snow surface or tracks of skunks that may emerge from winter sleep to look for food.
  - Average coldest week of the year occurs in January.



## MARCH

- Early
- Bald eagles begin to incubate eggs.
  - Male red-winged blackbirds, back two weeks before the females, ring the marshes with their "konk-la-ree."
- Mid
- Listen for the bugling of returned sandhill cranes and the honking of Canada geese.
  - These are traditionally the snowiest weeks of the year. Remaining snow is heavy and wet; snow that falls melts quickly.
  - Fuzzy flower catkins open on willows and are visited by many native bees and flies.
  - The vernal equinox, the astronomical first day of spring, occurs sometime between March 19 & 21; days and nights are almost equal in length.
- Late
- The first thunderstorm or severe weather of the year is possible.



## APRIL

- Early
- Listen for the high pitched, bird-like chirping of the spring peeper.
  - Listen for the long "cre-e-e-ek" sound of the Western chorus frog.
  - Pasque flowers begin to bloom.
  - Mourning cloak butterflies wake from hibernation and begin to mate.
  - Prescribed burning season begins at the refuge. Look for fresh green grass emerging from areas recently burned.
  - First eaglets hatch.
- Mid
- Ice-out occurs on refuge pools, lakes, and marshes.
  - Loons and wood ducks arrive as the ice leaves.
  - Pocket gophers push soil above ground as they dig tunnels below (April through freeze-up).
  - Best time to find fox sparrows, hermit thrushes, and golden-crowned kinglets.



- Mid/Late
- Snakes and turtles bask in sunlight to warm themselves.
  - First dandelions dot the landscape with their yellow blossoms.
  - Newly returned migrant songbirds are in full song to establish territories and attract mates.
  - Expect changeable weather—snow, rain, wind, or maybe temps in the 70s!
  - Look along wetland edges for the yellow blossom of marsh marigolds.
  - Check prairie openings for the red blossom of prairie smoke and woodlands for the white blossom of the wood anemone.

## MAY

- Early
- Listen for ruffed grouse drumming and turkey gobbling.
  - Look for tropical birds such as rose-breasted grosbeaks, orioles, warblers, and hummingbirds, which come north to nest where insect abundance and longer days of spring and summer allow greater reproduction.
  - Blanding's turtle females move to upland nest sites.
  - Look in the wetlands for cattail lodges of muskrats and the wood/mud lodges of beaver.
  - Look for the gold hue changing to green in the treetops as buds swell, trees flower, and branches leaf out.
  - "Nature's first green is gold, Her hardest hue to hold. Her early leaf's a flower, But only so an hour." – Robert Frost
- Mid
- In prairie openings look for the gold blossom of hoary puccoon. In the woodlands look for the red blossom of columbine and white flowers of false lily of the valley.
  - Smell the sweet scent of wild plum, black cherry, and choke cherry blossoms.



- Listen for the high, even trill of chorusing American toads.
  - Plan to come to the refuge for International Migratory Bird Day and the Friends' Plant Sale!
- Mid/Late
- First Canada goose goslings hatch.
  - Look for white blossoms on dogwood.
  - Watch for dragonflies, with wings held straight out at rest, and damselflies, with wings held together over their back at rest.
  - Celebrate the end of the possible snow season!



## JUNE

- Early
- Watch for turtles laying their eggs on the sandy edges of the Wildlife Drive.
  - The purple blossoms of wild lupine and the pink blossoms of wild rose are spectacular on the Wildlife Drive.
  - Spiders build webs, bees collect nectar from flowers, and dragonflies eat mosquitoes as they fly (all summer).
  - Loon chicks ride their parent's back in the wetlands and deer fawns lie hidden in the woods camouflaged by their dappled coloration.
- Mid
- In prairie openings look for the pink blossoms of common milkweed and the white blossoms of yarrow.
  - Look along wetland edges for blooming blue flag iris.
  - Deer flies and other biting insects appear.
  - Summer solstice, the astronomical first day of summer, occurs between June 19 and 21—in the midst of our longest days of the year. Sun sets after 9 PM—15 hours and 36 minutes of daylight to enjoy!
- Late
- Look in prairie openings for the purple blossoms of hyssop and leadplant and bright orange flowers of butterfly weed.



## FEBRUARY

- Early
- Watch for information about winter activities at the refuge.
  - Look for long, linear tracks made by otters sliding in snow.
  - Listen for courting calls of great horned owls.
- Mid
- Note the warmth of the sun.
  - Bald eagles court and refurbish their nests.
  - The crimson stems of red-osier dogwood may show signs of being snapped by rabbits or torn by deer.
- Late
- Expect warmer temperatures and snowmelt on sunny days.

