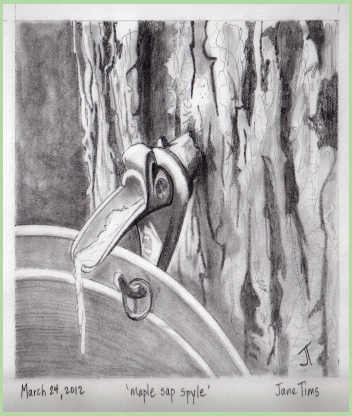
March, 2021



The Sugarbush Gazette

A Publication of the Friends of MacKenzie

Supporting Environmental Education
and
Outdoor Skill Development

"It was one of those March days when the sun shines hot and the wind blows cold; when it is summer in the light, and winter in the shade." --- Charles Dickens

March

March - when the arms of winter hold us back as the arms of spring pull us forward. March was named for the Roman god Mars, the God of War. Apparently, March was a good time to begin military campaigns following the detente of winter. Unfortunately, it was not a kind month for Julius Caesar, the ex-general and Roman Emperor who was assassinated on March 15th - the Ides of March.

March was originally the first month of the year, but following the addition of January and February, it became the third month in the Roman calendar. The spring or vernal equinox will occur on March 20th in the northern hemisphere. This date marks the beginning of spring. In the southern hemisphere it is known as the autumnal equinox and marks the beginning of fall. The sun will be directly over the equator at this time with equal amounts of daylight and darkness.

March Facts

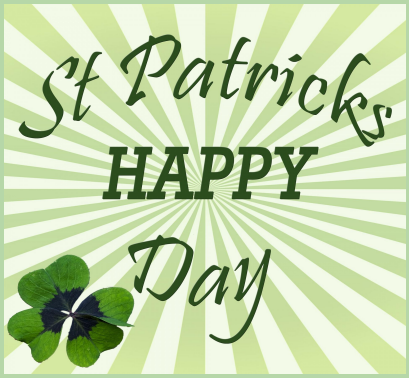
St. Patrick's Day is celebrated on March 17th (see article below).
The March full moon is known as the Worm Moon according to the Old Farmer's Almanac - worms emerge from the soil to the delight of returning robins and local anglers.

Alternative First Nation names for the full moon are based on the timing of returning animals - the Eagle or Goose Moon (Algonquin), the Crow Comes Back Moon (Northern Ojibwe), or the Sugar Moon (Ojibwe) noting when the sap is flowing in sugar maples.

This year's full moon will occur on March 28th.

St. Patrick's Day

St. Patrick's Day is celebrated in honor of St. Patrick, the patron saint of Ireland. Patrick was born in what is now England, but he was sold into slavery and taken to Ireland. He later escaped, left Ireland, but returned bringing the Christian faith to the Emerald Isle. He died in 461 AD, apparently on March 17th. Often used as a symbol of Ireland and of St. Patrick, the shamrock.'s three leaves were used to describe the Holy Trinity - the Father, Son, and Holy Ghost of the Christian faith. Another symbol of the Irish is the leprechaun, a reminder of the non-Christian belief in fairies and spirits.



St. Patrick's Day occurs in Lent, and Christians are expected to avoid eating meat (originally all days of Lent, now just on Fridays). However, the good bishops saw the need for a celebration and granted permission to consume meat. As such, the tradition of going to church in the morning and celebrating in the afternoon had begun. St. Patrick's Day celebrations occur in Ireland, Canada, and throughout the United States with large parades in Boston, New York, and Chicago. The first parade actually occurred in the United States in St. Augustine, Florida - a Spanish settlement.

Maple Syrup

In a typical year, the month of March is MacKenzie Maple Syrup time. Students from area schools would come to MacKenzie and learn all about the process of turning sap into syrup. Unfortunately, due to the Covid crisis, this year's Maple Program has been cancelled.

So, how much sap is needed to produce maple syrup? When our operation is in full swing, we will have tapped 120 black and sugar maple trees. Black maples are similar to sugar maples in appearance and in terms of sap flow and sugar content. Some of the

bigger trees will have two taps on them. Attached to each tap is a 2.5 quart sap bucket. On a good day when nighttime temperatures are below freezing and daytime temperatures rise above 40^0 F, the buckets can easily fill. Sometimes when we arrive, they are overflowing.

We collect the sap and measure its sugar content - usually 2-4%. A Rule of 86 can be used to determine how many gallons of sap will be needed to produce a gallon of maple syrup. Remember, from last month, maple syrup has a sugar content of 66-67%. So, take the sugar content of the sap, divide that into 86, and you should have a rough estimate of how much sap will be needed. For example, If the sugar content of the sap is 3%, it will take 28.7 gallons of sap to make one gallon of syrup.

So, how many drops of sap coming out of a tree is that? Let's see, there are 48 teaspoons in a cup, 2 cups to a pint, 2 pints to a quart, and 4 quarts to a gallon, and 28.7 gallons to make a gallon of syrup. But how many drops make a teaspoon - that we need to know. If we know that, we just multiply all of the numbers and the answer is - a whole lot of drops are needed to make a gallon of syrup. Fortunately, the maple trees are patient and cooperative, and tapping the trees does not harm them - some trees have been tapped for over 100 years.

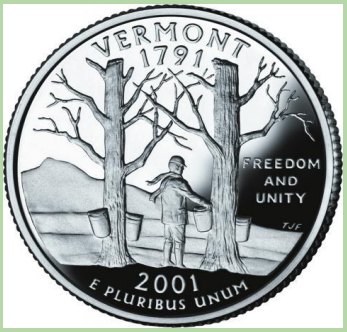
Where is most of the maple syrup produced? Here is a list of the top producing regions for Canada and the United States (2020).

Canada

1. Quebec
2. Ontario
3. New Brunswick

USA

1. Vermont
2. New York
3. Maine
4. Wisconsin
5. Michigan
6. Pennsylvania
7. New Hampshire



Master Plan

The Wisconsin Department of Natural Resources is creating a Master Plan for the state-managed properties in the Central Sand Hills region. When completed, the Master Plan will determine how properties are managed and maintained. A draft plan is expected by the end of spring 2021 with final approval by the end of the year.

Some of you who have participated in our major educational and fundraising events (the Maple Program, Maple Fest, and Fall Festival) will be receiving an email explaining the Friends position on managing the property and asking for any public comments. At present, the Friends support the following:

1. The MacKenzie Center has provided environmental education opportunities for 70 years. Recommendation - maintain all present levels of education. Hiring full-time staff would help ensure a continuity of environmental education.
2. The MacKenzie Center is unique among DNR properties in having a Wildlife Exhibit displaying animals native to our state. Many of the existing enclosures are 35 years old. Recommendations - update some of the existing animal enclosures to provide a less stressful living environment for the animals; upgrade the existing Wildlife Trail to create a better and more educational learning environment for visitors to the property; and construct a food preparation and animal care facility on-site to facilitate daily feeding requirements and periodic health check-ups.
3. The MacKenzie Center is unique among DNR properties by having a Conservation Museum. Recommendation - update and redesign the Conservation Museum to create an interactive educational experience for visitors to the property.

To view information on the Central Sand Hills Ecological Landscape Master Plan, go to https://dnr.wisconsin.gov/topic/fl/PropertyPlanning/CentralSandHills. For information specific to the MacKenzie Center, scroll down to the state map and click on the southernmost banner. Or, on the left of the map is an alphabetical listing of the state properties. Scroll down and click on MacKenzie Center. Be sure the ‘Properties with Outdated or No Master Plan’ is highlighted.

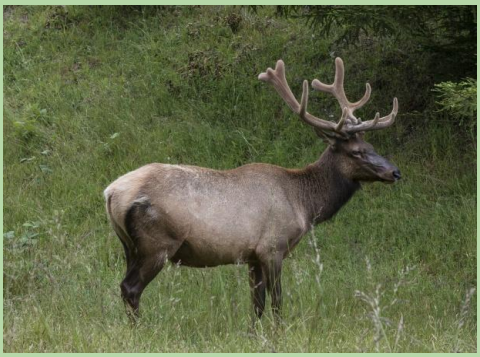
Changes

Last month, I described some of the changes I have observed from my childhood to the present. Here are a few more - all are success stories, and all involve the efforts of the Wisconsin DNR, US Fish and Wildlife Service. universities, corporations, natural resource organizations, and individuals.

The number of bluebirds has greatly increased due in a large part to the presence of artificial nest boxes provided by humans. The Bluebird Restoration Association of Wisconsin has done an excellent job in promoting the construction and monitoring of these artificial nest sites.

Wolves are now present in our state - some will argue that this is a good thing; others will argue that it is not. Wherever you stand on the species, hearing and seeing a wolf is an emotional experience. Lawsuits and court cases continue to exist regarding the species - is it endangered and in need of protection, or do its numbers justify management and hunting? Wolves moved into Wisconsin from Minnesota in the 1970's. Today, there are approximately 1200 wolves in 256 packs living in our state. A wolf hunt was conducted in February 2021. 200 wolves were shot or trapped in just three days.

Elk were eliminated from our state in the 1880's due to habitat loss and overhunting.



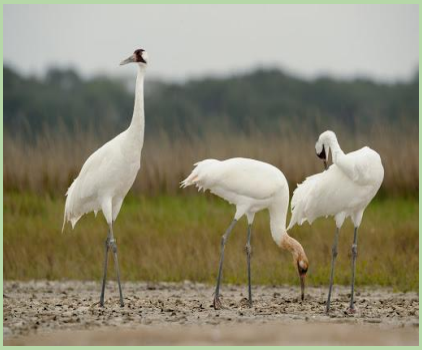
Beginning in the 1990's, elk have been reintroduced into Wisconsin. Live elk from the upper peninsula of Michigan and from Kentucky have been captured and transported here to create two separate populations - one in northern Wisconsin near Clam Lake numbering about 300 animals, and one in central Wisconsin in the Black River State Forest numbering around 100 animals. The bugling of a bull elk on a cool September morning can once again be heard. A limited hunt is conducted on the northern herd with 5-10 bulls being harvested each year.

Growing up in the southern half of the state, I would often look skyward in fall and spring to witness the migration of Whistling swans (now called Tundra swans) as they passed overhead on their breeding grounds in Canada to wintering grounds in Chesapeake Bay. Viewing areas could be found along the Mississippi River between Minnesota and

Wisconsin and at Goose Pond, a wetland complex a few miles south of the MacKenzie Center.

Today, we can also view Trumpeter swans, the largest waterfowl species in North America - males can sometimes weigh 35 pounds. In 1989, DNR biologists flew to Alaska and collected eggs. The eggs were brought to the Milwaukee County Zoo for hatching. Young swans, or cygnets, were raised in captivity and released into the wild. Today, there are nearly 6000 Trumpeter swans found throughout our state waters.

At this time of the year, Sandhill cranes can be seen and definitely heard in every county of Wisconsin. Also present, although in much lesser numbers, are Whooping cranes, a species once almost eliminated. A single migrating population breeding in Wood Buffalo National Park (Alberta and Northwest Territories, Canada) and wintering in the Aransas National Wildlife Refuge (Texas) was down to 15 individuals in the 1930's. Provided with protection, their numbers have increased. To promote sustainability of the species, a second migratory flock, completely separate from this flock, was considered for the easten United States.



Using humans as 'crane puppets', young cranes (colts) were raised in Wisconsin at the Necedah National Wildlife Refuge. The cranes developed their flight muscles by following ultra-light aircraft funded and supported by Operation Migration. The ultra-light aircraft also led the birds on the migration flight to Florida. Juvenile birds returned to Necedah in an attempt to breed and raise young. Unfortunately, the nests and young cranes were parasitized by black flies. Nesting success was quite limited.

Today, the cranes are being raised at the White River Marsh State Wildlife Area where black flies are less of a concern. Nesting success is still limited. Only a few wild-raised individuals are added to the flock each year. Most of the new birds are captive-raised and released. The young cranes are no longer led to Florida by aircraft, they are released directly into the wild prior to their migration. There are about 80 Whooping cranes in this flock.

March Phenology

1. Sap is running in maple trees.
2. Waterfowl (ducks, swans, and geese) are moving through the state.
3. Red-winged blackbirds return in large flocks.
4. Woodcock return and begin courtship flights.
5. Ruffed grouse begin drumming.
6. Wild turkeys present in large groupings establishing dominance hierarchies.
7. Wood frogs heard ‘quacking’ like mallard ducks followed soon thereafter by chorus frogs and spring peepers.
8. Snakes emerging from hibernacula.
9. Wildflowers blooming - pasque flowers, skunk cabbage, Dutchman’s breeches, and bloodroot. Pasque flowers are so named because they tend to bloom near Easter, or Paschal time.

Stay Connected

Friends of MacKenzie website: www.friendsofmackenzie.org
Facebook page: https://www.facebook.com/Friends-of-the-MacKenzie-Education-Center
MacKenzie Center website: https://dnr.wisconsin.gov/education/mackenzie