

HBMI Natural Resources Department Natural Resources Department



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Toqagiw 2021 (It is Autumn)

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Susan Young - Editor

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recycled paper



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HBMI Natural Resources Department



Moose Brook Project by Sharri Venno

We and our many partners (*see inset box*) are all but finished fixing a stream crossing at the junction of Moose Brook and Morningstar Road in Houlton, Maine. So, you may ask, what was the problem? Well, a very large, very old culvert made of corrugated metal was failing (*see photo at right*). Crumpled from long use by heavy trucks, the culvert had been identified as needing replacement for safety reasons. It also could no longer handle streamflow. Occasionally spring floodwater would overtop the road. Although it was large, it was not large enough; water shooting through the culvert scoured a pool at its downstream end creating a space between the bottom of the culvert and the top of the stream at low flow. This prevented fish like brook trout and other water-based creatures like turtles from passing through the culvert when water levels were low. The force of the water coming through an undersized culvert at high flows also prevented fish passage upstream.



Before – looking upstream

To top it all off, we learned in the process of deciding the best way to fix this problem that the stream was actually moved from its original location when the first culvert was installed (*see proposed fish passage/infrastructure project below*).

Proposed Fish Passage/Infrastructure Project

Moose Brook - Now



Moose Brook - After

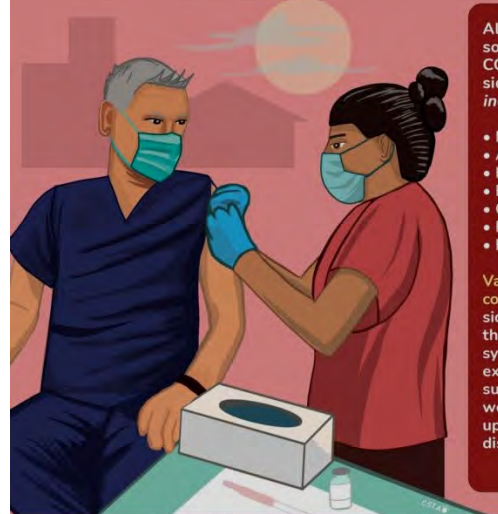


It's taken over 10 years of partnership work; Fundraising; assessment, design, and engineering; a road closure; many weeks of construction;

Continued
page 4

PROTECTION

Protect yourself. Protect your loved ones.
Together we can overcome this pandemic.



All vaccines have some side effects. COVID-19 Vaccine side effects may include:

- Muscle Pain
- Arm Soreness/Pain
- Headache
- Body Aches
- Chills
- Fatigue
- Fever

Vaccinate with confidence. These side effects are signs that your immune system is doing exactly what it is supposed to do. It is working and building up protection to the disease.

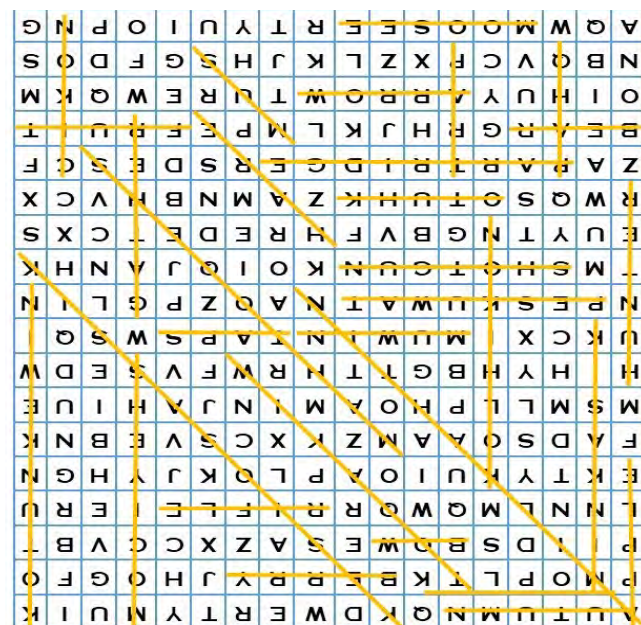
Most people who have been vaccinated report having some side effects, regardless of which vaccine they receive. Generally, side effects went away after a day or two and they are much less harmful than having COVID-19.

For more information, visit [CDC.gov/vaccines/covid-19](https://www.cdc.gov/vaccines/covid-19)



ACKNOWLEDGEMENTS: Developed in collaboration with SFIS Leadership Institute, Texas Women United, and UNM Native American Budget & Policy Institute

Word Search Answers



BE-E-T-LE = BEETLE

Unusual Blooms: Wildflowers that Open in Autumn

by Patrick J. Kiger

On your next walk in the woods, keep an eye out for some of these wildflowers which bloom later in the year.

We tend to think of Spring as the time when flowers bloom, and associate Autumn with the flamboyant colors of changing leaves. But there are plenty of wild flowering plants that wait until September to put on a show. On your next walk in the woods, keep an eye out for some of these wildflowers that bloom later in the year.

What Marks the Start of Fall?

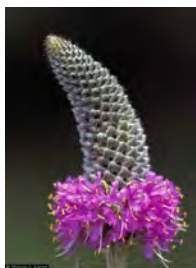


Bur marigold (*Bidens aristosa*) grows 1 to 5 feet tall and attracts migrating monarchs, as well as other insects collecting the season's last pollen.



American witch hazel (*Hamamelis virginiana*) is a shrub or tree that grows from Nova Scotia to Florida and as far west as the Great Lakes and

Texas, in moist shaded forests. It blooms in late October and early November, and its yellow flowers exude a spicy fragrance.



Purple prairie clover (*Dalea purpurea*) which has gradually spread as far west as New Mexico and eastward to New York, blooms as late as September in the central Great Plains. In addition to being pretty to look at, the plant provides forage food for livestock and wildlife.



Painted leaf spurge (*Euphorbia cyathophora*) is found throughout the eastern and central United States and Minnesota. It blooms in October.



The white and light-purple flowers of the **Heath Aster (*Aster ericoides*)** are covered with all manner of bees and

wasps foraging its pollen. The scentless flowers form bushy sprays that are native to much of the United States, except the far West.



Ironweed, which includes several species in the genus *Veronia*, is a plant that grows as tall as seven feet and produces dozens of purple disk-shaped flowers as late as October.



The **Maximilian sunflower (*Helianthus maximiliani*)** named after the German naturalist who discovered it on a trip to North America in the 1830s, is found from Maine to British Columbia. It blooms as late as November.



The **Red turtlehead (*Chelone obliqua*)** vaguely resembles a reptile's head but is more of a violet color. It is native to the southeathern United States but due to escapees from gardens, it's now also found in places such as Minnesota. It blooms as late as September.

<https://www.seeker.com/unusual-blooms-wildflowers-that-open-in-autumn-1769100429.html>

All photographs except Ironweed from USDA Plant database
www.plants.usda.gov/plants

Ironweed
www.brittanica.com

Photo credits:

Jeff McMillan: Bur marigold, Maximilan sunflower
Elaine Haug: Witch hazel
Thomas G. Barnes: Red turtle head, Purple prairie flower
Clarence Rechenthin: Heath Aster
Patrick J. Alexander: Painted leaf spurge

Watson Settlement Bridge Fire

On Monday July 19, 2021, the Watson Settlement Bridge located downstream from tribal offices was consumed by fire.

This well known local landmark was constructed in 1911 and spanned the Meduxnekeag River between the Foxcroft and Framingham Roads in Littleton. It was the youngest of Maine's covered bridges and the furthest north. Listed on the National Historic Register, the bridge was open for vehicle traffic until 1984 when a new bridge was built alongside it.

Firefighters from Littleton, Houlton and Monticello battled the blaze but the bridge could not be saved. Fortunately, the firefighters fought the flames using just water and not some of the fire fighting foams that are available to them, thereby, protecting water quality in the Meduxnekeag below. HBMI's water resources team has been monitoring the water that is flowing beneath the charred remains and will continue to do so once the remains of the structure are removed.

On Monday September 20, 2021, the Maine Department of Transportation (ME DOT) dismantled the charred remains of the bridge, revealing a very different landscape. A view that has not been seen for over 100 years.

The Maine State Fire Marshall's office has ruled this fire the result of arson and are asking for the community's help in locating those responsible for setting the fire. If you have any information please contact the State Fire Marshall at 1-888-870-6162.



DOT dam removal September 20, 2021. Note boom to catch debris in photo above right.

Equinox (continued)

At the Harvest Moon, there are shorter periods between moon rises. This phenomenon occurs due to the low angle that the Moon's orbit around Earth makes with the horizon during this time of year.

EGGS ON THE EQUINOX

As for the age-old idea that eggs are able to balance on end during the equinox but at no other time - that's just silly! Why should the laws of gravity be repealed just because the Sun illuminates both poles equally that day? Still, it's fun to consider, especially if it sparks conversation about the reasons for the seasons.

If you take the equinox so seriously that you have an equinox-obsessive personality, which psychologists call EOP, you'll contemplate the idea of equality on September 22. That's when our beloved Sun pauses momentarily, balanced and motionless, before lunging headlong toward the northern winter.

<https://www.almanac.com/old-misunderstood->

We've Finally Moved!



Well, it's official - all of HBMI's Natural Resources programs have moved out of the administration building and into our new space.

Our new building is up by the big red barn on Skijin Road just off of the Lowery Road across from the tribal greenhouses.

With this move, all of our phone numbers and contact information remain the same - oh the wonders of technology!

Upstairs in the building are offices, a meeting room, file and copy room as well as a kitchen. Downstairs is the new home of the water resources lab and some additional offices. Although we're still unpacking and figuring out just where everything needs to go, we're definitely enjoying the new space.

Once the pandemic eases and tribal offices are again open to the public, feel free to swing by for a tour.

Brain Teaser

Follow these word clues;

- ♦ I start as a verb
- ♦ Add tone letter and I become an insect
- ♦ Add another letter and I become a vegetable
- ♦ Add two more letters and I become an insect again

Who am I?

See answer page 12



Summer Tech 2021



At long last, we're pleased to announce that Steven Phillips has joined the Natural Resources Department as a summer tech.

Just when we thought we could have a normal field season, a few things knocked us off course and Steven was not able to join us until July. Unfortunately our second tech was ultimately unable to

come aboard. We are pleased to finally have Steven with us now and well into the fall.



If we look 100 years ahead and 100 years back . . .

What did we do to ensure our communities remained healthy?

- We washed our hands
- We wore a face mask
- We watched our distance
- We got vaccinated

www.cdc.gov/vaccines/covid-19

COVID-19 vaccinations are important to help stop the pandemic. The vaccine will not give you the virus.



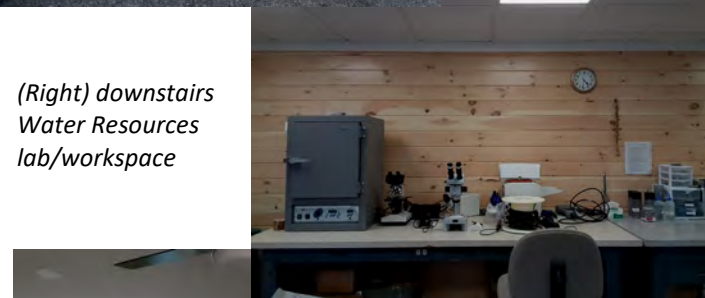
Autumn Word Search

AMILKAHTIN	GATHER
CIKON	APPLE
KESI-OSASSIK	SHOTGUN
KOLHIKON	TRAP
KOTUNKEWIN	HUNTER
MAHTOQEH	HARE
MINKASIK	FRUIT
MINS	BERRY
MOCIYEHS	PARTRIDGE
MUS	MOOSE
MUWIN	BEAR
OTUHK	DEER
PAHQ	ARROW
PESKUWAT	RIFLE
TAP	BOW
TOQAKIW	AUTUMN

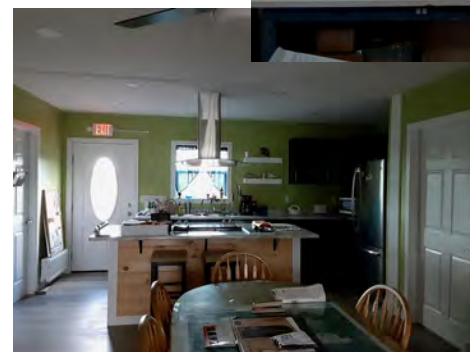
A	U	T	U	M	N	Q	K	D	W	E	R	T	Y	M	U	I	K
P	M	O	P	L	T	K	B	E	R	R	Y	J	H	O	G	F	O
P	I	I	D	S	B	O	W	E	S	A	Z	X	C	C	V	B	T
L	N	N	L	M	Q	W	Q	R	R	I	F	L	E	I	E	R	U
E	K	T	Y	K	U	I	O	A	P	L	O	K	J	Y	H	G	N
F	A	D	S	O	A	A	M	Z	K	X	C	S	V	E	B	N	K
M	S	M	L	L	P	H	O	K	M	I	N	J	A	H	I	U	E
H	I	H	Y	H	B	G	T	T	H	R	W	F	V	S	E	D	W
U	K	C	X	I	M	U	W	I	N	T	A	P	S	W	S	Q	I
N	P	E	S	K	U	W	A	T	N	A	O	Z	P	G	L	I	N
T	M	S	H	O	T	G	U	N	K	O	I	Q	J	A	N	H	K
E	U	Y	T	N	G	B	V	F	H	R	E	D	E	T	C	X	S
R	W	Q	S	O	T	U	H	K	Z	A	M	N	B	H	V	C	X
Z	A	P	A	R	T	R	I	D	G	E	R	S	D	E	S	C	F
B	E	A	R	G	R	H	J	K	L	M	P	E	F	R	U	I	T
O	I	H	U	Y	A	R	R	O	W	T	U	R	E	W	Q	K	M
N	B	Q	V	C	P	X	Z	L	K	J	H	S	G	F	D	O	S
A	Q	W	M	O	O	S	E	E	R	T	Y	U	I	O	P	N	G



(left) Main entrance facing west



(Right) downstairs Water Resources lab/workspace



(left) Main floor conference space and kitchen

Dams and Greenhouse Gasses

Wondering how dams and reservoirs create greenhouse gas emissions?

Large dams often require massive reservoirs in order to generate power. These reservoirs flood large areas of forests, wetlands, and other ecosystems causing vegetation and soil to become submerged and die. As the vegetation decomposes underwater, it releases greenhouse gases such as methane and carbon dioxide into the atmosphere worsening the climate crisis.

Other mechanisms such as degassing or the pressure change when water is released from dams also adds greenhouse gases into the atmosphere. The frequent manipulation of reservoir levels leads to erosion and the flooding of additional areas creating even higher levels of greenhouse gases. Some hydropower facilities can release greenhouse gases on par with natural gas plants.

For more information:

<https://savetheworldsrivers.org/.../Dams-GHG-NAMRA-new.pdf>

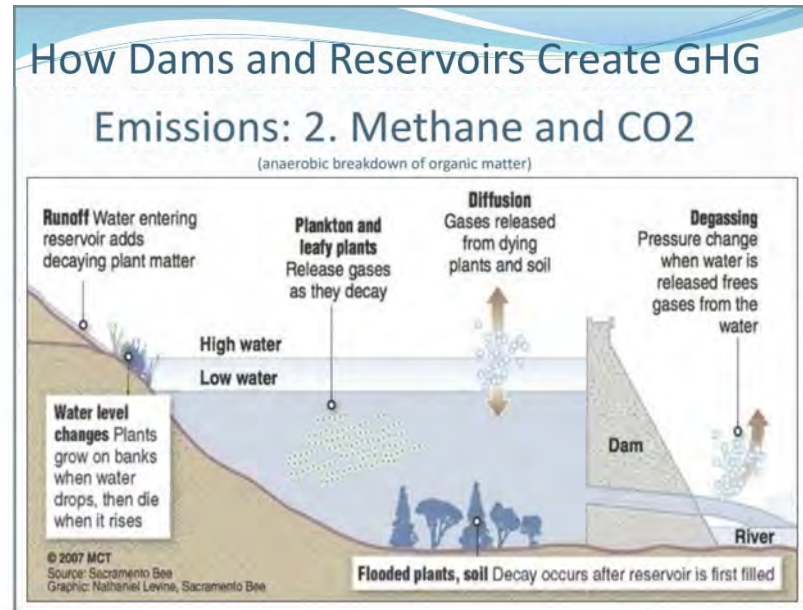
Moose Brook *continued*

large equipment; lots of earth moving; a prefabricated bridge; and a special effort to recreate, as best we could, the old stream channel and secure it with boulders and logs. (see after – looking downstream below).



Project Partners (in bold)

The **Town of Houlton** owns the culvert and raised funds from **State of Maine** bond and Federal Emergency Management Agency (**FEMA**) disaster



mitigation funding to fix it. **HBMI** listed the culvert as a top fish passage restoration priority and with help from The Nature Conservancy (**TNC**) added funds from a US Fish and Wildlife Service (**USFWS**) tribal wildlife grant program and USDA Natural Resources Conservation Service (**NRCS**) resource conservation partnership program. Maine's Departments of Environmental Protection (**MDEP**) and Inland Fisheries and Wildlife (**MDIFW**) and the Army Corps of Engineers (**USACE**) permitted the project. **Acadia Civil Works** provided engineering and project oversight, **Buildings Etcetera** and **McLaughlin Construction** provided construction services, and **Field Geology Services, LLC** helped design and create the new stream channel with help from **Dunbar Construction** who provided and installed the boulders and logs that are holding the channel in place.

Special Thanks goes to adjacent landowners **Tate & Lyle** and the **McCauslands** for permission to access the project site through their land and the Environmental Protection Agency (**EPA**) for their ongoing partnership support.

Skitkomiq 2021 *(continued)*

Sam St. John, spoke about the weather station that was installed in partnership with the Natural Resources Conservation Service as part of their national Soil Climate Analysis Network (SCAN). These systems collect data such as soil moisture, precipitation, wind speed and direction, temperature, incoming solar radiation and relative humidity.

Kathy Hoppe from Maine Dept. of Environmental Protection (ME DEP) brought along DEP's watershed model that simulates various types of pollution issues. By spraying water on sections of the model it shows how pollution/run-off can enter streams and rivers. The kids asked plenty of questions regarding point and non-point source pollution and talked about ways to reduce these impacts.

Using sand boxes, fluvial geomorphologist John Field explained how and why the weather creates a path across the landscape. With golf tees and monopoly houses representing trees and houses, the kids created neighborhoods around a river. Water was then pumped into the sand boxes to simulate how various flow levels alter the geography of the land around it. Golf tees simulated the trees along the river, falling in and floating away to create shade and shelter structures for the fish and animals that call the river home. Through this exercise John spoke about the restoration work the tribe is doing in the Meduxnekeag River.

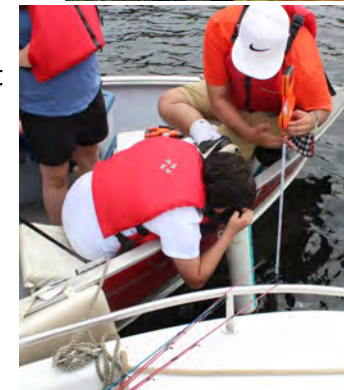
NRCS fisheries biologist Ben Naumann, returned to the camp again this year and brought along fellow biologist Chris Reidy. Ben and Chris shared frozen fish samples to show the differences between various fish species. They showed macroinvertebrates such as commonly seen stone and caddisflies and discussed how important they are to water quality.

The final day of the camp was spent out on Drews Lake (Meduxnekeag Lake). Staff from the Penobscot Nation Water Program (Jan Paul and Angie Reed) gave the kids a hands on day of lake sampling.

"Fish guy" Joe Zydlewski from the University of Maine Department of Wildlife, Fisheries and Conservation talked to the

kids about fish movement, their migrations and behavior, and how important connectivity and river restoration is to his work. He also talked about the various ways he tracks different species of fish including the use of an underwater camera. The kids really enjoyed getting

to control the underwater camera while it was deployed in the lake.



Clockwise from top left: Plant identification, controlling underwater camera, DEP watershed model, stream table activity, fish activity, water quality at Drews Lake

Wooly Bears *(continued)*

[band] *does* say something about a heavy winter or an early spring. The only thing is ... it's telling you about the *previous* year."

HOW TO "READ" THE WOOLY WORM

Weather is local so you need to read your own wooly worm.

Look for these fuzzy wuzzies in the fall. According to wooly worm watchers, there are two generations of worms each year. The first appear in June and July, and the second in September. The second generation worms are the "weather prophets."

To find a wooly bear, start looking under leaves and logs! Some are just crossing the road. Once you spot a wooly worm inching its way along the ground or a road, you'll see them everywhere! The caterpillars are most active during the day (not at night). After filling up on food - including violets, lambs quarter, and clover - their goal is to find a place to hide for the winter. Interestingly, the wooly worm overwinters as larva. Their entire body will enter a "frozen" state until May when it will emerge as the Isabella moth.

Skitkomiq 2021



Unlike 2020, we were able to bring our annual culture and science camp back to life this year. Last year, the challenges of Covid made it impossible to provide a safe environment for our tribal youth.

This year's camp looked a little different than previous years. Instead of a full week of camp activities, we decided to run the camp each Wednesday from July 14 to August 18. In the end, we were able to hold 4 of the 6 sessions planned. Unfortunately the trip to Katahdin Woods and Waters National Monument, and the session on wildlife biology had to be cancelled due to rising cases of Covid in the area.

While participation this year was smaller than previous years, the youth that came seemed to have a great time, learning and interacting with folks

Every year, the wooly worms do indeed look different - and it depends on their region. So, if you come across a local wooly worm, observe the colors of the bands and what they foretell about your winter weather.

Remember:

If the rusty band is wide, then it will be a mild winter. The more black there is, the more severe the winter.

That's it! Note that white, yellow, or other colors of fuzzy caterpillars are NOT the same type of wooly worm and are not used for weather forecasting. We'll leave the weather-prognosticating "skills" to your own observation!

WOOLY WORM VIDEO

In tribute to our fellow prognosticator, we made a wooly worm video ...

<https://youtu.be/0-3du6wQ6cg>

Whether the predictive powers of the wooly worm are fact or folklore, we always enjoy the fun!

<https://www.almanac.com/wooly-bear-caterpillars-and-weather-prediction?>

from the tribal community and our many partners.

Camp festivities started with an Opening Prayer led by tribal elder, Danya Boyce. Before the prayer, Danya explained the significance of the prayer and how it relates to Mother Earth and their spiritual, and mental health and reminded them to be thankful for nature.

Some of the camp activities included: Archaeology with Isaac St. John, HBMI's Tribal Historic Preservation Officer (THPO). Isaac led the kids in an archaeological dig on tribal land along the Meduxnekeag River, where the kids were able to use their own sifting screens to search for artifacts.

Matthew Edberg, led the kids on a walk of the nature trail and surrounding tribal lands talking about native and traditional plants as well as the plants the tribe is growing.

Continued page 9

The Misunderstood Equinox *Separating Fall Equinox Facts From Fiction*

A MOMENT IN TIME

The equinox happens at the *same moment* across the Earth (September 22, 2021, at 7:20 UTC) which is pretty cool. It's not an all-day event such as a birthday or holiday. The equinox is the moment the Sun crosses the celestial equator- that imaginary line in the sky above Earth's equator. At this instant, Earth's rotational axis is neither tilted away from nor towards the Sun.

Of course, your "clock time" of this instant depends on your time zone (3:20 P.M. EDT, 2:20 P.M. CDT, 1:20 P.M. MDT and 12:20 P.M. PDT).

NOT ALWAYS THE SAME DATE

The calendar can affect the date of the equinox as well. The autumnal equinox date is usually on the 22nd or 23rd of September. It varies slightly, since our Gregorian calendar doesn't perfectly match up with the time it takes the Earth to orbit the Sun (365 days versus approximately 365 and ¼ days).

ARE DAYS AND NIGHTS TRULY EQUAL ON THE EQUINOX?

At the equinox, the Earth will angle perfectly sideways to the Sun. Neither pole will tip toward or away from our bright star. And therefore, as the media never tires of reminding us, days and nights should theoretically be equal, right?

But this is never quite true. Our atmosphere bends the Sun's image upward so much that it rises two or three minutes earlier and sets that much later than it would on an airless world, and those extra five minutes of daily sunshine push the true date of equality to a few days after the equinox.

Even then, it's not strictly accurate to say day and NIGHT are equal, because of twilight. If useful daylight ends about an hour after sunset, and you

add in the dawn twilight too, then most places don't have equal day and night until around November 10. So we get more actual night than daylight for just three months, from then until mid-February.

SUNRISE AND SUNSET ON THE EQUINOX

Never mind the day-night equality business. A more precise equinox event is that the **Sun rises and sets exactly in the east and west** - not southeast or

northwest or anything else. It's a time of precision and an opportunity to correctly position your sundial. You know, that task you keep putting off.

And this happens no matter where you live on Earth, because we all see the same sky. We all see a due east and due west point on our horizon. That point marks the intersection of your horizon with

the celestial equator - the imaginary line above the true equator of Earth.

<https://www.almanac.com/astronomy/sun-rise-and-set>

THE SUN'S WINDING PATH

Another equinox phenomenon is that the Sun moves in a laser-straight line across the sky. A time exposure shows this nicely. By comparison, for the past six months, the Sun's path has displayed an upward curve, concave to the north, like a giant smile. Starting right after the equinox, the Sun's track across the sky starts to bend like a rainbow, with the concave part aimed downward.

THAT HARVEST MOON

The full Moon closest to the September equinox is always known as the Harvest Moon. This year, it happens on Monday, September 20—just two days prior to the equinox!

Continued page 10



Do Wooly Worms Really Predict Winter Weather?

By Catherine Boeckman, *The Old Farmers Almanac*

Wooly bear caterpillars - also called wooly worms - have a reputation for being able to forecast the coming winter weather. If their rusty band is wide, then it will be a mild winter. The more black there is, the more severe the winter. Just how true is this weather lore? Learn more about this legendary caterpillar and how to “read” the worm.

THE WOOLY WORM LEGEND

First of all, the “wooly worm” is not a worm at all! It’s a caterpillar; specifically, the larva of the Isabella tiger moth (*Pyrrharctia isabella*). Nonetheless, the name “worm” has stuck, at least in some parts of the United States. In others, such as New England and the Midwest, people tend to call them “wooly bears.” (Worm or not, at least we can all agree that they’re not bears!)

In terms of appearance, the caterpillar has 13 distinct segments of either rusty brown or black. Often, it is black on both ends with rust-colored segments in the middle, although it may sometimes be mostly black or mostly rust. (Note: All-black, all-white, or yellow wooly caterpillars are not wooly bears! They are simply different species and are not part of the wooly worm lore. So, if you spot an entirely black caterpillar, it isn’t forecasting an apocalyptic winter!)

According to legend:

The wider the rusty brown sections (or the more brown segments there are), the milder the coming winter will be. The more black there is, the more severe the winter.

HOW THE WOOLY BEAR CATERPILLAR BECAME “FAMOUS”

In the fall of 1948, Dr. C. H. Curran, curator of insects at the American Museum of Natural History in New York City, took his wife 40 miles north of the city to Bear Mountain State Park to look at wooly bear caterpillars.

Dr. Curran collected as many caterpillars as he could in a day, determined the average number of reddish-brown segments, and forecast the coming winter weather through a reporter friend at *The New York Herald Tribune*.

Dr. Curran’s experiment, which he continued over the next eight years, attempted to prove scientifically a weather rule of thumb that was as old as the hills around Bear Mountain. The resulting publicity made the wooly worm one of the most recognizable caterpillars in North America (alongside the monarch caterpillar and tomato hornworm).



Wooly Bear Caterpillar. Photo by SillyPuttyEnemies / Wikimedia Commons.

WHAT IS A WOOLY BEAR CATERPILLAR?

The caterpillar that Dr. Curran studied, the banded wooly bear, is the larval form of *Pyrrharctia isabella*, the Isabella tiger moth.

- The Isabella is a beautiful winged creature with yellowish-orange and cream-colored wings spotted with black. It’s common from northern Mexico throughout the United States and across the southern third of Canada.
- The tiger moth’s immature larva, called the *black-ended bear* or the *wooly bear* (and, particularly in the South, *wooly worm*), is one of the few caterpillars most people can identify.
- Wooly bears do not actually feel much like wool - they are covered with short, stiff bristles of hair.
- In field guides, they’re found among the “bristled” species, which include the all-yellow salt marsh caterpillar and several species in the tiger moth family. Not all wooly caterpillars are true ‘wooly bears’ though!

Continued page 7

Wooly Bears (continued)

- If you find an all-black wooly caterpillar, don’t worry - this doesn’t mean that we’re in for a severe, endless winter! It’s just a caterpillar of a different species, and is not used for forecasting. The same is true for all-white wooly caterpillars.
- Wooly bears, like other caterpillars, hatch during warm weather from eggs laid by a female moth.
- Mature wooly bears search for overwintering sites under bark or inside cavities of rocks or logs. (That’s why you see so many of them crossing roads and sidewalks in the fall.)

When spring arrives, wooly bears spin fuzzy cocoons and transform inside them into fullgrown moths.



Isabella Tiger Moth. Photo by Andy Reago & Chrissy McClarren/Wikimedia Commons.

- Typically, the bands at the ends of the caterpillar are black, and the one in the middle is brown or orange, giving the wooly bear its distinctive striped appearance.

DO WOOLY BEAR CATERPILLARS REALLY FORECAST WINTER WEATHER?

Between 1948 and 1956, Dr. Curran’s average brown-segment counts ranged from 5.3 to 5.6 out of the 13-segment total, meaning that the brown band took up more than a good third of the wooly bear’s body.

The corresponding winters were milder than average, and Dr. Curran concluded that the folklore has some merit and might be true.

But Curran was under no scientific illusion: He knew that his data samples were small. Although the experiments legitimized folklore to some, they

were simply an excuse for having fun. Curran, his wife, and their group of friends escaped the city to see the foliage each fall, calling themselves The Original Society of the Friends of the Wooly Bear.

Thirty years after the last meeting of Curran’s society, the wooly bear brown-segment counts and winter forecasts were resurrected by the nature museum at Bear Mountain State Park. The annual counts have continued, more or less tongue in cheek, since then.

For over forty years, Banner Elk, North Carolina, has held an annual Wooly Worm Festival in October,



Wooly bear caterpillar in its defensive posture.

highlighted by a caterpillar race. Retired mayor Charles Von Canon inspects the champion wooly bear and announces his winter forecast. Similarly, there is a Woolybear Festival that takes place in Vermilion, Ohio, each October.

Most scientists discount the folklore of wooly bear predictions as just that, folklore. Says Ferguson from his office in Washington, “I’ve never taken the notion very seriously. You’d have to look at an awful lot of caterpillars in one place over a great many years in order to say there’s something to it.”

Mike Peters, an entomologist at the University of Massachusetts, doesn’t disagree, but he says there could, in fact, be a link between winter severity and the brown band of a wooly bear caterpillar. “There’s evidence,” he says, “that the number of brown hairs has to do with the age of the caterpillar - in other words, how late it got going in the spring. The

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