

The Newsletter of the Friends of Worlds End State Park.



Winter 2021

Vol. 3 Issue 1

The Vista

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To conserve, support and protect the park's resources by promoting education, recreation, and stewardship.



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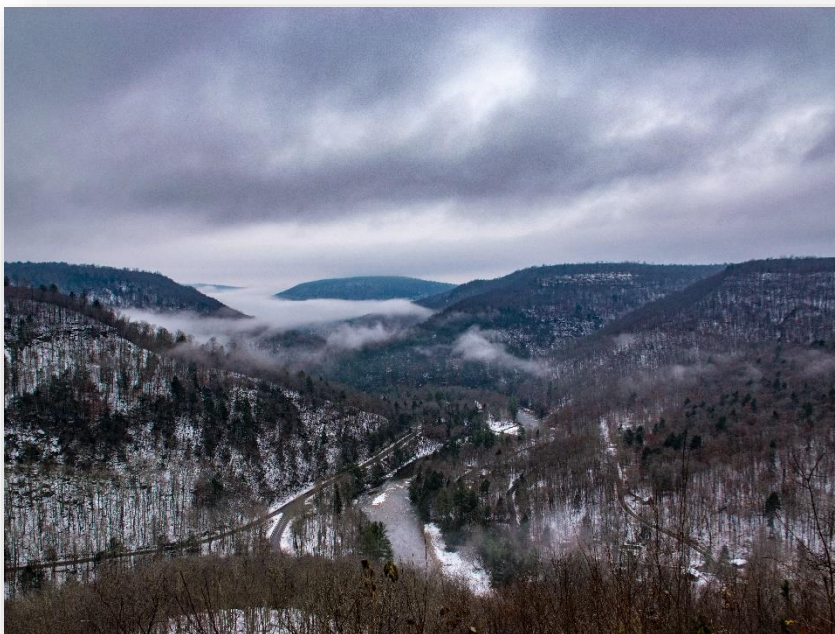
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WORLDS END 2021

We say goodbye to 2020 noting that it was a record-setting year for Pennsylvania's State Park system...as reported by the Department of Conservation and Natural Resources (DCNR):

During May, June, and July, the Pennsylvania state park system saw increases of more than a million visitors each month over the same periods last year, representing monthly visitation increases systemwide of as much as 36 percent, with some parks seeing 50 to 100 percent more visitors.

In this newsletter, we will say hello to 2021 by sharing some great news about the amphitheater improvement project (see page 3) and some other things to look forward to in the coming year – including winter recreation activities.

Before making any plans at the park this winter, we advise everyone to keep up to date on any pandemic-related bulletins and restrictions posted on DCNR's website:

<https://www.dcnr.pa.gov/Pages/AlertDetails.aspx>

AMPHITHEATER IMPROVEMENT PROJECT:

GOAL REACHED!!

| GOAL | |
|-----------|--|
| \$30,000! | |
| \$28,000 | |
| \$26,000 | |
| \$24,000 | |
| \$22,000 | |
| \$20,000 | |
| \$18,000 | |
| \$16,000 | |
| \$14,000 | |
| \$12,000 | |
| \$10,000 | |
| \$8,000 | |
| \$6,000 | |
| \$4,000 | |
| \$2,000 | |
| \$0.00 | |



Thanks to generous contributions and support of our loyal firewood and ice customers, we are pleased to announce that we have reached our \$30,000.00 fundraising goal! This means we will be able to start work on the new amphitheater in 2021 – well ahead of our original schedule. This project is intended to make the amphitheater an all-weather venue, and to increase its versatility for new events, like family movie nights. The project may include upgrades like:

- Installing a roof.
- Improved stage and screen.
- New projection and sound system.
- More seating.
- Improved lighting.

The next step is the design and product selection. Our hope is to have the amphitheater completed in time to have it available as a venue for events commemorating the park's 90th anniversary in 2022. Look for updates in future issues of THE VISTA – including more about park's 90th anniversary celebration!

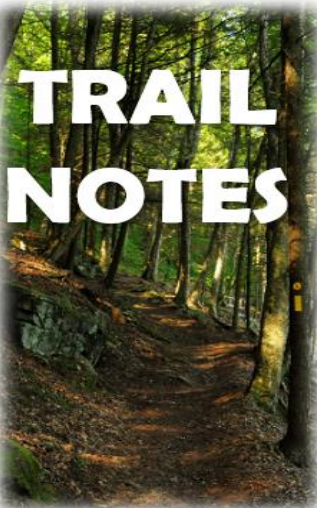
FIREWOOD AVAILABLE THIS WINTER IN THE CABIN AREA:

Firewood will be available for sale in the cabin area this winter - \$8.00 per bundle. Look for the self-serve kiosk as you enter the cabin area near the trash dumpsters. Money from these sales funds the park improvement projects of the Friends of Worlds End State Park.

Your Friends Contributions at Work!

Your generous contributions and patronage of our firewood and ice sales also make it possible for the Friends to support park activities. This is especially important in this time of limited budgets and high park visitation. This autumn the Friends were able to support the park's popular archery program by purchasing \$200.00 worth of archery targets. Look in future issues of THE VISTA for more about the 2021 archery program coming this summer.

On the right- Park Environmental Educator and Certified Archery Instructor Jane Swift with the new targets purchased by the Friends of Worlds End State Park.



NEW MAP AND GUIDE COMING!

Following up on our successful **Trails in and around Worlds End State Park** map and guide, local trailblazing legends Ruth Rode and Dave Kowalewski are working on a sequel - **Falls & Views Loop: Exploring the Wildness of Worlds End State Park and the Loyalsock State Forest!** This is planned to be a map and guide for a 75-mile, four section backpacking loop featuring over 50 waterfalls and 17 vistas. Check out future issues of THE VISTA for updates on this project and for when and where this new guide will be available.



Start your winter park activities by reserving a cozy cabin:

<https://pennsylvaniastateparks.reserveamerica.com/camping/worlds-end-state-park/r/campgroundDetails.do?contractCode=PA&parkId=880423>

For outdoor recreation ideas and conditions, DCNR has winter activity reports on their website:
<http://maps.dcnr.pa.gov/storymaps/winteractivities/#overview>

Cross-country skiing information can also be found on DCNRs website:
<https://www.dcnr.pa.gov/Recreation/WhatToDo/Cross-CountrySkiing/Pages/default.aspx>

http://elibrary.dcnr.pa.gov/GetDocument?docId=1742361&DocName=sf-GOPA_Cross%20Counry%20Skiing.pdf

Information on the Double Run Ski Trail:

<http://elibrary.dcnr.pa.gov/GetDocument?docId=1738814&DocName=Double%20Run%20Ski%20Trail%20-%20Forestry%20Trail%20Guide%208-5x14%20Portrait.pdf>

...and the Old Loggers Path Trail:

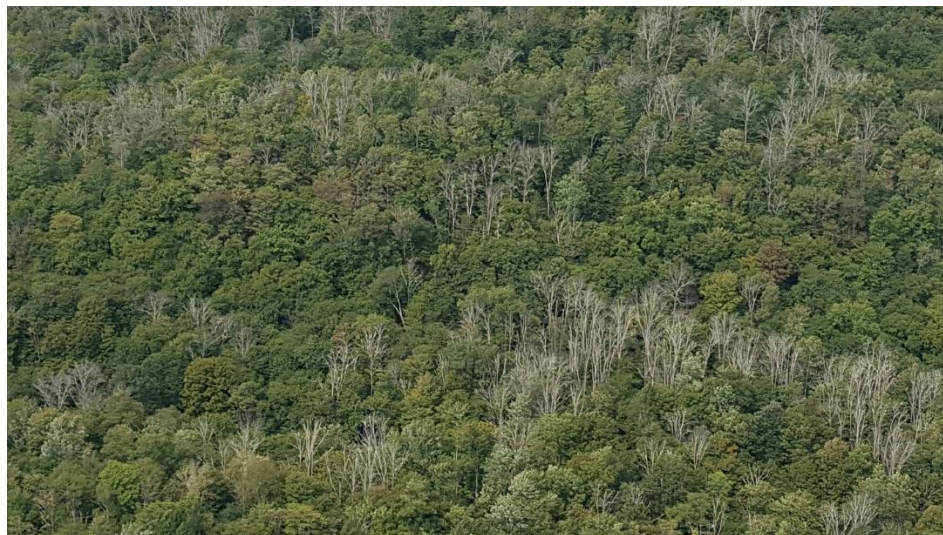
http://elibrary.dcnr.pa.gov/GetDocument?docId=1741648&DocName=sf-OldLoggersPathTrail_fd20.pdf

In the winter, you just have to keep in mind a few things to ensure your own safety...

- The air temperature in the park and the mountains can be significantly colder and windier than in the towns and valleys.
- Dress in layers. As you move around, and get warmer, you can always remove a layer – or add additional layers as needed. And wear a hat!
- Warm, sturdy footwear is essential if you are hiking.
- Know the trails you are hiking – have a map (available at the park office). Trails on the north side of mountains or in deep hollows can be snowier and icier than other trails. Hiking or trekking poles can help in such conditions.
- Winter air can not only be cold – but also very dry. Stay hydrated! Take along beverages - and drink before you feel thirsty to stay properly hydrated.
- There is no cell service in the park. Make sure someone knows where you are and when you expect to return.
- A sunny day on white snow can be blindingly bright – don't forget sunglasses.
- The winter days are not only cooler – but also shorter. Make sure you plan your outings so that you are out of the woods well before the early sunsets.
- Stay informed of any pandemic-related restrictions - <https://www.dcnr.pa.gov/Pages/AlertDetails.aspx>

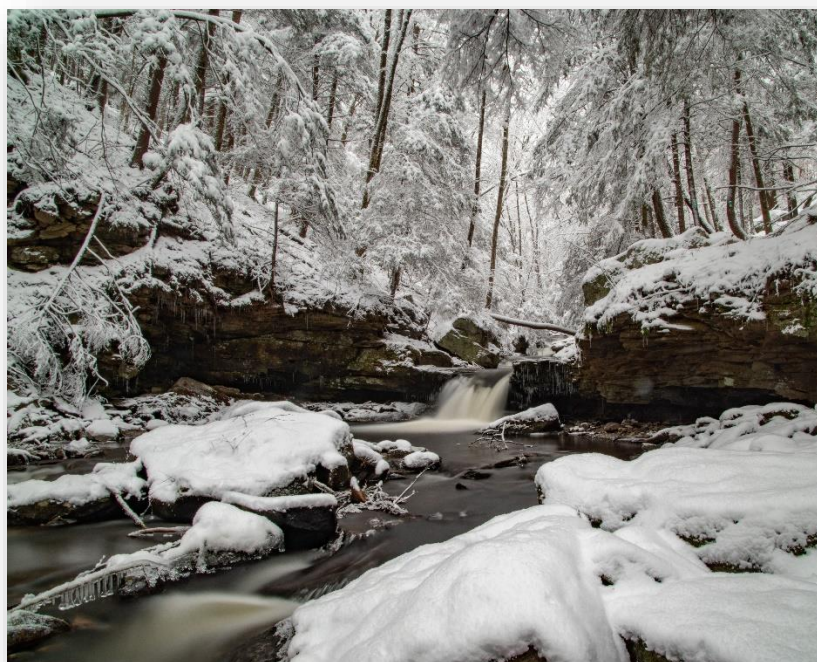


Beware the Ash-Fall! In recent years, the Emerald Ash Borer has unfortunately succeeded in killing almost all of the Ash trees in our local forests. These dead trees are now falling to the forest floor. Be aware of fallen branches and trees as you hike trails in the forest – especially during or after windy or snowy weather. Also keep this in mind if you are camping in the forest - avoid setting up your camp around dead Ash trees.



ABOVE: This photo taken from the Loyalsock Canyon Vista this past summer shows the dead Ash trees dotting the hillsides surrounding the park.

BELOW: Cottonwood Falls on Double Run:





CONSTRUCTION UPDATES:

ROUTE 154 REPAIR: You may have noticed the damage to the west-bound lanes of route 154 in the park near the Point Pavilion. PennDOT has been making temporary repairs by repaving this section – but a more permanent repair is being planned for late 2021 into 2022. This extensive project will stabilize the road but will unfortunately require the closing of the road in both directions for

several weeks. This will in effect cut off the campground, Double Run and the Loyalsock Canyon Vista from the park office and day-use area, with no convenient detour available. This may result in the temporary or early closure of the campground in late 2021. It is hoped that the project can be timed to take place mostly in the off-season and thus minimize the impact on the campground. Monitor the park's Facebook page and future issues of THE VISTA for updates on this project.

MINERAL SPRING ROAD REOPENED:

Mineral Spring Road – the road that connects the campground to the Loyalsock Canyon Vista – had been closed since the flooding rains of summer 2018 washed part of it away (see picture to the right). The road has recently been repaired and is now open – reconnecting the campground to Shanerburg Road and the vista!



SWIMMING AREA DAM TO BE REPLACED: The dam just below the swimming area is going to be replaced sometime in 2021-22. This will likely necessitate the closing of the swimming area while this project is underway. It is hoped that this project will be timed to minimize the impact on the swimming area and day-use area. Monitor the park's Facebook page and future issues of THE VISTA for updates on this project.

ENROLL TO BECOME A DCNR CONSERVATION VOLUNTEER

If you are interested in volunteering at the park, we encourage you to register. Registering brings you insurance coverage and the ability to track your volunteer hours. See more on DCNR's website: <https://www.dcnr.pa.gov/GetInvolved/Pages/default.aspx>



Observing and Photographing the Winter Night Sky

On the
previous
page...

The Milky Way Soars Over Worlds End State Park.

Photographed from the sidewalk on Cabin Bridge Road is our home galaxy, the Milky Way. Our solar system is located in one of the spiral arms of our galaxy – and in this picture we are gazing toward the center of the galaxy – seen edge-on. The dark areas are dust and dark matter between us and the galaxy's center.

The Milky Way is only visible in the night sky in areas with very dark skies with minimal artificial light pollution. And it may take several minutes for your eyes to adjust to the darkness before you can see it.

Photograph by Kyle Fawcett.

An often-overlooked winter-time activity is stargazing and star photography. Winter night skies are ideal for these activities – with the cold air usually clearer than hazier summer air masses. Winter nights are also longer and start earlier – so you can enjoy them in the early evening well before bedtime. The minimal light pollution found at Worlds End and the surrounding Loyalsock State Forest means you have the really dark skies to see a multitude of stars, planets and shooting stars. So, grab a folding chair, a warm drink, flashlight (a red light or red filter or cellophane over your flashlight is ideal), warm clothes and a hat – and fingerless gloves are useful if you have to manipulate telescope or camera controls. Take a star guide book and/or access the many apps and downloads available online to help you identify night sky features. A telescope and/or binoculars can bring you closer to the stars and planets – and take a digital camera if you want to try some night photography.

You will need a location that provides an unobstructed view of the sky and without any artificial light nearby. Fortunately, Worlds End and the surrounding area offer several such locations. In the park, the bridge and sidewalk on Cabin Bridge Road near the cabin area and the Loyalsock Canyon Vista are good locations. Nearby High Knob Vista offers an extensive view of the western, northern and southern sky with plenty of parking. Hunters Lake and Sones Pond also offer parking and big skies with no visible artificial light.

*When
photographing the
Milky Way...
including
foreground
elements such as
trees or hills can
provide scale and
perspective.*



PHOTOGRAPHING THE NIGHT SKY

Modern digital cameras make night-time star photography easier than ever before. For help and information, a web-search of “star photography” will produce a lot of helpful websites and apps. Be patient, experiment, and keep some basics in mind:

- You need a location with unobstructed views of the sky and no artificial light visible.
- A clear, cloud-free night is needed. Check the weather forecast for such nights.
- A moon-less night is also preferable – check the calendar for dates around the new moon.
- You will need a camera that you can control the exposure because you will need to keep your shutter open for several seconds.
- Because you will be taking photos at long exposure times, you will need a mount your camera on a tripod and a stable surface. A remote shutter-release can also help minimize camera movement.
- Set your aperture-f/stop as wide as your lens allows.
- Focusing can be tricky. Your camera’s auto-focus will likely not work. You should switch to manual focusing – and look for a bright star. Look through the viewfinder at the bright star and rotate the manual focus ring until the blurry spot of light turns into a sharp pin-point.
- Experiment with exposure times. Depending on the brightness of the stars you are photographing – you will likely need an exposure time of between 3 to 20 seconds to produce the desired effect. Remember that the stars move – exposure times greater than 30 seconds will blur the stars.
- Likewise, experiment with your ISO setting. A high setting will probably be necessary.
- Look out for airplanes! Airplanes flying through your shot will show up as a series of dots across part of the photo. The later into the night you are out, the fewer airplanes there will be. Shooting stars can likewise show up – as a thin line streaking across part of the photo – but there is not anything you can do to see and avoid shooting stars coming.

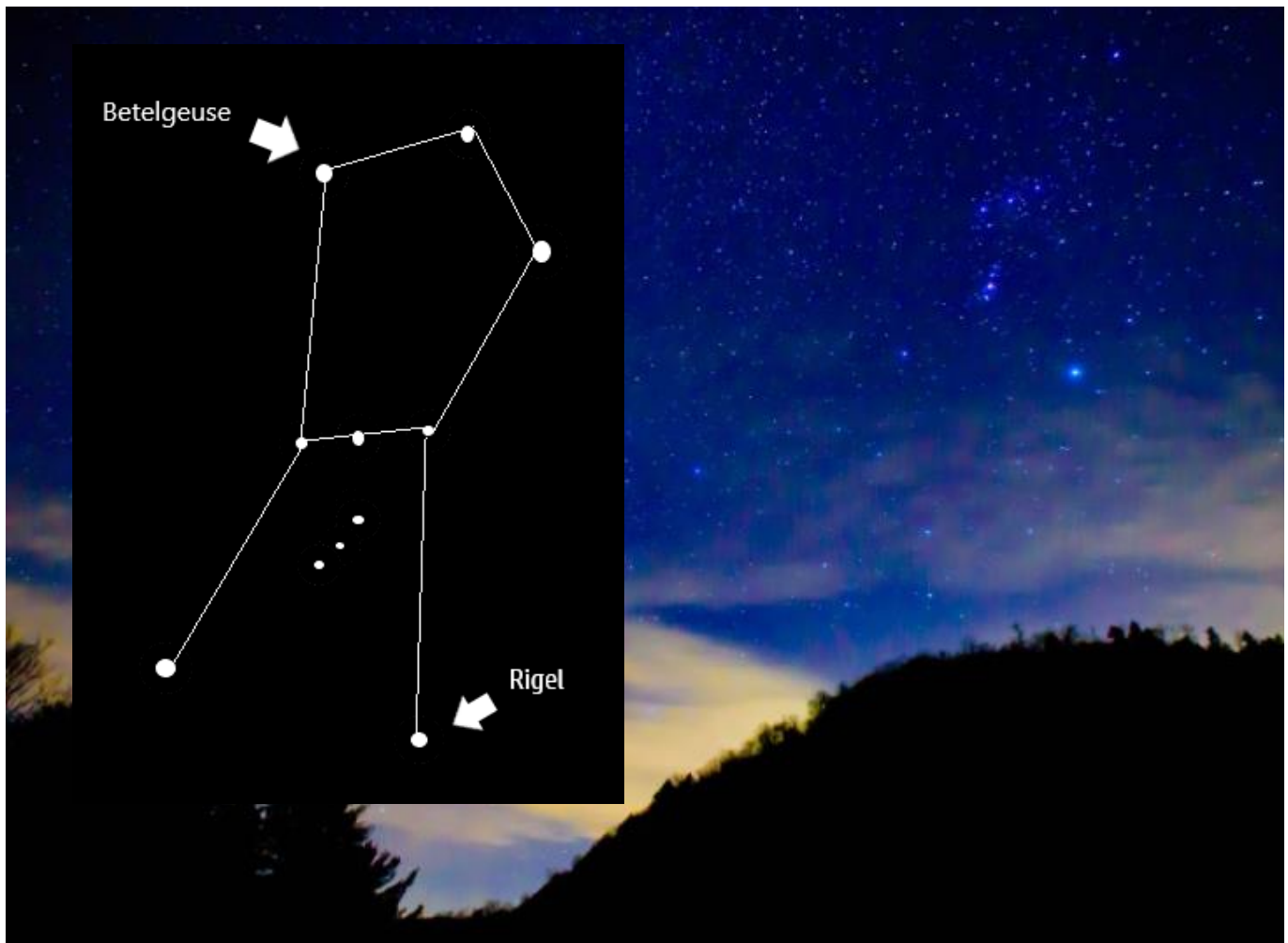


*Comet Neowise
photographed at
the High Knob
Vista in July
2020.*

WINTER CONSTELLATIONS

Another reason winter is the best season for star-gazing are the prominent constellations that are visible. As a student at Mansfield University, my work-study job was in the university's planetarium – where I had the daunting task of learning every constellation in the sky for every season – so that I could tutor students in such. The passage of time has unfortunately robbed me of much of this knowledge. However, I can still recollect the more famous winter constellations – none more so than Orion the Hunter – who dominates the night winter sky. Several bright stars make this constellation impossible to miss – with the brightest and most well-known being Rigel and Betelgeuse. Rigel, the brightest star in Orion, is a blue supergiant. Betelgeuse is a red supergiant – and what is also called a variable star – because its brightness can vary. This variability has been so noticeable lately that it has been in the news. In 2019, Betelgeuse dimmed so much that the loss of brightness was enough to be noticed by the naked eye.

ORION THE HUNTER – over Worlds End – Photographed from Cabin Bridge Road

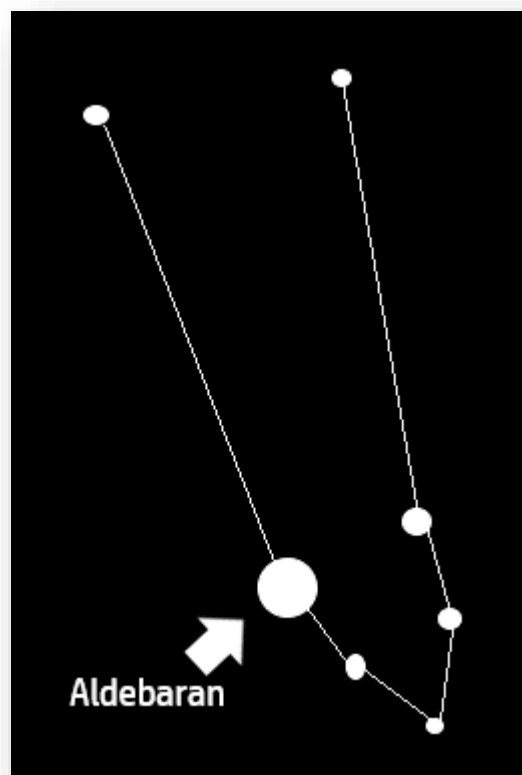




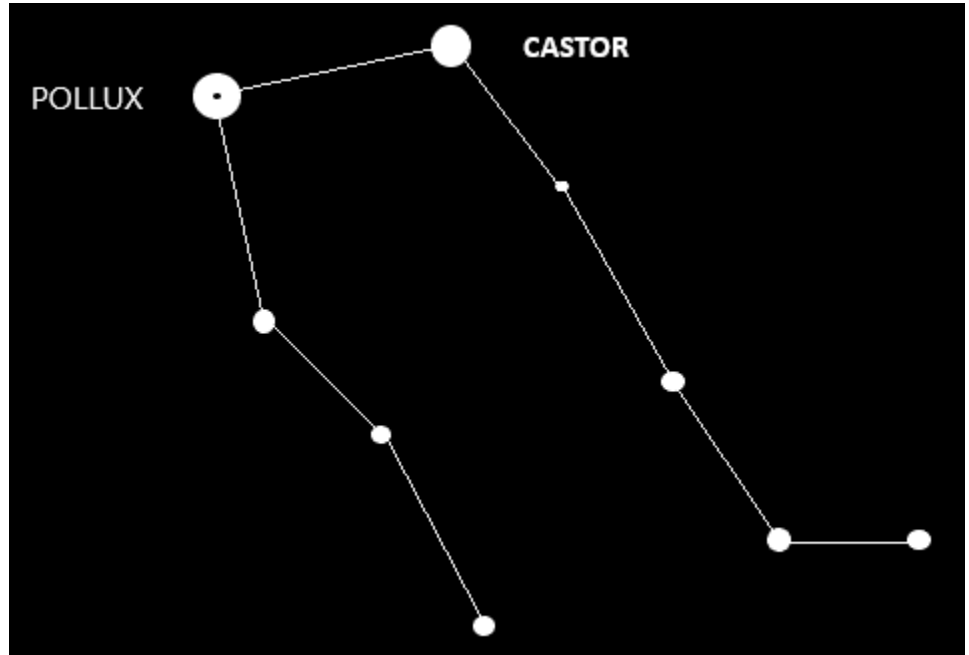
TAURUS

And facing the hunter – charging toward him, is Taurus the Bull – one of the 12 constellations of the zodiac. It is easily recognizable as a “V” of stars and features one of the brightest stars in the winter sky – Aldebaran, an orange giant.

And on the “back” of Taurus is another famous feature of the night winter sky – the star cluster known as the Pleiades – or the “Seven Sisters.” Like the Milky Way, this cluster of small stars is only visible in clear, dark skies away from artificial light. Under such skies, the Pleiades are visible to the naked eye – but are best viewed through a binocular or telescope.



A color-composite image of the Pleiades from the Digitized Sky Survey Credit: NASA/ESA/AURA/Caltech



GEMINI

Another prominent zodiac constellation just above Taurus in the winter night sky is Gemini – the twins. At the “head” of the twins are two bright stars – Pollux and Castor. In Greek mythology, Castor and Pollux were twin brothers. In the night sky, Castor is a white star – and is actually a multiple-star – but to the naked eye appears as a single star. It’s twin, Pollux, is a large yellow star.

THE AURORA BOREALIS

An occasional feature of the night sky is the Aurora Borealis – also known as the Northern Lights because it is a phenomenon usually seen to our north in the polar regions. While rarely visible in northern Pennsylvania – there may be upcoming opportunities to see this stunning sight. The Aurora Borealis is linked to sun flare activity that drives geomagnetic disturbances in the Earth’s atmosphere. Larger disturbances can bring the Aurora further south – and occasionally to Pennsylvania. Large geomagnetic storms are most common during the peak of the 11-year sunspot cycle – and we are now entering that peak period. So pay attention to the news and stay alert for these solar disturbances that could bring the Aurora south to our area. There are several websites that provide Aurora forecasts – including the Space Weather Prediction Center operated by the National Oceanic And Atmospheric Administration (NOAA) at <https://www.swpc.noaa.gov/products/aurora-30-minute-forecast>. And the same with any stargazing – find a dark area with no artificial light and with a view of the sky to the north. And be patient – it can take awhile for the Aurora to show up – but it is worth the wait!

Article by Dan Mumford



A frozen Mineral Spring Falls (also known as Neeneha Falls).

To support the Friends of Worlds End State Park, check out the SUPPORT section of the Pennsylvania Parks and Forests Foundation website and designate your gift to the FRIENDS OF WORLDS END STATE PARK!

<https://paparksandforests.org/support/ways-to-give/>

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