



Peoria Astronomical Society, Inc.

P.O. Box 10111 Peoria, IL 61612-0111
Section of Peoria Academy of Science
Affiliate of the Astronomical League

www.astronomical.org

STARLITE

Winter, 2021

WHAT'S IN THIS ISSUE?

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25 & 50 years ago
Submitting photos & Articles for Starlite
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NCRAL Newsletter & how to sign up
Programs for 2021 & 2022
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Officers:

President: Dan Son, sonshine1992@gmail.com
Vice-President: Brian Bill
Secretary: Phil Burroughs
Treasurer: Dave Monroe, dave.monroe@comcast.net

Directors:

Parliamentarian: Dave Monroe, dave.monroe@comcast.net
Nominating Chairman:
Legal Agent: Rodney Nordstrom
Northmoor Chairman: Dan Son, sonshine1992@gmail.com
Jubilee Chairman: Jesse Hoover

PEORIA ASTRONOMICAL SOCIETY IS NOW ON FACEBOOK:
www.facebook.com/PeoriaAstronomicalSociety

Update your address, phone or email changes

Please notify Scott Swords at sswords3@comcast.net if you will be getting a new mailing address, email address and/or phone number. It is important that he has your personal information correct so you will continue to receive the Starlite and the Reflector. He would also like to receive any changes to your e-mail address as this is part of his database.

If you would like to join the Peoria Astro e-group or if you have changed your e-mail address, please notify Mike Frasca at mfrasca@att.net or Dan Son at sonshine1992@gmail.com with your e-mail address (for in-club use only – not given out to other sources). He does not need your mailing address or phone number. If you are not a member of the e-group, you may want to consider joining.

NEW MEMBERS:

The Peoria Astronomical Society welcomes new members: Donna Krahn, Nicholas Tinsman and Jeff Anderson.

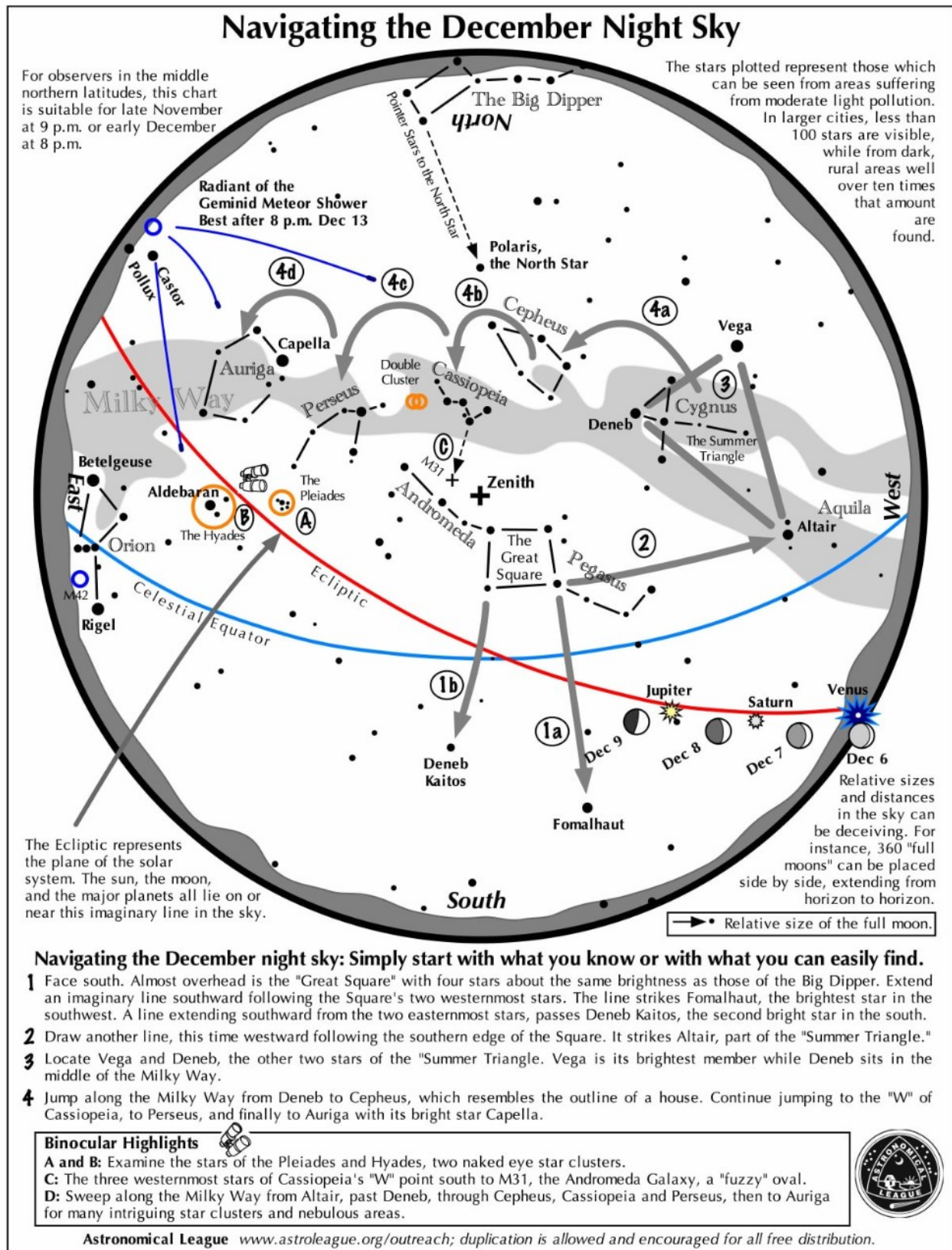
2022 Meteor Shower Schedule:

The Quadrantid meteor shower will be active from 12 December to 12 January, producing its peak rate of meteors around 3 January. The shower is expected to reach peak activity at around 14:00 PST on 3 January 2022, and so the best displays might be seen before dawn on 3 January and after dusk on 3 January. New Moon is Jan 3rd.

Comet finder: Dan Son

<http://cometchasing.skyhound.com/>

Great web site that has finder charts for visible comets. Comet Leonard (C/2021 A1) may become naked eye in mid December.



President's Message

Well we have had quite a ride this past year. We all have dealt with Covid and the reopening of Northmoor and getting people inside the dome to enjoy what we all enjoy doing, observing. I am very thankful for all the volunteers who helped get Saturday night public observing up and running. I know we did a great job of keeping everyone safe and having a good time doing the work we love. Then we get the news of a group trying to build a pavilion next to the observatory. We have had many people who love the Donovan Park come out and support PAS to keep this from happening like Friends of Open Space – Donovan Park. As of now the proposed pavilion has been withdrawn but we believe it will be coming back further down the road so this fight is not over. Keep your ears and eyes open for more information to be coming soon.

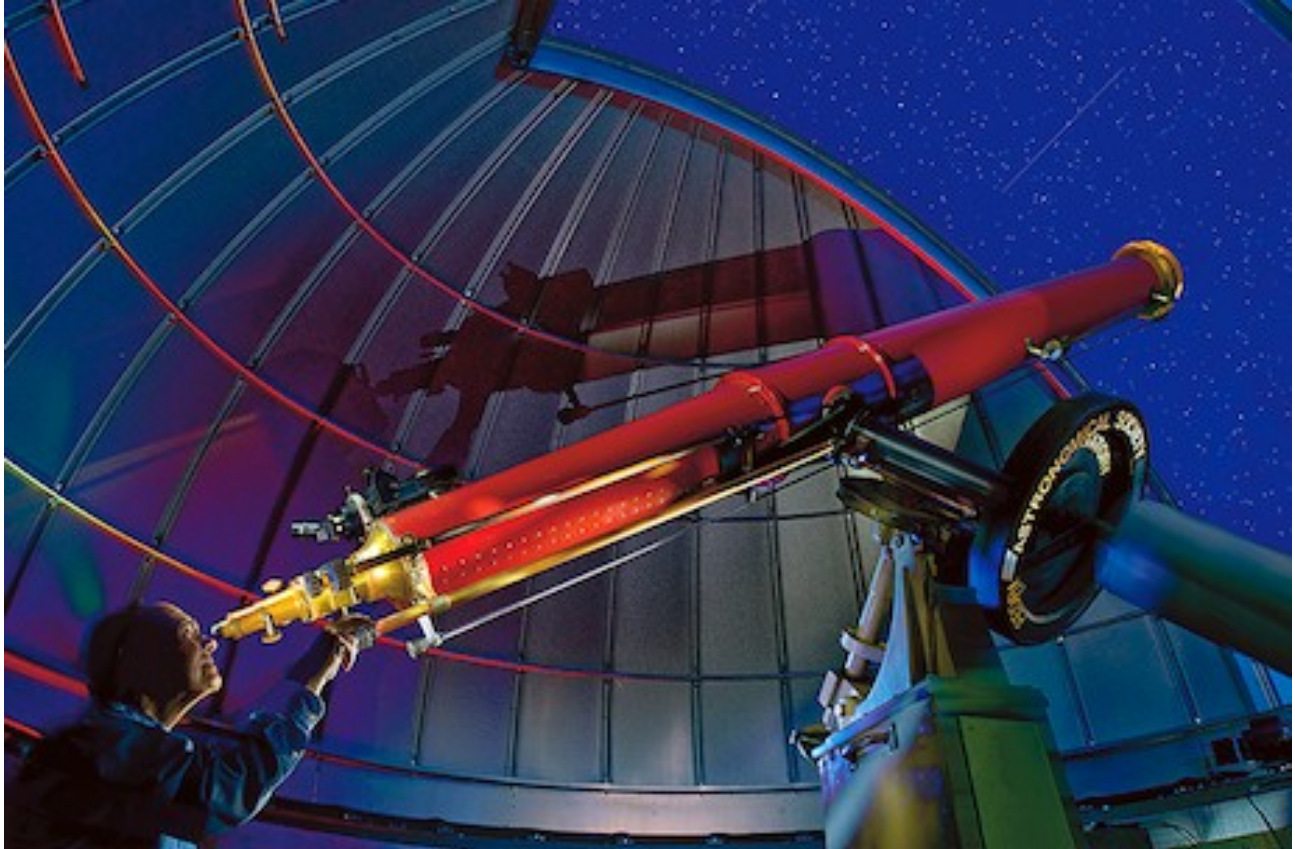
I want to thank Bob Pauer who for at least 8 years has been Jubilee Chairmen. He is stepping down but will always be watching over and working at Jubilee. We will also welcome Jesse Hoover who will step into the Chairmen roll and take on these duties. It is great to see members step up to these rolls that help keep PAS running and doing the best we can for our members. We have had some issues at Jubilee lately and I would like to report what we know. First...the bridge has been replaced and the road is open!



I know this is not a big deal but I do not like detours. #2 is a missing padlock. We do not know how it happened but our gate padlock was missing from the gate so we replaced it and all is well. We did change the combination to the padlock so if you missed it being posted to the email group, just contact any Board member to get that combination. #3 is that we PAS have been asked not to go to Jubilee Observatory during shotgun deer hunting weekends. This is the 1st time in our history that this has happened and a new Park Superintendent made this decision. We will be following up on this issue and get back to our members ASAP when we find out more. The next shotgun dates are December 2 thru the 5th, as of now plan on Jubilee to be closed those dates unless we know otherwise. Jubilee is open all other times and we would encourage anyone to dress warm and go out and observe winter objects are the best!



It is with great sadness in the passing of a dear friend and long time PAS member Bill Cole. He became a member about the same time I did in 1999. He was always very active with PAS serving on the board and as Northmoor Chairmen from 2002 till late 2012. I know he loved using that scope and it shows with some of the photos that have been in the Peoria Journal Star or on murals around Peoria of him at Northmoor. He even offered the Board a meeting place where he lived and it was a nice break from always meeting at Hardee's. I hope we can get more people like Bill who enjoy what they do and always smiling while they do it. Thank you Bill for all you did, you will be missed.



Submission of photos / article content for the Starlite: Jesse Hoover

If you have a photo that you would like to submit for the Starlite, please send these to Jesse Hoover hooveje@gmail.com or Dan Son sonshine1992@gmail.com along with a little write-up about the photo. Photos can be from star parties, club events, personal view, etc. Astrophotography is encouraged. Also, if you have educational content, tips, techniques, lessons learned or how-to articles with photos, we encourage that material for the Starlite. We can also put these on our Facebook page if you so desire. <https://www.facebook.com/PeoriaAstronomicalSociety>

The Caterpillar Matching Gifts Program: Brian Hakes

As of July 1, 2012 the Cat matching gifts program changed. Employees/Retirees are asked to submit matching gift forms electronically via the Caterpillar Foundation website, www.caterpillar.com/foundation. The process is easy. Once you made your gift to the PAS you can go online to the Cat Foundation website and complete the electronic form, there is no paper involved. Once the form is registered with the foundation they will notify the PAS and the treasurer will then verify the gift has been received. Because there will be no mailings, the turnaround time for the whole process will be negligible. This is especially advantageous at the end of the calendar (tax) year. This is an excellent way to support the PAS. If you can, please participate in this

generous program. This is a great way to help the society and the promotion of astronomy in the greater Peoria area.

Reflector:

Reflector Magazine digital edition is available for download

You may access an archive of digital issues from the AL website by visiting: _

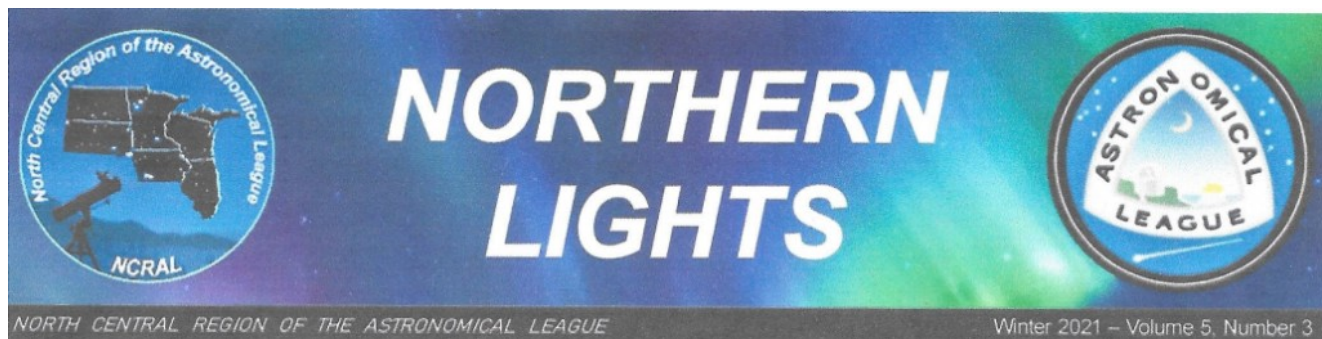
<https://www.astroleague.org/reflector>

NCRAL Newsletter:

The North-Central Region of the Astronomical League (NCRAL) is made up of member societies... the six states commonly thought of as the Upper Midwest of the USA, plus the Upper Peninsula of the state of Michigan. The PAS is a member of the NCRAL. Their Region Newsletter, also named “Northern Lights”, has been resurrected and is better than ever! The latest issue’s can be read on their website can be found here:

<https://ncral.wordpress.com/newsletter-archive/>

You can access the current issue and all other back issues through this link.



As members of the NCRAL, we are allowed to submit our content to their newsletter as well. So if you have really cool articles appropriate for the viewing of the larger regional society audience mentioned above... please send these to Carl.

NCRAL Northern Lights Newsletter

Carl J. Wenning, Editor in Chief

NCRAL Regional Representative

Twin City Amateur Astronomers

Bloomington-Normal, Illinois

Email: carlwenning@gmail.com

Add Your Email Address to NCRAL Member Database

Add your email address to the NCRAL member database now so that you can get direct mailings of NORTHERN LIGHTS and important and timely announcements about Regional conferences, star parties, and so forth. Your email address will never be shared with or sold to outside entities. Sign-up takes only about a minute. You'll need to provide your name, email address, astronomy club affiliation (including at-large), and indicate if you hold particular positions within your club. Go to the following case-sensitive URL to add your information to our database: <https://goo.gl/gS8SF>

Program Schedule 2021– 2022 5th – All speakers confirmed

We expect to be meeting face-to-face in the Dome Planetarium at the Peoria Riverfront Museum (svZ-speaker via Zoom)

December 1, 2021	Following up on 2021's biggest astronomy news – the ongoing stories (svZ) Dr. Shannon Schmoll PhD, Abrams Planetarium, Michigan State University
January 5, 2022	No Meeting in January
February 2, 2022	Planetary Atmospheres using Legos“+ Big Astronomy” fulldome show Dean Campbell, PhD, Bradley University
March 2, 2022	The Artemis Mission to the Moon (svZ) Patricia Moore, Communication Strategist – Museum Outreach Deep Space Exploration Systems, NASA Johnson Space Center
April 6, 2022	Solar System Cratering (svZ) Carlisle Wishard, Ph.D (candidate), Purdue University
May 4, 2022	All New Astro-Jeopardy II Brian Bill

Inclement weather notice: Monitor email (e-group), local radio stations or PAS Facebook Page if a program, board meeting, viewing, or star party may be canceled due to weather. If we determine a risk in the weather, the Society will cancel the event. If we host an event and you feel the weather or road conditions are questionable, please take the safest actions and do not attend the event.

FROM STARLITES PAST

By Dan Son

50 Years Ago:

ORIGINS OF INTEREST - by . . . alias . . . "Pegasus"

Not too far from the great square of Pegasus lies Delphinus, the Dolphin, just about the tiniest constellation in the entire celestial sphere. At an earlier time, it may have been larger, having included some of the stars of Egeuleus. It lies just east of and between Cygnus and Aquila close to the eastern edge of the Milky Way.

The entire form is made up of five stars with a shape like that of a four point diamond, with the fifth serving as sort of a tail. It, too, almost approximates the silhouette of a tiny fish. In fact, the early Greeks referred to it as "the sacred fish". Its main star, named Sualocin, is Nicolaus spelled backwards. The second star of importance is labeled Rotanez, which is Zenator, in reverse, honoring that gentleman who was assistant to the great Giuseppi Piazzi, the astronomer, credited with discovering the first asteroid.

The Dolphin has a strange history and has been prominent in many early charts and discussions. Christians of the seventeenth century, somehow saw the cross of Jesus Christ in this constellation, saying it was transferred to the sky after the crucifixion. Early Arabs probably influenced its present day name calling it the Arabic, "Dulfin", which one of their chroniclers described as a "marine animal friendly to man, attendant upon ships to save drowning sailors".

Delphinus also enjoys another popular name, but the origin of it is lost. It is popularly called, "Job's Coffin", by some, but why or how, remains one of those mysteries.

I love the stories of the Constellation and I had some space so here is the story of Delphinus:

After Zeus, Poseidon, and Hades had overthrown their father Cronus, they divided up the sky, the sea, and the underworld between them, with Poseidon inheriting the sea. He built himself a magnificent underwater palace off the island of Euboea. For all its opulence, the palace felt empty without a wife, so Poseidon set out in search of one. He courted Amphitrite, one of the group of sea nymphs called Nereids, but she fled from his rough advances and took refuge among the other Nereids. Poseidon sent messengers after her, including a dolphin, which found her and with soothing gestures brought her back to the sea god, whom she subsequently married. In gratitude, Poseidon placed the image of the dolphin among the stars.

Another story, given by Hyginus and Ovid, says that this is the dolphin that saved the life of Arion, a real-life poet and musician of the seventh century BC. Arion was born on the island of Lesbos, but his reputation spread throughout Greece for he was said to be unequalled in his skill with the lyre. While Arion was returning to Greece by ship from a concert tour of Sicily and southern Italy, the sailors plotted to kill him and steal the small fortune that he had earned.

When the sailors surrounded him with swords drawn, Arion asked to be allowed to sing one last song. His music attracted a school of dolphins which swam alongside the ship, leaping playfully. Placing his faith in the gods, Arion leaped overboard – and one of the dolphins carried him on its back to Greece, where Arion later confronted his attackers and had them sentenced to death. Apollo, god of music and poetry, placed the dolphin among the constellations, along with the lyre of Arion which is represented by the constellation Lyra.

25 Years Ago:

A Primer for the Beginner

Lesson One: Learn the Sky

by John Barra

This is the first in a series of articles designed to assist those who are just starting out in astronomy. These articles might be equally instructive to others who have been trying for a few years to use their telescopes but have trouble finding objects that should be easy to locate. Though full of desire and enthusiasm for stargazing, they may have just gotten off on the wrong foot.

It does you no good to have a new telescope and a bunch of star atlases if you cannot find your way around the sky. My suggestion is this: put away your telescope at first and just learn the sky. If the temptation to use your equipment is too great, take your telescope out when the Moon is bright. Gaze at the Moon or at the easy-to-find planets of Venus, Jupiter, and Saturn. Then put away your telescope for the rest of the month and continue with this first lesson.

STEP ONE: LEARNING THE CONSTELLATIONS

The first and most important step in learning the sky is to study the constellations. A good knowledge of the constellations is essential in order to learn how to starhop from object to object,

an art that will be explained in a later lesson.

Purchase a simple star book that has constellation charts. *Observing the Constellations* by John Sanford or *The Audubon Society Field Guide to the Night Sky* by Mark R. Chartrand are two good choices. You should also buy a planisphere and a spiral notebook or other blank journal.

The only instruments you will need besides your eyes will be a pair of binoculars and a flashlight with a red lens. Just about any pair of binoculars you have will do for now. Before you purchase new binoculars that you expect to use in the future for more advanced stargazing, ask an experienced astronomer for buying tips.

You might have difficulty picking out the constellation stars from the rest in a rich, star-filled sky. So begin at a site that is not pitch black. After you learn the constellations is the time to go to the better sites away from the city.

Go at your own pace. At first, study one or two new constellations a night, using your constellation chartbook as a

guide. Learn their stars well and take the time with your binoculars to enjoy the general sky within each constellation. Your naked eye will be sufficient to find and learn some of the bright constellations such as Orion, Ursa Major, and Cassiopeia. You will need binoculars to see the dim ones such as Lacerta, Camelopardalis, and Cancer. Finally, you will use both the naked eye and binoculars to see constellations containing both bright and dim stars.

Don't expect to learn all the constellations at once. Many constellations are visible at night only during a particular season. Plan on taking nearly a year to learn all the ones visible in this part of the northern hemisphere. Some constellations in the southern hemisphere, of course, are not viewable here at any time.

NEXT ISSUE: STEP TWO: LEARNING THE MOVEMENTS OF THE CONSTELLATIONS THROUGH THE SKY

It does you no good to have a new telescope and a bunch of star atlases if you cannot find your way around the sky...

Images from all over!!

Well I was very impressed with this image from Jean-Francois Gout showing the Umbra curvature on the Moon during the 2021_11_19.



Setting up for showing some school children at Wilder-Waite Grade School the night sky. Dan Son

Imaging:

I posed a question to the PeoriaAstro group and here is the response.

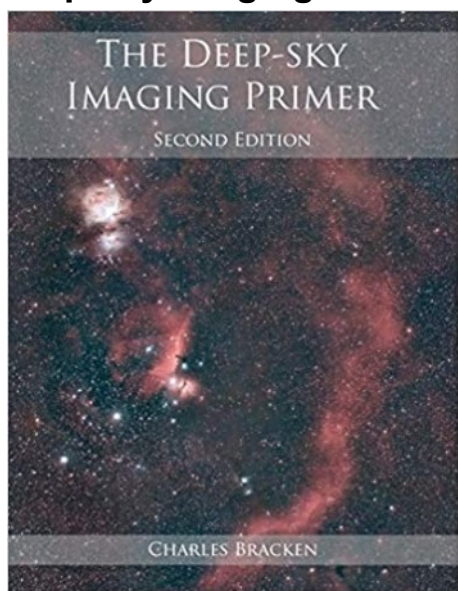
Question: looking for some advice on books for astrophotography, either end of the spectrum...setup and photographing or the workflow and software to get the best out of your digital data.

Thanks to all of you who took the time to respond, I will be getting some new Christmas gifts from this list.

Nic Napier from PAS has a YouTube channel with some tutorials as well as many others who give good information for a beginner.

<https://www.youtube.com/channel/UCXLcsYNpNzFONTMcopL0qoA>

The Deep-sky Imaging Primer 2nd edition by Charles Bracken



Some where of web sites that contain a lot of useful information.

<https://astrobackyard.com/>

<https://www.youtube.com/channel/UC65vvpQDX5rymeqrYt-Bb1g>

<https://alynwallacephotography.com/>

Any books from **Michael Covington**:

[https://www.amazon.com/Books-Michael-Covington/s?rh=n](https://www.amazon.com/Books-Michael-Covington/s?rh=n%3A283155%2Cp_27%3AMichael+A.+Covington)

[%3A283155%2Cp_27%3AMichael+A.+Covington](https://www.amazon.com/Books-Michael-Covington/s?rh=n%3A283155%2Cp_27%3AMichael+A.+Covington)

We have a lot of smart, experienced members who have knowledge and want to share with you, just ask!

2022 Members Dues:

Dave Monroe has sent out dues notices for 2022 through the email group and I am adding it here in case you need a reminder. If you joined after September 30th or later you do not need to send in dues. You can print the page and bring to members meeting this December 1st or mail it in.



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2022 DUES NOTIFICATION

Your support of the **Peoria Astronomical Society** has been greatly appreciated !!
Please select the membership of your choice for your 2022 dues:

- Regular Membership - \$40.00
- Patron Membership - \$50.00 or greater

- Patron membership includes regular Membership status and the sincere gratitude of the Society.
- Membership includes everyone in your immediate family.
- Membership includes membership in the Peoria Academy of Science.
- If you joined PAS after September 30, 2021, you do not need to pay for 2022. You will be carried over.
- Any amount paid more than \$40.00 is tax deductible.
- If your employer has a Matching Gift Program, please consider taking advantage of it to multiply your gift over \$40.00.

➔ **Payment is due by January 1, 2022**

Please make checks payable to:
Peoria Astronomical Society, Inc

Mail to:
Peoria Astronomical Society, Inc.
Attn: Treasurer
P.O. Box 10111
Peoria, IL 61612-0111

Thank you again for your continued support of the Peoria Astronomical Society!! We look forward to seeing you at monthly meetings and at our Star Parties.

Dave Monroe
Treasurer

Peoria Astronomical Society October 2021 Minutes

Meeting called to order at 7:34 pm, Zoom Meeting, October 20, 2021

Attendees: Phil Burroughs, Brian Bill, Sheldon Schafer, Eric Clifton, Dan Son, Rodney Nordstrom, Dave Monroe

Minutes: (Phil Burroughs) The minutes of the August Board Meeting were approved on a motion made by Eric and seconded by Dave.

Treasurer's Report: (Dave Monroe) –Dave presented three Treasurer's Reports. The July Treasurer's report had receipts of \$ 260 and disbursements of \$ 29.21. The August Treasurer's Report had no receipts and disbursements of \$ 30.24. The September Treasurer's Report had receipts of \$ 328 and disbursements of 35.08. At the end of September, the checking account balance was \$ 4,429.13 and the savings account balance was \$13,592.51. The Treasurer's Reports were approved on a motion by Eric and seconded by Brian. Dave has been added to the checking account. Vice President Brian Bill will be also added to the checking account.

Jubilee: (Bob Pauer) – Bob Pauer is stepping down as chairman. Dan is going to see if Jesse is interested in being chairman. Eric said the Jubilee lease is up next year. He will look into the renewal of the lease.

Northmoor: (Dan Son) – The 2021 season is over. Dan is going to talk to Terry Beachler about adding drain holes to upper and lower shutters to eliminate accumulating water. The accumulating water runs into the observatory when the shutters are opened. The Northmoor Pavilion seems to be dead. Robert Johnson' Peoria Park Board President polled members and determined the pavilion was not a good idea. Eric thanked all who helped with the ending the pavilion and Rodney thanked Eric for his work in leading the efforts.

Nominating: (Jesse Hoover) –None

Legal Agent: (Rodney Nordstrom) – None

Membership/Alcor: (Eric Clifton/Scott Swords) – New members were Dona Krahn, Nicholas Tinsman, Nick Napier and possibly Dean Regas.

Starlite (Dan Son) – Deadline for articles for the Winter Starlite is the November Board Meeting.

Program: (Sheldon Schafer). – Sheldon said there are no changes to the program.

Peoria Academy of Science: (Vacant) – There was discussion on the interaction of PAS and the Peoria Academy of Science. It was suggested that Renae Carrigan might be able to attend the Peoria Academy of Science Meetings for PAS, since she attends those meetings already as the museum's representative. Eric suggested the Academy send their minutes to PAS.

Light Control: (Jesse Hoover) – No report.

Website: (Stan Pope). – Dan will update the site director E-mail addresses and download the latest Starlite .

Old Business: None

New Business: - Finding a new Jubilee Chairman and the Jubilee lease are future business. Sheldon and Eric plan to set up a meeting with Cyds about their light pollution and the Northmoor Observatory. Rodney suggested improving the path to Northmoor Observatory and the sign-in book. He also suggested we come up with ideas for attracting younger members.

Meeting adjourned at 8:49 pm. Mininutes taken by Phil Burroughs, PAS Secretary