

Lorain County, Ohio

October 2020

Website: blackriverastro.org

Newsletter submissions: Editor



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--Wednesday, October 7, 7 p.m.: Regular meeting/annual meeting of the members via Zoom. Dave Lengyel will present a planetarium program using Sky Safari.

--Thursday, October 15, 7 p.m.: Board meeting, via Zoom.

--There will be no public observing in October due to the pandemic.

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DUES ARE DUE in October. Please send your renewal of \$20.00 to treasurer Dan Walker with the membership form found at the end of this newsletter.

Visit Our Website

Explore if you will the informative BRAS website and all its interesting, timely links, and join the interactive members-only BRAS Forum to better keep in touch.

Guidescope Contributions Wanted

If you have any astronomical wanted/for sale announcements, photos, interesting article links, equipment reviews, observing reports, essays, or anything that you think to which the local amateur astronomy community could relate, please send them to your humble Guidescope editor for inclusion in forthcoming issues.

BOARD SUMMARY September 10, 2020

The September Board of Directors meeting was called to order at 7:06 p.m. with eight Directors present. The minutes of the August meeting were displayed on the screen, after which it was moved by Jeff Walsh and seconded by Dan Walker to accept the minutes. The Treasurer, Dan Walker, reported an opening balance of \$5,398.94, with income of \$20 from dues and no expenses. Thus the closing balance was \$5418.94.

Committee reports followed. There was no report from the Guidescope editor. The website committee reported that Dave Lengyel could not access the Oberlin Clear Sky Chart on his computer although the other weather apps were there. Others were able to access the Clear Sky Chart, so David Griffiths, our webmaster, has been asked to investigate. John Reising reported that he has installed a 2" Crayford focuser on the back of the orange tube C-14. This focuser was purchased for the club as a gift by Mike Garrett and screws directly onto the visual back of the C-14. Very coarse focus is done with the Celestron focuser, then the final focusing is done with the Crayford which will eliminate the image shift that is often a problem on large SCTs. Thanks, Mike! John reported the observatory to be in good shape. The OTAA committee reported that there are two OTAA Conventions scheduled for 2021 so far: CAA on July 31, and BRAS on Sept 4th.

Programming is becoming a problem. We have a speaker for October when Dave Lengyel will present a planetarium program using Sky Safari. We have no speakers for

November through the next 10 months. Any members interested in doing a program for a General Meeting should contact any Board member or the President, Steve Schauer at BRASPres@gmail.com.

Old Business followed with the first item being the upcoming election. Each year 1/3 of the Board of Directors have their terms expire. An election is then held in October to elect Directors and the Directors then choose the four club officers. This year, the election will be held online using Google Forms. If you are a club member who paid their 2020 dues, you will receive a ballot via email. On the ballot you provide your email and then vote for the Directors of your choice and push "Submit". Your ballot will be sent to the Treasurer and counted automatically. You will then get an email showing your ballot so that you know it was counted properly. These ballots will be sent out the last week in September and we ask that members vote promptly. Then, a half hour before the October meeting, which will be on Zoom, the Board will have a separate meeting on Zoom to select officers for 2020.

The second item of Old Business was a discussion of our Text Notification System or TNS. The intent of this program was to send a text or email notice to anyone who signs up announcing when a Public Observing, Solar observing, or impromptu observing session is being held. Since we changed webmasters and moved our website to a new server, we have not used the TNS, mostly because we have had no observing sessions due to the pandemic. Dan Walker and David Griffiths have devised a new way to send out the TNS which can now be done from any computer and not just the club laptop. When looking at our club roster, we have 43 Active (paid) members, 90 Expired members and two information members. Of these, 90 signed up to receive TNS notifications. Of the 90 Expired members, 9 are people whose membership expired two years ago, 10 are memberships that expired three years ago, and 71 are people whose memberships expired four or more years ago. This information brings up several questions. First, impromptu observing sessions are for active members only, while public observing sessions are for anyone to attend. Do we thus need two separate TNS lists? Secondly, do we drop some of the Expired people from the list, especially if they haven't been members for five or six years? Should we send out an email to those expired saying we are going to drop you unless you tell us not to? PLEASE NOTE: we have three mailing lists. One is kept by our Secretary and newsletter editor, Bill Ruth. People on this list get all-club emails and the monthly newsletter the Guidescope. We WILL NOT drop anyone from this list. Dave Lengyel also has an extensive list from which he sends out the monthly Observers Calendar. We will NOT drop anyone from

this list. These two lists are extensive and are used as outreach for the club. The only list we are contemplating culling is the official roster we use to keep track of dues payment. This official roster is the one we use to determine who gets ballots (paid up members only), who gets impromptu observing session TNS, and who has paid their dues. This is the only list we may cull. We will discuss this further in the next Board meeting.

The last item of Old Business was a discussion of 2021 dues which are due in October. Because our monthly meetings are online for the time being, we will place a membership form in the October, November and December newsletters. We ask members to fill out the membership form and mail their \$20 dues to Treasurer Dan Walker whose address is on the membership form.

Next came New Business. The first item was the decision to have the October General Meeting on Zoom and to cancel our public star parties and solar observing sessions for October. With over 1,000 people in Ohio being infected with Covid-19 every day it seems wise to cancel public gatherings. Similarly, we are going to cancel our annual holiday party in December. Instead, we are going to have a “Dessert and Wine” Zoom meeting for our December 2nd General Meeting. This is exactly what it sounds like. We will each get the dessert of our choice and a beverage (adult or otherwise) and meet on Zoom, just to gather and talk.

The third item of New Business was a discussion of whether we should purchase covers for some of the other telescopes stored at the observatory. The two permanently mounted C-14s have silver heat-reflecting and waterproof covers over them. We will consider buying similar covers for the 16” Newtonian and the 9” Lucas scope. The two Beadle scopes have the tubes sealed at the top and bottom and the Honis scope could be covered with a vinyl bag as it also has tube covers. We will look into pricing for covers for the 16” and the 9”.

The fourth item, was a discussion of how to handle viewing the Mars opposition in October. Opposition is when Mars will be closest to the Earth in their respective orbits for the year. This will happen on Oct 13th. We would like to have some small members-only viewing sessions at the observatory to view Mars with our larger telescopes. However, to comply with the Governor's mandate and the Metro Park's guidelines, these sessions will need to be limited to 10 people or less with masks required unless we are well separated from each other. Some attempt to sanitize telescope eyepieces and focusers may need to be considered. We are considering doing the following: we will select three dates to observe. These will be on weekends to accommodate people who

are working, and weekdays for the retired members. We will send emails to members asking folks to choose one and email the President with your selected date in order to reserve it. These will then be reserved on a first come, first served basis. You will hear more about this in the days to come.

The final item of New Business was the always happy duty of accepting a new member application. We welcome Brandy Stead of Lorain into the club. Welcome Brandy!

Dates for October were set, and the meeting was adjourned at 8:25 p.m.

~Steve Schauer

The Hoax That Wouldn't Die

This month, Mars will be coming to opposition, which means that it will both rise opposite the Sun as seen from Earth (and thus be up all night) as well as be at its closest to Earth. This is nothing unusual in that it happens every 26 months. However, thanks to its elliptical orbit, not every opposition is created equal, with some being far more spectacular than others.

In 2003, Mars made its closest approach to Earth in roughly 60,000 years, at which point the Red Planet was just over 34 ½ million miles from Earth, nearly as close as it can ever get. Result: Mars would be brighter than anyone had ever seen it before. It was this brightness that led to a hoax that continues to haunt the world nearly 20 years after the 2003 opposition.

With a source that remains unknown, an email (remember, there was no social media yet) began circulating in the summer of 2003, which stated that Mars would appear as large as the Moon when viewed through a 75x power telescope. However, as often happens with the retelling of stories (or the re-circulation of emails), reference to the 75x power telescope disappeared, implying that a naked-eye Mars would be the size of the Full Moon.

The world hasn't been the same since.

Despite clearly not being as big in the sky as the Full Moon in 2003, the Mars-Moon hoax continues to make the rounds on the Internet every time Mars comes toward opposition. Even in 2020, the whole "Mars will be as big as the Moon" idea continues to re-circulate, though nowhere near to the extent that it did in the years immediately following 2003.

Still though, it is undeniably a part of astronomical pop culture, for better (it can serve as an educational moment) or for worse (it's completely untrue).

~Denny Bodzash

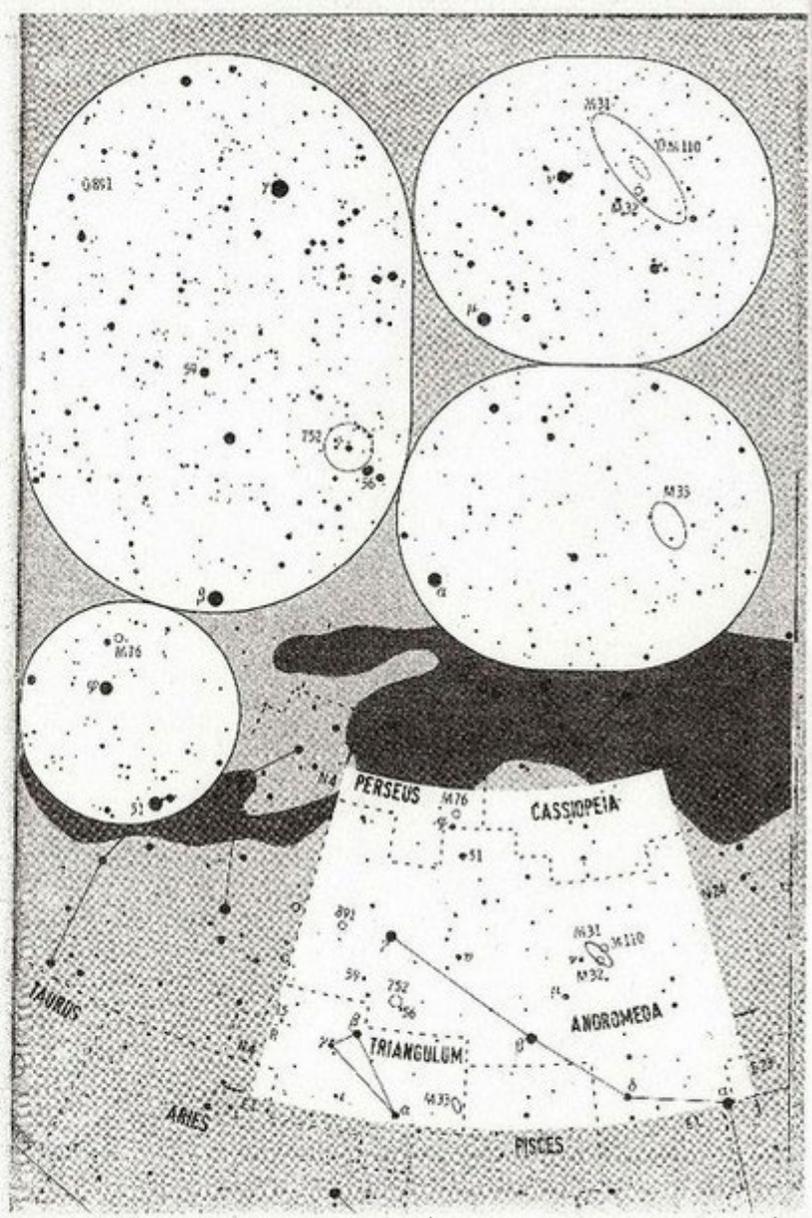
NO Northern Sky Fall Constellations

NEBULA	Position	v-Mag.	Size	Shape	Type	Vis.	Dist.	R.A.	Dec.
205 M110	And	8	12x10'	0	E5 ⁺ Glx	☑	3 Mly	0°40.4	41.69
221 M32	And	8	11	3.5	C E2 Glx	☑	3 M	0 42.7	40.87
224 M31	And	4	13	150	Sb Glx	☑	3 M	0 42.7	41.27
598 M33	Tri	6	14	50	0 Sd Glx	☑	3 M	1 33.9	30.66
650 M76	Per	10	11	2.5	0 A PN	☑	4000	1 42.4	51.57
752	And	6	14	50	0 m OC	☑	1500	1 57.8	37.68
891	And	10.4	13	10	Sb Glx	☑	40 M	2 22.6	42.33

- 205 M110 Companion galaxy of the Andromeda Galaxy, slightly asymmetric.
- 221 M32 Companion of the Andromeda Galaxy, almost stellar in binoculars.
- 224 M31 **Andromeda Galaxy**, nearest large galaxy, physically comparable with our Milky Way, bright prominent core, dust lanes west of the core, outer spiral arms and great size visible only under dark sky.
- 598 M33 **Triangulum Galaxy**, dark sky and low power essential, elongated glow in binoculars without a bright core; a telescope shows two or three spiral arms with emission nebulae and stellar associations.
- 650 M76 **Little Dumbbell**, irregular shape, consists of NGC 650 and 651.
- 752 Difficult object with unaided eye, nicely resolved in binoculars.
- 891 Faint edge-on galaxy, very elongated shape distinct in a telescope.

STAR	Position	V-Mag.	B-V	Te.	Abs.	Name	Dist.	R.A.	Dec.
21 α	And	2.1	0.0	1	0 ^h	Alpheratz, Sirrah	98 ly	0°08.4	29.09
31 δ	And	3.3	1.3	1	.....	.....	102	0 39.3	30.86
35 υ	And	4.5	-1	-2	.....	.....	650	0 49.8	41.08
37 μ	And	3.9	0.1	1	.....	.....	140	0 56.8	38.50
43 β	And	2.1	1.6	-2	.....	Mirach	200	1 09.7	35.62
50 φ	And	4.1	0.5	1	3	.....	44	1 36.8	41.41
51	And	3.6	1.3	0	.....	.....	180	1 38.0	48.63
ψ	Per	4.0	-1	-3	.....	.....	800	1 43.7	50.69
2 α	Tri	3.4	0.5	2	.....	Elmuthalleth	64	1 53.1	29.58
56	And	5.0	1.3	-2	.....	.....	320,900	1 56.0	37.26
57 γ	And	2.1	1.2	-3	.....	Alamak	370	2 03.9	42.33
4 β	Tri	3.0	0.1	0	.....	.....	125	2 09.5	34.99
59	And	5.6	0.0	1	.....	.....	300	2 10.9	39.04
6 ε	Tri	4.9	0.8	0	.....	.....	300	2 12.4	30.30
9 γ	Tri	4.0	0.0	1	.....	.....	120	2 17.3	33.85
15	Tri	5.1	1.1	-2	.....	.....	1000	2 35.8	34.70
R	Tri	6.0-10	1.3	-2	.....	.....	1000	2 37.0	34.26

BINARY	Position	V-Mag.	B	V	Te.	Sep.	PA	Vis.	VARIABLE STAR
56	And	5.7	5.9	1.1	1.6	201	.....	☑	R Tri [.....]
57	And	2.2	4.9	1.4	0.0	9.6	.....	☑	Period 267 d
59	And	6.1	6.8	0.0	0.1	16.7	.....	☑	Max. 2451368
6	Tri	5.2	6.7	0.8	0.5	3.9	.....	☑	Min. Max. -150
15	Tri	5.4	6.7	1.6	0.2	142.2	.....	☑	Extrema 8.4 12.6



Thanks to John Reising for Constellation of the Month.

Deep-Sky Objects for October

Objects for Binoculars							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
23 ^h 56.7 ^m	+61° 44'	NGC 7788	9.4v	9'		Cas	Open Cl 20• with 7790
23 ^h 57.0 ^m	+57° 44'	NGC 7789	6.7v	15'		Cas	Open Cluster 300•
23 ^h 58.4 ^m	+61° 13'	NGC 7790	8.5v	17'		Cas	Open Cl 40• with 7788
01 ^h 51.5 ^m	-10° 20'	Zeta	3.7, 9.9	187.0"	41°	Cet	Double Star
01 ^h 53.5 ^m	+19° 18'	Gamma (AC)	4.8, 9.6	221.3"	84°	Ari	D.S. (AB: 4.8,4.8; 7.8")
02 ^h 32.7 ^m	+61° 27'	Mel 15	6.5v	22'		Cas	Open Cl 40• (w E.neb IC1805)
Objects for Small Telescopes (2-6 inch)							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
01 ^h 15.6 ^m	+58° 49'	NGC 436	8.8v	5'		Cas	Open Cluster 30•
01 ^h 44.1 ^m	+61° 53'	NGC 654	6.5v	5'		Cas	Open Cluster 60•
01 ^h 46.0 ^m	+61° 15'	NGC 663	7.1v	16'		Cas	Open Cluster 80•
02 ^h 03.0 ^m	+33° 17'	Iota	5.3, 6.9	3.9"	71°	Tri	Double Star
02 ^h 42.7 ^m	-00° 01'	M77	8.9v	8.2'x7.3'		Cet	Galaxy
03 ^h 57.9 ^m	+40° 01'	Epsilon	2.9, 8.1	8.8"	10°	Per	Double Star
Objects for Medium Telescopes (8-14 inch)							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
00 ^h 14.1 ^m	-23° 11'	NGC 45	10.8v	6.3'x4.6'		Cet	Galaxy
01 ^h 47.9 ^m	+27° 26'	NGC 672	10.9v	6.6'x2.6'		Tri	Galaxy
01 ^h 59.3 ^m	+19° 01'	NGC 772	10.3v	7.3'x4.6'		Ari	Galaxy
02 ^h 08.4 ^m	+1° 00'	NGC 821	10.7v	3.3'x2.3'		Ari	Galaxy
02 ^h 27.3 ^m	+33° 35'	NGC 925	10.1v	12.0'x7.4'		Tri	Galaxy
02 ^h 30.8 ^m	+37° 08'	NGC 949	11.8	3.3'x2.1'		Tri	Galaxy
02 ^h 34.2 ^m	+29° 19'	NGC 972	11.4v	3.4'x1.6'		Ari	Galaxy
Objects for Larger Telescopes (16-inch & larger) Challenge Objects							
RA	Dec	Number	Mag(s)	Size/Sep.	PA	Const.	Type of Object
00 ^h 39.0 ^m	+48° 20'	NGC 185	9.2v	14.5'x12.5'		Cas	Galaxy
01 ^h 09.4 ^m	+35° 43'	NGC 404	10.3v	6.1'x6.1'		And	Galaxy
01 ^h 31.3 ^m	-06° 52'	NGC 584	10.5v	3.2'x1.7'		Cet	Galaxy
01 ^h 33.9 ^m	+30° 39'	M33	5.7v	67.0'x41.5'		Tri	Galaxy
02 ^h 09.4 ^m	-10° 08'	NGC 835	12.1v	1.9'x1.6'		Cet	Galaxy with 833, 838, 839
02 ^h 18.0 ^m	+14° 33'	NGC 877	11.9v	2.1'x1.7'		Ari	Galaxy with 870, 871, 876
02 ^h 39.2 ^m	+10° 51'	NGC 1024	12.1v	4.4'x1.6'		Ari	Galaxy with 1028, 1029

Print and use the [Deep-Sky Interest Group - Observation Form](#) to record your observations.

Select from a topic in the navigation bar on the left, or from the links below.

[Home](#) | [About](#) | [Calendar](#) | [Facilities](#) | [Features](#) | [Guides](#) | [Light Pollution](#) | [S.I.G.](#) | [Members](#) | [Join](#) | [Links](#)

Thanks to Len Jezior for deep sky object charts.

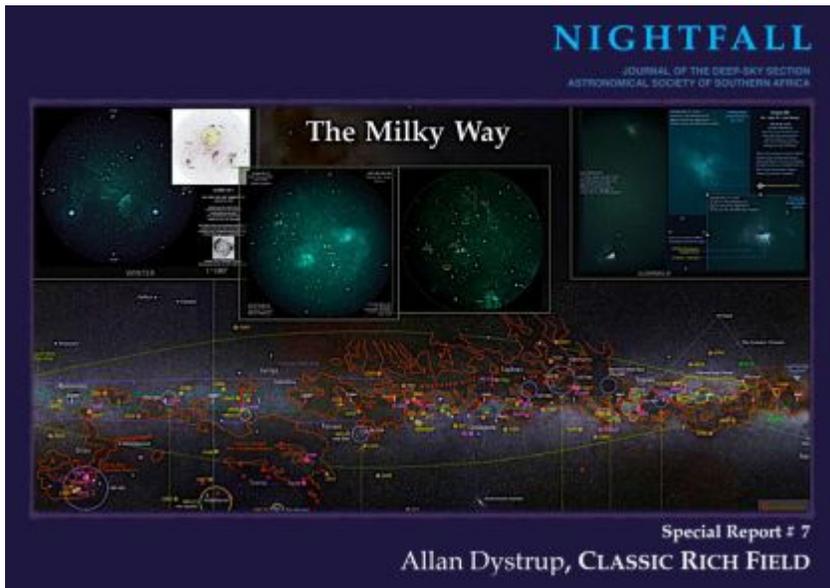
...from the excellent 10 Minute Astronomy website by Matt Wedel
<https://10minuteastronomy.wordpress.com/>

New post on 10 Minute Astronomy



[Resources for Naked-Eye and Small-Scope Observing](#)

by [Matt Wedel](#)



Allan Dystrup's Classic Rich Field, and more

A few years ago, Cloudy Nights user Allan Dystrup started a thread called "[Classic Rich Field](#)". It's mostly about OB associations, and the early observations were all done with a Vixen 55mm f/8 scope. Later observations were done with classic refractors of up to 4" aperture, and included night vision enhancement. The thread fired my interest in OB associations, and I admire Allan's commitment to making detailed observations with small telescopes. Also, other experienced observers chimed in with additional information. It's one of the best threads I've ever encountered on CN.

Allan also published an overview of his Classic Rich Field project in *Nightfall*, the Journal of the Deep-Sky Section of the Astronomical Society of Southern Africa. It just came out this summer, and it's a free download [at this link](#) (17 Mb).

What I did not know until recently is that he has a bunch of other threads going, including "[Classic Messier](#)", "[Classic Best NGC](#)", "[Classic Planet Observation](#)", and "[Classic Moon](#)". Turns out he also has a clearinghouse page with links to all of them, which is [here](#). Go read and be inspired.



250+ Deep-Sky Objects Visible with 7x35 Binoculars and the Naked-Eye

Scott N. Harrington
2nd edition, 1st revision June, 2020
2nd edition September, 2018
1st edition June, 2017

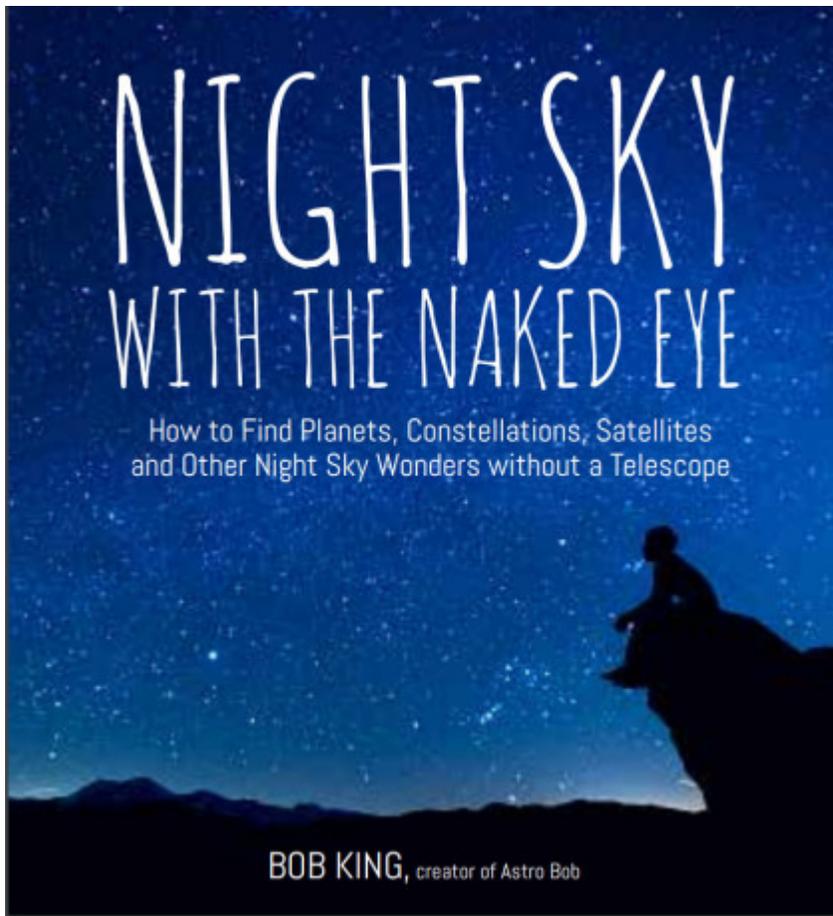


Scott Harrington's DSOs for Small Telescopes, Binoculars, and Naked Eyes

From the wonderfully useful site [Adventures in Deep Space](#), check out these thoroughly awesome observing lists:

[100+ Planetary Nebulae Visible with Small Telescopes & Binoculars](#), by Scott Harrington

[250+ Deep-Sky Objects Visible with 7x35 Binoculars and the Naked Eye](#), by Scott Harrington



Bob King's *Night Sky with the Naked Eye*

I spend a good chunk of every dark sky observing session just looking around, with no instruments. So I was excited when this book came out, I got a copy, and I love it. Of course, that was all four years ago, and you're just hearing about it now because I'm kind of a lousy blogger. But there you go. Here's the [Amazon link](#).

[Matt Wedel](#) | September 12, 2020 at 12:54 AM | Categories: [Binoculars](#), [Deep sky observing](#), [Naked eye](#), [Observing projects](#), [Small telescopes](#) | URL: <https://wp.me/pBMsu-Rk>

Thanks to Dan Walker for passing this along.



Occultation of double star beta Scorpii 9/21/20. Split is visible when image is enlarged (below).
~Dave Lengyel



Black River Astronomical Society Membership Application



Class of Membership

- Regular (\$20/year)
 Junior (under 16 \$10/year)

Date: _____ Name: _____

Address: _____

Apt: _____

City: _____

State: _____

Zip: _____

Email1: _____

Email2: _____

Telephone: _____

Cell: _____

Cell Provider: _____

Cell Provider needed for TNS text messages.

BRAS publishes membership information in a roster distributed only to members. Please indicate your preferences below.

	Include in roster:	
Address:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Email1:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Email2:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Telephone1:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Telephone2:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Cell:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Interests:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Skills:	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Do you wish to be notified of special events with a text message on your cell phone or email? Cell Email
 This Text Notification Service (TNS) would include club meeting reminders, special observing events, aurora alerts, etc. and would generate whatever charges your provider plan assesses for a text message.

Tell us about any special astronomical interests or equipment you use (*optional*).

If you believe you have talents or resources that might contribute to the Black River Astronomical Society's [membership skill-base](#), please detail here. (*Don't be shy.*)

Bring this form to a meeting, or mail with membership dues to: Daniel Walker, 4375 Meadow Lark Dr., Lorain OH 44053

Board use area. Class: Dues: Pd: Approved: Date:
 Note: _____