

## **Beginner List**

A great way to enjoy the unique beauty of the dark skies at Oregon Star Party (OSP) is to view bright deep sky objects, colorful double stars, and planets through a telescope. The objects listed are easily visible in most telescopes, and many can also be seen in binoculars.

To receive the Beginner List observer pin you must observe and record at least 20 of the objects listed below while you are here at OSP. As an added reference each object's page number in the popular Sky and Telescope Pocket Sky Atlas (PSA) is listed as well.

Most of the objects listed below are visible between sunset and midnight during the star party. All are visible before astronomical dawn. The beginner list award is intended for visual observing. Go-to telescopes and image enhancers (photography) are not permitted for the Beginner List award. You may get assistance in locating objects on star charts or in the sky, but you must locate them yourself with your telescope. Looking through a telescope, in which someone else has sighted the object for you, is not acceptable. Object sketches are a bonus but they are not necessary if you provide a good description of each object.

When finished, bring your record of observations to the Observing Program table next to the Information Tent to receive your pin. *Please check the information tent for updates on when the Observing Program table will be staffed, and where it is going to be for the next session. Typically it will be manned later in the afternoon.*

4/25/2023 v1.0

## 2023 Oregon Star Party Beginner Observing List

#	Type	Object	Con	RA	Dec	Mag	Size/PSA	Alternate Name/Comments
						Split		
1	CS/VS	Herschel's Garnet Star	Cep	21h 43' 30.4"	58° 46' 48.0"	3.4-5.1	na	71 Mu Cephei, very red star
2	DS	Albireo	Cyg	19h 30' 45.3"	27° 57' 54.0"	3.4, 4.7	34.7"	62 Beta Cygni, showpiece double star
3	EN	M16	Sgr	18h 18' 48.0"	-13° 46' 59.0"	6.4	35'	67 Eagle Nebula
4	EN	M17	Sgr	18h 20' 48.0"	-16° 11' 00.0"	6	46'	67 Omega Nebula, Swan Nebula
5	GC	M3	CVn	13h 42' 11.6"	28° 22' 38.0"	6.9	18'	44
6	GC	M13	Her	16h 41' 41.2"	36° 27' 35.0"	6.5	20'	52 Hercules Cluster
7	GC	M92	Her	17h 17' 07.3"	43° 08' 09.0"	7.1	14'	52 The "other" Hercules Cluster
8	GC	M15	Peg	21h 29' 58.3"	12° 10' 01.0"	6.9	18'	75
9	GX	M31	And	00h 42' 44.3"	41° 16' 08.0"	4.3	3"	3 Andromeda Galaxy
10	GX	M33	Tri	01h 33' 50.9"	30° 39' 35.0"	6.4	1"	2 Triangulum Galaxy, challenge
11	GX	M81	UMa	09h 55' 33.2"	69° 03' 55.0"	7.8	22'	31 Bode's Galaxy
12	GX	M82	UMa	09h 55' 52.3"	69° 40' 47.0"	8.9	11"	31 Cigar Galaxy
13	GX	M51	CVn	13h 29' 52.7"	47° 11' 43.0"	8.6	14'	43 Whirlpool Galaxy
14	GX	M101	UMa	14h 03' 12.6"	54° 20' 55.0"	8.4	24'	42 Pinwheel Galaxy, challenge
15	OC	NGC457	Cas	01h 19' 35.0"	58° 17' 00.0"	7	20'	3 ET Cluster, Owl Cluster
16	OC	NGC884 & NGC869	Per	02h 19' 00.0"	57° 07' 00.0"	5.7	18'	2 Double Cluster; specs for NGC 869
17	OC	M6	Sco	17h 40' 20.0"	-32° 15' 00.0"	4.5	20'	58 Butterfly Cluster
18	OC	M11	Scu	18h 51' 05.0"	-06° 16' 00.0"	6.3	32'	67 Wild Duck Cluster
19	OC	NGC 7789	Cas	23h 57' 24.0"	56° 42' 00.0"	7.7	25'	3 Caroline's Rose, challenge
20	P	Saturn	Aqr	20h 33' 38.4"	-10° 53' 34.0"	0.6	19"	66 Look for rings and a few of the brighter moons.
21	P	Jupiter	Ari	02h 40' 05.7"	14° 19' 50.0"	-2.3	39"	4 Up to four moons may be visible and bands on the planet Note - rises around 1AM best after 2AM
22	PN	M20	Sgr	18h 02' 36.0"	-23° 02' 00.0"	6.3	29'	69 Triffid Nebula
23	PN	M57	Lyr	18h 53' 35.7"	33° 01' 48.0"	8.8	1.4'	63 Ring Nebula
24	PN	M27	Vul	19h 59' 36.2"	22° 43' 08.0"	7.1	8'	64 Dumbell Nebula
25	PN	NGC7293	Aqr	22h 29' 38.5"	-20° 50' 11.0"	7.6	15'	76 Helix Nebula, challenge, best after 1
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P	Planet	DP	Dwarf Planet					
GX	Galaxy	SC	Star Cloud		Locations J2000.0			
GC	Globular Cluster	S	Star		From Starry Night 8			
OC	Open Cluster	DS	Double Star		July 21, 2022, 1 PM			
PN	Planetary Nebula	MS	Multiple Star		(except as noted)			
EN	Emission Nebula	CS	Carbon Star					
SN	Supernova Remnant	VS	Variable Star					
DN	Dark Nebula	Ast	Asterism					