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by John Wagoner

American Association of Amateur Astronomers



The Astronomical League is pleased to introduce its Binocular Messier Club. The Binocular Messier Club is for beginning observers as well as experienced amateurs. Beginning observers will find that it doesn't take an expensive telescope, but only a simple

pair of binoculars, no matter what size, cost or condition, to do serious astronomy. On the other hand, experienced amateurs, even though they may already have the AL's telescopic Messier and Herschel certificates, will enjoy the new perspective binocular observing gives them as they pull back from an object and observe the area surrounding that object as well as the object itself. Seeing the object and its relationship to the sky around it will put that object in its proper context in the sky.

RULES AND REGULATIONS

To qualify for the AL's Binocular Messier Certificate, you need only be a member of the Astronomical League, through either an affiliated club or as a member-at-large, and observe 50 or more Messier objects using only binoculars. Any 50 of the 110 recognized Messier objects may be observed. You may use any pair of binoculars, but we recommend those with objectives between 20MM and 80MM in diameter.

To record your observations, you may use the log sheets found in the back of the Astronomical League's manual **Observe: A Guide to the Messier Objects**, or any similar log sheet. Your own log sheets should include: object, date, time, power, seeing, type of binocular, and observing notes. Order the Observe manual through *Astronomical League Sales, PO Box 572, West Burlington, IA 52655-9998*. The price is \$10.00, including postage. Or you can order on-line at www.astronomicalleguesales.com

To receive your Binocular Messier Certificate, simply send your observations along with your name, address, phone number, and club affiliation to your club's Awards Coordinator, or to: *Mike Benson, AL Binocular Coordinator, 2116 Crystal Dr., Nashville, TN 37210-3333. Phone (615) 883-6571. E-mail: ocentaurus@aol.com.* Upon verification of your observations, your certificate will be forwarded either to you or your club's "Awards Coordinator," whomever you choose.

If you need to become a member of the Astronomical League as a Member-at-Large, contact *Jackie Beucher, AL Executive Secretary, 11305 King Street, Overland Park, KS 66210-3421.* (913) 469-0135. E-Mail: M31@sky.net.

You may also join The American Association of Amateur Astronomers, which is a member society of the Astronomical League. Join on-line at our web page: www.AstroMax.com. Or send a check for \$20 (\$25 family) for each membership to: AAAA, P.O. Box 7981, Dallas, TX 75209-0981. E-Mail: aaaa@AstroMax.com.

AAAA Members: If you have completed an AL observing project, submit your observations directly to the AAAA for certification. Be sure to send COPIES only. Do NOT send original photographs or observing logs.

THE APPENDICES

For those of you who are uncertain as to which Messier objects to observe, or who need a formal program to follow, we have included *Appendix A* and *Appendix B* for your use. *Appendix A* is for binoculars between 20MM and 50MM in diameter. *Appendix B* is for binoculars between 56MM and 80MM in diameter.

Each appendix lists the appropriate Messier objects that can be observed with that size instrument, and is divided into three categories: Easy, Tough, and Challenge objects.

Easy objects are those that appear large and bright in the field of view, and are easily located.

Tougher objects are small and dim in the field of view and require identifying the fields around them with the help of some sort of star chart to verify their location.

Challenge objects are those that are small and faint, sometimes requiring averted vision, and need to be pinpointed exactly on a good star atlas to identify.

You'll notice that in the small binocular category (*Appendix A*), 42 objects are classified as easy. You need only choose 8 of the objects in the tougher category to receive your certificate. For larger binoculars (*Appendix B*), all 50 objects needed to receive the certificate can be chosen out of the easy category. The point is that anyone, with any pair of binoculars, no matter what their size, shape, condition, or cost, can do serious astronomy, and acquire a Binocular Messier Club certificate. To prove that point, all 76 objects in *Appendix A* (Easy, Tough, and Challenge objects) were observed with a pair of 7x35 Tasco binoculars purchased at Wal-Mart for \$19.00.

Appendix C is for reference purposes, listing all 110 of the Messier objects, the times when they are best observed, and in constellation sequence. So, if you are wondering what is the best time of the year to observe a Messier object, refer to Appendix C. Appendix C tells by season each object's coordinates, their NGC numbers, the constellation they are located in, and their sizes and magnitudes. Appendix C also lists all of the Messier objects in the exact same order as the Astronomical League's Observe manual Observe: A Guide to the Messier Objects, in case you are using that as an observing aide.

I think you will find that the Binocular Messier Club is a fun and worthwhile project that will not only give you a whole new perspective on the universe in which we live, but a more comfortable feeling for the night sky that we all enjoy so much.

Good luck, clear skies, and good observing.





APPENDIX A

APPENDIX B

for 11x80 BINOCULARS

for 7x35, 7x50, and 10x50 BINOCULARS

I. EASY MESSIER OBJECTS:

I. EASY MESSIER OBJECTS:

2, 3, 4, 5, 6, 7, 8. 10, 11, 12, 13, 15, 16, 17, 18, 22, 23, 24, 25, 27, 29, 31, 34, 35, 36, 37, 38, 39, 41, 42, 44, 45, 46, 47, 48, 50, 52, 55,67, 92, 93,103

TOTAL = 42

2, 3, 4, 5, 6, 7, 8, 10, 11, 12, 13. 14, 15, 16, 17, 18, 19, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38, 39, 40, 41, 42, 44, 45, 46, 47, 48, 50, 52, 53, 55, 62, 67, 71, 78, 79, 80, 81, 82, 92, 93, 94,103

TOTAL = 58

II. TOUGHER MESSIER OBJECTS:

14, 19, 28, 30, 33, 40, 49, 53, 62, 63, 64, 78, 79, 80, 81, 82, 83, 94

TOTAL = 18

II. TOUGHER MESSIER OBJECTS:

1, 9, 33, 49, 51, 54, 56, 60, 61, 63, 64, 65, 66, 68, 75, 77, 83, 87, 97, 101, 102, 104, 106

TOTAL = 23

III. CHALLENGE MESSIER OBJECTS:

1, 9, 26, 32, 51, 54, 56, 65, 66, 68, 71, 75, 97, 101, 104, 106

TOTAL = 16

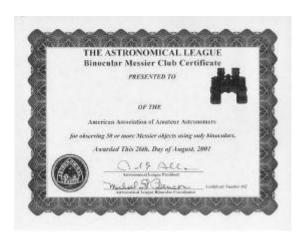
GRAND TOTAL = 76

III. CHALLENGE MESSIER OBJECTS:

20, 58, 59, 69, 70, 72, 84, 85, 86, 88, 89, 90, 95, 96, 99, 100, 105, 107, 108, 109, 110

TOTAL = 21

GRAND TOTAL = 102







APPENDIX C

The Messier List

I. THE WINTE	R GROUP			II. TH	IE EAF	RLY S	PRING	GRC	UP (continue	ed)
NGC# R.A. D	ec Mag Typ	Con	SizeMessier	NGC#	R.A.	Dec	Mag	Тур	Con	SizeMess	ier
224 0.42.9 44	16 15 Col	۸nd	170' 21	\A/IN14	12 20 0	E0 00	0.0	DN	1 11/10	40"	40
224 0 42.8 41 221 0 42.8 40	16 4.5 Gal 52 10.0 Gal	And And	178' 31 8'x6' 32	VVIIN4	12 20.0	58 22	9.0	Dbl	UMa	49	40
	41 10.0 Gal	And	17'xl0' 110	3623	11 18.9	13 06	10.5	Gal	Leo	8'xl.5'	65
598 1 33.9 30		Tri	73'x45' 33		11 20.2	13 00		Gal	Leo		66
7654 23 24.2 61		Cas	13.0' 52		10 43.9	11 42		Gal	Leo		95
7004 20 24.2 01	00 0.0 001	Ous	10.0 02		10 46.7	11 49		Gal	Leo		96
581 1 33.2 60	42 7.0 OCI	Cas	6.0' 103		10 47.8	12 35		Gal	Leo	-	05
1039 2 42.0 42		Per	35.0' 34	00.0	10 11.0	12 00	0	Ou.	200	2.0 .	00
	34 12.0 PIN	Per	163"xl 07" 76	5272	13 42.2	28 23	7.0	GCI	CVn	16.2'	3
1952 5 34.5 22		Tau	6 x4' 1		13 30.0	47 11	8.0	Gal	_	-	51
1432 3 47.0 24		Tau	110.0' 45		13 15.8		8.5	Gal	CVn		63
					12 50.9		9.5	Gal			94
1960 5 36.1 34	08 6.5 OCI	Aur	12.0' 36		12 18.9		9.5	Gal		19'x8' 1	06
2099 5 52.4 32		Aur	24.0' 37						_		
1912 5 28.7 35		Aur	21.0' 38								
1976 5 35.3 -5	23 5.0 DfN	Ori	85'x60' 42								
	16 7.0 DfN	Ori	20'xl5' 43	III. Ti	HE LA	TE SP	RING	GRO	JP		
				NGC#	R.A.	Dec	Mag	Typ	Con	SizeMess	ior
2068 5 46.8 0	04 8.0 DfN	Ori	8'x6' 78	1400#	11.71.	Dec	way	ıур	0011	Oizewiess	ici
1904 5 24.5 -24	33 8.5 GCI	Lep	8.7' 79	4472	12 29.8	8 01	10.0	Gal	Vir	9'x7.5'	49
2168 6 08.9 24	20 5.5 OCI	Gem	28.0' 35		12 37.8	11 50		Gal	Vir		58
2323 7 03.2 -8	20 7.0 OCI	Mon	16.0' 50		12 42.1	11 39		Gal	Vir		59
2287 647.0 -20	44 5.0 OCI	CMa	38.0' 41	_	12 43.7	11 34	_	Gal	Vir		60
					12 25.1	12 54		Gal	Vir		84
2437 741.8 -14	49 6.5 OCI	Pup	27.0' 46	4074	12 20.1	12 04	11.0	Oui	V 11	0.0	04
2422 7 36.6 -14		Pup	30.0' 47	4406	12 26.3	12 57	11 0	Gal	Vir	7.5'x5.5'	88
2447 7 44.6 -23	05 6.5 OCI	Pup	22.0' 93		12 30.9	_	-	Gal	Vir		87
					12 35.7			Gal	Vir		89
					12 36.9	13 10	_	Gal	Vir	-	90
II. THE EARLY	SPRING GR	OUP			12 22.0		10.5	Gal	Vir		61
NGC# R.A. D	ec Mag Typ	Con	SizeMessier	1000		. 20	10.0	Ou.	٧.,	0 10.0	٠.
				4594	12 39.9	-11 37	9.5	Gal	Vir	9'x4' 1	04
2632 8 40.1 19	59 4.0 OCI	Cnc	95.0' 44	5024	13 12.9	18 10	8.5	GCI	Com	12.6'	53
2682 8 50.4 11	49 7.5 OCI	Cnc	30.0' 67	4826	12 56.7	21 41	9.0	Gal	Com	9.3'x5.4'	64
2548 8 13.8 -5	48 5.5 OCI	Hya	54.0' 48	4382	12 25.5	18 12	10.5	Gal	Com	7. 1'x5.2'	85
3031 9 55.6 69	40 8.5 Gal	UMa	21'xl0' 81	4501	12 32.1	14 26	11.0	Gal	Com	7'x4'	88
3034 9 55.9 69	41 9.5 Gal	UMa	9'x4' 82								
				4192	12 13.9	14 55	11.0	Gal	Com	9.5'x3.2'	98
	01 12.0 PIN	UMa	202"xl96" 97	4254	12 18.9	14 26	10.5	Gal	Com	5.4'x4.8'	99
	41 11.0 Gal	UMa		4321	12 23.0	15 50	10.5	Gal	Com	7'x6' 1	00
	23 11.0 Gal	UMa	7'x4' 109	4548	12 35.5	14 30	11.5	Gal	Com	5.4'x4.4'	91
5457 14 03.3 54	22 8.5 Gal	UMa	22.0' 101	4590	12 39.5	-26 45	9.0	GCI	Hya	12.0'	68





IV. THE MID-SUMMER GROUP

NGC#	R.A. Dec	Mag	Тур	Con	SizeMes	sier
5866 15 6205 16	37.1 -29 52 18.6 2 05 06.5 55 45 41.7 36 28 17.1 43 08	8.5 7.0 10.5 7.0 7.5	Gal GCI Gal GCI GCI	Hya Ser Dra Her Her	Il'xI0' 17.4' 5.2'x2.3' 16.6' 11.2'	83 5 102 13 92
6254 16 6218 16 6402 17	19.2 -18 31 57.1 -4 06 47.2 -1 57 37.6 -3 15 02.6 -26 16	9.0 7.5 8.0 9.5 8.5	GCI GCI GCI GCI GCI	Oph Oph Oph Oph Oph	9.3' 15.1' 14.5' 11.7' 13.5'	9 10 12 14 19
6171 16 6121 16 6093 16	01.2 -30 07 32.5 -13 03 23.6 -26 32 17.0 -22 59 40.1 -32 13	7.5 8.5	GCI GCI GCI GCI OCI	Oph Oph Sco Sco Sco	14. l' 10.0' 26.3' 8.9' 15.0'	62 107 4 80 6
6475 17	53.9 -34 49	3.5	OCI	Sco	80.0'	7

V. THE LATE SUMMER GROUP

NGC#	R.A.	Dec	Mag	Туј	o Con	SizeMes	ssier
6705	18 51.1	-6 16	7.0	OC	I Sct	14.0'	11
6694	18 45.2	-9 24	9.5	OC	I Sct	15.0'	26
6611	18 18.8	-13 47	6.5	C/N	l Ser	7.0'	16
6618	18 20.8	-16 11	7.0	CIN	l Sgr	11.0'	17
6613	18 19.9	-17 08	8.0	OC	l Sgr	9.0'	18
6603	18 18.4	-18 25	4.0	OC	l Sgr	2 deg.	24
6514	18 02.3	-23 02	5.0	C/N	l Sgr	28.0'	20
6531	18 04.6	-22 30	7.0	OC	l Sgr	13.0'	21
6523	18 03.1	-24 23	5.0	C/N	l Sgr	60'x 35'	8
6656	18 36.4	-29 54	6.5	GC	l Sgr	24.0'	22
6626	18 24.5	-24 52	8.5	GC	l Sgr	11.2'	28
6494	17 56.8	-19 01	6.0	OC	l Sgr	27.0'	23
4725	18 28.8	-19 17	4.9	OC	l Sgr	40.0'	25
6715	18 55.1	-30 29	8.5	GC	l Sgr	9.ľ	54
6809	19 40.0	-30 58	7.0	GC	l Sgr	19.0'	55
6637	18 34.4	-32 21	9.0	GC	CI Sgr	7.1'	69
6681	18 43.2	-32 18	9.0	GC	CI Sgr	7.8'	70
6864	20 06.1	-21 55	9.5	GC	CI Sgr	6.0'	75

VI. THE FALL AND EARLY WINTER GROUP

NGC#	R.A	A. Dec	Mag	Тур	Con	SizeMess	ier
6720 6913 7092 6853 6838	19 16. 18 53. 20 23. 21 32. 19 59. 19 53. 21 40.	6 33 02 9 38 32 2 48 26 6 22 43	9.5 9.5 9.0 5.5 7.5 8.5 8.5	GCI PIN OCI OCI PIN GCI GCI	Lyr Lyr Cyg Cyg Vul Sge Cap	7.1' 85.6"x6l.6 7.0' 32.0'. 480"x340' 7.2' I 1.0'	29 39
6981	21 33. 20 53. 20 59.	5 -12 32	7.5 10.0 9.0	GCI GCI OCI	Aqr Aqr Aqr	12.9' 5.9' 2.8'	2 72 73
7078 628 1068	21 30. 1 36. 2 42.	6 15 48	7.5 10.5 10.5	GCI Gal Gal	Peg Psc Cet	12.3' 10.2'x9.5' 7'x 6'	15 74 77

C/N - cluster and nebula

Dbl - double star diffuse nebula

Gal - galaxy

GCl - globular cluster

OCl - open cluster

PIN- planetary nebula





The American Association of Amateur Astronomers

Observing Log

Observer:		Location:		Page:	
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INDEX	Period -	Instrument	Notes
Object	Date	Time	
	Power	Seeing	
	Type Instrument		
Object	Date	Time	
	Power	Seeing	
	Type Instrument		
Object	Date	Time	
	Power	Seeing	
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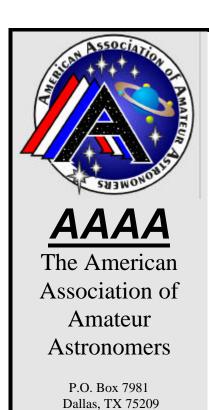
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