

Messier Objects

Almost every amateur astronomer begins to be aware of the Messier Catalog as soon as they open their first book. The novice is sure to find some spectacular object pictured and designated by its "Messier Number" with the universal abbreviation "M". Of the myriads of star clusters and nebulae scattered over the sky only about 100 (perhaps 110 at most) can claim membership to this celebrated list. However, this happens to include most, but not quite all, of the finest of these objects observable from mid-northern latitudes.

There is nothing in the catalog that the owner of so humble an instrument as a three-inch reflector cannot reach under good observing conditions. Many of the objects can be seen with binoculars and some with the naked eye. Thus, the Messier Catalog is a happy hunting ground for any amateur with a taste for deep sky objects.

Even an extremely brief review of the history of Messier's Catalog will explain why it contains so many bright and easy clusters and nebulae.



Charles Messier (1730-1817) was a French astronomer who developed an intense interest in comet hunting. While he had other achievements to his credit, this was his chief occupation during his long observing career. In this, he was so successful that he probably observed half of the comets known in his time. He discovered about twenty. It was to keep track of the star clusters and nebulae which might have otherwise confused him by their comet-like appearance, that he began to catalog and describe them. In commenting on his catalog in later years, he frankly stated that he had compiled it in order to aid other comet hunters. There is a slight touch of irony in the fact that Messier's chief claim to immortality grew out of his efforts to rid himself of a nuisance to what, he felt, was his important life's work. As might be expected, Messier's telescopes were all modest instruments, none of them exceeding the capacity of telescopes amateurs can expect to own today.

Messier did not discover all the objects in his catalog and he never made any such claim. Many of the objects were called to his attention by his contemporaries, notably Pierre Méchain and the fact was always carefully noted. The catalog was published in several stages as additions were made to it, the first 45 entries being printed in 1771. In its classic form, it contained 103 entries. Studies of Messier's papers and correspondence (Dr. Helen Sawyer Hogg and Dr. Owen Gingerich) suggest that another four to six objects should be added to bring the total to 110.

The prospective observer should be warned that if he follows the older editions of the catalog, or many of the older charts, he may find nothing in the position indicated. More recent editions have corrected these errors but there are a few entries about which there is some doubt.

Messier Observing List

(a) Pair of stars	pn: planetary nebula	ig: irregular galaxy
(b) Milky Way star cloud	bn: bright nebula	oc: open cluster
(c) Asterism of four stars	sg: spiral galaxy	gc: globular cluster
	eg: elliptical galaxy	sr: supernova remnant

M	NGC	Type	Mag	RA	Dec	Con
1	1952	sr	8	05h 34.5m	+22° 01'	Tau
2	7089	gc	6.5	21h 33.5m	-00° 49'	Aqr
3	5272	gc	6.4	13h 42.2m	+28° 23'	CVn
4	6121	gc	5.9	16h 23.6m	-26° 31'	Sco
5	5904	gc	5.8	15h 18.5m	+02° 05'	Ser
6	6405	oc	4.2	17h 40.0m	-32° 12'	Sco
7	6475	oc	3.3	17h 54.0m	-34° 49'	Sco
8	6523	bn	6	18h 03.7m	-24° 23'	Sgr
9	6333	gc	8	17h 19.2m	-18° 31'	Oph
10	6254	gc	6.6	16h 57.2m	-04° 06'	Oph
11	6705	oc	5.8	18h 51.1m	-06° 16'	Sct
12	6218	gc	6.6	16h 47.2m	-01° 57'	Oph
13	6205	gc	5.9	16h 41.7m	+36° 38'	Her
14	6402	gc	7.6	17h 37.6m	-03° 15'	Oph
15	7078	gc	6.4	21h 30.0m	+12° 10'	Peg
16	6611	oc	6.0	18h 18.9m	-13° 47'	Ser
17	6618	bn	7	18h 20.8m	-16° 10'	Sgr
18	6613	oc	6.9	18h 19.9m	-17° 08'	Sgr
19	6273	gc	7.2	17h 02.6m	-26° 16'	Oph
20	6514	bn	8	18h 02.4m	-23° 02'	Sgr
21	6531	oc	5.9	18h 04.7m	-22° 30'	Sgr
22	6656	gc	5.1	18h 36.4m	-23° 54'	Sgr
23	6494	oc	5.5	17h 56.9m	-19° 01'	Sgr
24	Sag Star Cloud	(b)	4	18h 18.4m	-18° 25'	Sgr
25	IC4725	oc	4.6	18h 31.7m	-19° 14'	Sgr
26	6694	oc	8.0	18h 45.2m	-09° 24'	Sct
27	6853	pn	8	19h 59.6m	+22° 43'	Vul
28	6626	gc	7	18h 24.6m	-24° 52'	Sgr
29	6913	oc	6.6	20h 24.0m	+38° 31'	Cyg
30	7099	gc	7.5	21h 40.4m	-23° 11'	Cap
31	224	sg	3.4	00h 42.7m	+41° 16'	And
32	221	eg	8.2	00h 42.7m	+40° 52'	And
33	598	sg	5.7	01h 33.8m	+30° 39'	Tri
34	1039	oc	5.2	02h 42.0m	+42° 47'	Per
35	2168	oc	5.1	06h 08.8m	+24° 20'	Gem
36	1960	oc	6.0	05h 36.3m	+34° 08'	Aur
37	2099	oc	5.6	05h 53.0m	+32° 33'	Aur
38	1912	oc	6.5	05h 28.7m	+35° 50'	Aur

M	NGC	Type	Mag	RA	Dec	Con
39	7092	oc	4.6	21h 32.3m	+48° 26'	Cyg
40	WNC 4	(a)	8	12h 22.2m	+58° 05'	UMa
41	2287	oc	4.5	06h 47.0m	-20° 46'	CMa
42	1976	bn	4	05h 35.3m	-05° 23'	Ori
43	1982	bn	9	05h 35.5m	-05° 16'	Ori
44	2632	oc	3.1	08h 40.0m	+20° 00'	Cnc
45	Pleiades	oc	1.2	03h 47.5m	+24° 07'	Tau
46	2437	oc	6.1	07h 41.8m	-14° 49'	Pup
47	2422	oc	4.4	07h 36.6m	-14° 29'	Pup
48	2548	oc	5.8	08h 13.8m	-05° 48'	Hya
49	4472	eg	8.4	12h 29.8m	+08° 00'	Vir
50	2323	oc	5.9	07h 03.0m	-08° 21'	Mon
51	5194-5	sg	8.1	13h 29.9m	+47° 12'	CVn
52	7654	oc	6.9	23h 24.2m	+61° 36'	Cas
53	5024	gc	7.7	13h 12.9m	+18° 10'	Com
54	6715	gc	7.7	18h 55.1m	-30° 28'	Sgr
55	6809	gc	7.0	19h 40.0m	-30° 57'	Sgr
56	6779	gc	8.2	19h 16.6m	+30° 11'	Lyra
57	6720	pn	9	18h 53.6m	+33° 02'	Lyra
58	4579	sg	9.8	12h 37.7m	+11° 49'	Vir
59	4621	eg	9.8	12h 42.0m	+11° 39'	Vir
60	4649	eg	8.8	12h 43.7m	+11° 33'	Vir
61	4303	sg	9.7	12h 21.9m	+04° 28'	Vir
62	6266	gc	6.6	17h 01.2m	-30° 07'	Oph
63	5055	sg	8.6	13h 15.8m	+42° 02'	CVn
64	4826	sg	8.5	12h 56.7m	+21° 41'	Com
65	3623	sg	9.3	11h 18.9m	+13° 06'	Leo
66	3627	sg	9.0	11h 20.3m	+13° 00'	Leo
67	2682	oc	6.9	08h 51.3m	+11° 48'	Cnc
68	4590	gc	8.2	12h 39.5m	-26° 45'	Hya
69	6637	gc	7.7	18h 31.4m	-32° 21'	Sgr
70	6681	gc	8.1	18h 43.2m	-32° 17'	Sgr
71	6838	gc	8.3	19h 53.7m	+18° 47'	Vul
72	6981	gc	9.4	20h 53.5m	-12° 32'	Aqr
73	6994	(c)		20h 59.0m	-12° 38'	Aqr
74	628	sg	9.2	01h 36.7m	+15° 47'	Psc
75	6864	gc	8.6	20h 06.1m	-21° 55'	Sgr
76	650-1	pn	11	01h 42.2m	+51° 34'	Per
77	1068	sg	8.8	02h 42.7m	-00° 01'	Cet
78	2068	bn	8	05h 46.7m	+00° 04'	Ori
79	1904	gc	8.0	05h 24.2m	-24° 31'	Lep
80	6093	gc	7.2	16h 17.0m	-22° 59'	Sco
81	3031	sg	6.8	09h 55.2m	+69° 04'	UMa
82	3034	ig	8.4	09h 56.2m	+69° 42'	UMa
83	5236	sg	8	13h 37.7m	-29° 52'	Hya

M	NGC	Type	Mag	RA	Dec	Con
84	4374	eg	9.3	12h 25.1m	+12° 53'	Vir
85	4382	eg	9.2	12h 25.4m	+18° 11'	Com
86	4406	eg	9.2	12h 26.2m	+12° 57'	Vir
87	4486	eg	8.6	12h 30.8m	+12° 23'	Vir
88	4501	sg	9.5	12h 32.0m	+14° 25'	Com
89	4552	eg	9.8	12h 35.7m	+12° 33'	Vir
90	4569	sg	9.5	12h 36.8m	+13° 10'	Vir
91	4548	sg	10.2	12h 35.4m	+14° 30'	Com
92	6341	gc	6.5	17h 17.1m	+43° 08'	Her
93	2447	oc	6	07h 44.6m	-23° 53'	Pup
94	4736	sg	8.1	12h 50.9m	+41° 07'	CVn
95	3351	sg	9.7	10h 44.0m	+11° 42'	Leo
96	3368	sg	9.2	10h 46.8m	+11° 49'	Leo
97	3587	pn	11	11h 14.9m	+55° 01'	UMa
98	4192	sg	10.1	12h 13.8m	+14° 54'	Com
99	4254	sg	9.8	12h 18.8m	+14° 25'	Com
100	4321	sg	9.4	12h 22.9m	+15° 49'	Com
101	5457	sg	7.7	14h 03.2m	+54° 21'	UMa
102	M101					
103	581	oc	7	01h 33.1m	+60° 42'	Cas
104	4594	sg	8.3	12h 40.0m	-11° 37'	Vir
105	3379	eg	9.3	10h 47.9m	+12° 35'	Leo
106	4258	sg	8.3	12h 19.0m	+47° 18'	CVn
107	6171	gc	8.1	16h 32.5m	-13° 03'	Oph
108	3556	sg	10.0	11h 11.6m	+55° 40'	UMa
109	3992	sg	9.8	11h 57.7m	+52° 22'	UMa
110	205	eg	8.0	00h 40.3m	+41° 41'	And

Messier Observing Log

M	Date	M	Date	M	Date
1		39		77	
2		40		78	
3		41		79	
4		42		80	
5		43		81	
6		44		82	
7		45		83	
8		46		84	
9		47		85	
10		48		86	
11		49		87	
12		50		88	
13		51		89	
14		52		90	
15		53		91	
16		54		92	
17		55		93	
18		56		94	
19		57		95	
20		58		96	
21		59		97	
22		60		98	
23		61		99	
24		62		100	
25		63		101	
26		64		102	
27		65		103	
28		66		104	
29		67		105	
30		68		106	
31		69		107	
32		70		108	
33		71		109	
34		72		110	
35		73			
36		74			
37		75			
38		76			







