
* Messier Marathon Observer's Form *

This file presents the Messier objects in the order of the Marathon Search Sequence given by Don Machholz in his "Messier Marathon Observer's Guide", suited so that you can fill in your observations easily.

Messier Marathon Search Sequence
=====

Compiled online by Hartmut Frommert, using work of Don Machholz. Depending on geographic location, it may be impossible to find them all, and may be better to slightly modify this list. In case of doubt consult Don Machholz's book. This list should be good for northern latitudes 20 to 40.

My Messier Marathon
=====

Date: 3 . 22-23 2012 Observer: JONATHAN REED
Location: Johnson Mesa, NM. Lat: 36°N 52' 14.25" Long: 105°W 58' 21.56" Time Zone: MST

Instruments used: ORION SKYQUEST 10" Dobsonian + Orion Skyquest 8" Dobsonian

General Comments: We did this in honor of our professor Robert Day, who passed away two days before we left for the marathon. Happy Hunting Dr. Day! We will miss you!

The Object List:
=====

No.	M#	NGC#	Con	Type	Your#	Time	Comments
1.	M77	1068	Cet	G S	<u>1</u>	<u>20:23</u>	<u>Dim, paired with star. Bright core - low Cetus.</u>
2.	M74	628	Psc	G S	<u>2</u>	<u>20:30</u>	<u>Very Dim. Very Difficult. Near Triad stars</u>
3.	M33	598	Tri	G S	<u>3</u>	<u>20:36</u>	<u>Fairly Dim Filled Lens. Fuzzy w/ clear core.</u>
4.	M31	224	And	G S	<u>4</u>	<u>20:37</u>	<u>Bright core. Very easy find.</u>
5.	M32	221	And	G E	<u>6.</u>	<u>20:37</u>	<u>Tricky find, but found in dust lane of M31.</u>
6.	M110	205	And	G E	<u>5</u>	<u>20:37</u>	<u>off the end of M31. Fairly easy find.</u>
7.	M52	7654	Cas	OC1	<u>7</u>	<u>20:45</u>	<u>Cluster clearly separated, in a bright field of stars.</u>
8.	M103	581	Cas	OC1	<u>8</u>	<u>20:51</u>	<u>Open cluster, slightly more dispersed than previous</u>
9.	M76	650	Per	Pl	<u>9</u>	<u>21:00</u>	<u>Dim Hourglass shaped nebula.</u>
10.	M34	1039	Per	OC1	<u>10</u>	<u>21:05</u>	<u>Very dispersed open cluster, easy find.</u>

- | | | | | | | |
|-----|------|----------|-----|---------------|--------------|--|
| 11. | M45 | - Tau | OC1 | <u>12</u> | <u>21:12</u> | <u>very nice, saw whole collection + some nebulosity</u> |
| 12. | M79 | 1904 Lep | GI | <u>11</u> | <u>21:10</u> | <u>1st Globbie! Fuzzy but very nice.</u> |
| 13. | M42 | 1976 Ori | DN | <u>13</u> | <u>21:20</u> | <u>The trapezium looks amazing and the nebula looks great</u> |
| 14. | M43 | 1982 Ori | DN | <u>14</u> | <u>21:21</u> | <u>Just below the trapezium, Gas cloud looks great.</u> |
| 15. | M78 | 2068 Ori | DN | <u>16</u> | <u>21:28</u> | <u>Fuzzy patch with stars inside, somewhat dim.</u> |
| 16. | M1 | 1952 Tau | SNR | <u>15</u> | <u>21:27</u> | <u>Fuzzy patch, fairly bright. Near the Horn star in Taurus.</u> |
| 17. | M35 | 2168 Gem | OC1 | <u>18</u> | <u>21:38</u> | <u>Dim, open cluster. Kinda hard to distinguish.</u> |
| 18. | M37 | 2099 Aur | OC1 | 17 | <u>21:34</u> | <u>Fairly wide field. Dimmer, but easy to distinguish</u> |
| 19. | M36 | 1960 Aur | OC1 | <u>20</u> | <u>22:03</u> | <u>Dim open cluster.</u> |
| 20. | M38 | 1922 Aur | OC1 | <u>19</u> | <u>22:00</u> | <u>Spread open cluster with a few bright stars around periphery.</u> |
| 21. | M41 | 2287 CMa | OC1 | <u>21</u> | <u>22:13</u> | <u>Widely spread cluster</u> |
| 22. | M93 | 2447 Pup | OC1 | <u>22</u> | <u>22:15</u> | <u>Tight cluster. Hard to find in the heavy star field.</u> |
| 23. | M47 | 2422 Pup | OC1 | <u>24</u> | <u>22:27</u> | <u>Dim, almost triangular cluster</u> |
| 24. | M46 | 2437 Pup | OC1 | <u>23</u> | <u>22:26</u> | <u>Open cluster with small ring-like nebula in it.</u> |
| 25. | M50 | 2323 Mon | OC1 | <u>26</u> | <u>22:36</u> | <u>Dim open cluster, oddly shaped.</u> |
| 26. | M48 | 2548 Hya | OC1 | <u>25</u> | <u>22:33</u> | <u>Wide field open cluster. Tricky to identify.</u> |
| 27. | M44 | 2632 Cnc | OC1 | <u>28</u> | <u>22:40</u> | <u>Very wide spread. Naked eye visible.</u> |
| 28. | M67 | 2682 Cnc | OC1 | <u>27</u> | <u>22:39</u> | <u>Dim cluster, very dim, but easy find.</u> |
| 29. | M95 | 3351 Leo | G S | <u>29</u> | <u>22:49</u> | <u>Clear core with supernova visible towards edge</u> |
| 30. | M96 | 3368 Leo | G S | <u>30</u> | <u>22:50</u> | <u>Slightly larger than M95, no supernova</u> |
| 31. | M105 | 3379 Leo | G E | <u>33</u> | <u>22:55</u> | <u>The brightest of a trio of apparently colliding galaxies.</u> |
| 32. | M65 | 3623 Leo | G S | <u>31</u> | <u>22:54</u> | <u>Awesome. It's like the left of a pair of galactic goal posts.</u> |
| 33. | M66 | 3627 Leo | G S | <u>32</u> | <u>22:54</u> | <u>It's a little rounder, but it's the right goal post</u> |
| 34. | M81 | 3031 UMa | G S | <u>34</u> | <u>23:02</u> | <u>Oval shaped, bright core,</u> |
| 35. | M82 | 3034 UMa | GIr | <u>35</u> | <u>23:02</u> | <u>Very thin, right angle to M81.</u> |
| 36. | M97 | 3587 UMa | PI | <u>37</u> | <u>23:06</u> | <u>Fuzzy, very circular, semi-transparent.</u> |
| 37. | M108 | 3556 UMa | G S | <u>36</u> | <u>23:05</u> | <u>Thin, dim edge on spiral galaxy.</u> |
| 38. | M109 | 3992 UMa | G S | <u>39</u> | <u>23:14</u> | <u>Dim, core clear, oval shape</u> |
| 39. | M40 | - UMa | 2St | <u>38</u> | <u>23:13</u> | <u>Messier is a jerk. That binary is a pair!</u> |

40.	M106	4258	CVn	G	S	<u>41</u>	<u>23:22</u>	<u>Edge on, dim, but easy to spot.</u>
41.	M94	4736	CVn	G	S	<u>40</u>	<u>23:20</u>	<u>Oval, bright core, cloudy</u>
42.	M63	5055	CVn	G	S	<u>43</u>	<u>23:27</u>	<u>Dim core, fuzzy oval, but, easily seen.</u>
43.	M51	5194	CVn	G	S	<u>42</u>	<u>23:25</u>	<u>You can see the spiral arms! See the spiral arms!</u>
44.	M101	5457	UMa	G	S	<u>45</u>	<u>23:36</u>	<u>Much dimmer than I expected, you can barely make out spiral structure</u>
45.	M102?	5866	Dra	GS0		<u>44</u>	<u>23:33</u>	<u>Dim core, you can tell there's not much outer structure.</u>
46.	M53	5024	Com	GI		<u>47</u>	<u>23:48</u>	<u>Very round, bright, with fuzzy patches and some detail.</u>
47.	M64	4826	Com	G	S	<u>46</u>	<u>23:41</u>	<u>Bright core, oval outer structure, very easy find.</u>
48.	M3	5272	CVn	GI		<u>49</u>	<u>23:56</u>	<u>Very clear, many individual stars definitely visible.</u>
49.	M98	4192	Com	G	S	<u>48</u>	<u>23:51</u>	<u>Clear core, but dim, outer detail difficult to make out.</u>
50.	M99	4254	Com	G	S	<u>51</u>	<u>00:07</u>	<u>Clear core, pinwheel detail visible.</u>
51.	M100	4321	Com	G	S	<u>50</u>	<u>00:04</u>	<u>Clear central core, pinwheel detail hard to see.</u>
52.	M85	4382	Com	GS0		<u>52</u>	<u>00:16</u>	<u>Dim view with clear core.</u>
53.	M84	4374	Vir	GS0		<u>53</u>	<u>00:13</u>	<u>The brightest in a supercluster. Amazing view!</u>
54.	M86	4406	Vir	GS0		<u>54</u>	<u>00:21</u>	<u>The next brightest, a little more bright, clear core, no fuzzy obvious.</u>
55.	M87	4486	Vir	G	E	<u>55</u>	<u>00:24</u>	<u>Round and fuzzy with a bright core next to a bright star.</u>
56.	M89	4552	Vir	G	E	<u>57</u>	<u>00:33</u>	<u>Same field as M90. Round fuzzy.</u>
57.	M90	4569	Vir	G	S	<u>56</u>	<u>00:30</u>	<u>This with care, tricky find.</u>
58.	M88	4501	Com	G	S	<u>58</u>	<u>00:44</u>	<u>Tough find, dim core, fuzzy thin oval.</u>
59.	M91	4548	Com	G	S	<u>59</u>	<u>00:49</u>	<u>Very faint, dim core, circular cloud.</u>
60.	M58	4579	Vir	G	S	<u>62</u>	<u>00:59</u>	<u>Circular, dim, almost appears to have two cores.</u>
61.	M59	4621	Vir	G	E	<u>60</u>	<u>00:55</u>	<u>Faint elliptical galaxy, circular.</u>
62.	M60	4649	Vir	G	E	<u>61</u>	<u>00:55</u>	<u>Two bright cores apparently colliding with each other.</u>
63.	M49	4472	Vir	G	E	<u>63</u>	<u>01:01</u>	<u>Looks like a very faint globular, no real clear core.</u>
64.	M61	4303	Vir	G	S	<u>64</u>	<u>01:06</u>	<u>Very circular, dim, but clear core, near binary.</u>
65.	M104	4594	Vir	G	S	<u>65</u>	<u>01:14</u>	<u>Very distinct, the trademark dark dust lane is visible.</u>
66.	M68	4590	Hya	GI		<u>66</u>	<u>01:15</u>	<u>Very dim, no clear detail, just fuzzy.</u>
67.	M83	5236	Hya	G	S	<u>67</u>	<u>01:19</u>	<u>Very clear core, some dust lanes visible.</u>

68.	M5	5904	Ser	Gl	<u>68</u>	<u>01:21</u>	<u>Many stars visible, clearest globbie yet.</u>
69.	M13	6205	Her	Gl	<u>69</u>	<u>01:30</u>	<u>Very big, very clear, so many stars. Globby defined.</u>
70.	M92	6341	Her	Gl	<u>70</u>	<u>01:32</u>	<u>Small globbie with a bright central core of stars.</u>
71.	M57	6720	Lyr	Pl	<u>72</u>	<u>01:48</u>	<u>Clear ring form, but fuzzy with not much detail.</u>
72.	M56	6779	Lyr	Gl	<u>71</u>	<u>01:38</u>	<u>Very small, very dim globbie.</u>
73.	M29	6913	Cyg	OC1	<u>73</u>	<u>01:58</u>	<u>Very small open cluster. Easily found, but somewhat dim.</u>
74.	M39	7092	Cyg	OC1	<u>74</u>	<u>02:06</u>	<u>Very widespread open cluster, not an obvious grouping.</u>
75.	M27	6853	Vul	Pl	<u>76</u>	<u>03:12</u>	<u>Rectangular shape, fuzzy, definite symmetry.</u>
76.	M71	6838	Sge	Gl	<u>75</u>	<u>03:05</u>	<u>Dim, but clear globular cluster.</u>
77.	M107	6171	Oph	Gl	<u>77</u>	<u>03:16</u>	<u>Dim, with a clear center, small diameter.</u>
78.	M12	6218	Oph	Gl	<u>78</u>	<u>03:20</u>	<u>Bright, but diffuse, not very dense.</u>
79.	M10	6254	Oph	Gl	<u>79</u>	<u>03:23</u>	<u>Very similar to M12 but more dense and dimmer fuzzier.</u>
80.	M14	6402	Oph	Gl	<u>81</u>	<u>03:32</u>	<u>Small, dim, fuzzy, not a lot of definition.</u>
81.	M9	6333	Oph	Gl	<u>80</u>	<u>03:25</u>	<u>Small, but bright core, fuzzy outer regions.</u>
82.	M4	6121	Sco	Gl	<u>83</u>	<u>03:37</u>	<u>Very clear, no fuzziness, all stars seem clearly visible</u>
83.	M80	6093	Sco	Gl	<u>82</u>	<u>03:34</u>	<u>Dim, but clear bright center with some resolution</u>
84.	M19	6273	Oph	Gl	<u>85</u>	<u>03:36</u>	<u>Dim, clear core, small/fuzzy diameter.</u>
85.	M62	6266	Oph	Gl	<u>84</u>	<u>03:44</u>	<u>Dim, kinda fuzzy, clear core</u>
86.	M6	6405	Sco	OC1	<u>87</u>	<u>03:58</u>	<u>open cluster naked eye about 2 fingers above M7.</u>
87.	M7	6475	Sco	OC1	<u>86</u>	<u>03:48</u>	<u>open cluster between stinger and spout. Naked eye.</u>
88.	M11	6705	Sct	OC1	<u>89</u>	<u>04:04</u>	<u>very dense somewhat circular, no stand out stars.</u>
89.	M26	6694	Sct	OC1	<u>88</u>	<u>04:01</u>	<u>very small open cluster, no real shape, dim</u>
90.	M16	6611	Ser	OC1	<u>90</u>	<u>04:12</u>	<u>round, dim cloud, very difficult to make out detail. TRIangle shaped cloud, looks like a swan or eagle.</u>
91.	M17	6618	Sgr	DN	<u>92</u>	<u>04:10</u>	<u>Triangle shaped cloud looks like eagle</u>
92.	M18	6613	Sgr	OC1	<u>91</u>	<u>04:15</u>	<u>very sparse cluster, almost didn't recognize it.</u>
93.	M24	>6603	Sgr	OC1	<u>93</u>	<u>04:24</u>	<u>very, very dim, very compact open cluster</u>
94.	M25	I4725	Sgr	OC1	<u>94</u>	<u>04:27</u>	<u>not very dense, widespread, fairly bright cluster.</u>
95.	M23	6494	Sgr	OC1	<u>95</u>	<u>04:31</u>	<u>very large, not dense, but quite clear</u>
96.	M21	6531	Sgr	OC1	<u>96</u>	<u>04:35</u>	<u>very, very disperse, it's almost not there, but there but close by helps.</u>

97.	M20	6514	Sgr	DN	<u>97</u>	<u>04:37</u>	<u>peanut shaped gas cloud with dark dust lanes.</u>
98.	M8	6523	Sgr	DN	<u>98</u>	<u>04:39</u>	<u>circular cloud with crisscrossed dark dust lanes.</u>
99.	M28	6626	Sgr	Gl	<u>99</u>	<u>04:42</u>	<u>bright middle, quick dimming towards the circumference.</u>
100.	M22	6656	Sgr	Gl	<u>100</u>	<u>04:44</u>	<u>very clear, large, fairly uniform brightness</u>
101.	M69	6637	Sgr	Gl	<u>101</u>	<u>04:47</u>	<u>dim, small, fuzzy, by the bottom of the pot.</u>
102.	M70	6681	Sgr	Gl	<u>102</u>	<u>04:48</u>	<u>dim, smaller than M69, slightly less fuzzy</u>
103.	M54	6715	Sgr	Gl	<u>103</u>	<u>04:50</u>	<u>very small, almost looked like a distant elliptical galaxy.</u>
104.	M55	6809	Sgr	Gl	<u>104</u>	<u>04:56</u>	<u>very dim, yet still clear, big, low on horizon.</u>
105.	M75	6864	Sgr	Gl	<u>105</u>	<u>05:03</u>	<u>very small, fuzzy, dim.</u>
106.	M15	7078	Peg	Gl	<u>106</u>	<u>05:08</u>	<u>bright center, slightly fuzzy, mid sized.</u>
107.	M2	7089	Aqr	Gl	<u>107</u>	<u>05:17</u>	<u>medium size, bright, fuzzy, no structure</u>
108.	M72	6981	Aqr	Gl	<u>108</u>	<u>05:26</u>	<u>very dim, no resolution visible, very fuzzy.</u>
109.	M73	6994	Aqr	4St	<u>109</u>	<u>05:37</u>	<u>very dim four stars; looks like ':' wacky flux capacitor.</u>
110.	M30	7099	Cap	Gl	<u>110</u>	<u>05:53</u>	<u>extremely dim, but fuzzy disk structure visible.</u>

```

*****
*
*
*   Score: 110 of 110 !!
*
*
*****

```

Key:

No. : Don Machholz' sequence number
 M# : Messier number
 NGC# : NGC (or IC) number
 Con : Constellation (abbreviated)
 Type : Object Type (see below)
 Your# : Your actual sequence number
 Time : Your observing time (in your time zone)
 Comments: Any important observing circumstances/results etc.

Types:

OC=Open Cluster, Gl=Globular Cluster, Pl=Planetary Nebula,
 DN=Diffuse Nebula, G S=Spiral Galaxy, G E=Elliptical Galaxy,
 GIr=Irregular Galaxy, GS0=Lenticular (S0) Galaxy, SNR=SNR,
 2St=Binary Star, 4St=4 Star System