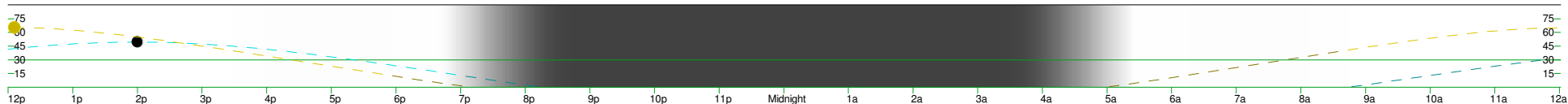


# Messier Observing List

## Evening of 2013 Aug 9 at Morris Museum



Sunset 07:06p, Twilight ends 08:50p, Twilight begins 03:17a, Sunrise 05:01a, Moon rise 08:47a, Moon set 08:12p  
 Completely dark from 08:50p to 03:17a. Waxing Crescent Moon. All times local (EST).

Listing All Classes visible above the perfect horizon and in complete darkness after 08:32p and before 09:33p.  
 The minimum visual difficulty is: detectable.

Cls	Primary ID	Alternate ID	Con	RA (Ap)	Dec (Ap)	Mag	Size	Rise	Transit	Set	Begin	Optimum	End	S.A.	Ti	Pair	Mag	Sep
Gal	Whirlpool Galaxy	M 51	CVn	13h30m26.1s	+47°07'43"	8.7	9.8'x 7.8'	11:01a	04:14p	11:23p	08:25p	08:48p	10:04p	7	0.55			
Gal	M 101	NGC 5457	UMa	14h03m40.7s	+54°17'16"	8.4	21.9'x 21.4'	11:37a	04:47p	12:20a	08:29p	08:51p	10:16p	2	0.34			
Gal	M 102	NGC 5866	Dra	15h06m52.0s	+55°43'02"	10.7	6.3'x 2.8'	12:45p	05:50p	01:28a	08:27p	08:53p	10:52p	2	0.33			
Glob	Keystone Cluster	M 13	Her	16h42m11.3s	+36°26'25"	5.8	20.0'	02:30p	07:25p	01:59a	08:22p	08:55p	12:05a	8	0.61			
Glob	M 12	NGC 6218	Oph	16h47m57.8s	-01°58'03"	6.1	16.0'	05:40p	07:31p	12:25a	08:20p	08:49p	10:35p	15	0.69			
Glob	M 10	NGC 6254	Oph	16h57m53.5s	-04°07'04"	6.6	20.0'	06:01p	07:41p	12:28a	08:24p	08:49p	10:30p	15	0.70			
Glob	M 92	NGC 6341	Her	17h17m33.5s	+43°07'43"	6.5	14.0'	02:53p	08:01p	02:56a	08:22p	08:58p	12:48a	8	0.58			
Glob	M 14	NGC 6402	Oph	17h38m20.5s	-03°15'03"	7.6	11.0'	06:38p	08:21p	01:11a	08:22p	08:55p	11:03p	15	0.70			
Open	M 26	NGC 6694	Sct	18h46m04.7s	-09°21'54"	9.0	7.0'	08:06p	09:29p	01:55a	08:25p	09:29p	11:47p	16	0.71			
Open	Wild Duck Cluster	M 11	Sct	18h51m50.7s	-06°14'59"	6.1	32.0'	08:02p	09:35p	02:15a	08:24p	09:35p	12:11a	16	0.70			
PNe	Ring Nebula	M 57	Lyr	18h54m07.4s	+33°03'07"	9.4	1.4'	04:48p	09:37p	04:00a	08:17p	09:37p	02:19a	8	0.62			
Glob	M 56	NGC 6779	Lyr	19h17m09.9s	+30°12'53"	8.4	8.8'	05:18p	10:00p	04:16a	08:26p	10:00p	01:33a	8	0.63			
Glob	M 71	NGC 6838	Sge	19h54m24.5s	+18°49'08"	8.4	4.0'	06:50p	10:37p	04:31a	08:21p	10:37p	02:32a	8	0.65			
PNe	Dumbbell	M 27	Vul	20h00m13.7s	+22°45'48"	7.3	8.0'	06:26p	10:43p	04:45a	08:21p	10:43p	02:46a	8	0.64			
Open	M 29	NGC 6913	Cyg	20h24m29.5s	+38°33'26"	7.5	10.0'	06:08p	11:07p	05:48a	08:24p	11:08p	03:29a	9	0.60			
Glob	M 15	NGC 7078	Peg	21h30m39.6s	+12°13'50"	6.3	18.0'	09:11p	12:13a	05:54a	09:11p	12:14a	03:31a	16	0.67			
Open	M 39	NGC 7092	Cyg	21h32m20.4s	+48°29'48"	5.3	29.0'	07:05p	12:15a	07:28a	08:25p	12:14a	03:43a	9	0.53			

Symbol Key:

Open	Open Cluster	Doub	Double or Multiple Star	Con	Constellation
Glob	Globular Cluster	Bin	Binary Star (with orbit)	MSS	Major Solar System Object
PNe	Planetary Nebula	Var	Variable Star	Com	Comet
Neb	Diffuse Nebula	DVar	Double & Variable	MP	Minor Planet
Gal	Galaxy	BVar	Binary & Variable		
GalCl	Galaxy Cluster				
Dark	Dark Nebula				
QSO	Quasar				

Observation status: Y = observed, N = not observed, R = re-observe  
 Quality of opportunity (Q): A = optimum, B = near optimum, F = far from optimum