

The Insider's Guide to the Galaxy Presents...

Messier Minutes

a guide to completing RASC's Messier Observing Certificate



Part 10 -

May 24th – June 7th, 2022

The following pages include a list of objects discussed in the May 24th, 2022, episode of Messier Minutes. Including finder charts and log pages.

List of Targets Discussed:

May 24 moonless; this is last of the spring Messiers

Messier #	Constellation	Magnitude	Type	NGC	Name
63	CVn	8.6	SG	5055	Sunflower Galaxy
94	CVn	8.2	SG	4736	Cat's Eye or Croc's Eye
101	UMa	7.9	SG	5457	Pinwheel Galaxy
51	CVn	8.1	SG	5194	Whirlpool Galaxy & NGC 5195
102	Dra	9.9	SG	5866	Spindle or Fool's Gold

Notes:

M63:

(13x7 arc-minutes)

Flocculent spiral galaxy (patchy, discontinuous arms) is barely visible in binoculars. Bright core and oval halo can be seen in small aperture telescopes. Larger apertures will reveal structure and dust lanes. Bright foreground star in halo. Close to the line connecting Alkaid to Cor Corali, but much closer to the latter. Or, make a right angle set square towards Alkaid using the Chara – Cor Corali separation. Or, aim your finger a thumb's width north of mag 4.7 star 20 CVn. Watch for shape, structure, and asymmetry. 37 million l-y away.

M94:

(11x9 arc-minutes)

Stubby barred spiral galaxy. Bright core and halo allow sightings in large binoculars under dark skies. Readily visible in smaller aperture telescopes, where it looks like a planetary nebula. Large apertures can reveal a bright ring around the core, curving dust lanes, and a faint outer ring composed of two curving arms. Located midway between Cor Corali and Chara, but offset a thumb's width towards Alkaid – a squat isosceles triangle. Watch for orientation, field stars, extent of the halo. 16 million l-y away.

M101:

(29x27 arc-minutes)

Large, bright, face-on loose spiral galaxy near the Big Dipper's handle. Relatively easy in binoculars under dark skies, it's no problem for any size of telescope. More details are seen with larger apertures. Make an isosceles triangle with Alkaid and Mizar on the Polaris side of the Big Dipper's handle. 21 million l-y away. Watch for asymmetry in the spiral arms (making it Arp 26) and small nearby NGC 5477 plus NGCs 5473, 544, and more.

M51:**(11x7 arc-minutes)**

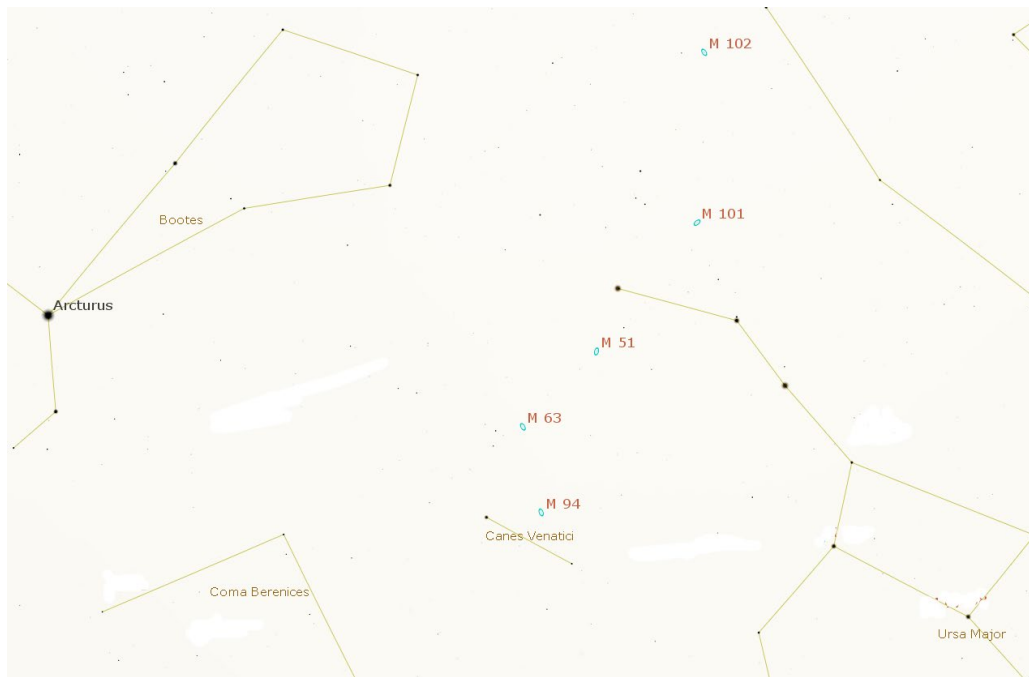
Grand design spiral galaxy with a well-defined core and prominent arms). Readily visible in good binoculars under dark skies, and any size of telescope, even from suburban skies. Larger apertures better show the arms and dark dust lanes, and the star bridge connecting it to NGC 5195. Located 3 degrees from Alkaid at a 90° angle from the Big Dipper's handle, in the direction of Cor Corali. Look for shape and structure, knots of H2 regions. Interaction between the two galaxies makes it Arp 85. 23 million l-y away.

M102:**(5x2 arc-minutes)**

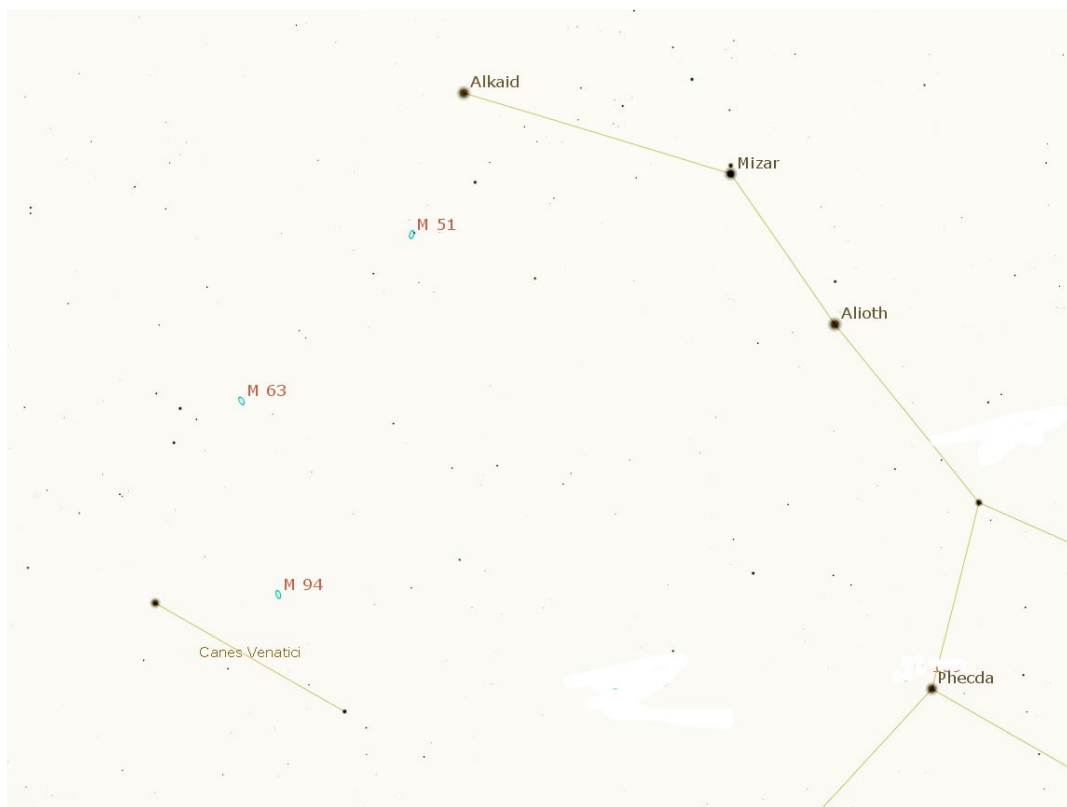
Edge-on lenticular galaxy. Small and fainter, so not a binocular target. Visible in small telescopes, but larger apertures will show its large halo and bisecting dust lane. Located 4° west of Edasich (Iota Dra), on the Arcturus side. Also, a third of the way along the line joining Theta Dra and Alkaid. Or double the line from Kappa Dra to Thuban. Look for the shape and orientation, dust lane, and field stars. 50 million l-y away.

Target Finder Charts:

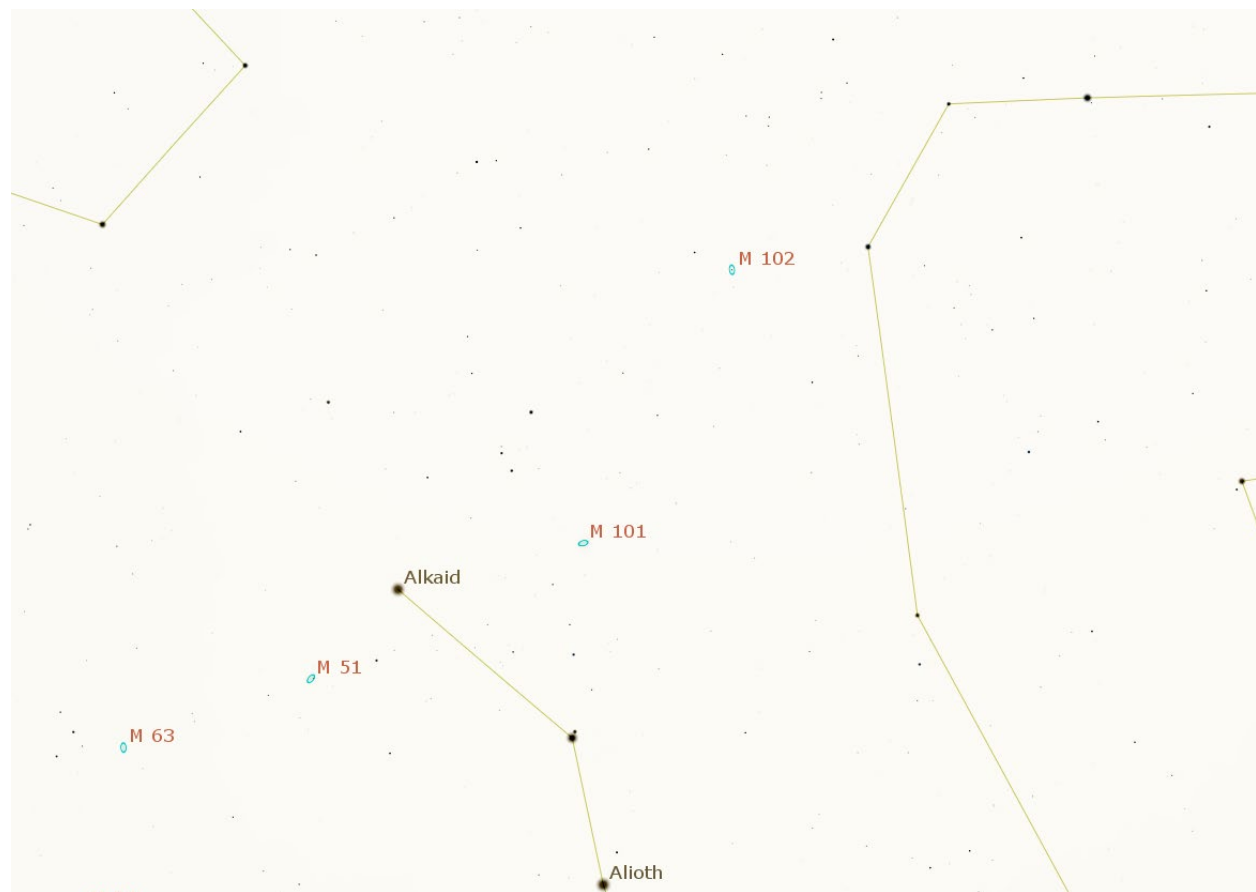
Overview of Targets -



M63, M94, and M51 Closer Look –



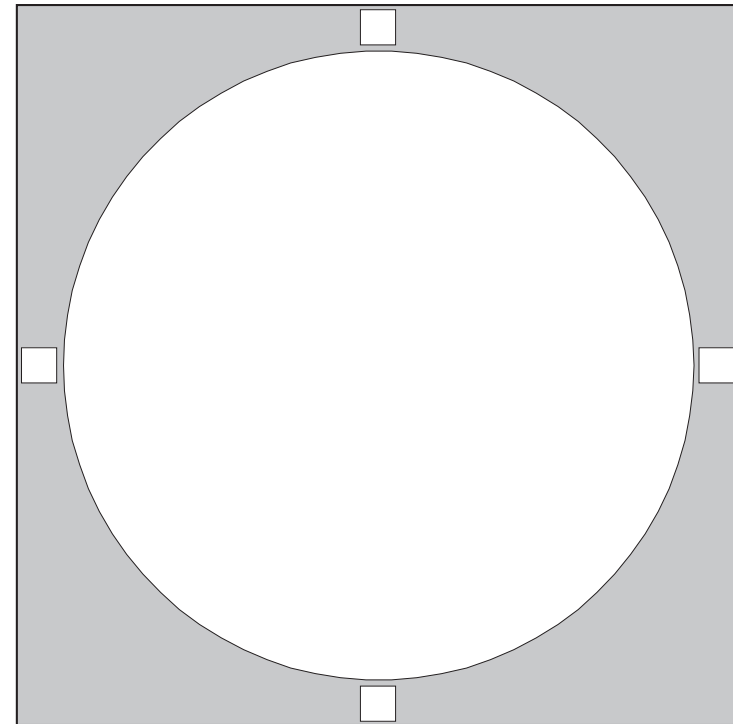
M101 & M102 Closer View –



RASC Messier Objects - M63

Sunflower Galaxy

Messier Object	M63		
NGC	5055		
Constellation	Canes Venatici		
Type	Spiral Galaxy (G-SAbc)		
Magnitude	8.6		
Distance (Kilo light-years)	37000		
RA	13 15.8		
Dec	+42:02		
Size	14.0 x 8.0'		
UM I	UM II	75,76	37
	SA	7	
Remarks	!! Sunflower Galaxy; bright, elongated		
Time (hh:mm)			
Seeing	1	2	3 4 5
Transparency	1	2	3 4 5
Observing Location			
Telescope			
Date (dd:mm:yyyy)			

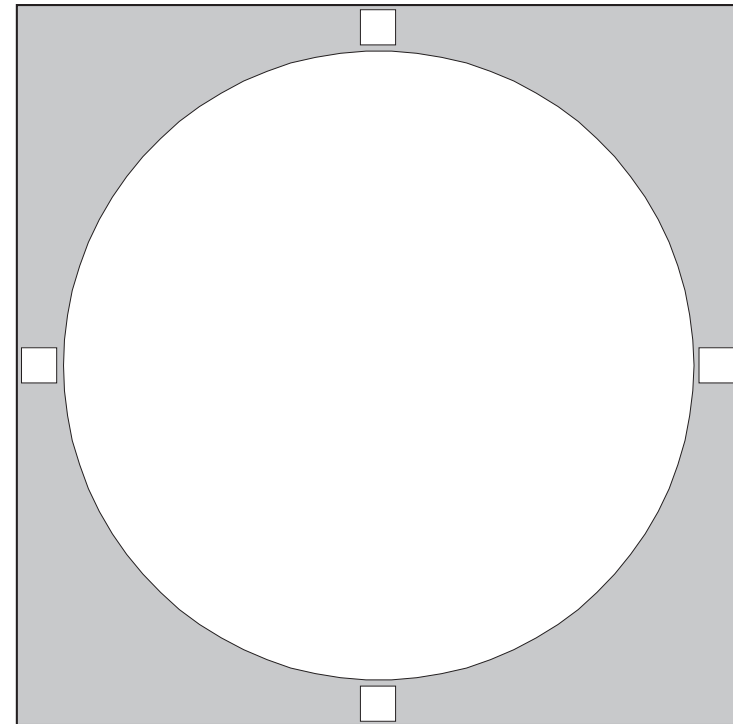


Notes

PN: Planetary Nebula	RN: (diffuse) Reflection Nebula	Seeing: 1 = Best 5 = Poor	* = Number of stars in cluster
SNR: Supernova Remnant	EN: (diffuse) Emission Nebula	Transparency: 1 = Best 5 = Poor	** p = Photographic Magnitude
GC: Globular Cluster	G-: Galaxy, with Hubble type given	Time: DD:MM:YYYY	*** !! = Showpiece Object
OC: Open Cluster	E/RN: Diffuse emission and reflection Nebula	Date: Specify Time Zone or UT	http://www.rasc.ca

RASC Messier Objects - M94

Messier Object	M94		
NGC	4736		
Constellation	Canes Venatici		
Type	Spiral Galaxy (G-SAab)		
Magnitude	8.2		
Distance (Kilo light-years)	14500		
RA	12 50.9		
Dec	+41:07		
Size	13.0' x 11.0'		
UM I	UM II	75	37
	SA	7	
Remarks	very bright and comet-like		
Time (hh:mm)			
Seeing	1	2	3 4 5
Transparency	1	2	3 4 5
Observing Location			
Telescope			
Date (dd:mm:yyyy)			



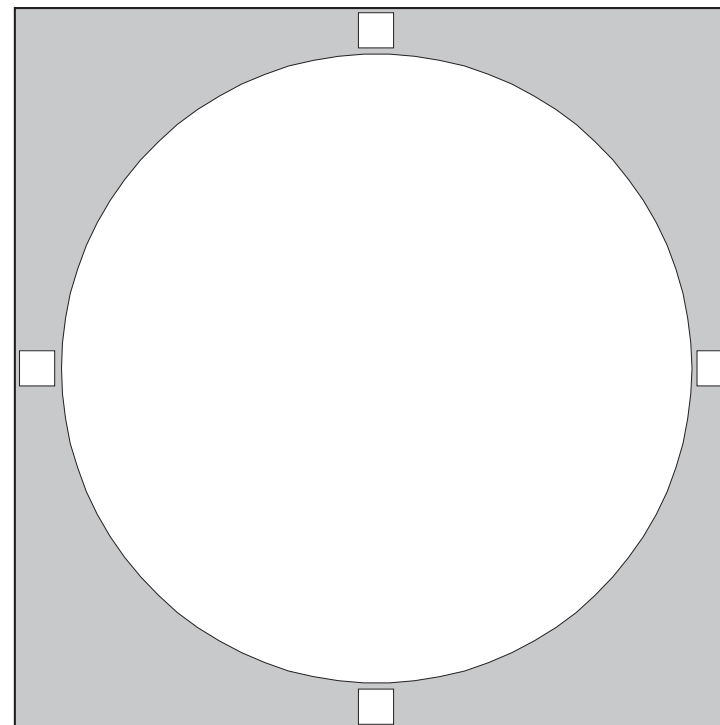
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RASC Messier Objects - M101

Pinwheel Galaxy

Messier Object	M101		
NGC	5457		
Constellation	Ursa Major		
Type	Spiral Galaxy (G-SABcd)		
Magnitude	7.9		
Distance (Kilo light-years)	27000		
RA	14 03.2		
Dec	+54:21		
Size	26' x 26'		
UM I	UM II	49	23
	SA	2, 7	
Remarks	!! Pinwheel Galaxy; diffuse face-on spiral		
Time (hh:mm)			
Seeing	1	2	3 4 5
Transparency	1	2	3 4 5
Observing Location			
Telescope			
Date (dd:mm:yyyy)			



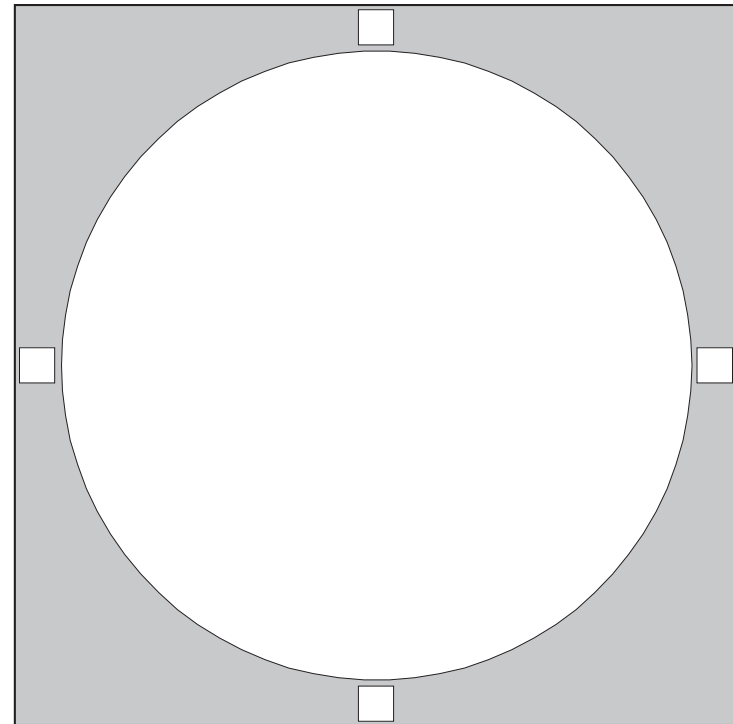
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RASC Messier Objects - M51

Whirlpool Galaxy

Messier Object	M51		
NGC	5194/5		
Constellation	Canes Venatici		
Type	Spiral Galaxy (G-SAbc)		
Magnitude	8.4		
Distance (Kilo light-years)	37000		
RA	13 29.9		
Dec	+47:12		
Size	8.0' x 7.0'		
UM I	UM II	76	37
	SA	7	
Remarks	!! Whirlpool Galaxy; superb in big scope		
Time (hh:mm)			
Seeing	1	2	3 4 5
Transparency	1	2	3 4 5
Observing Location			
Telescope			
Date (dd:mm:yyyy)			

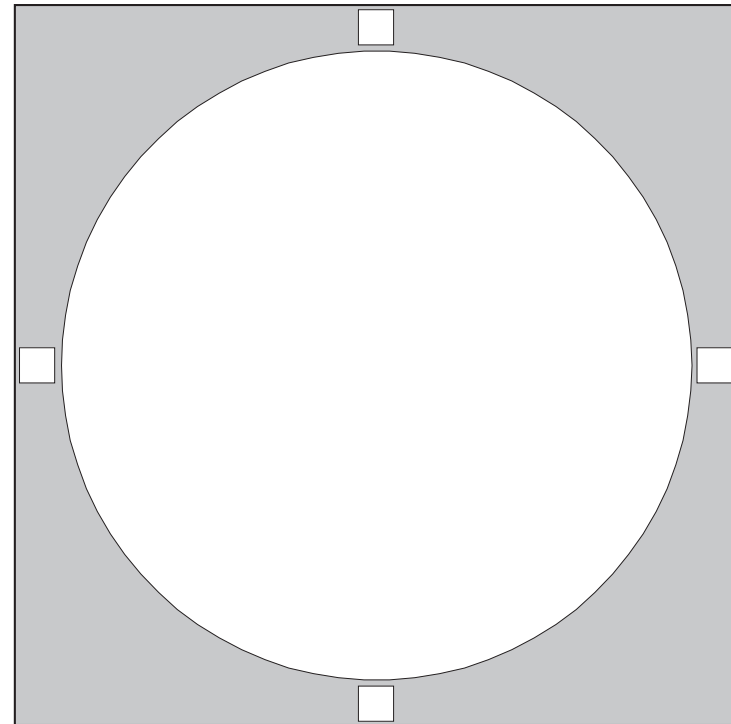


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RASC Messier Objects - M102?
NGC 5866 Spindle Galaxy

Messier Object	M102?		
NGC	5866?		
Constellation	Draco		
Type	Spiral Galaxy (G-SA0)		
Magnitude	9.9		
Distance (Kilo light-years)	40000		
RA	15 06.5		
Dec	+55:46		
Size	6.6' x 3.2'		
UM I	UM II	50	22
SA			
Remarks	or is M102 = M101? (look for 5907)		
Time (hh:mm)			
Seeing	1	2	3 4 5
Transparency	1	2	3 4 5
Observing Location			
Telescope			
Date (dd:mm:yyyy)			



Notes

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