Welcome to the Messier Observing Program

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. He discovered about twenty. In commenting on his catalog in later years, he stated that he had compiled it in order to aid other comet hunters. There is a slight touch of irony in the fact that this claim to immortality grew out of his efforts to rid himself of a nuisance to what, he felt, was his important life's work.

An Introduction to HAA Observing Programs

The Hamilton Amateur Astronomers provide various Observing Programs. These Observing Programs are designed to provide a direction for your observations and to provide a goal. The Observing Programs have certificates to recognize the observers' accomplishments and for demonstrating their observing skills with a variety of instruments and objects.

Observing Programs offer a certificate based upon achieving certain observing goals. You are required to observe a specific number of objects from a list or of a specific type (meteors, comets, etc.) with a specific type of instrument (eyes, binoculars, telescope). Some Observing Programs have multiple levels of accomplishment within, and some permit observations of different types (manual vs. go-to, visual vs. imaging) and note this on your certificate. There is no time limit for completing the required observing but good record keeping is required.

Observing Programs are designed to be individual effort. Each observer must perform all the requirements of each Observing Program themselves and not rely on other people to locate the objects. This is called "piggy-backing" and is not acceptable for logging objects for any of the Observing Programs. You are allowed to look through another observer's telescope to see what the object looks like, but you still need to locate and observe the object on your own.
When you reach the requisite number of objects, your observing logs are examined by an appropriate authority and you will receive a certificate to proclaim to all that you have reached your goal.

When you complete an Observing Program by yourself, you should feel a sense of pride and great accomplishment for what you have just completed. Each Observing Program is designed not only to show you a variety of objects in the sky and to learn some science related to those objects, but to also familiarize you with your telescope and how to use it, night-sky navigation (the ability to find the objects in the vastness of space) and to learn some observing techniques that will enhance your viewing of the objects in the programs.

The Messier Observing Award

The Hamilton Amateur Astronomers offers special recognition in the form of a Messier Observing Program certificate for those that have observed most or all of the Messier objects. To qualify you must be a member of the Hamilton Amateur Astronomers. There are two levels of this award: 75 objects (Silver Level) and the (Gold Level) certificate for successfully observing all 110 objects. To obtain certification you must observe the following rules: The Messier list happens to include most, but not quite all, of the finest objects observable from mid-northern latitudes. There is nothing in the catalog that the owner of a three-inch reflector cannot reach under good observing conditions. Many Messier objects can be seen with binoculars and some with the naked eye.

Rule 1:

Visually observe 75 Messier objects (for the Silver Level) or 110 Messier objects (for the Gold Level) and keep a record of your observations.

Your notes must include:
a. Date (Month, dd, yyyy) and Time of observations (indicate Local time or UT).
b. Object identification.
c. Observing Location (distance from nearest town).
d. Seeing and Transparency.
e. Aperture and focal length of telescope.
f. Type of telescope if using GOTO feature.
g. Eyepiece used and magnification obtained.
h. List any filters used.
i. A description of the Messier object as it appears in the eyepiece.
j. OPTIONAL sketch of the Field of View.

Rule 2:

Have your observing log examined by the H.A.A. Messier Observing Program Coordinator.
Be sure to include your name, mailing address, email address, phone number, Upon successful completion of the requirements a numbered “Silver Level” or “Gold Level” certificate will be presented to you at a future meeting of the HAA. If you choose to receive the certificate by

mail, be sure to indicate that choice on your submission form. The certificate will be suitable for framing.

Rule 3:

The 'Goto" option is yours. If you choose to complete the observing program using electronic aids or an "automated telescope', an award WILL be issued and a notation will be made on the certificate indicating "Electronic Assistance Used".

Rule 4:

Since the purpose of the Messier Observing Program is to familiarize the observer with the nature and location of the objects in the sky, the use of an automated telescope which finds the objects without effort on the part of the observer is discouraged. "Automated telescope" also includes the use of digital setting circles where a read-out shows the user directions to follow to locate an object. This also includes the unacceptable use of smartphones that use applications to locate objects in the night sky. The use of the setting circles found on the axis of telescope should also be avoided. In short, only finder scopes, Telrads, or Telrad-like devices are preferred.

The reason.....?

The purpose of the "no Go-To" rule is so that you learn the sky and learn how associate a map with the real sky. Learn how to get from here to there without the electronics or the scales. Learn to locate objects without the electronic interface. The knowledge of being able to perform this will always be of benefit in the future.

Also "Messier Marathon" sessions where all the objects are found in one occasion is to be discouraged. An observer cannot truly observe objects in that limited amount of time. Take your time, enjoy yourself, and REALLY see the objects as they were meant to be seen.
This program is meant to be completed using a telescope where multiple magnifications (including a higher power) and filters (if available) can be used.

You are encouraged to not reuse observations from any other Observing Program toward this Observing Program. As time goes by and your experience increases, so will your observing skills. Subsequent observations of the same object should reflect an increase in your observational skills.

Sample observation entry:

Date: June 6, 2018 Time: 02:15 EDT

Object: Messier 15 aka: NGC 7078, Mellotte 234

Object location: Pegasus. 25 degrees above the horizon, 4 degrees NE of Enif.

Observing location: Binbrook Conservation Area, Binbrook, ON

Seeing: 4/5 Transparency: 7/10 Conditions: warm, calm

Equipment: Aperture 110 mm Focal length: 770 mm Type: Orion Duplex Refractor

Eyepiece: 5 mm Barlow: None Filters: None Magnification: 154x

Object description:

Quite large, 1/10 Field of view. Very bright, magnitude 6.3. Round.

Type IV Open Cluster, moderately rich, moderately concentrated.

2/3 resolved to reveal about 100 brighter stars and many more lesser stars.

No nebulosity noted.

Generally, a large round mass of resolvable stars around a stellar core.

Messier Observing Award Submission Form

Name as you would like to have it appear on the certificate:

_____

Phone: _____

eMail: _____

✓ I am submitting my observation information for the:

____ Silver Award (75 objects)

____ Gold Award (Remaining 35 objects)

Please supply the Silver Award certificate number: _____

____ I prefer to have my certificate mailed to me.

Address: _____

_____

_____

_____

Certification

I certify that I have faithfully followed the rules of this program.

(___ I have) / (___ I have not) used Electronic Assistance.

_____