



# ASTRONOMICAL LEAGUE

A FEDERATION OF ASTRONOMICAL SOCIETIES  
A NON-PROFIT ORGANIZATION

- ★ *To promote the science of astronomy;*
- ★ *By fostering astronomical education;*
- ★ *By providing incentives for astronomical observation and research;*
- ★ *By assisting communication among amateur astronomical societies.*

## ASTRO NOTES

Produced by the Astronomical League

### Note 12: Observing Programs of the Astronomical League - I Deep Sky Programs, part 1

The Astronomical League sponsors over 30 observing and activity award programs for its members, and others are being developed. The equipment required for the observing programs ranges from the unaided eye to telescopes with solar filters. The objects of study range from the very near solar system to the very deep sky and there are observing programs to challenge both beginner and experienced observers.

The award programs presented on this ASTRONOTE are for beginning to advanced deep sky programs. See ASTRONOTE 25 for solar system observing programs, ASTRONOTE 28 for part 2 of the deep sky programs, and ASTRONOTE 29 for Activity Award programs.

#### **Messier Club**

The Messier Club is the oldest of the Astronomical League observing award programs. Observers wishing to earn a Messier certificate must independently locate, observe and log at least 70 Messier objects for a regular certificate. Observers who log all 110 Messier objects earn the honorary certificate and a distinctive pin. Computer controlled telescopes and digital setting circles are NOT allowed because this program's purpose is to teach participants how to find their way around the night sky. This program is based on the League manual ***Observe: A Guide to the Messier Objects***. The manual includes descriptions of the objects and log sheets for recording your observations.

#### **Binocular Messier Observing Club**

This program is for beginning as well as experienced observers. The only equipment needed is a pair of binoculars. Any binoculars may be used, but those with objectives between 20mm and 80mm are recommended. A certificate and pin is given for observations of at least 50 Messier objects using only binoculars. Any of the recognized 110 Messier objects may be observed. Observations must be recorded on log sheets similar to those found in the League manual ***Observe: A Guide to the Messier Objects***.

#### **Sky Puppy Club**

The first Observing program designed specifically for children. The workbook style enhances learning through hands-on projects, matching word exercises, coloring, word games, and includes a make-your-own planisphere project. A Sky Puppy participant will learn the rudiments of observing, how to read a chart or planisphere, how to find and identify constellations, stars, and deep-sky objects. The Sky Puppy manual, which includes an audio CD-ROM of constellation stories, may be ordered from Astronomical League Sales.

#### **Universe Sampler Club**

The Universe Sampler observing program is a unique observing program designed specifically for the beginning observer. It is designed to expose the beginner to a sample of the many different types of objects that the Universe has to offer for our observing enjoyment. It is designed to help the new observer learn his or her way around the sky and to teach some of the basics of astronomy. It offers an alternate naked-eye list of deep sky objects for those who are interested in astronomy but shy away because they do not have a telescope or binoculars. The Astronomical League offers special recognition in the form of a Universe Sampler Club certificate and pin for those that have completed either the "naked eye" or the "telescope" paths. This program is based on the Universe Sampler manual, available from League Sales.

#### **Constellation Hunter Club (Northern Skies and Southern Skies)**

The purpose of these two programs is to provide an orientation to the sky for novice astronomers. They require no special equipment (other than a planisphere and a reference for the brighter star names), and no prior knowledge. The objective is to provide a forum for the novice observer to become more familiar with the constellations and brighter stars, to begin to learn to navigate among the stars, and to provide a solid foundation for moving on to other observing programs such as the Messier Club. The Constellation Hunter Club has two certifications and pins: The Northern Skies and the Southern Skies.

## Urban Club

Live in an area with light polluted skies? Now you need not go out to a dark site to qualify for an observing club certificate. Using a telescope in town, you can qualify by finding a variety of objects including double and multiple stars, variable stars and objects from the Messier and NGC catalogs. Discover what you can see from your own back yard!

## The Deep Sky Binocular Club

This program is similar to the Binocular Messier Club. You are required to observe 60 specified deep sky objects not on Messier's list. Binoculars having objectives of 50mm or greater are recommended. Observations must be recorded on log sheets similar to those found in the League manual **Observe: A Guide to the Messier Objects**.

## The Double Star Club

This Club introduces observers to 100 of the finest double star and multiple star systems in the heavens. A large telescope is not necessary since all stars on the qualifying list have been observed using a 3" refractor. You need not travel to the darkest sky sites since many of the stars will be visible from your backyard. See what you can do with your existing equipment from any location!

## The Herschel 400 Club and the Herschel II Club

The Herschel Clubs are for more advanced deep sky enthusiasts. This observing program is more challenging than the Messier Club. An observer must locate and log 400 specified objects from William Herschel's catalog to qualify for the Herschel 400 award, and then observe an additional 400 objects to qualify for the Herschel II award. While many of these objects are faint, the Herschel 400 objects can be seen in a quality six-inch scope under dark skies by an experienced observer, and the Herschel II objects will require a 10-inch or larger aperture. The Herschel Clubs are based on the League Manuals **Observe the Herschel Objects** and **Observe the Herschel II Objects**.

## The Caldwell Observing Club

Sir Patrick Caldwell-Moore has made a catalogue of beautiful and interesting objects that you should, literally, go out of your way to observe. The 109 objects on the list range from magnitude 1 through 13, and Declination +85° to -80°, so some effort will be required. The benefits far outweigh any inconvenience however, as you will be treated to many wonderful new sights to behold in the night sky, and maybe even make some new international observing friends along the way. Record your observations on The Observers Guide - Deep-Sky Observation Form, or a similar form.

## The Southern Skies Binocular and Southern Sky Telescopic Clubs

Selected objects for the Southern Hemisphere are showcased in these two observing programs. The Binocular list can easily be achieved in a couple of clear nights and with careful planning the telescopic list can also be achieved in a minimal amount of time.

## For More Information

The Observing manuals, containing detailed information and forms helpful to complete many of these programs, are available from Astronomical League Sales. The address and current price are listed in the current issue of the League's quarterly newsletter, the **REFLECTOR**, and on the League's web site at [www.astroleague.org](http://www.astroleague.org). All of the observing programs, except the Herschel 400 Club, require that the observer be a member of the Astronomical League, either through an affiliated club or as a member-at-large, or as a patron or lifetime member.

**If you have further questions, email or send a self-addressed, stamped envelope to the appropriate person:**

**Messier Club:** Scott Kranz, 106 N Darrowby Drive, Raymore, MO 64083-9181, (816) 522-8921, E-mail: [s.kranz1@comcast.net](mailto:s.kranz1@comcast.net)

**Binocular Messier Observing Club:** Aaron Clevenson, 19411 Cluster Oaks Drive, Humble, TX, 77346, (281) 852-4667, E-mail: [aaron@clevenson.org](mailto:aaron@clevenson.org)

**Sky Puppy Observers Club:** Kevin Cornwell, 111 E. Puainako Street, Suite 585 #169, Hilo, HI, 96720, E-mail: [kevin@cornwell.net](mailto:kevin@cornwell.net)

**Universe Sampler Club:** Amelia Goldberg, 5115 Stillbrooke Drive, Houston, TX 77035, (713) 721-5077, E-mail: [Sgoldberg124@comcast.net](mailto:Sgoldberg124@comcast.net)

**Constellation Hunters Club:** Aaron Clevenson, 19411 Cluster Oaks Drive, Humble, TX, 77346, (281) 852-4667, E-mail: [aaron@clevenson.org](mailto:aaron@clevenson.org)

**Urban Club:** Aaron Clevenson, 19411 Cluster Oaks Drive, Humble, TX, 77346, (281) 852-4667, E-mail: [aaron@clevenson.org](mailto:aaron@clevenson.org)

**Deep Sky Binocular Club:** Aaron Clevenson, 19411 Cluster Oaks Drive, Humble, TX, 77346, (281) 852-4667, E-mail: [aaron@clevenson.org](mailto:aaron@clevenson.org)

**Double Star Club:** Mike Benson, 2308 Dundee Lane, Nashville, TN 37214-1520, (615) 883-6571, E-mail: [ocentaurus@aol.com](mailto:ocentaurus@aol.com)

**Herschel 400 Club:** Brenda Branchett, 515 Glen Haven Dr., Deltona, FL 32738, (386) 479-5355, E-mail: [bbranchett@cfl.rr.com](mailto:bbranchett@cfl.rr.com)

**Herschel II Club:** Candace Pratt, c/o Rose City Astronomers, Oregon Museum of Science and Industry, 1945 SE Water Ave., Portland, OR 97214-3356. E-mail: [candace@icingsglass.com](mailto:candace@icingsglass.com) or <http://www.rca-omsi.org/herschel2/index.htm>

**Caldwell Club:** Susan Rose, 655 Bellmore Avenue, East Meadow, NY 11554-4708, (516) 640-4433, E-mail: [suerose@optonline.net](mailto:suerose@optonline.net)

**Southern Skies Binocular Club:** Aaron Clevenson, 19411 Cluster Oaks Drive, Humble, TX, 77346, (281) 852-4667, E-mail: [aaron@clevenson.org](mailto:aaron@clevenson.org)

**Southern Skies Telescopic Club:** Kathy Machin, 4845 N. Smalley, Kansas City, MO, 64119: [kmachin@kc.rr.com](mailto:kmachin@kc.rr.com)