## The Chatfield Binocular Challenge List

© Darrell Chatfield 2002

This list has been prepared from various sources of information. I have tried to include enough variety so as not to rely solely on just the Messier List. All of the objects should be visible with a pair of 7X35-50 binoculars, although a larger pair will show more detail. I hope this will encourage you to get out under the stars and enjoy the heavens with minimal equipment. A certificate will be available to those who complete the list. A few rules are:

1. You must find the objects on your own.

2. You cannot use a telescope, or any such instrument to locate the objects.

The use of a good star atlas, such as *Sky Atlas 2000* or *Uranometria*, is recommended. A good dark site will help you in finding the objects as well assist you in seeing more details. You will only have to find 35 out of the 40 objects in the list. This will give you a choice of objects, if you find it hard to locate some of them. I encourage you to make notes on your observations, which can be in any format you choose. This will help in developing your observational skills. Thank you. *—Darrell Chatfield* 

| CONSTELLATION  | R.A. DEC.      | OBJECT        | ТҮРЕ   | MAG     | DESCRIPTION  |
|----------------|----------------|---------------|--------|---------|--|
| ANDROMEDA      | 00 40.0 +41 00 | M31           | GAL    | 3.5     | Famous Andromeda Galaxy                              |
| ANDROMEDA      | 01 57.8 +37 41 | NGC 752       | O/C    | 5.7     | 75 stars. Large. Irregular.                          |
| AQUARIUS       | 21 33.5 -00 49 | M2            | GL/C   | 6.5     | Rich globular. Fine object.                          |
| AURIGA         | 05 28.7 +35 50 | M38           | O/C    | 6.4     | Large. Easy to resolve.                              |
| AURIGA         | 06 49.3 +41 04 | NGC 2281      | O/C    | 5.4     | Group of 30 stars. Bright.                           |
| CAMELOPARDALIS | 03 58.0 +63 06 | Kemble 1      | ASTER. | 4.0     | Kemble's Cascade. Chain of stars.                    |
| CANCER         | 08 40.0 +19 59 | M44           | O/C    | 3.1     | Beehive Cluster. Excellent.                          |
| CANES VENATICI | 13 42.2 +28 23 | M3            | GL/C   | 6.0     | Small object. Bright.                                |
| CANIS MAJOR    | 06 47.0 -20 44 | M41           | O/C    | 4.5     | Large glowing patch of light.                        |
| CASSIOPEIA     | 23 57.0 +56 44 | NGC 7789      | O/C    | 6.7     | 300 stars. Large white patch.                        |
| CASSIOPEIA     | 01 46.0 +61 15 | NGC 663       | O/C    | 7.1     | 80 stars. Rich.                                      |
| COMA BERENICES | 12 25.0 +26 00 | Melotte 111   | O/C    | 1.8     | Coma Cluster. Huge.                                  |
| CYGNUS         | 20 58.8 +44 20 | NGC 7000      | E/N    | 5.9     | North American Neb. Obvious                          |
|                |                |               |        |         | glow.  |
| CYGNUS         | 21 32.3 +48 26 | M39           | O/C    | 4.6     | Loose. Bright cluster.                               |
| GEMINI         | 06 08.9 +24 20 | M35           | O/C    | 5.3     | 200 stars. Very rich.                                |
| HERCULES       | 16 41.7 +36 28 | M13           | GL/C   | 6.0     | Famous globular. Fuzzy glow.                         |
| HYDRA          | 08 13.8 -05 48 | M48           | O/C    | 5.9     | 80 stars. Large. Triangular shape                    |
|                |                |               |        |         | in the center.                                       |
| MONOCEROS      | 07 03.2 -08 20 | M50           | O/C    | 6.0     | 80 stars. Bright smudge.                             |
| MONOCEROS      | 06 41.1 +09 53 | NGC 2264      | O/C    | 3.9     | Christmas Tree Cluster.                              |
| ORION          | 05 35.4 -05 27 | M42           | E/N    | 4.0     | Great Orion Nebula.                                  |
| OPHIUCHUS      | 16 57.2 -04 06 | M10           | GL/C   | 6.6     | Glowing ball of light.                               |
| OPHIUCHUS      | 16 47.2 -01 57 | M12           | GL/C   | 6.9     | Large globular.                                      |
| PEGASUS        | 21 30.0 +12 10 | M15           | GL/C   | 6.4     | Nice object.   |
| PERSEUS        | 02 19.0 +57 09 | NGC 869/884   | O/C's  | 4.4     | Double Cluster. Beautiful field.                     |
|                |                |               |        |         | Very easy.   |
| PERSEUS        | 02 42.0 +42 47 | M34           | O/C    | 5.5     | 60 stars. Easy.                                      |
| PISCES         | 23 30.0 +03 00 | Circlet       | ASTER. | 3.0     | Circlet of 5 main stars.                             |
| PUPPIS         | 07 36.6 -14 29 | M47           | O/C    | 4.5     | 30stars. Hazy patch.                                 |
| SAGITTARIUS    | 18 36.4 -23 54 | M22           | GL/C   | 6.0     | Excellent globular.                                  |
| SAGITTARIUS    | 18 18.4 -18 25 | M24           |        | 4.6     | Star Cloud. Excellent view.                          |
| SCORPIUS       | 16 23.6 -26 31 | M4            | GL/C   | 6.5     | Large fuzzy ball of light.                           |
| SCORPIUS       | 17 40.0 -32 12 | M6            | O/C    | 4.6     | 130 stars. Bright.                                   |
| SCUTUM         | 18 51.1 -06 16 | M11           | O/C    | 5.8     | Wild Duck Cluster. Very rich.                        |
| SERPENS        | 15 18.6 +02 05 | M5            | GL/C   | 6.2     | Very rich cluster.                                   |
| SERPENS        | 18 39.0 +05 27 | IC 4756       | O/C    | 5.0     | Very large.  |
| TAURUS         | 03 47.5 +24 07 | M45           | O/C    | 1.2     | Pleiades. Very bright. Fine                          |
| object. TAURUS | 04 27 +16 00   | Melotte 25    | O/C    | 0.5     | Hyades. V-shaped. Look for<br>Aldebaran.             |
| URSA MAJOR     | 09 55.6 +69 04 | M81/M82       | GAL    | 7.0/8.4 | Easy pair.   |
| URSA MAJOR     | 13 23.9 +54 56 | Mizar/Alcor   | D/S    | 2.3/4.0 | Easy-to-see pair.                                    |
| VULPECULA      | 19 59.6 +22 43 | M27           | PL/NEB | 7.5     | Dumbell Neb. Misty glow.                             |
| VULPECULA      | 19 25.4 +20 11 | Collinder 399 | ASTER. | 3.6     | Coathanger Cluster. Look for upside-down coathanger. |