



The Star

Newsletter of the
Mount Cuba Astronomy Group

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Program Schedule:

Programs are at 7:30 at
Mt. Cuba Astronomical Observatory 1610 Hillside Mill
Road, Greenville, DE unless indicated otherwise.

May 14

Mapping The Sky

(Where in the heavens is it?!

Presenter - Hank Bouchelle

As difficult as it may seem to find or point out objects in the sky, there are not one but two ways to do this. One of them requires only two simple tools, your finger and a tree with moss on one side. Join us!

June 11

Stars and Constellations of Summer

“Don’t forget the Moon”

Our neighbor the moon, despite being runner-up in the brightest object category, is often overlooked or ignored in the hunt for the faint Messier objects and our surprise visitors, the comets. We “curse” the poor moon for taking away perhaps a good week of viewing each month. Am I incorrect that about the only time the moon makes the public papers is when it actually disappears as part of an eclipse. Yet, close-up views of the moon’s craters never fail to produce a small gasp, wow, or other impression when seen at a star party.

An entire season of programs couldn’t do justice to the moon, but perhaps this article will entice you to “rediscover” our closest neighbor.

Mt Cuba 4.5' Clark Lens Cleaning on April 25 2013

The telescope making group has been busy with a variety of projects, the most recent being a cleaning of the Mount Cuba 4.5” Clark lens. The following photos of this project were provided courtesy of Robert Stack.



Images go down the 1st column then the 2nd column



THROUGH THE TELESCOPE----

MAY OBSERVATIONS

(Adapted from Astronomy Made Simple, 1955)

URSA MAJOR, known as the **Great Bear**, is a constellation visible throughout the year in most of the northern hemisphere. It can best be seen in April. It is dominated by the widely recognized asterism known as the Big Dipper or Plough, which is a useful pointer toward north, and which has mythological significance in numerous world cultures.

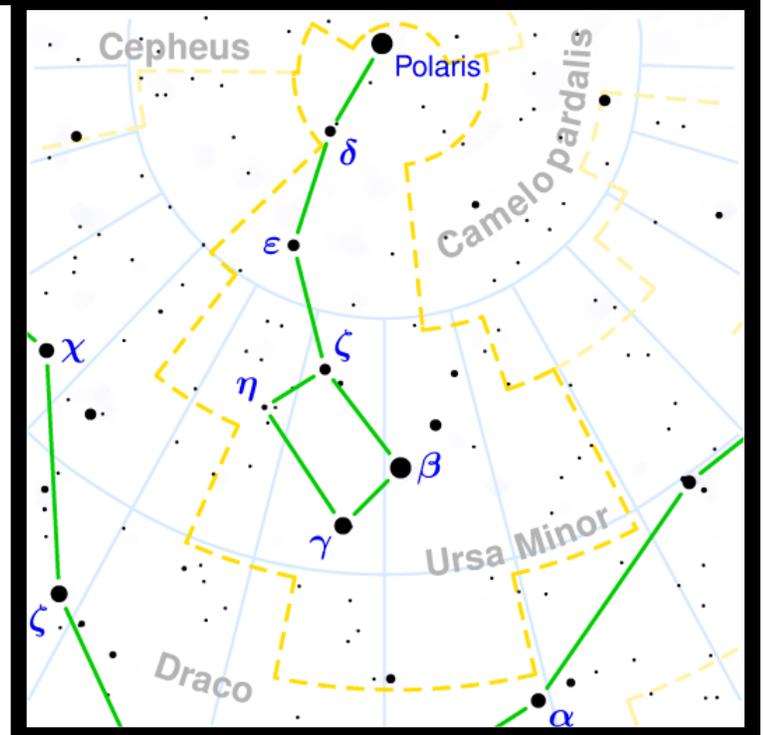
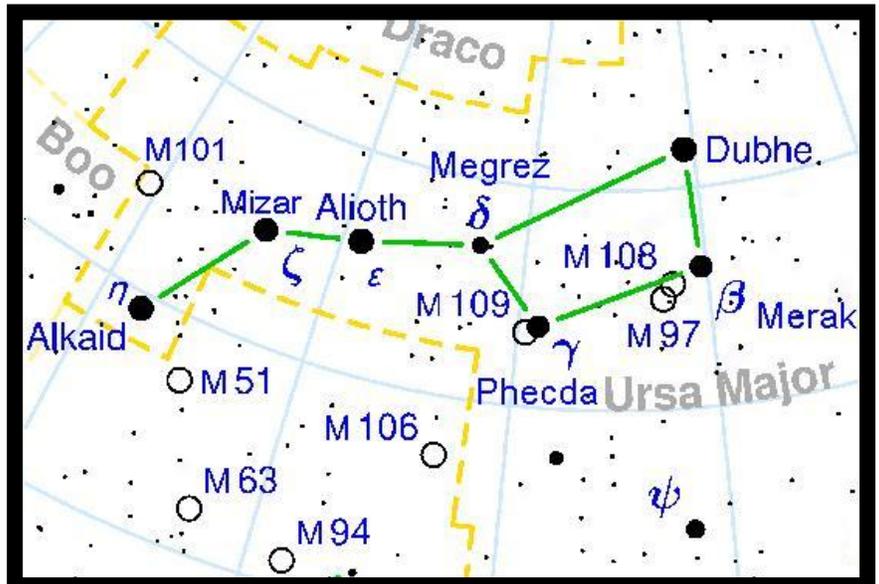
The star Mizar, at the middle of the handle, is a double star: The brighter component has an apparent magnitude of 2.1; the fainter star, 4.2. This was the first of the double stars to be discovered, in 1650. The angle they subtend at an observer is 15 seconds of arc. Subsequent spectroscopic research showed that each star of this binary system is in itself a double, thus making Mizar a quadruple star.

Another object of interest in the Big Dipper is the Owl Nebula. It is a large round cloud known by catalog numbers M97 or NGC 3587. The first catalog of nebulae and star clusters was compiled by the French astronomer, Messier, in 1781. The list contains 103 objects, more than half of which are star clusters. Therefore, M97 means object 97 in the Messier catalog.

A New General Catalog, containing a comprehensive list of nebulae and clusters, was published in 1888 in England, and two supplementary lists were added to it. Most objects are commonly known by their number in that catalog. Thus, Messier 97 is object number 3587 in the New General Catalog.

URSA MINOR, known as the **Little Bear**, is a constellation in the northern sky. Like the Great Bear, the tail of the Little Bear may also be seen as the handle of a ladle, hence the name Little Dipper. It was one of the 48 constellations listed by the 2nd century astronomer Ptolemy, and remains one of the 88 modern constellations. Ursa Minor is notable as the location of the north celestial pole, although this will change after some centuries due to the precession of the equinoxes. Ursa Minor and Ursa Major were related by the Greeks to the myth of Callisto and

Arcas. However, in a variant of the story, in which it is Boötes that represents Arcas, Ursa Minor represents a dog. This is the older tradition, which sensibly explains both the length of the tail and



the obsolete alternate name of *Cynosura* (the dog's tail) for Polaris, the North Star.

The star Polaris, Alpha-Ursae Minoris, also known as the North Star, is a double star. The two companions differ greatly in apparent brightness. One of the blue stars in this binary system has an apparent magnitude of 2.0, while the value of the other star is 9.0. A three-inch telescope and good atmospheric conditions are needed to see the faint companion, which is located below the bright one in November, and in May, above it.

Starry Eyed Challenge



Which of the following terms describe an hypothesis, supported by data, that describes how the universe began with a huge explosion. It further states, that everything in the universe was once concentrated at one tiny point.

- A. heliocentric model
- B. geocentric model
- C. big-bang theory
- D. the inner planets

Mt. Cuba Astronomy Group *Membership Form*

The Mt. Cuba Astronomy Group is a tax-exempt organization dedicated to astronomy education and public outreach. Benefits of membership include:

- Monthly newsletter that includes details about the Group's activities and much astronomical information
- Monthly programs on subjects and topics of astronomical interest
- Free or discounted subscriptions to astronomy-related publications
- Free registration for MCAG workshops and classes
- Mention Mt. Cuba Astronomy Group and receive a 5% discount at Manor Books in New Castle (<http://www.yelp.com/biz/manor-used-books-New Castle>)



Mail to:

Ms. Carolyn Stankiewicz
1001 Woodstream Dr.
Wilmington, DE 19810

Name _____

Name(s) (children, if any, and age): _____

E-mail address: _____

Home address: _____

Phone (optional): _____

No, this is not a Photoshop touch up special. Chris Myers took this image during a full moon. We'll have to get Chris in for a program on how he gets these excellent star fields. It would be nice to get as many folks as possible capturing images of our approaching "Comet of the Century".
Thanks Chris !



Have an astronomy related image you would like to share? It doesn't matter when it was taken as long as it was taken by you or a friend. Please send the photographer's name and the specifics of the image.