

## Cache Valley Clear Skies

The Journal of the Cache Valley Astronomical Society



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[www.cvas-utahskies.org](http://www.cvas-utahskies.org)

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### No Meeting This Month

There is no club meeting scheduled for June. During the spring and summer months we will instead hold club (private) as well as public star parties. Most of the public star parties will be held around first quarter moon and most of the private star parties will be held around new moon. The main location for public star parties this year will be **Heritage Park** which is located at 2456 South 800 W, Nibley. Please see the club website, the **Upcoming Star Parties** section of this newsletter or contact a member of the executive committee for more information. Our next scheduled meeting is the Annual General Meeting in September.

### The President's Corner By Dell Vance, CVAS President

Well it is official we have made it to June. The nights are still cool but not cold for star gazing. I was out last night trying out a new accessory for my telescope. I bought a Celestron NexImage 5 for my telescope. Wow, did that open up a new steep learning curve. Not only do I have to learn how to use the camera, but the software that goes with it is interesting as well.



This is my first experience with video and Registax. It doesn't have a manual. So, I am learning how to use it by the old trial and error method. There are several YouTube clips that help a lot.

What I love about astronomy is that you never know it all. There are so many gadget and tricks to try that you should never get bored. It is also great to have so many people with experience to help you through the challenges, both in CVAS and out. People are generally willing to share their knowledge.

May was a very busy month. Tom Westre and I went up to Conestoga Ranch to provide support for their star gazing activities up there.

It was a great night and the skies were very good. We knew it was time to wrap it up when the sprinklers came on. They are working with us to prevent that from happening again. They are great folks to work with and it is exciting to share our hobby with their guests. We did have some activities that got cancelled such as the Scout-O-Rama, but they have asked us to keep them in mind for next year.

Our annual Club get together and star party is on June 10th and we want to make sure everyone is aware of it. See the information in the newsletter for the location and times. We have been invited to so many activities that we can't cover them all, but please be sure to help your neighbors and friends to enjoy astronomy this month.

Here is one of the photos that I took last night. Remember that I am still learning how to use all this new technology and I have a 6" SCT to work with, but I think it is going to work out great as I overcome the challenges involved.



Saturn photo by Dell Vance

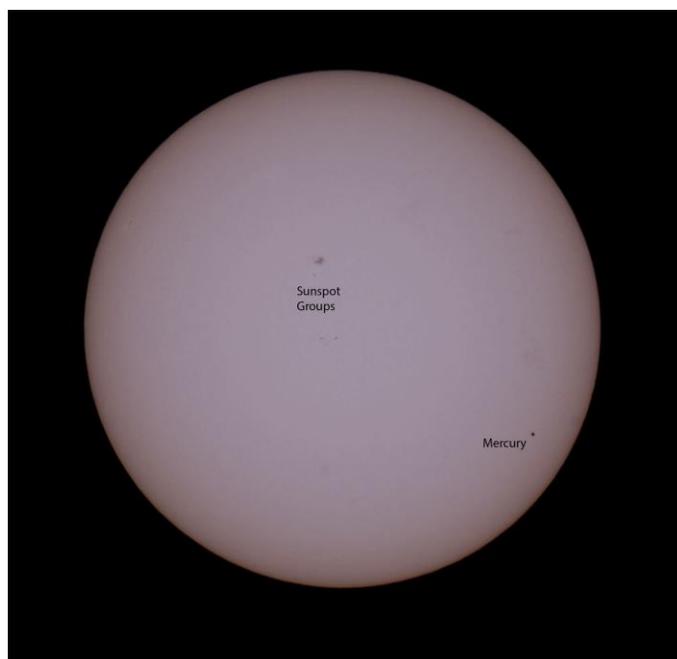
Have a great month and we'll see you at the party.

Clear Skies!

## Mercury Transit, May 9<sup>th</sup>

Several CVAS club members were able to observe the transit of Mercury on May 9<sup>th</sup>. Tom Westre and

Dell Vance shared the view of the transit at the Logan Library. Other club members observed from various places around the valley. Transits of Mercury are somewhat rare because they only occur when both planets cross the plane of the ecliptic (on the same side of the Sun). This only happens in May and November. The next transit will occur on November 11, 2019. As is typical with May weather there were some extended periods of time where clouds blocked the transit. However, there were also some fairly long periods of time where we could see the small dark orb of Mercury working its way across the Sun. We were also treated to some decent sized sunspot groups.



May 9<sup>th</sup> Mercury Transit photo by Dale Hooper (Mercury is at the lower right)

## Spotlight on Ophiuchus, the Serpent Bearer

By Dale Hooper

Ophiuchus is very large constellation. It is the 11<sup>th</sup> largest in area at 948 square degrees. When Ophiuchus is climbing high in the sky – it means that the summer Milky Way is soon to follow. In fact, Ophiuchus has his left foot dipped into the Milky Way.

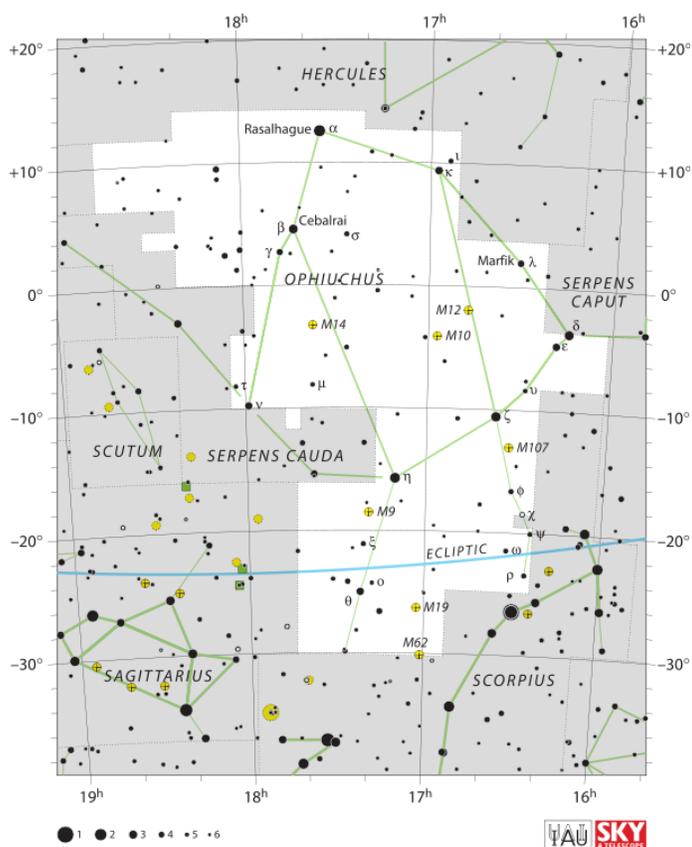
Because it is close in proximity to the disk of the Milky Way, Ophiuchus contains a lot of nice double and multiple stars, globular clusters, dark nebulae and a few nice planetary nebulae. To see the dark nebulae it is very likely that you will need to travel to a location with dark skies.

Ophiuchus is also the location of another object which may not look grand but is very interesting because of where it is and what we see it doing. Ophiuchus is home to the red dwarf Barnard's Star. At 5.96 ly it is the fourth closest star beyond the Sun. It has the highest proper motion of any star which means it scoots across the sky at 10.3" per year. Since it moves so quickly, the table includes its latest coordinates (Epoch J2000.00). Unfortunately, it doesn't appear to have any planets orbiting it so if Project Daedalus ([https://en.wikipedia.org/wiki/Project\\_Daedalus](https://en.wikipedia.org/wiki/Project_Daedalus)) ever goes forward, I suspect they will want to choose another star.

All of the objects in the list (other than Barnard's Star) rate four or more stars in *The Night Sky Observer's Guide* (Ophiuchus is in Volume 2). Barnard's Star rates three stars.

As usual, the table is organized according to increasing Right Ascension values.

Object	R.A.	Dec.
5 Ophiuchi (Double star)	16h25.6m	-23°27'
λ Ophiuchi (Quadruple star)	16h30.9m	+01°59'
Messier 107 (Glob. cluster)	16h32.5m	-13°03'
Messier 12 (Globular cluster)	16h47.2m	-01°57'
24 Ophiuchi (Double star)	16h56.8m	-23°09'
Messier 10 (Globular cluster)	16h57.1m	-04°06'
Messier 62 (Globular cluster)	17h01.2m	-30°07'
Messier 19 (Globular cluster)	17h02.6m	-26°16'
Barnard 57 (Dark Nebula)	17h08.3m	-22°50'
Barnard 60 (Dark Nebula)	17h11.8m	-22°26'
Barnard 246 (Dark Nebula)	17h12.0m	-22°40'
NGC 6309 (Plan Neb m11.5)	17h14.1m	-12°55'
Barnard 61 (Dark Nebula)	17h15.2m	-20°21'
36 Ophiuchi (Multiple star)	17h15.3m	-26°36'
Barnard 62 (Dark Nebula)	17h16.2m	-22°53'
Barnard 63 (Dark Nebula)	17h16.5m	-21°29'
Barnard 64 (Dark Nebula)	17h17.2m	-18°32'
39 Ophiuchi (Double star)	17h18.0m	-24°17'
Messier 9 (Globular cluster)	17h19.2m	-18°31'
β126 (Triple star)	17h19.9m	-17°45'
Barnard 59 (Dark Nebula)	17h21m	-27°23'
Barnard 72 (Dark Nebula)	17h23.5m	-23°38'
NGC 6369 (Plan Neb m11.4)	17h29.3m	-23°46'
Barnard 78 (Dark Nebula)	17h33m	-26°30'
Messier 14 (Globular cluster)	17h37.6m	-03°15'
Barnard's Star (mag 9.5)	17h57.8m	+04°42'
τ Ophiuchi (Triple star)	18h03.1m	-08°11'
70 Ophiuchi (Multiple star)	18h05.5m	+02°30'
NGC 6572 (Plan Neb mag8.1)	18h12.1m	+06°51'
NGC 6633 (Open cluster)	18h27.7m	+06°34'



## CVAS Minutes – May 2016

There was no meeting in May.

## Upcoming Star Parties

- 03 Jun CVAS Star Party – Heritage Park  
(2456 S 800 W, Nibley)
- 10 Jun Annual Pot-Luck Dinner and Star  
Party – Nibley West Pavilion (850 W  
2450 S, Nibley) (7:00pm)
- 11 Jun Solar Party – Logan Library (10am –  
11:30am)
- 08 Jul CVAS Star Party – Heritage Park
- 15 Jul Public Star Party – Heritage Park
- 16 Jul Solar Party – Logan Library (10am –  
11:30am)

## Upcoming Events

- 03 Jun Saturn at opposition  
Mercury 0.5° north of Moon  
200 inch Hale Telescope dedicated  
(1948)  
Ed White, first American to walk in  
space (1965)
- 04 Jun New Moon
- 05 Jun Mercury at greatest western  
Elongation
- 08 Jun Giovanni Cassini born (1625)
- 12 Jun First Quarter Moon
- 13 Jun Pioneer 10 leaves solar system (1983)
- 14 Jun Flag Day  
Earliest sunrise of the year
- 16 Jun Valentina Tereshkova, first woman in  
space (1963)
- 18 Jun Sally Ride, first American woman in  
space (1983)
- 19 Jun Father's Day
- 20 Jun Full Moon  
Summer Solstice
- 22 Jun Royal Greenwich Observatory  
founded (1675)  
James Christy discovers Pluto's moon  
Charon (1978)
- 26 Jun Charles Messier born (1730)  
Pluto passes 2.7' due south of  
magnitude 2.9  $\pi$  Sagittarii.
- 27 Jun Last Quarter Moon
- 29 Jun George Ellery Hale born (1868)
- 30 Jun Tunguska impact (1908)  
Cassini arrives at Saturn (2004)