From The Editor

Back in the olden days when the club was first formed, we printed the Event Horizon newsletter in time for general meetings so we could hand it out to the members. This saved a considerable amount of money in postage, envelopes and labels. Not to mention the time needed to fold the newsletters, stuff them into the envelopes and take them to the post office! Now that Event Horizon is accessed electronically by the vast majority of our members, we are no longer confined to a (variable) publishing date dependent on our general meetings. Publishing the newsletter at the first of each month makes listing astronomical and club events much simpler. The Sky This Month will no longer have to cover half of this month and half of next. It can follow the convention of all the other astronomical calendars in existence. We can also use the newsletter to highlight the upcoming meeting and include speaker biographies. I had planned on moving to a first-of-the-month publishing date with our September issue,

From the Chair by Steve Germann

I thank the many regular contributors who help make the EH a top-notch astronomy monthly. It's a tribute to our club that so many interesting things can be chronicled.

At our meeting in June, our speaker is Peter Brown who will tell us about the Great Grimsby Meteor of 2009.

Peter co-ordinates the Southern Ontario Meteor Watch, an assembly of all-sky cameras placed strategically in the province. When a high-altitude fireball is seen by 2 or more cameras, its path in the sky, orbit and debris field can be estimated. There's even a chance its orbit can be tracked back into photos and the object found there. For a tiny meteor, it's not going to show up in any photos, of course. It will be fascinating indeed to hear what's possible.

The regular HAA meeting will be held on the THIRD Friday in June, to accommodate the moon phase, our speaker's schedule, Father's Day Weekend, and the schedule of many HAA members, since the star party season is just beginning.

Speaking of star parties, the summer is the best time for them. Camping with your telescope set up near the tent means you have minimal unwind-

IN THIS ISSUE:

From the Chair (continued)

ing to go to sleep after a late-night observing session, and every incentive to observe again the next evening.

I have been to many star parties, and I have been able to use my scope every single night, if only for a few hours sometimes.

Cherry Springs Star Party will give you a view through truly dark skies, in a park designed for Astronomy. It's a treat to visit, and they have wireless internet and wallsocket power as well.

Stellafane is a gathering of amateur telescope makers in Vermont. It precedes by one week Starfest, probably the best collection of astro-speakers outside of the HAA regular meeting routine (I wish).

Shortly after the next meeting will be the Summer Solstice. Everyone have a great summer and I hope to see you at some of our events, BCA, or sidewalk astronomy.

Don't forget, our September meeting will also be on the THIRD Friday, September 17, 2010.

From The Editor (continued)

but when this month's general meeting had to be delayed to June 18, it meant that the newsletter wouldn't be available until three weeks into June. It seemed like a perfect time to publish early. Watch your Inbox for a link to the next issue of Event Horizon on September 1st.

It is said that there are two seasons in Canada: winter and construction. Many amateur astronomers use the summer to build equipment, accessories or observatories. We have two articles this month from a couple of do-it-yourselfers that I hope will inspire you.

The list of upcoming events is extensive this month. Just because our general meetings end until September doesn't mean the club hibernates. I hope to see you at the many scheduled events & star parties over the summer. I also hope we have many opportunities for sidewalk astronomy and observing at Binbrook. Watch your email for opportunities to observe with us throughout the summer.

I wish you all a happy, safe and CLEAR summer!!

Ann Tekatch

June 2010 Treasurer's Report by Don Pullen

(Unaudited)

Cash opening Balance (1 May 2010)	$ 4210.06
Expenses	$ 0.00
Revenue	$ 235.00
Closing Balance (31 May 2010)	$ 4445.06

Notes:
1. Major revenue sources included: 50/50 ($35.00), Memberships ($85), Messier Marathon Donations ($115)
2. No expenses incurred within month

This Month's Masthead Photo: by Ann Tekatch. Taken Saturday, May 29 at Rattlesnake Point Conservation Area, Canon G10 on automatic settings. Photo processed with Adobe Photoshop Elements to lighten the shadows.
In the picture, as the sun sets behind him, John Gauvreau shares astronomical lore with a group of totally captivated Girl Guides.
Correction to last month's photo credits: Photo of Comet Wild 2 was taken on April 14, not April 12 as stated. My apologies to Bob Christmas for the error.

My Backyard Observatory by Les Webb

"The best accessory for a telescope is its own observatory." I remember Ann Tekatch saying those words to me many years ago. I believe it was when we were both members of the Hamilton RASC. Ann hasn't aged a day since then! *(Thanks Les. The cheque is in the mail. - ed.)*

It was Labour Day weekend in 2008 when I got the bug to build one. I remember hauling everything out to the patio for the evening and waiting for it to get dark enough to polar align the mount. Then my neighbours turned on their patio light (1,000 watt floodlight). I called her and she was good enough to turn it off, but, 20 minutes later, it was on again. I waited because I knew they don't usually leave the light on all night. However, at 11:15 pm, I decided to give up and pack everything up.

Further down my yard by the garden, trees and my hedge block all the lights, but I was not about to move everything. Plus, I will not leave equipment out in an unfenced yard with access from all along the riverbank. My yard is quite dark as sites go. The west is blocked with high trees, which block out the light from Brantford. It's not perfect by any means, but as Mick Jagger says: "You can't always get what you want, but sometimes you can get what you need."

So with this in mind I set about planning to build my own roll-off roof observatory. I had the plans from SkyShed, which I had won at Starfest one year. I didn't like them that much, so I spent the next 6 months designing my own. My main considerations in the design were: location in the backyard to get the best view of the sky that I could; keep my wife happy; use a wooden floor on slabs; height from the floor to the roof; and what type of roof would be best.

I settled on a wooden floor, 12" off the ground. A 4x4 pressure-treated frame is set on concrete blocks, which rest on 18" square patio slabs. I worked out that they would not sink much into the lawn.

For the overall size of the observatory, 8' x 8' would be too small, giving inside dimensions of only 7'4". Although 9' x9' would be okay, all the standard sized materials made 10' x 10' more appealing. There would be less cutting, more room and you'd have to buy the same lumber for a 9 x 9 structure as you would for a 10 x 10. As for any by-laws, the observatory is 10 x 10 exactly 3' from the property line where only 2' is required as it is not a fixed structure. The supports at the back for the roof, well they're there for hanging flower baskets if anyone ever asks!

I pondered what type of roof: normal wood & shingles or plastic. I chose a normal roof with a 30-degree pitch so it would support a snow load. Plastic was too expensive and I didn't like the idea of cutting the plastic and risking it shattering or cracking.

I decided on using 12 casters with locks on six of them (3 per side) for the roll off roof. (See photo at right) These would roll down between two rails on each side. I used 1/2" electrical metal tubing for this because it was cheap, rustproof and if secured every 12" with 3 1/2" screws and 3/8" spacer under the tube, it would work perfectly.

Continued on p. 4

My Backyard Observatory (continued)

I built the roof frame separately from the structure, lifted it up and slid it between the rails. I had allowed 1/4" of play, side to side, and it went up no problem! Once in place, I added the sheathing and shingles as well as more bracing to strengthen it and prevent any warping. It survived the winter perfectly. I calculated the weight of the roof plus a snow layer of 4 or 5 inches to be 750 lbs. max. I use a winch to pull it open and close, but I can move it by hand myself if I want to.

The telescope pier (left) is made of 4" diameter 0.200" steel pipe with a 10" diameter 1/2" thick steel flange welded on the bottom. There is a machined inner pipe, which is 3' long that slides into the pier and locks in place to make the height adjustable. All of this is mounted on a 4' deep, 12" diameter concrete pile set into the ground. It doesn't move much at all I can tell you!

The top of the pier was made to fit my Super Polaris German equatorial mount. (See photo below) Eventually I want to replace this with an equatorial GoTo mount with dual axis control for auto tracking.

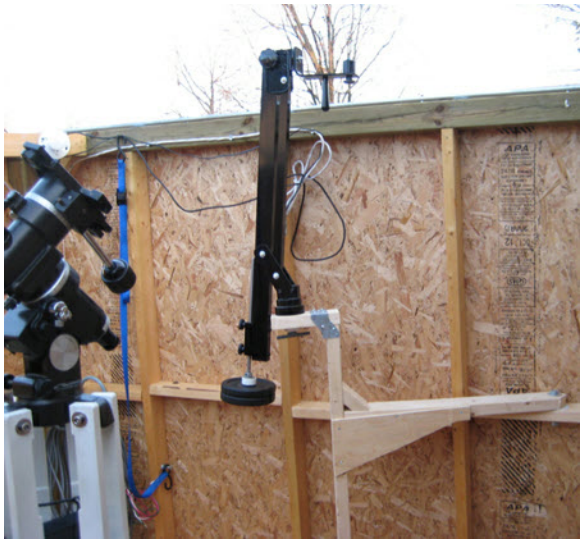
I have 120volt power and light dimmers for both white and red lights as well as power for the mount. The receptacles are split, top plug 120v lower plug variable AC.

The inside of the observatory still needs some work such as making shelves, etc., but it is very functional. I use a 40 watt light bulb on a dimmer to keep the mount "warm" when not in use so that condensation will not form on it. It is, of course, covered with an insulated cover while not in use. This also weathered the winter well.

The roof is secured when closed by 4 Ti-downs and the six locks on the wheels. It only takes a couple of minutes to open or close the observatory. Knowing that I can leave my equipment outside and be able to use it anytime and lock it up while I go inside is very pleasing.

Continued on p.5

My Backyard Observatory (continued)



I don't leave the OTA, eyepieces, etc. in the observatory, but all of that equipment is very portable.

I have mounted a swivel wooden mount to the inside of the observatory to hold the parallelogram mount for my 11 x80 binoculars as you can see in the photo on the left. Jim and John thought this was a great idea.

I will eventually run hydro underground to the observatory, but at the moment, a suspended extension cord supplies the power. The undercoating, as you can see in the photo (below), was a pinky/orange colour. This was because I asked a friend if they had any old paint they didn't need and I mixed it all together. I saved $100 on paint and I recycled paint that would have been thrown away. The topcoat was the same - I had quite a bit of leftover grey and blue paint from the office so I mixed it together. I still have almost a gallon left for touch-ups on the observatory!

If anyone would like to see the observatory or wants help, I would be glad to offer my assistance. I am also planning an evening for some members to come over and use it as well as my backyard for observing. It would be a great evening!

The total cost of my observatory was approximately $1,800. Trust me, it's worth every penny and all the effort I put into building it.

For Sale:

8” (203 mm) Meade S.C.T. , focal length 2000 mm, yoke mount, clock drive, red dot finder, illuminated setting circles and a dew shield but no tripod. (I can make an adapter to fit most standard tripods and piers.) $600.00 or best offer. Alternatively, I need 3-2" eyepieces, a 2"--2x barlow, a 2” mirror diagonal and 5-2" lunar & planetary filters. I will trade the telescope for items of equal value.
Please contact Harvey Garden at 905-692-4595.

May General Meeting Report by Bob Christmas

The May meeting at the Hamilton Spectator auditorium was chaired last month by Mario Carr, standing in for HAA chair Steve Germann, who was out of town on business. Mario got the meeting started at 7:30 with a few miscellaneous announcements.

Mario then handed the floor off to Mike Jefferson, who told the meeting audience about his wonderful trip to Australia and New Zealand the previous month. Mike brought lots of show-and-tell material, mostly photos, from his trip, which he had put at the back.

Don Pullen, our main speaker at May's General Meeting
Photo courtesy of Ann Tekatch

After Mike, the evening's main speaker, HAA Treasurer Don Pullen, gave his talk of Space Science. Don had given an abbreviated version of this talk at the January HAA meeting, and he gave this talk in April at the monthly Buffalo Astronomical Association meeting. Don's talk dealt with "interesting tidbits in the world of astronomy, cosmology, and aerospace engineering". He talked about the recent upgrades to the Hubble Space Telescope, and the cutting edge science it is now involved in, including the detection of the smallest object yet to be discovered in the Kuiper Belt beyond Neptune's orbit -- all of 1 km across! Don also mentioned the Hayabusa satellite, the Spirit and Opportunity rovers on Mars, which are still going strong after all these years, and the Mars Reconnaissance satellite, which took a stunning image of the Martian moon Phobos recently. Don's talk also updated us on the Cassini and New Horizons probes, the SOHO Solar Dynamics Observatory, the Chandra Space Telescope, the Wide Field Infrared Survey Explorer, the Corot and Kepler missions, and various other current space news.

After Don's talk, there was our usual intermission, which gave people opportunities to chat, as well as to look at all of Mike's pictures from his trip. After the break, Alex Tekatch drew tickets for the door prizes and 50/50 draw.

Up next was John Gauvreau, who did The Sky This Month for May 2010. John gave everybody a heads-up about the passing that weekend of the International Space Station and the Space Shuttle Atlantis, which was catching up to the ISS at the time. He then gave everybody a tour of deep sky sights around the Big Dipper, in Ursa Major, including the galaxies M81 and M82, M97 – the Owl Nebula, and galaxy M108, as well as the trio of galaxies M65, M66 and NGC 3628 in Leo. He also talked about Comet 81P Wild 2 in Virgo, with a little explanation, photo, and help from yours truly. He also showed numerous images recently taken by HAA members, including his own, images by yours truly (Bob C), as well as lunar images from Don Pullen and Joe McArdle. John also gave a short history/physics lesson about astronomer Johannes Kepler, and Kepler's laws of planetary motion.

After the meeting, about a dozen and a half of us reconvened at Boston Pizza on Main Street west, in Hamilton -- although about three other members went to Kelsey's instead!

It was a fine evening of astronomical learning indeed – fantastic!

Astronomy Book Club Meeting
Sat. June 26 at 7:30 pm.
What inspired you to get into astronomy? Your astronomical inspiration could be anything from a book, article, video, magazine, person or whatever. Come out and discuss it. RSVP Mario Carr at mariocarr@cogeco.ca.

My Favourite "Transformer" by Harvey Garden

Hello fellow HAA members! I would like to introduce you to my own "Transformer":

Before:

After:

Who would have guessed that a binocular station was inside of the box? Any member who is interested in building a binocular box is welcome to get in touch with me. My email address is harvey.garden@gmail.com.

Scouting and Astronomy – Coming Together in August by Don Pullen

2010 marks the 100th Anniversary of Scouting in Canada. To celebrate, several scout troops are organising a "Jamboree" (a large group of scouts camping together) within the city limits of Burlington. Called the Burlington Centennial Camp, it's going to be held the weekend of August 27 to 29. This is the weekend BEFORE the long Labour Day weekend.

When we held our public observing night in Burlington back in January, I was approached by one of the leaders to see if we wanted to help with this event. The organisers would like us to set up telescopes on Friday and Saturday nights (weather permitting) to provide a major evening activity for the Scouts.

This event is open to all segments of Scouting and Guiding, which means we'll have boys and girls from as young as 5 or 6, up to 18 years of age, plus all the leaders. So far, they have received interest from over 300 people in attending the jamboree.

It's going to be held at Nelson Arena on New Street. Camp and activities will be set up in the large field behind the arena.

We are looking for volunteers to help out for one or both nights. Since there will be so many children of

Scouting and Astronomy – Coming Together in August (continued)

various ages, we won't be able to handle the items necessary for them to earn their astronomy badges. However we can show them some interesting things, answer some questions and give them a good introduction to astronomy. For many, it will be their first experience looking through a scope.

As more details become available, we'll be updating our website. In the meantime, you can check their site at: ***www.burlingtoncamp.com***

So mark your calendars now, If you're interested in helping with this event, please contact any HAA council member, or email me at ***treasurer@amateurastronomy.org***.

HAA Astronomy Outreach at Rattlesnake Point by Ann Tekatch

On Saturday, May 29, nine of our members travelled to the Rattlesnake Point Conservation Area near Milton to help a group of about 40 Sparks, Brownies, Girl Guides and Pathfinders earn their astronomy badges. We arrived at the campground at about 7:30 pm and set up in a field not far from the campsites occupied by our hosts.

Among the HAA-ers gathered at Rattlesnake, we had 5 telescopes of various sizes and two pairs of binoculars with which to provide views of the planets, stars and deep sky objects. In addition, John Gauvreau brought along his large meteorite for some hands-on astronomy.

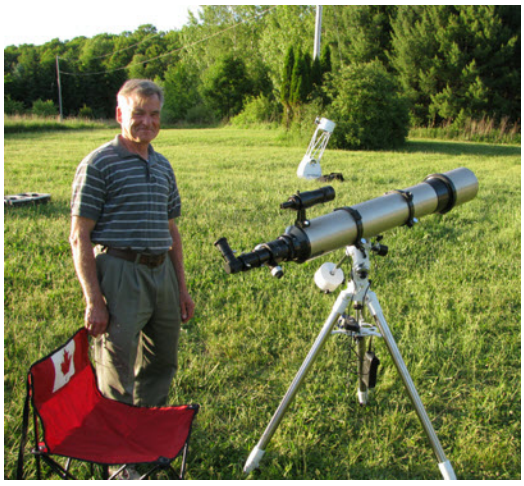
Andrew had thoughtfully checked the Heavens-Above website before we arrived and discovered that there would be a very bright Iridium flare visible from our location at 9:30 pm. It was a huge hit with the crowd.

The girls and their leaders were awed by views of Saturn, Mars, Venus and a handful of the brighter Messier objects. We left the campground at about 11:30 pm with the words of one leader still ringing in our ears: " You guys are way better than Randy Attwood!"

The HAA owes a big thank you to the volunteers who donated their time and fuel to travel to Rattlesnake: John Gauvreau, Don Pullen, Jim Wamsley, Gord Newell, Joe McArdle, Andrew Bruce, Brenda Frederick, Jackie Fulton and Ann Tekatch.

On this and the following page are a few photos taken by myself, Don Pullen and Joe McArdle:

John engages a group of Girl Guides in an astronomy pop quiz.



Gord getting ready for the crowds.

HAA Astronomy Outreach at Rattlesnake Point (continued)

"It's okay, they won't bite." Jackie(left) and Brenda (right) show a Spark how to look through big binocs.

Joe posing with a couple of admirers.

"Look up. Waaaayyy up!" Jim's telescope was the tallest on the field.

"Saturn is this big!"
Don's enthusiasm was shared by us all.

Andrew explains the finer points of a Newtonian reflector to a future optical engineer.

Ann builds a Solar System of Sparks.

Letter of Thanks from Winners of the BASEF James A. Winger Award

Dundas, ON
April 1, 2010

Dear Mr. Pullen:

Our names are Meg Sharpley and Deanna Khes-Grabiec and we're in Grade 8 at St. Augustine's school in Dundas. We participated in the 2010 Bay Area Science and Engineering Fair (BASEF) held at McMaster University from March 24-27, 2010.

We were the recipients of The James A. Winger Award sponsored by Hamilton Amateur Astronomers BASEF 2010 sponsored by your organization. We would like to thank you for your support of this year's Fair.

The purpose of our project was to measure and compare the amount of skyglow in an urban area compared to a rural area. We planned to do this using a manual camera and an imaging program. We wanted to measure skyglow to see how much light pollution is in rural and urban settlements in the night sky. We felt that light pollution was important to study because a great deal of it is unnecessary and is wasteful of increasingly limited resources. From this project we were able to learn a lot about the atmosphere and light pollution itself. This project really helped to open our eyes to the issue of pollution and the effect it has on the world and everything in it.

Sharing what we learned with the judges was a really great experience because they got to see what we now see concerning light pollution and what we as a whole need to do to help prevent the effects of pollution. When we shared parts of our project with the judges we were amazed to see that many people, not just us, had either never heard of skyglow or thought it was a big concern. This made sharing our project with others not just about marks or awards, but making other people aware of the world around them.

This being our second year at BASEF, definitely gave us a better perspective of other problems and new inventions in our world by viewing the other exhibits. Even though BASEF is lots of work and preparation, the experience and the memories we take away with us can last a life time. Getting the chance to go to BASEF and being able to represent our school is such a privilege. Being able to compete with the best around the area is even better because it challenged us to strive high and by striving you get the chance to succeed which in turn rewards you with the help of sponsors. Even if you do not think you are very interested in going into a Science or Technology career, learning about the different opportunities makes you want to think twice about future plans.

Again, thank you very much. Please consider continuing your corporate sponsorship of BASEF again next year.

Sincerely,

Meg Sharpley — Deanna Khes-Grabiec

Astronomy Crossword Puzzle by Mario Carr

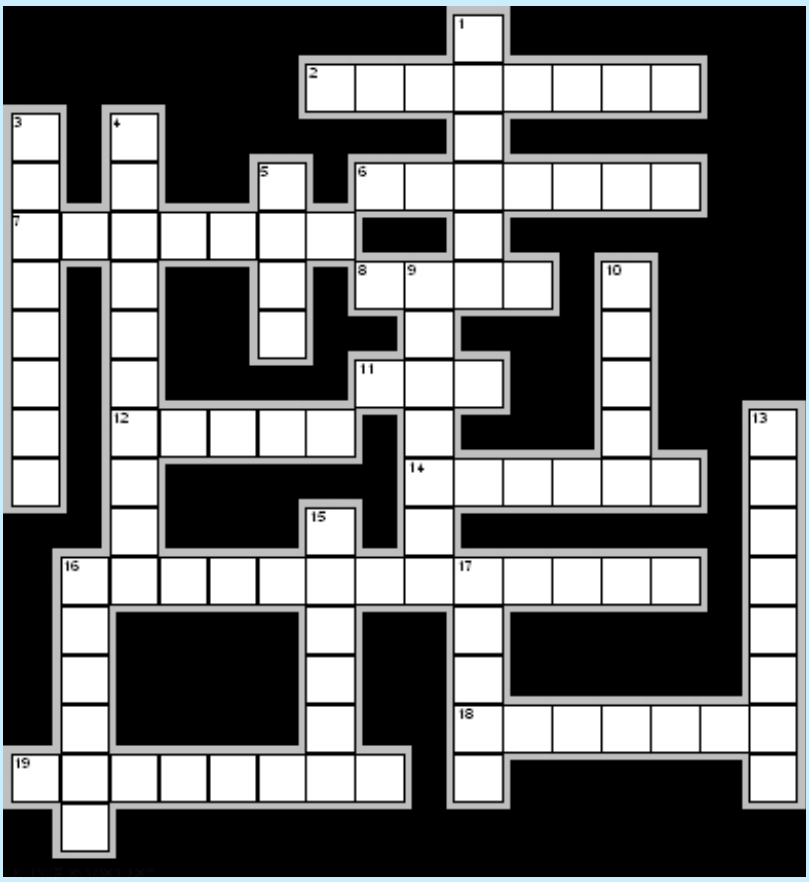
Across

2. Summer
6. Great globular
7. Closet to Mars on June 6 and 7
8. Big
11. Tea
12. Outermost end parts of Saturn's rings as seen from Earth
14. Coat
16. A radius
18. Cherry
19. A moon

Down

1. Located in Virgo during May
3. Summer Meteor shower
4. Clouds seen from Australia
5. Coal
9. Dwarf planet
10. This astronomer mapped the moon and has the same name as a James Bond actor
13. Summer star party
15. Nebula
16. A year of the stars author
17. Southern

(Answers on p.17)



The Sky This Month(and the next, and the next...)June 2010

by John Gauvreau

The summer Milky Way though Cygnus - photo by John Gauvreau last year at the Huronia Star Party.

As best as I can recall, summer is when I started observing as a teenager. My first deep-sky objects were M31, the Andromeda Galaxy, and M13, the great globular cluster of Hercules. These still draw me and many other observers night after night, but now the sky seems so much richer for all the other objects I have observed. Still though, summer just feels like the right time to observe, probably because of those long-ago memories. Now that summer is here again, let's look at what we can observe this year.

Of course, June brings the **Summer Solstice**, that moment when the Sun reaches its most northern point in our skies. This occurs on June 21st this year, and around that time we experience the longest days and shortest nights of the year. Twilight is also longest around this time, because just as the Sun is at its highest during the day, it is at its highest during the night too, and that means it remains not far below our horizon, keeping close to our skies and casting a twilight glow late into the evening and early in the morning. There are still plenty of dark hours though to observe, and those hours are all the better for the mild temperatures and fresh air of late spring and early summer.

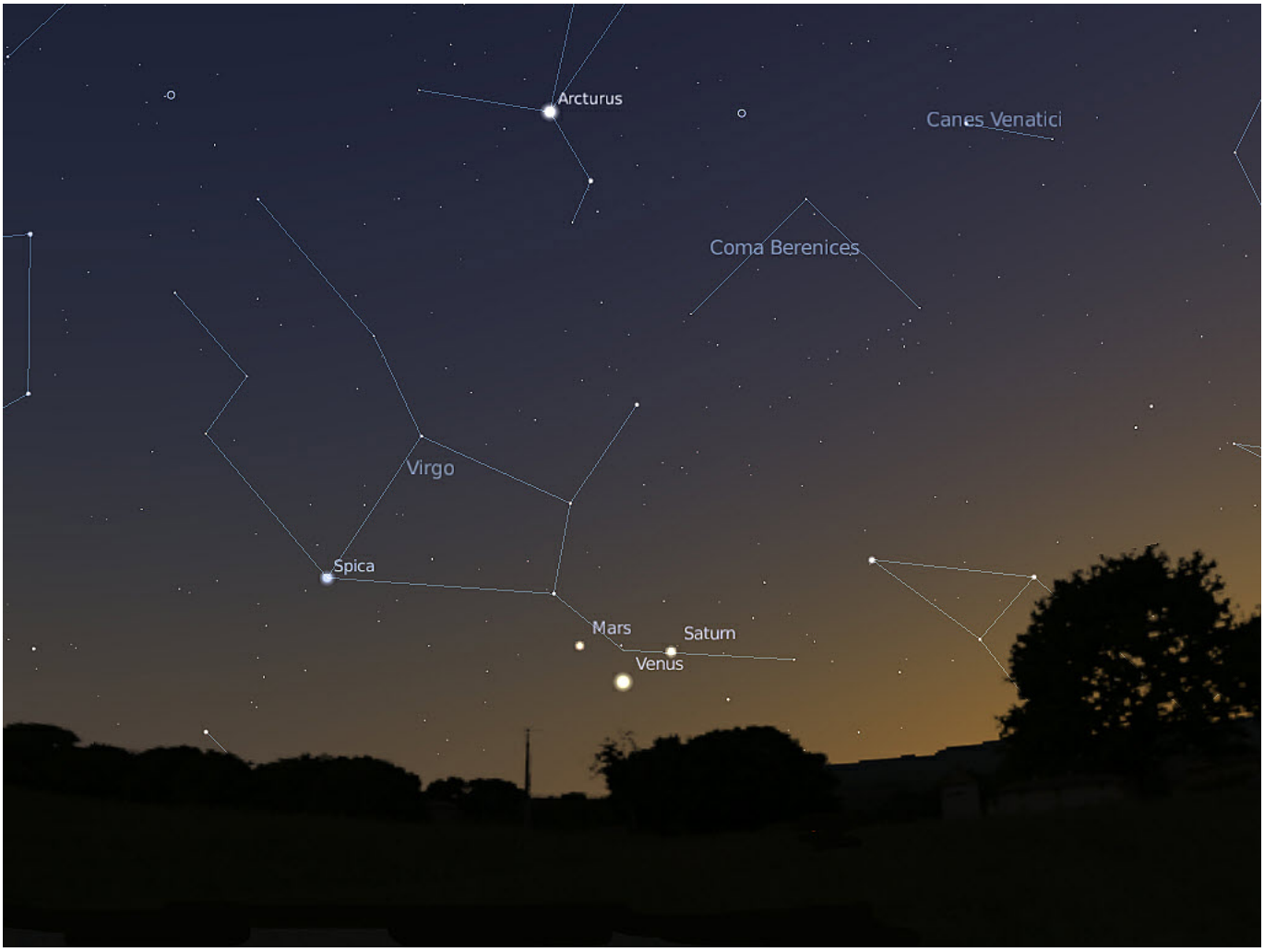
During a full Moon, the Sun and Moon are on opposite sides of the sky. If the Sun is at it's highest point in June, then the full Moon is at its lowest. This month's **Full Moon** occurs on June 26th, only a few days after Summer Solstice, so this will be a particularly low full moon. Although that may not make for the best observing conditions, enjoy the moonrise as it skims the horizon (it will appear to be the slowest moonrise of the year, happening in almost slow-motion) and enjoy the moody atmosphere as the moon lurks low in the hazy summer sky. This may give it that lovely golden-yellow colour that will make this Honey-Moon so suitable for those June weddings. July Full Moon occurs on July 25th and in August it occurs on the 24th.

Don't be discouraged by the **summer haze** that is turning your moon such a rich colour. Although the summer air often seems less than transparent, and you might think it a bad time for observing, remember that haze only occurs in relatively still air, and that still air often means steady air with excellent 'seeing'. 'Seeing' is the term we use to describe the steadiness of the atmosphere we are looking through, and good seeing means rock steady images in your telescope. Bright objects like planets show more detail, while still shining though the murky, haze filled sky. Often these hazy nights are the ones when you can pick out that extra detail on the surface of Jupiter, or the rings of Saturn. Curiously, I have read that until the latter half of the 20th century, Winter was actually the haziest

The Sky This Month June 2010 (continued)

season of the year, due to wood fires burning to heat homes. Of course, along with the haziest days of the year, we also get some of the clearest. My mother emigrated here from Scotland in the early 1950's and still talks about the "Canadian sky". She is referring to the deep, high blue of the summer day that came after the passage of a cold front, and contrasted so well with the hazy, pollutant filled sky that she left behind in Britain. It's the kind of sky that photographers like to include in calendar pictures of the Canadian shield. How lucky we are to have the still, hazy days of summer for planet observing, and the deep, clear nights to enjoy the Milky Way and its deep-sky treats. Every clear night is good for observing, if you know how to use it best.

The **Planets of Summer** remain unchanged from the past months. **Venus, Mars and Saturn** continue to be visible, but all are sinking in to the west. The three are converging to form a beautiful triangle of planets that will be at its best in mid-August. When two or more celestial objects appear in the same part of the sky we call it a conjunction. A conjunction of three planets is definitely a sight worth seeing! Start following their paths though the sky during July though, and watch as the three planets move closer and closer. During the Perseid Meteor shower there will be a reward for those observers who get out at dusk, as the three planets form a tight group and are joined by a crescent moon on August 12th and 13th. (although a little more spread out, the planets are also joined by a crescent moon one month earlier, on July 14th and 15th). These are great photo opportunities. Just a tripod and a camera that you can keep open for a 10 or 20 seconds should do the job. By August 20th, Venus and Mars appear less than 2 degrees apart. Compare their colours, and tell me if Mars looks more reddish when next to the pure white of Venus. This grouping of the planets is one of the highlights of the year, and visible to everyone, with no telescope required. Don't miss it!



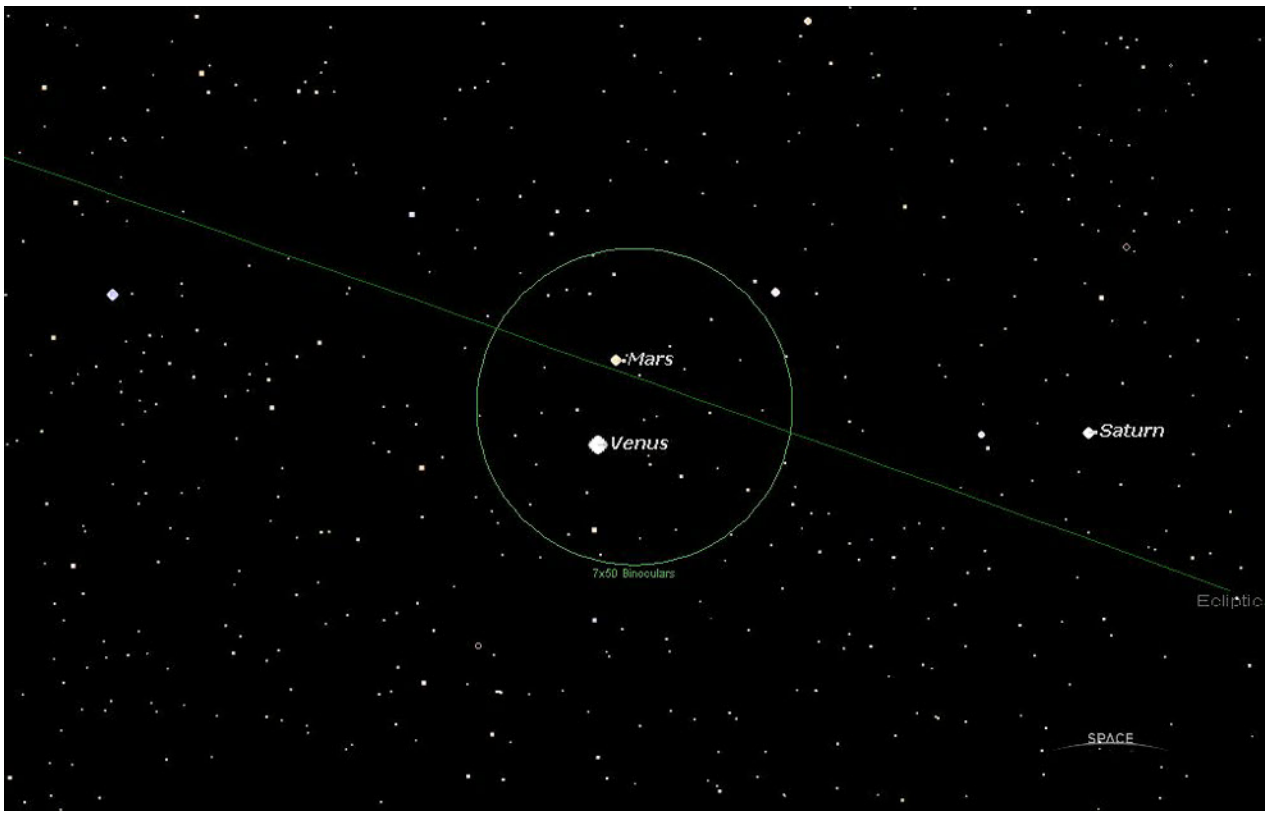
Planetary conjunction, for August 10th, at 9:15 in the west.

Continued on p. 14

The Sky This Month June 2010 (continued)

By mid August, **Jupiter** rises around 10:30 pm, although it doesn't reach its highest until the wee hours. Still, how nice to see this planet back again, and know that it is lining up for its turn as King of the Night, once our trio of Venus, Mars and Saturn finally do succumb to the western horizon. Jupiter has once again appeared to have lost one of its equatorial bands, and when it will return is anyone's guess, so keep an eye on this dynamic planet.

We have already mentioned the **Perseid Meteor Shower**. For many, this is the meteor event of the year. Because it is a very reliable shower, and falls in the warm month of August, it is easy to observe. Getting away from the light pollution of the city helps, and we will be opening the Binbrook Conservation Area on the night of August 11th for members to come and watch for meteors! A clear sky, a blanket to stretch out on a and a thermos of coffee or tea are your best observing aids. This year there is a crescent moon, but it sets by 9pm, so it should be a good year!



Venus and Mars easily fit into the same binocular field (and some wide field telescopes) around August 20th when they're less than 2 degrees apart.

I would hear about it from some members if I didn't mention the arrival of **Comet McNaught** (C/2009 R1) this summer. It will be high in the east by the end of June, and might be visible in binoculars for those willing to get up early enough to see it in the predawn sky. Any comet is a treat, and many are unpredictable, so this is definitely worth keeping an eye on.

The **deep-sky** of the summer is unquestionably the richest of the year. As the Milky Way rides high overhead, spanning from Sagittarius, though the Summer Triangle, to Cassiopeia, the trail of nebulae and clusters seems unending. I can remember attending a star party some years ago and ignoring the telescope beside me in favour of a reclining lawn chair and a pair of binoculars. Scanning along the Milky Way provided views of so many clusters and knots of stars that I soon stopped paying any attention to charts and catalogue numbers, and just looked at the starry sky. Lost in this reverie, I then stumbled across the Andromeda Galaxy, and was so startled by this unexpected (and huge!) cotton ball in space, that I nearly jumped up and shouted! Do yourself the same favour and just enjoy the night sky this season.

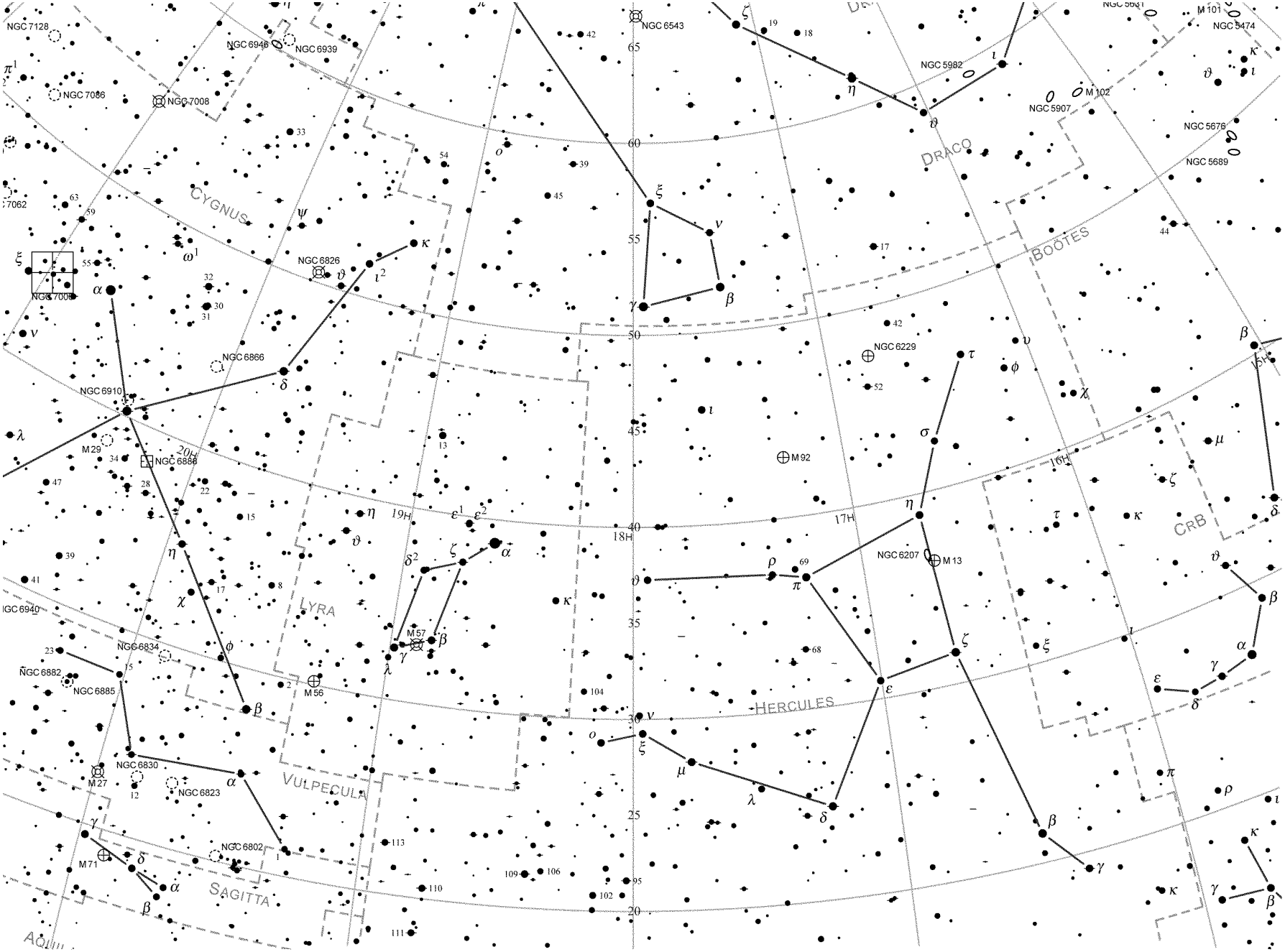


Chart 6: *RA* 16^h *to* 20^h, *Declination* $+65^o$ *to* $+20^o$

Mag-7 Star Atlas Project *(version 2.0)*

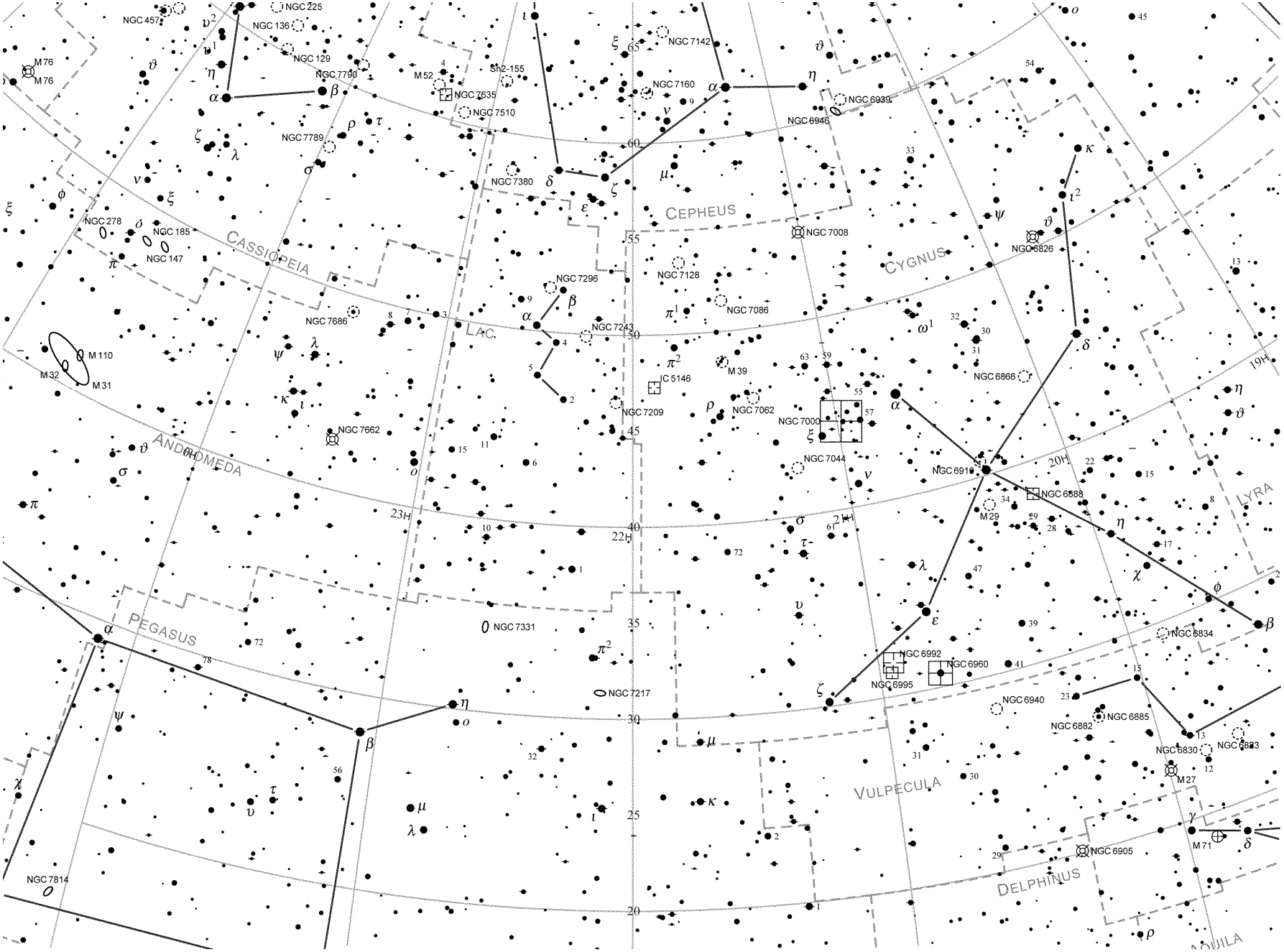


Chart 7: *RA* 20^h *to* 0^h, *Declination* $+65^o$ *to* $+20^o$

Magnitude: 0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0

Mag-7 Star Atlas Project *(version 2.0)*

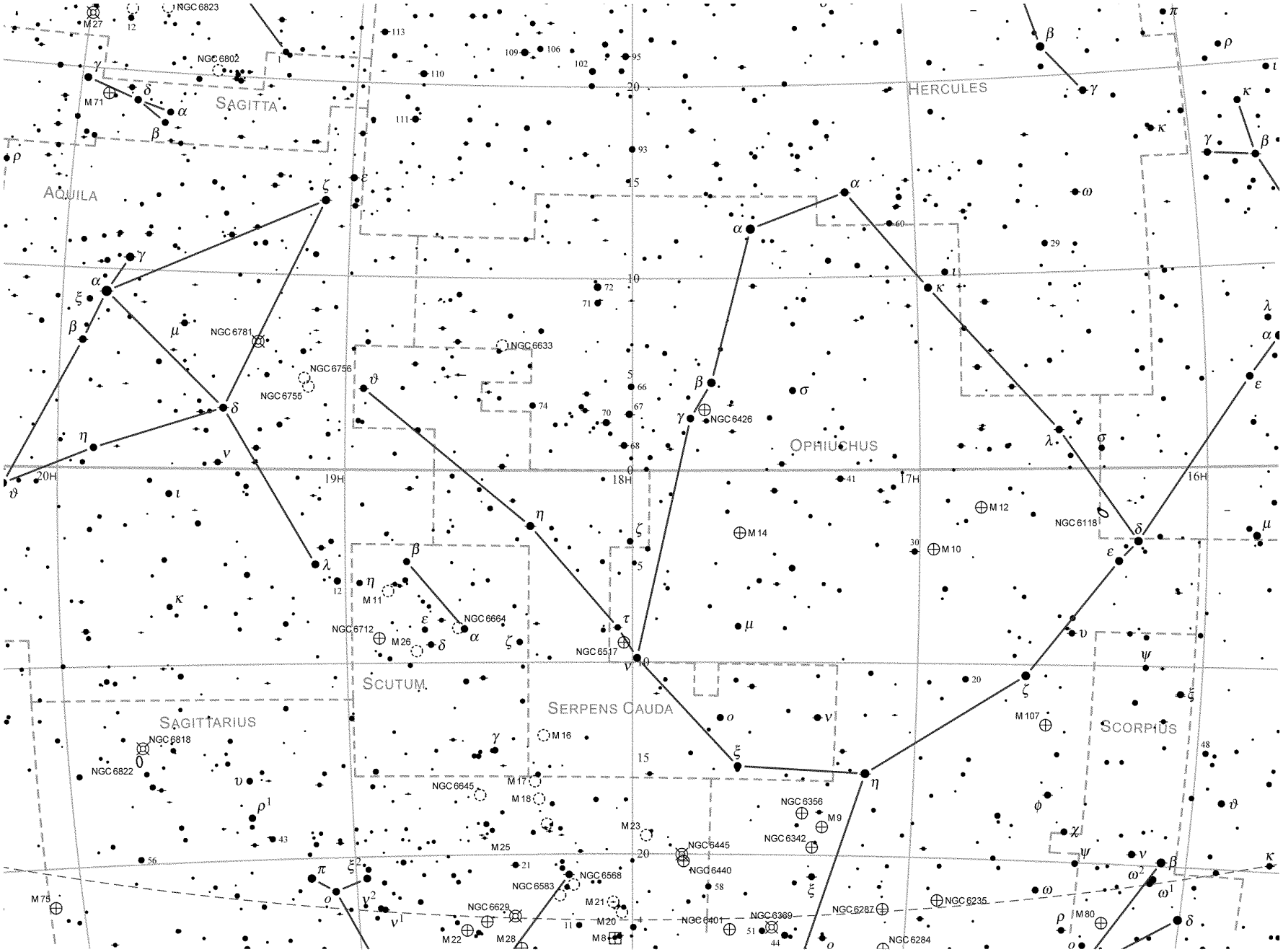


Chart 12: *RA* 16^h *to* 20^h, *Declination* $+20^o$ *to* -20^o

Magnitude: 0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0

Mag-7 Star Atlas Project *(version 2.0)*

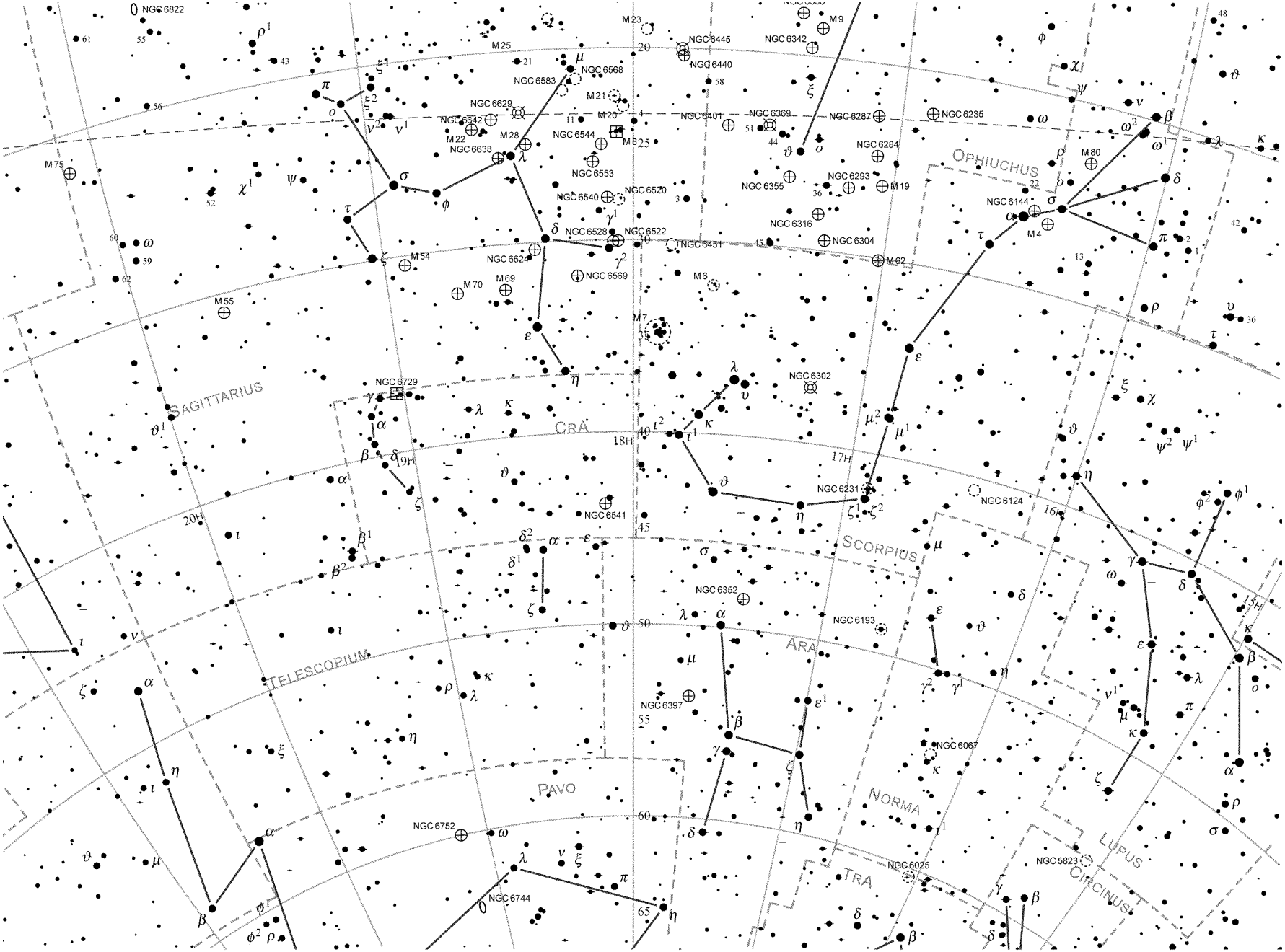


Chart 18: *RA* 16^h *to* 20^h, *Declination* -20^o *to* -65^o

Magnitude: 0.0 1.0 2.0 3.0 4.0 5.0 6.0 7.0

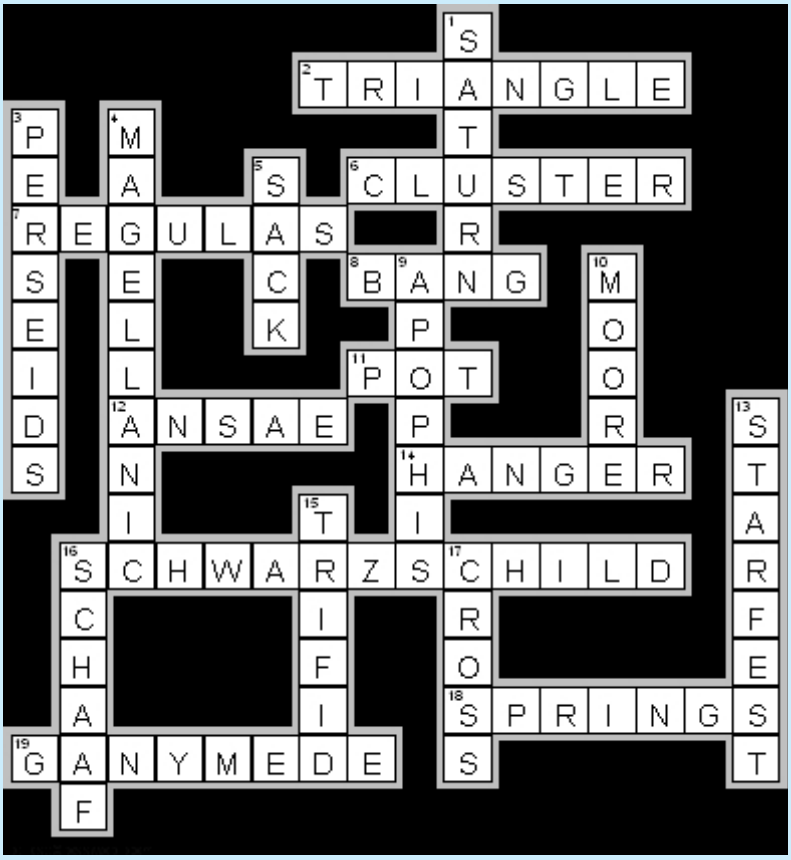
Mag-7 Star Atlas Project *(version 2.0)*

Cartoon Corner by Alexandra Tekatch

Summer Observing

Girl: “Ugh, mosquitoes!”
Man: “NOOOO - not bug spray!!! This is a $1,000 telescope!!”

Astronomy Crossword Puzzle (page 10) - Answers:



UPCOMING EVENTS

June 5 - Cosmology Discussion Group Meeting, 7:30 pm. Contact John Gauvreau for details and to RSVP: observing @amateurastronomy.org
June 10-13 Cherry Springs Star Party, Cherry Springs State Park, Pennsylvania. Pre-registration is required. See: http://www.astrohbg.org/CSSP/Information.html
June 18 - General Meeting, Hamilton Spectator Building., 7:30 pm. Speaker is Peter Brown of the University of Western Ontario. Topic is The Grimsby Meteorite.
June 19 - Tentatively scheduled Clean-Up Morning at the Tyneside Road area of the Binbrook Conservation Area. Details will be emailed to members.
June 26 - Book Club meeting, 7:30 pm. RSVP Mario Carr: mariocarr@cogeco.ca.
July 9-12 - Stargazing Manitoulin, details at: http://www.gordonspark.com/Stargazing_Manitoulin.pdf
July 17 - The Sky This Season-Live from Binbrook Conservation Area, 9pm -??
July 24 - Cosmology Discussion Group Meeting, 7:30 pm. Contact John Gauvreau for details and to RSVP: observing @amateurastronomy.org
August 5-8 - Stellafane, Springfield, Vermont. Details at: http://stellafane.org/convention/2010/index.html
Aug. 11 - Perseid Meteor Watch at Binbrook Conservation Area, 8pm to 11pm. Members and Public welcome.
Aug. 12-15 - Starfest, (Canada's biggest star party.) Riverplace Campground north of Mount Forest, Ontario. Details at: http://www.nyaa.ca/index.php?page=/sf10/sf.home10
August 27 & 28 - Boy Scouts in Burlington - see Don's article on p.7 of this issue. Volunteer stargazers needed!
Sept.8-12 - Huronia Star Party, Details at: http://www.hsp-ssaa.ca/HSP_Site.html
Sept.10-12 - Black Forest Star Party, Cherry Springs State Park, Pennsylvania. Details at: http://www.bfsp.org/starparty/index.cfm?CFID=2143011&CFTOKEN=30499628
Sept. 17 - General Meeting, Hamilton Spectator Building, 7:30 pm. * Note the change in date - it will be the THIRD Friday in September to accommodate the two major star parties.
Sept. 18 - Grimsby Public Night (raindate Sept. 19) - details to be announced.

2009-2010 Council

Chair	Steve Germann
Second Chair	Jackie Fulton
Treasurer	Don Pullen
Membership Director	Jim Wamsley
Observing Director	John Gauvreau
Event Horizon Editor	Ann Tekatch
Webmaster	Bob Christmas
Recorder	Mike Jefferson
Secretary	Wayne Stansfield
Public Education	Mario Carr
Councilors at Large	Brenda Frederick Ray Badgerow Harvey Garden Andrew Bruce Darrell Maude Joe McArdle

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Binbrook Conservation Area
Come observing with the HAA and see what a great location this is for stargazing, a family day or an outdoor function.
Please consider purchasing a season's pass for $70 to help support the park.
http://www.npca.ca/conservation-areas/binbrook/
905-692-3228

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