

Event Horizon

June 2005

Volume 12 Issue 8

Chair's Report

by Glenn Muller

It's one of those "good news – bad news" deals. First the bad news: Our June meeting will be the last until September. The good news is there will be lots of opportunity for get togethers in the next few months. And the first one is the June 11th Brantford Public Night.

Originally scheduled for May 14th, which was overcast, some of our members took the opportunity to scope out the Brantford Tourism Centre. It has a nice indoor meeting room which we plan to use from 7:30pm until it gets dark enough for observing. With this facility available the event can go "rain or shine" and, should the sky not cooperate, we can always stay inside to give presentations and answer questions.

Last month, Brantford Expositor reporter Tim Philp gave the HAA some nice publicity with an article that has been reprinted in this issue. It's a good opportunity to introduce our club to a neighbouring community so, if you can make it, please follow the directions posted elsewhere in the newsletter and on the website.

Public nights are also planned for July and August.

July 16th will see members set up scopes in Sam Lawrence Park on the Mountain brow. This is a popular park in the evening and we're hoping that a warm Summer night will make this informal event a success. And, since we got such a positive response for last year's Perseid Meteor Watch at Binbrook, we're going to do it again on August 12th. Of course, there will be the usual member's observing nights at Binbrook and, possibly, a session or two dedicated to Comet Tuttle in the evenings following the July 4th Deep Impact rendezvous - keep an eye on our website's "Activities" page for updates.

So far I've touched only on HAA events but, if you want to be part of a bigger picture, you should check out some of this summer's star parties. While the

NYAA Starfest (August 4th – 7th) is Mecca for many astronomers from Canada and the Northeastern States, there are also a few smaller but well-attended gatherings within a few hours driving of Hamilton.

Stargazing Manitoulin and The Manitoulin Star Party, held at Gordon's Park, Manitoulin Island, run from June 30th to July 4th, and August 11th to August 14th, respectively. Greg Emery has been to this site and reported extremely dark skies.

A somewhat intimate and inexpensive star party that Gail and I attended last year is Rochestarfest. Located just below Rochester, about two hours south-east of Buffalo, this event features free camping, decent skies, and Phil Harrington as this year's keynote speaker. The host club is very friendly and put on a nice buffet for Saturday night. Since Gail and I have this penciled in for July 8th – 10th, we would like to know if this also interests you. If so, please contact me at chair@amateurastronomy.org or check out www.rochesterastronomy.org for more information.

More than observing opportunities, star parties are extended social events and we've yet to attend one we didn't enjoy. If you haven't yet been to one, make this the year you find out just what you've been missing.

So, how's that for good news outweighing the bad news – while they'd never hire me at CNN – I rather like it that way.

Have a great Summer!

Glenn invites your comments on these topics or any aspect of the club. He can be reached via chair@amateurastronomy.org



Brantford viewing	page 3
Observing Notes	page 4
Eye Candy	page 8
For Sale	page 9

Upcoming events	page 9
NASA	page 10
Web Watch	page 10

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HAMILTON AMATEUR ASTRONOMERS

Event Horizon is a publication of the Hamilton Amateur Astronomers (HAA).

The HAA is an amateur astronomy club dedicated to the promotion and enjoyment of astronomy for people of all ages and experience levels.

The cost of the subscription is included in the \$25 individual or \$30 family membership fee for the year. Event Horizon is published a minimum of 10 times a year.

HAA Council

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Submissions to the web site or newsletter are welcome. Submissions may be edited for size & content.

Email Reminder notice

We send email reminders before each meeting which describes the location, time and topic of the general meeting.

If you're not on the list, make sure that you receive your reminder by sending a note to: publicity@amateurastronomy.org

Subscription Offer for Members

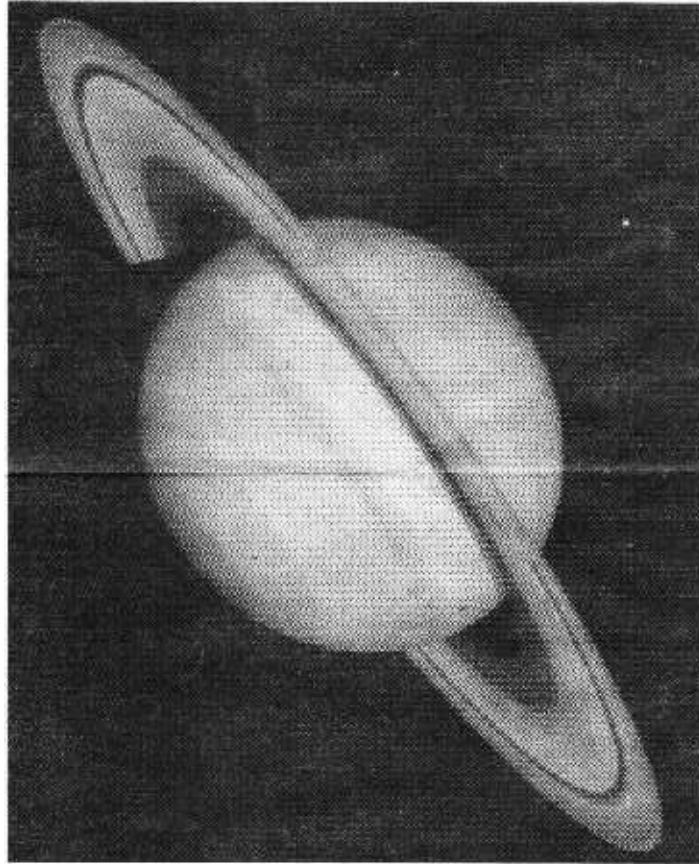
Members of the club are eligible for a discount on Sky & Telescope Magazine subscriptions.

The regular annual rate is \$49.95 (U.S.). HAA members pay only \$39.95 (U.S.).

Contact Ann Tekatch for information on how to sign up; tekatch@sympatico.ca 905-575-5433

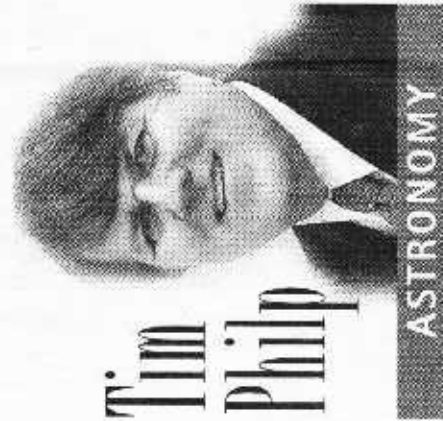
An Offer

Thinking of buying your first telescope but wondering what kind to get? Before you buy, consider this offer from Mike Spicer: a "loaner" 5 inch telescope with electronic alt-az controls. The scopes are lightweight, easy to set up and very easy to use. Mike is offering newer members of our club one of these telescopes to try out for a month or so. Interested? You can reach Mike by email at deBeneEsse2001@AOL.com or by phone at (905) 388-0602.



Catch a close-up look at Saturn at tonight's event.

MASA Photo



Tim Philip ASTRONOMY Astronomy Night in Brantford

In high school, a group of my friends used to get together for nights of star gazing as often as we could. One of these friends introduced me to a fellow in Hamilton who published an astronomy newsletter for his observing group. We got together and became good friends who had a mutual interest in astronomy.

While my interest in astronomy had been long-standing, it was this new friend who introduced me to the world of amateur astronomy and the contribution that non-professionals can make.

His specialty was variable star observation. Many stars change their brightness over periods ranging from hours to weeks. Amateurs can keep an eye on these stars and report their brightness over time to allow astronomers to build up a very comprehensive picture of the cycles that these stars go through.

Unfortunately, this fellow and I lost

looking through the lens, the image was on the computer screen. It was interesting as they fiddled with exposure times and focus to get a very nice image of a globular cluster of stars.

Everyone was extremely welcoming and I had a look at several objects including Jupiter, Saturn, a couple of globular clusters, and even a comet! That is one of the benefits of joining a group. You get to share your accomplishments with others and get advice on equipment and observation techniques. If you want more information on the Hamilton Amateur Astronomer Club, visit: <http://amateurastronomy.org/> for an overview of the club and its activities.

I broached the topic of a similar observation night here in Brantford and the club was enthusiastic about sharing their expertise. After a bit of planning, the group decided that they would bring their equipment to Brantford for a night of observation to allow the public to come out and have a look at the sky through their equipment.

If you would like to see what Saturn, the ringed planet, looks like or if you would like to see the bands and giant red spot on Jupiter, come out tonight to the Brantford Tourism Centre on Wayne Gretzky just North of the 403 and look for the telescopes in the parking lot.

This is a free event and club members will be available to show you the sky and explain what you are seeing. I plan to be there to help and if we get an enthusiastic response, we will hold other events at different times of the year.

As always, there is a risk of bad weather with this kind of event, but if the sky is clear, we will be there. If not, we will reschedule for later in the year.

I hope to meet a lot of you tonight. Perhaps what you see and learn will start you on a lifetime of observation of the universe.

Tim Philip of Brantford is a freelance writer.

Used with permission

Observing Notes by Mike Spicer and Glenn Muller

Monday June 06,08:36am by mike
SUMMER! IT'S SUMMER! IT'S....HAZY!

What an interesting first weekend of June! The air full of moisture so the night sky has only a handful of naked eye stars. I guess it's summer now because the warm, humid air is here.

Saturday evening our Chairman visited my office to give me pointers on using Powerpoint (thanks, Glenn!), so you can expect more from my future presentations. The sky didn't look inviting so the proposed Binbrook observing session was out. While scanning star atlas pages into the computer I set up a telescope on the patio and had my first good look at Mars about 4 am.

Mars will be a great sight in the late fall when at opposition. It will be over 20" in diameter and more than 20° higher in the sky than it was in 2003... so a more favourable observing target for Hamilton observers. No need to drive all the way to Florida to get good images of Mars this year!

Mars is just 8" in diameter at the beginning of June, magnitude +0.25 and easily dimmed by the haze near the horizon, but by 4 am it was high enough in the sky for me to see its little disk with a very large and bright S polar cap, dark green-grey continents against the salmon-coloured planet's disk. I was using a 3" apo scope and 5mm orthoscopic eyepiece. The disk is only 84% illuminated so it looked like a gibbous moon, not quite round. Little Phobos and tiny Deimos are very dim at magnitudes 13 and 14 respectively - invisible now, they will brighten quite a bit come fall. In 2003's Mars opposition a number of youngsters identified Phobos while looking at Mars in the 11" scope.

Sunday night another observer and I went to Binbrook Conservation Area for a few hours of binocular observing. It does not get dark until after 10:30 pm now. Binbrook's tree-less horizon lets you see below -40° declination. The entire tail of Scorpius, for example. A little of the constellation Ara... you get the point. Steve and I watched the Jovian moons, saw some globulars, I spotted the Leo triplet of galaxies falling into the west, R Coronae Borealis at magnitude 5.8, R Leonis about mag 6.4...and then heat lightening, iridium flares, several satellites and finally a thin, misty cloudiness descended.

I must report that the Binbrook front gate, damaged last month, has now been entirely removed. Anyone need two 10" diameter steel posts set in five feet of concrete? They are lying on the ground pending removal from the site. The park's temporary replacement "gate" is still controlled by the big brass lock that our key fits (good to know).

Saturday June 04,4:13pm by glenn The CSC does not look promising - if you are looking to go to Binbrook, tonight, I suggest you call us first (905) 570-4869 to make sure the gate will be open.

Friday June 03,10:17pm by glenn This is a new moon weekend and the Clear Sky Clock is offering some hope for

Saturday night. If conditions are favourable, we'll open Binbrook about 9:30pm. Check here for updates or call 905-570-4869 for further info.

Wednesday June 01,05:26am by mike
IMAGING WITH A BIG TELESCOPE

Wow, clear skies every night this week so far. I hope you have been out enjoying the observing weather before the mosquitoes get too thick. Monday and Tuesday evening May 30-31 Darrell and I started the Supernova Watch program at a local observatory, but the BIG telescope I am talking about is Andy's 14" Celestron SCT that we used afterward. Completing our testing and initial imaging runs at the observatory, we were joined by Andy and Bert, two very active observers. Luckily, Andy brought his excellent Celestron 14" SCT.

Andy's telescope is a beautiful instrument in near-perfect collimation on a heavy-duty GEM CGE go-to mount. Very quiet and very accurate. A 14" SCT with XLT coatings is a very large instrument, with great light-gathering power. Of course, being well-collimated, Andy's telescope also had near-perfect focus as well, limited only by the seeing (about 2 arc-seconds). Darrell moved our CCD imaging equipment to the 14" scope with excellent results.

Darrell and I stayed with Andy until almost 2 am. In the transparent cloud-free air, Andy's go-to scope made imaging much easier for us. We enjoyed his company as well as his equipment! Andy decided there and then to buy a DSI camera ("It's so simple, and with spectacular results!") Darrell collected excellent images of Jupiter and various deep sky objects considering the light pollution at the site. I hope we see Andy and his scope at Binbrook this summer!

Saturday May 28,10:51pm by mike OBSERVER NOTES,
28 May 05

The June 10th monthly meeting at the Spectator building will be our last until fall, so now is the time to make our plans for summer. Summer is great for public observing nights, member get-togethers at Binbrook, etc... and there are some special events happening this summer, too. As a club member who likes to observe, I had a few ideas to pass on to the club Council. I sent my ideas to our Club Chairman, Glenn Muller and received a reply almost immediately that my ideas would be on the agenda for the Council meeting 27 May. I decided to attend the meeting to see how Council works.

HAA council meets at the homes of its council members in turn. Our Observing Director Greg Emery hosted this month's meeting. It was very satisfying to see how well the members of council worked together to plan the summer's events. There's a lot of give-and-take and friendly ribbing, but the Chairman keeps everyone on the agenda and decisions are made very quickly with general agreement in an informal atmosphere. Anyone can speak to any topic or raise new ideas. Glenn circulates the agenda in advance and makes notes as we deal with each. He is an excellent Chairman, never overbearing, always interested in the views of others,

but able to have Council decide matters quickly.

So we have speakers lined up almost to the end of this year, several public observing events including Brantford, the Perseid Meteor Watch, Sam Lawrence Park, and Mars observing in the next couple of months, a BBQ in the fall. Many of my ideas were acted upon with thanks. It's a great club and you are encouraged to take part in all our summer activities. Anthony will provide all the details of these upcoming events on this web site far in advance, as usual!

Saturday May 28,10:34pm by mike WHAT A BUSY WEEK!

Invitations to observe at other locations this week, took me to a couple of members' home observatories. Very interesting to look through other telescopes at other back yards for a change. Wednesday for example, offered a chance to use an 8" Maksutov for observing Jupiter and imaging double stars and the moon. Thanks for inviting me over, Steve - great telescope!

Thursday there was a double transit of Jupiter, Io and Europa skimming across the disk in the early evening. Europa started crossing at 5:55 pm, followed by its shadow at 8:08... Io started its transit across the Jovian disk as Europa finished at dusk (8:35 pm). Europa's shadow finished its transit at 10:41 chased off the planet by the faster-moving Io. Io exited the face of Jupiter just 4 minutes later, followed by Io's shadow an hour later.

It was interesting to compare the shadows of these two satellites. Europa at 3,120 km in diameter is more than 500 km smaller than Io, so only 86% of Io's size. However, Europa is 1.7 times farther away than Io from the top of Jupiter's atmosphere and its shadow appears larger than Io's on those cloud-tops. The paths of the shadows was interesting, too - Europa's shadow passed above the NEB and looked darker than Io's which was superimposed on the brown NEB. Saturday May 21,03:50am by mike SUMMER STARTS IN 30 DAYS, YOU SAY?

What happened to Spring? I think we are going right from winter to summer this year. It's only mid-May and the June bugs were out in force tonight. I saw Scorpius and Ophiuchus high in the sky... why am I still wearing gloves and a hat while observing?

Five of us went out to Binbrook with some very nice telescopes: 4" and 5" refractors, a nice 5" Mak, an 8" Newtonian and an 11" SCT. By the time I arrived the others had already set up and Clyde was about to start imaging. There were no delays in aligning the telescopes and the evening was clear and warm ("low tonight, 9° C"). I put binoviewers on my scopes and looked at Saturn, already low in the west at dusk. Visitors wanted to look at the moon, but a gibbous moon is effulgent; I needed two ND9 filters screwed together, to tame its brightness.

It was a good night to compare a 5" refractor with a 5" Mak for clarity of view. Owners of particularly good telescopes must be wary or a newcomer will just buy your scope from under you. We did a tour of lunar features with seeing limited to 2 arc-seconds. Everyone saw a lot of irregularities

on Jupiter's bands and the peculiar triangle-shape of three Jovian moons. The views in the 11" were very nice, especially when I toured a number of globular clusters (remember our observing project for this summer?), but the bright moon and a bit of haze interfered.

Clyde concentrated on imaging, even trying faint planetaries (the other summer observing project). I talked Clyde into entering some of his DSI images in the Sky News photo contest (closing date 1 June), they are excellent shots taken without expensive equipment or hours of software manipulation. Good photos taken with average equipment requires skill and dedication...and HAA members like Bob Christmas and Clyde Miller are excellent examples of those outstanding qualities.

I think Clyde's 30 second single shot of M13 deserves to win the Sky News contest. It's a photo with unique character that I expect he will show at the June meeting.

Clyde captured M66, M81 and M82 Friday night while I stuck to visual observing. By 2 a.m. I had donned a winter coat, gloves and a hat but my toes were getting cold. My nose was running, a clear sign it was time to pack up and leave Binbrook. Guard your health, I say! I wouldn't want a lengthy illness wreaking havoc with my telescope use schedule! Telescope time is hard to come by and good weather seems pretty scarce too! Let's hope summer comes early and stays late this year! Friday May 20,05:24am by mike

Looking Good for Friday Night at Binbrook

Friday night 20 May looks good for observing. Clyde will have his 8" and DSI, I will bring the 11" and perhaps a 5" refractor; Tim is bringing his 5" and a few friends; Darrell expects to drop by to kibbutz the imaging and you are also invited to join us from 8:30 at Binbrook Conservation area (see map below) just south-east of Hamilton. Bring binoculars and a lounge chair if you have one... escape the air and light pollution of the city. You can observe R Coronae Borealis and R Leonis with us! Hope to see you there.

Friday May 20,05:21am by mike Observer's Notes, 18 May 2005 - Using a Go-to

I was invited to observe in another city on Tuesday and Wednesday of this week and took my friends up on those opportunities. The Sky Clock was less optimistic than me, so imaging was probably out and I looked forward to some visual observing with my friend's 5" telescope.

The accuracy of a go-to scope depends in part on the stars you select for the initial alignment, and how carefully you centre them. It's best to select stars that are widely separated in the sky (picking Capella and Vega is better than picking Castor and Pollux, for example!). When centering the stars, start with a wide-field eyepiece like a 32mm; once you have the star centered, switch to a high power eyepiece like a 5mm, to ensure that the star really is centered. A crosshair eyepiece helps; if you don't have one, put the star out-of-focus until the bloated image fills the eyepiece field of view, to be sure it is centered. Remember to re-focus before you go to the next alignment star!

You may hear more experienced observers poo-poo the

go-to telescope. But there's no denying that a go-to telescope is a real benefit to observing today. Lives are busier than they used to be, with less leisure time to spend on hobbies. Skies are busier, filled with satellites, planes and pollution so objects are harder to locate. Most people use a handset/mouse/palmpilot. They're comfortable with an Autostar or Nexstar in their hand when observing. The slewing sound (even of a Meade scope, apparently) is comforting to the modern observer... he's not alone, the scope is there, too, almost alive.

My friend's house has a fairly dark back yard with a very good E to W horizon and a clear view of Polaris. Before this night he had observed with a simple 492 controller (up, down, right, left). He found the 497 go-to controller to be complicated. Once I could see Polaris, it was it was easy to align his 5" scope. He was amazed at how the scope put objects in the field of view of his 25mm eyepiece every time! The optics in his 5" were excellent, the go-to right on! Now he is eager to drive to a dark site so he can look at faint DSO's... I predict that he will be looking for a very large go-to telescope by the end of summer!

Tuesday May 17,06:03am by mike COME OUT TO BINBROOK TUESDAY NIGHT

The Sky Clock does not lie! Tuesday after dark the sky will be clear, the seeing excellent, the air still and cool. A great night for lunar observing or imaging with that electronic eyepiece you haven't tried out yet! Who is up for a session at Binbrook starting at 8:30? (Coat, hat, gloves). Come on, you know ya waaaaaaan it. Email Mike if interested: deBeneEsse2001@AOL.com

Tuesday May 17,04:12am by mike
OBSERVER'S NOTES, 16 May 2005

Monday evening 16 May the clouds parted and the Hamilton air seemed rain-washed clean. There were a lot of stars in the sky - a much-welcomed change. Quite a bit of twinkle - seeing was limited to about 2 arc-seconds. A keen observer dropped by to pick up a dew shield and stayed for a few hours to look through the Nexstar 11.

We discussed two inch eyepieces. He already has 52mm erfle and likes its wide field of view. He was curious about mid-power wide-field eyepieces. My favourite two inch is the Meade 8.8 UWA, arguably one of the best eyepieces made. I showed him two-inch Naglers and Meade Ultra-wides; he wasn't keen on their great weight or cost. He liked the 1RPD eyepiece - a fantastic value for its price. Great contrast and clarity for a reasonable price, as he found when we observed Jupiter with it. You may have heard that 2" eyepieces are only for low-power, wide-field views, but that isn't the case. You can get excellent mid-and-high power two inch eyepieces with very good eye relief compared to the 1.25" eyepieces. Siebert makes an outstanding lightweight 7mm two inch eyepiece with clarity as good as an orthoscopic design, so you don't have to search around for a 1.25" adapter in the dark when you switch from low-power 2" eyepieces.

Tim Philp, the columnist who recently praised the HAA

for its commitment to public education, has given permission for HAA to scan his article "Astronomy Night in Brantford" and post it to this web site. I am sure HAA members will be pleased to see the article. You may also be pleased to hear that Mr. Philp will be joining HAA after recently meeting so many friendly and helpful club members! Welcome, Tim! Tim has an excellent Meade go-to scope, an ETX-125 with all the trimmings. Don't forget to bring your scope to the observing sessions, Tim.

As for the recent rain day in Brantford, we will try again on Saturday evening June 11th. Members are welcome to come out with telescopes, binoculars or what-have-you to show the sky to the Brantford public. Chairman Glenn will make sure you are provided in advance with all the details as to time and location. There is a fabulous meeting room for us to put on displays for the public from 7:30 - 9 pm, before we go out observing. If you have thoughts on a display, please let us know.

Sunday May 15,06:03am by mike
ASTRONOMY NIGHT IN BRANTFORD

Last month on Astronomy Day a reporter from Brantford came to our very well attended public night, then followed up at our observing session at Binbrook. Little did I know that he would write an article on his experiences with Hamilton Amateur Astronomers.

Tim Philp writes a weekly Astronomy column in the Brantford Expositor. This week's article (4 columns worth) was all devoted to HAA. And what a glowing article it was! I wonder if it can be put on our web page. Mr. Philp suggested we hold a public night in Brantford, and although it was overcast Clyde and I went to his site as scheduled on Saturday evening. I am glad we did!

The site - Brantford's new Tourism Centre - is on the Hamilton side of Brantford in an area with full-cut-off lighting and lots of room with a great horizon to the SE and S, just a minute from the Expressway. The Centre has a beautiful meeting hall with all the amenities - free! We were made very welcome. Mr. Philp will secure a site near first quarter moon in June, July and August if the HAA wishes to have public observing there (3 nights - one MUST be clear!). Who knows what might develop from that?

We adjourned from the Tourism Centre about 9 pm and went to Clyde's home to synchronize our schedules for the summer. By 11 pm it was clear out! A little later there was a pretty good display of (mostly green) aurorae visible from my patio. All in all, a very positive experience for this observer!

Saturday May 14,05:26am by mike
SSH, I WAS LATE FOR THE BIG MEETING

Friday the 13th. Pogo never liked the 13th. I was scheduled to give a talk on filters at the HAA monthly meeting. The Chair allotted me a generous 45 minutes. I thought up grandiose plans to address solar, lunar, planetary, deep sky, light pollution and imaging filters using my own photos and scans of the light curve for each type of filter.

Ah, but the grander the plan, the less likely it's realized. Friday afternoon I finished office work and turned to the final format of the talk. 80 photos and scans to accompany the text, all in video format for the digital projector. Astronomers seem to like watching projection shows and eschew dry printed matter presentations. I was in for a surprise.

At 7:30 as the HAA got underway, I was still at my computer, wondering (in colourful language) why the CD burning program had burned the text images but not the photos. I packed up the computer with the CD in it, no paper copy of the talk. I brought a case of filters for the curious and I remembered to bring 40 copies of the 2005 project booklets Observing Planetary Nebulae and Observing Globular Clusters for general distribution at the meeting. My motto: every spring, a new observing project.

Flying Westward down the Linc at 7:50 it occurred to me that the meeting was not at the Spec building, but at the Teamster's Hall across town on the lower East side. The police do not like when you turn around in the spaces by yellow plastic barrels at underpasses. I used Meadowlands instead. Now facing East, I hurried to Parkdale Ave, cars receding behind me each with a squadcar-red tinge. The lights were dimmed in the Hall, the meeting in progress as I arrived, seriously late.

Our Chair was so glad to see me! The professional astronomer was a no-show and our third speaker, Greg Emery was just finishing his informative talk on the Sky for May. He had great colour photos. Before I started my talk, I handed out booklets on observing planetaries....maybe the astronomers filling the room would look at the planetary booklet and not notice my filter talk was very dry.. with not one pretty colour pix.

No chance. They watched the text projected on the screen as I went through my presentation. I asked people to imagine they could see the photos but eyes were on me as I talked. They were silent, serious looking eyes. I tried levity... no one laughed at my jokes. Doug was absent so they couldn't laugh at his jokes, either. I think people at the very back could hear me but with Keith away, I couldn't be sure. 9:30 came mercifully with only few questions. I was finished, and famished.

Surprises followed. I was asked for several copies of the CD presentation, or paper copies of the text. "There was so much valuable information, why didn't you do a booklet like you did for eyepieces?" So they liked the talk. I handed out globular cluster booklets as gifts to the audience. Then the shocker... I didn't catch it all, but I think Chairman Glenn asked me to give another talk, on imaging. Later on I was told they liked the jokes, but were concentrating on the information, to remember it.

What a great club the HAA is. The leadership organizes a variety of presentations each meeting, always with one or two on practical observing, often adding a professional speaker. We are so lucky to have talent here in Hamilton. Our observing director is an excellent speaker with well prepared and colourful presentations. A large percentage of our members attend and actively take part at meetings. We hold

well-attended observing events for members and for the public. Why, there's one this Saturday the 14th... if you're not watching TV or eating a costly buffet, join us!

After meeting presentations, members remain, talking excitedly in groups about this or that observing or equipment matter. Such smiles, such camaraderie. They pick up our club newsletter Event Horizon that Anthony ensures is on display for each meeting (great job, Anthony). After the meeting, as many as 30 adjourn to dinner and discussion at Kelsey's or East Side Mario's.

New members say they really feel welcome and long-time members say there's always something new and interesting. Maybe that's why our events are so well attended! Hurrah for the HAA!

Saturday May 14,04:32am by mike

SO LONG TO THE BIG MAK

Wednesday May 11th the 8" Maksutov left my office for the last time. She looked so beautiful in the corner by the bookshelf, mounted on a beefy TAL mount and 4" pier. Now she's gone and there's a story in that.

Steve is an avid observer who bought an electronic-control mount from me for his 5" scope last summer. He said he was happy with it... but I caught the looks he had cast at the Nexstar 11. I knew he'd be back, eventually. He emailed me this week to ask advice on a bigger scope. I agreed the Celestron 11" CPC was a good value. He went to pick it up but alas, they will not arrive in the Canadian shops and astro-boutiques 'till winter 2005.

Steve wanted to see the 8" maksutov in my office. The mak is just about the perfect telescope: images as good as an apo refractor, completely colour-free, the OTA compact compared to refractors; permanent collimation once set, eyepiece always easy to access from a seated position. This 8" mak was heavy and required a beefy mount, so I bought the heaviest-duty TAL for it. Images were as good as in a 7" apo refractor I had recently sent off to a happy observer in Germany.

Steve said he'd be by Wednesday evening. I protested it was going to rain; he insisted "it will clear by midnight, we can observe then". I liked his enthusiasm. I set the scope out on the patio to cool. It rained about 8 pm so I brought it in. Steve came at 9 pm so I took it out again. At midnight the sky was clear with a very cold biting wind. Steve was ready to observe. Between sneezes I admired his spunk. My nose started to run as it always does when I get very cold, but we kept observing for hours. He carefully observed close doubles, Jupiter's bands (through the tree branches), and various DSOs like M57. He was impressed.

I didn't want him to buy the mak, after all, she's almost perfect. I set up the Nexstar 11" to dampen his love. Images are brighter, close doubles resolve better in the Nexstar... usually. Alas, the Mak was cooled down and the Nexstar was not. Steve was adamant he wanted the Mak. At 5:30 am, he drove off with her, mount and all. There's a big space in my office where the big Mak was... and wouldn't you know it, the very next night it was clear. Steve sent me a long email

gushing on how pleased he is with the big Mak, now resting on her mount at his house. He was specific about all the great objects he observed Thursday night with her. I hope he enjoys her exquisite company for many years to come, Steve. But what shall I do about that big empty space in my office? I had grown accustomed to her face...

Wednesday May 04,02:15am by mike
OBSERVING PROJECTS FOR 2005

Each year I try to develop interest in observing projects. In 2005 I have booklets available free of charge for HAA members who would like to take part in either Observing Planetary Nebulae or Observing Globular Clusters.

The 12 page booklets contain lists of 90 Globulars and 100 Planetary objects with their RA and Declination, Designations, size in " or ' of arc, description or concentration class, brightness, and constellation. The objects are listed by RA and each booklet contains photos or drawings of representative examples. Members are encouraged to use the recording sheet included with the Globular Cluster list and to draw what they see. I would be very interested in the results.

Planetary Nebulae are fascinating to observe under excellent conditions; globulars are bright and large enough to observe even under so-so conditions. Both types are relatively bright and suitable for imaging. I hope that members will take one of each booklet at the May Meeting and make an effort to observe these interesting objects during the warm weather of summer and fall.

EyeCandy

by *Bob Christmas*



Open Cluster M67
Extract from 400mm f/5.6 image.

Date: Sunday, May 1, 2005

Location in Sky: Cancer

Location on Earth: Spectacle Lake, near
Barry's Bay, Ontario

Exposure: 6 minutes

Film: Fuji Superia 1600



Antares and Globular Cluster M4

Extract from 400mm f/5.6 image. Another globular cluster, NGC 6144, appears just above and to the right of Antares.

Date: May 5, 2005

Location in Sky: Scorpius

Location on Earth: Spectacle Lake, near
Barry's Bay, Ontario

Exposure: 7 minutes

Film: Fuji Superia 1600

Stuff for Sale

1) Fujinon 10x70 FMT-SX Flat-Field Ultra-Bright Binoculars A beautiful pair of large-aperture binoculars for sweeping through the summer Milky Way. Razor-sharp images right to the edge of 5 deg 18 arcmin diameter field. Average transmission of coatings is 95% over the visible spectrum.

This pair of Fujinon 10x70 FMT-SX binoculars comes with all original items: - carrying case - booklet - lens cloth - neckstrap - objective covers

Asking \$600.00

2) 6mm Televue Radian eyepiece Beautiful 6mm Televue Radian complete with Skypiece case. Mint condition. Used infrequently. No longer have telescope to use it on. Original caps and box included.

A full 20mm of eye relief - view the entire field while wearing your glasses!

Asking \$300.00

3) WAT-902HS Low-light Video Camera WAT-902HS Low-light Video Camera. Manufacturer claims sensitivity to 0.0003 lux. Requires 12VDC. BNC output. Auto-iris connection on camera. Tripod socket. Like new. Perfect for meteor monitoring.

Asking \$200.00

If interested, please contact: Doug Welch
welch@physics.mcmaster.ca

Upcoming Events

Event: Brantford's 1st Public Astronomy Night

Date: Sat June 11th 2005 from 7:30 - 9pm

Location: It will be the Brantford Tourism Center @ Lynden Park Mall.

Directions are easy as follows:

Hwy 403 to Brantford

Wayne Gretzky Pkwy exit then north on Wayne Gretzky Pkwy.

Turn right into Lynden Park Mall entrance.

Turn right at the stop sign and the Tourism Center is straight ahead.

Can't be missed you can see it from all the aforementioned roads.

Admission: Free

Also: After 9pm, weather permitting, member's telescopes will be available for a public stargaze in the parking lot.

Event: Manitoulin Star Party

Date: June 30th to July 4th and August 11th to August 14th

Location: Gordon's Park, Manitoulin Island

Details: www.gordonspark.com/astronomy.html

Event: Rochestarfest

Date: July 8th - 10th

More info: chair@amateurastronomy.org

Event: Sam Lawrence Public viewing

Date: July 16th

Location: Sam Lawrence Park on the Hamilton Mountain brow

Admission: Free

Details: HAA members will set up telescopes for public viewing

Event: Hamilton Centre RASC Family BBQ

Date: July 16th. The event starts in the afternoon with Burgers and Sausages being served at around 17:00.

Location: RASC Observatory site in Waterdown

Details: The Hamilton RASC We would like to extend an invitation to members of the Hamilton Amateur Astronomers for this event. People should bring chairs, something to drink and any other food that they would like such as salads or desserts. In past years, it has been clear and people have observed well into the wee hours.

More info: email mark.kaye@sympatico.ca

Event: NYAA Starfest

Date: August 4th - 7th

Details: www.nyaa-starfest.com/starfest

Event: Perseid Meteor Watch

Date: August 12th

Admission: Free

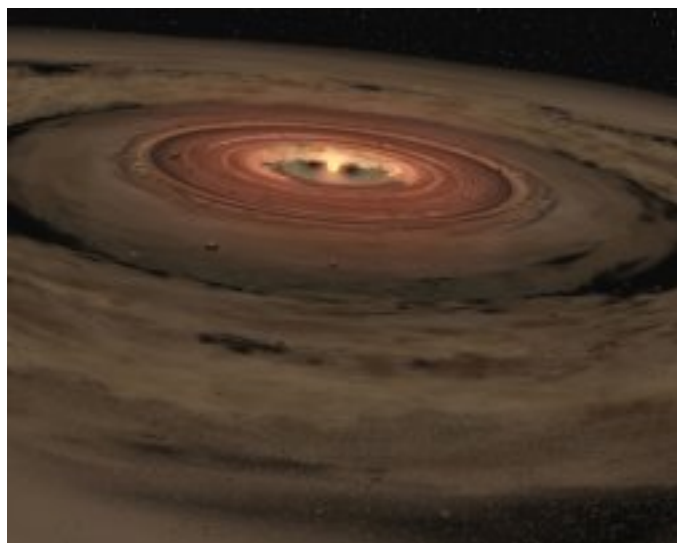
Location: Binbrook Conservation Area



Seeing in the Dark with Spitzer by Patrick Barry and Tony Phillips

Have you ever gotten up in the middle of the night, walked to the bathroom and, in the darkness, tripped over your dog? A tip from the world of high-tech espionage: next time use night-vision goggles.

Night vision goggles detect heat in the form of infrared radiation—a “color” normally invisible to the human eye. Wearing a pair you can see sleeping dogs, or anything that’s warm, in complete darkness.



Artist's rendering of brown dwarf OTS44 with its rotating planetary disk.

This same trick works in the darkness of space. Much of the exciting action in the cosmos is too dark for ordinary telescopes to see. For example, stars are born in the heart of dark interstellar clouds. While the stars themselves are bright, their birth-clouds are dense, practically impenetrable. The workings of star birth are thus hidden.

That’s why NASA launched the Spitzer Space Telescope into orbit in 2003. Like a giant set of infrared goggles, Spitzer allows scientists to peer into the darkness of space and see, for example, stars and planets being born. Dogs or dog *stars*: infrared radiation reveals both.

There is one problem, though, for astronomers. “Infrared telescopes on the ground can’t see very well,” explains Michelle Thaller, an astronomer at the California Institute of Technology. “Earth’s atmosphere blocks

most infrared light from above. It was important to put Spitzer into space where it can get a clear view of the cosmos.” The clear view provided by Spitzer recently allowed scientists to make a remarkable discovery: They found planets coalescing out of a disk of gas and dust that was circling—not a star—but a “failed star” not much bigger than a planet! Planets orbiting a giant planet? The celestial body at the center of this planetary system, called OTS 44, is only about 15 times the mass of Jupiter. Technically, it’s considered a “brown dwarf,” a kind of star that doesn’t have enough mass to trigger nuclear fusion and shine. Scientists had seen planetary systems forming around brown dwarfs before, but never around one so small and planet-like. Spitzer promises to continue making extraordinary discoveries like this one. Think of it as being like a Hubble Space Telescope for looking at invisible, infrared light. Like Hubble, Spitzer offers a view of the cosmos that’s leaps and bounds beyond anything that came before. Spitzer was designed to operate for at least two and a half years, but probably will last for five years or more.

For more about Spitzer and to see the latest images, go to www.spitzer.caltech.edu/spitzer. Kids and grown-ups will enjoy browsing common sights in infrared and visible light at the interactive infrared photo album on The Space Place, spaceplace.nasa.gov/en/kids/sirtf1/sirtf_action.shtml.

This article was provided by the Jet Propulsion Laboratory, California Institute of Technology, under a contract with the National Aeronautics and Space Administration.

Council meetings

All club members are welcome to attend the council meetings. Contact info@amateurastronomy.org for details.

Web Watch

Title: Deepspace animation

Description: A very interesting space animation.
Link Submitted by Brenda Cormick

Site: www.frontiermultimedia.com/deepspace.htm