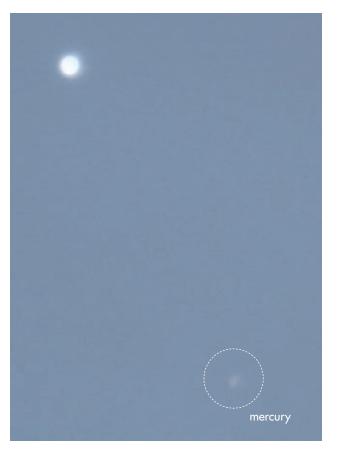


The Newsletter of the Saskatoon Centre of the Royal Astronomical Society of Canada

Vol. 36, No. 7/8 July/August 2005



Closer Approch of Venus and Mercury

Venus and Mercury within 4 arcminutes of each other June 27 at 16:40 UT. Picture taken with a digital camera through an 8-inch Meade reflector at 98 power during a rare cloudless moment in June. See more about this inside in McCurdy's view of it from Edmonton. — PHOTO BY TENHO TUOMI

In this issue...

Membership Information, Bottle Drive & U of S Observatory Hours	2
RASC Calendar of Events; General Meeting Announcement	3
Books for Sale; Sky Buys and Mirror Cells	3
Minutes of the Last Executive and General Meetings	4
Newsletters from Other Centres	4
Talking to Parks Helps to Save the Skies!	5
Mercury-Venus Close Appulse	6
Education Awards for Our Very Own!	6
Family Reunion Star Party	7
RASC-SASKATOON RAFFLE – BUY! SELL! WIN?!	7
Meteor Information for July	8
SSSP 2005 Update	9
The Messier, H-400 & H-400 II, FNGC, Binoc & EtU Club	10
RASC Observing Group Notes	10



Saskatoon Centre

The Royal Astronomical Society of Canada P.O. Box 317, RPO University Saskatoon, SK S7N 4J8

WEBSITE:

www.usask.ca/psychology/sarty/rasc E-MAIL: rmwaldron@shaw.ca

TELEPHONE: (306) 382-9428

Membership? It's never too late to join!

Regular: \$64.00/year Youth: \$34.25/year Lifetime: \$1100

The Saskatoon Centre operates on a one-year revolving membership. You will be a member for the next 12 months no matter when in the year you join. If you do not want to join at this time, ask to get onto our FREE 3-month Temporary Membership list. You will receive regular mailings of our *Saskatoon Skies* newsletter and will be invited to participate in Centre activities. Members are encouraged to renew early to avoid disruption in publications. Renew through the membership coordinator, Mike Clancy, or renew through the National Office and let Mike know that you did!

Benefits of Membership in the Saskatoon Centre

- knowledgeable & friendly amateur astronomers
- use of the Sleaford Observatory
- use of the U of S Observatory (after training)
- Saskatoon Skies Newsletter
- · Observer's Handbook
- The Journal of the RASC (bimonthly)

- SkyNews Magazine (bimonthly)
- use of the Centre library
- discounts to Sky & Telescope Magazine*
- free, no-cost, no-obligation, 3-month temporary membership if you don't want to join right now!

* New subscription or renewal of **Sky & Telescope**? Send new info or renewal notice, plus credit card # to Norma Jensen, 128 - 4th Street East, Saskatoon, SK S7H 1H8, or fax 306-659-2170.

Saskatoon Centre's main officers:

President – Ron Waldron Vice-President – Garry Stone

Secretary – Al Hartridge Treasurer – Norma Jensen



Light Pollution Abatement website at: www.ras.sk.ca/lpc/lpc.htm

U of S Observatory

The U of S Observatory is open to the general public every Saturday of the year. Admission is free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear nights, visitors may look through the vintage 6-inch and tour several displays. Current events are recorded on the Astronomy Information Line at 966-6429.

Observatory Hours:

About this Newsletter...

Newsletter Editors – Tenho Tuomi, Linda Janzen Copy – Brian Friesen & WBM Collate – Brian Friesen, Walter Essar, Jim Young, Les & Ellen Dickson, Yannis Pahatouroglou Labels & Temps – Mike Clancy Web Posting – Gord Sarty

Printing of this Newsletter is courtesy of



Copying is provided on a Risograph copier for a nominal fee.

Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 100 copies per issue. Saskatoon Skies welcomes unsolicited articles, sketches, photographs, cartoons, and other astronomy or space science articles. Articles can be sent by mail in any format to the Centre's mailbox. Submitted materials can be returned upon request. Submissions may also be sent by e-mail – preferred as plain unformatted ASCII text files without line breaks. Images sent by e-mail should be attached .JPGs (.GIFs also accepted). Send e-mail submissions to the editor at <tuomi@sasktel.net>. Please send articles in "generic" formats with simple formatting - one tab at the beginning of paragraphs, one space after commas and periods. A separate by-mail subscription to Saskatoon Skies is available for \$15.00 per year. Saskatoon Skies is also posted on our Saskatoon Centre homepage as a .pdf file and can be downloaded free-of-charge. Members may choose to receive the newsletter by regular mail or via the Internet. Articles may be reprinted from Saskatoon Skies without expressed permission (unless otherwise stated), but source credit is requested. **DEADLINE** for submissions is the 26th of each month. Saskatoon Skies accepts commercial advertising. Please call the editor for rates. Members can advertise noncommercial items free of charge.



by Darrell Chatfield

\$13.35 in Canadian Tire Money received from Jim Wood. Thank you very much. The total collected to date is \$65.60. Please bring your bottles and Canadian Tire Money to the General meetings. I will collect them after the meeting concludes. If you cannot make it to the meeting but would like to contribute, please call me at 374-9278.

2005 RASC Calendar of Events			
DATE	EVENT	CONTACT	TELEPHONE
July 30-Aug. 7	Mt. Kobau Star Party — Osoyoos, BC	Jim Failes	(250) 763-6962
Aug. 4-7	Saskatchewan Summer Star Party (SSSP'05) — Cypress Hills Inter-provincial Park, www.usask.ca/psychology/sarty/rasc/starparty.html	Les Dickson	249-1091
Aug. 11-14	Manitoulin Star Party — Manitoulin Island, ON — www.gordonspark.com/astronomy.html		
Aug. 12	Noctilucent Cloud Season ends		
Sept. 1-4	Alberta Star Party — Eccles Ranch Obs. Caroline, AB — www.syz.com/rasc/asp2005.htm	Roland Dechesne	(403) 246-4498
Sept. 9-11	Northern Prairie Starfest — Black Nugget Lake, AB — http://edmontonrasc.com/nps.html	Warren.Finlay@	Ualberta.ca
Sept. 19	Executive Meeting — 6:30 pm, 175 Physics, U of S	Ron Waldron	832-9428
Sept. 19	General Meeting — 7:30 pm, 175 Physics, U of S	Ron Waldron	832-9428
Sept. 30	Observer's Group Session — Sleaford Observatory at dusk	Bill Hydomako	384-4781

Monday, Sept 19, 7:30 PM Room 175 Physics, U of S

Presenting:

Highlights of the Alberta Star BQ, SSSP'05, **Northern Prairie Starfest**

by Rick Huziak, Les Dickson, et al

Bring your own story of your **Summer Astronomy Vacation!**

Note: There will be an executive meeting at 6:30 p.m.



BOOKS FOR SALE by Bruce Brandell, Sales Coordinator

Some of the items are left from the Star Party. All will be available at our next meeting.

Call 249-1119, or email <bruce_brandell@yahoo.com>

Title	Author	No. Avail.	Cdn\$
Calendar, RASC 2005	Rajiv Gupta, Editor	1	\$ 5.00
Messier Cards, laminated	Sky Publishing	3	\$ 6.00
Messier Poster, colored	Sky Publishing	2	\$20.00
Milkyway Poster	Sky Publishing	2	\$25.00
The Moon Map	Sky Publishing	1	\$15.00
The Mars Map	Sky Publishing	1	\$15.00
Astrophotography	G.N. Patterson	27	\$ 5.00
RASC Centennial Mug		6	\$ 8.00
RASC Stickers, blue or white			\$ 1.00
Pins SSSP 2004		14	\$ 5.00
Pins SSSP 2003		2	\$ 4.00
Pins SSSP 2002		lots	\$ 4.00
Pins SSSP 2001		lots	\$ 4.00

SKY BUYS & MIRROR CELLS

THE SASKATOON CENTRE'S SWAP AND SALE PAGE!

For Loan to Members:

Slide set for talks on general astronomy and light pollution. You can borrow this set any time you want to give a talk to your favourite group.

Contact Rick Huziak at 665-3392.

Some SSSP04 moments...

photos by George Charpentier



Minutes of the EXECUTIVE MEETING June 20, 2005, 6:30 pm – 175 Physics, U of S

- 1. Meeting called to order at 6:32 p.m.
- 2. Approval of minutes of the last meeting. Moved by Rick Huziak, seconded by Jim Young and carried.
- 3. **Report on GA:** Les Dickson the motion to change and amend the fee split was defeated, National fees will increase by \$5.00, there is a movement toward an electronic journal but this has not yet been affirmed, the Observer's Handbook remains a main source of income for the National office.
- 4. **Fundraising:** Darrell has tickets for the raffle for members to sell. They are \$3.00 each or two for \$5.00.
- 5. **Membership:** There are 74 members presently and 17 temporary members as well.
- 6. **Sleaford:** a new outside door for the toilet has been purchased and Darrell is cutting it down and painting it. The dome needs a fiberglass repair.
- 7. SSSP: A planning meeting was held last Thursday. Pins, meals and shirts have been ordered. Centennial 2005 goodies have also been ordered. Many volunteers are needed. A light pollution award will be given on Saturday at the star party. Ron Waldron has volunteered to be the MC at the Wapiti Room.
- Sask Light Abatement Committee: Griffith Stadium
 will be installing full cut off lighting. Motion by Rick
 Huziak to spend up to a maximum of \$200.00 for light
 pollution abatement certificates. Seconded by Les Dickson
 and carried.
- 9. **Fees:** A motion to increase fees to \$57.00 per year was made by Rick Huziak, seconded by Jim Young. Motion was amended to increase the fees to \$64.00 per year effective immediately and Youth membership to comply with whatever National is going to charge. Motion made by Les Dickson, seconded by Jim Young and carried. The new fees have to be added to the web site and all brochures will have to be updated.
- Newsletter: will go out on July 18th to help advertise SSSP 2005. July 4 will be deadline for articles, etc. for the newsletter.
- 11. Meeting adjourned at 7:30 p.m.

Minutes of the GENERAL MEETING

June 20, 2005, 7:30 pm - 175 Physics, U of S

- 1. Meeting called to order at 7:30 p.m.
- 2. Approval of minutes of previous meeting. Moved by Larry Scott, seconded by Ellen Dickson and carried.
- 3. **Highlights of executive meeting** given by Ron Waldron.
- 4. Presentations:
 - Cataclysmic Variable Stars: From SS Cygni to Supernovae
 Gord Sarty
 - Baader Solar Filters Rick Huziak.
 - Astronomy Board/Card Game Opportunity Ken Maher.
- Next Meeting September 19, 2005. Hope to see everyone at the SSSP.
- 6. Meeting adjourned at 10:00 p.m.

More SSSP04 moments...

photos by George Charpentier



Newsletters from Other Centres... Hello all. Here are the newsletters that have been received for the past month by your **Central Mailer**. *Darrell Chatfield* is the new librarian and he can arrange a time to go to the library. This is to let you know what is available and what other Centres have been doing. — Ellen Dickson, Central Mailer

June/05

- Stardust (Edmonton Centre) "GA 2005 Okanagan Centre", "George Moore's Astronomy Workshop"
- The StarSeeker (Calgary Centre) "Calgary RASC Star-BQ", "Entabeni Transit Authority Pt 3"
- Scope (Toronto Centre) "Open House & Awards Picnic", "2005 Eclipse Trip Details"

May/05

- Stardust (Edmonton Centre) "My Australian Dark Sky Observatory"
- The StarSeeker (Calgary Centre) "Member Names Asteroid Recognizing Alberta's Centennial"

Talking at Parks Helps to Save the Skies!

by Richard Huziak



I'd like to make a suggestion!

Over the next two seasons, the Provincial Parks will be working on adopting a Dark Sky Parks Policy. Quite frankly, this will cost the parks some money, since a partial lighting retrofit will likely be part of the overall plan. But it seems that Sask Parks/Sask Environment is committed to this, so it will happen.

A few months ago, Mike Clancy and I did a light pollution educational program at the Sask Parks Interpreters' Conference at Blackstrap, and it went over very well. In fact, Brad Mason (CHIPP) has hired Joan Hodgins to be the dark sky co-ordinator (as part of her duties). She gave an amazing talk and activities seminar at the workshop, and also put together a killer LPA display! So, to do our part, I suggest that we need to get our members to support the Parks this season and next season by doing whatever public activities they can at whatever Provincial Park you can get to or decide to visit on your vacation. Our club and members might also volunteer to do starnights over the summers, and lone members on vacation should take their telescopes and give less formal, even impromptu, starnights. Make your event visible!

If it is arranged in advance, the Parks normally offer a cash honorarium (\$40 - \$100 depending on the park) meant to cover gas, plus day passes for program-givers, and often a free campsite for the night. Each park offers something a little different. We should, however, be careful not to make this a cash cow, since we need to be part of the Dark Sky Team! We should be bending over for them – Parks is making a big effort

on behalf of the dark sky! Each park employs an Interpreter whose job it is to do park programming. Contact them if you are going to use their park. I will be covering Good Spirit Lake PP and Duck Mountain PP on the July long weekend. Cypress Hills PP will be covered during the Sask Summer Star Party. Odds are Pike Lake, Danielson and Douglas will be covered over the summer by me, Tenho Tuomi and Garry Stone. There are 33 or so other provincial parks to go! Also, when you are there, seek out the Park Manager and have a talk with him or her about the Dark Sky Parks project. They will have questions, and personal contact will help them feel more at ease! For more information about the DSP project, contact Vance Petriew or me, but I'm sure you already know what to say! We have also had an inquiry from Rockin Glen Regional Park – they want to be a Dark Sky Park, too!

I think it is vitally important to do this over the next two years. Not all Park managers are convinced because although they all have bought in on the concept, they still see true budgetary costs associated, and parks do not have a lot of money, as Vance and I found out when we spoke at the Park Managers Conference in April. So we need to support and encourage them as much as we can. Please make an extra effort in the Parks over the next two years. Any program we do scores us major Brownie points with the Sask Environment and their managers.

Wouldn't it be cool to go camping for free every weekend this summer in exchange for just sharing what you love to do anyway?

Mercury-Venus Close Appulse

by Bruce McCurdy, Edmonton Centre From RASCals Discussion List rascals@lists.rasc.ca, June 28, 2005

The past few days have featured two related planetary 'alignments', both exceptional in their way. The pair Mercury-Venus drew to within 4' yesterday morning (16h UT on the 27th), the closest encounter of Earth's inferiors until 2070. And these two in conjunction with Saturn formed an exceptionally tight trio, separated at minimum by just 1°22' one day earlier. According to Jean Meeus' *Mathematical Astronomy Morsels*, this is the tightest grouping of three naked-eye planets at elongation more than 15° from the Sun for the period <1980 - 2036.

Persistent cloud cover here in central Alberta has rendered impossible observation of the trio since they were >6° apart last Tuesday, and has presented serious challenges to seeing the ME-VE conjunction. Fortunately my summer job in the public observatory at the newly-rechristened Telus World of Science – Edmonton obliges me to try, in skies which even most astronomers would write off. And wouldn't you know, I got lucky on Friday afternoon, Sunday evening and Monday afternoon.

Yesterday I wasn't able to open up early as planned (closest approach of just under 4 arcminutes was around 10:30 a.m. MDT), but eventually the heavy clouds broke up and it became possible to see through the intervening cirrus around 1 p.m. The pair was still only about 5' apart when it reached conjunction in right ascension around 2 p.m.

Observations were conducted with a 16-inch Meade LX 200 SCT and a 7-inch Astrophysics Starfire refractor. I took great pleasure in putting a couple of our newest toys to the test: a 22mm Type 4 yielded 185x in the Meade with an impressive 26' field of view, and a 12mm Televue Radian yielded 133x with a similar f.o.v. in the Starfire. With Mercury in the centre of the field, Venus was less than halfway to the edge, allowing both to be easily seen by visitors. Seeing conditions precluded the application of higher powers.

I aligned the star diagonals so that I was always looking up the vertical axis of the scopes, kept Mercury centred, and watched the position angle of Venus pass through the zero point during the afternoon. The two planets had changed position significantly since Sunday evening's similar miracle hole about 18 hours earlier. At that point they were slightly more than 10' apart with Venus at position angle 105°. By 4 p.m. yesterday they were <6' apart at P.A. 350°.

Given the rare opportunity to see both in the same high power eyepiece, it was interesting to compare our two inner neighbours. For starters their phases are significantly different. Venus was 50% further than Mercury, at 1.53 AU compared to 1.02, so the sun angles were quite dissimilar. Both are gibbous with a hard round edge on the sunward side, but Venus is 91% illuminated and Mercury only 61%. In addition to the lower phase angle, Mercury is smaller and has a much lower albedo, so despite being closer to both Earth and the Sun, currently appears about 4 full magnitudes dimmer. Mercury is a pale peach colour, Venus pure white. On Friday during brief moments of decent seeing, I saw a slightly duskier patch near Mercury's terminator.

Throughout yesterday afternoon the (2D) distance between the two was roughly 30 Venus diameters. It was easy to imagine I was a Venusian looking at the Earth-Moon system which is also separated by ~ 30 Earth diameters (if seen near maximum elongation) and, coincidentally, by about four full magnitudes. Mercury was double the size and the wrong phase to be a true analog for the Moon, but the wonderful thing about imagination is it can be flexible. Has to be to "observe" from Venus, which is even cloudier than Alberta. :)

I'm just happy to report the observation from here turned out to be real enough, if less than complete.

Education Award for Our Very Own!

by Peter Jedicke *<PJedicke@fanshawec.ca>*From RASCals Discussion List *<rascals@lists.rasc.ca>*,
July 5, 2005

Hi all,

You all know Mary Lou Whitehorne, Chair of our national Education Committee and the brains behind "Skyways." Well, Mary Lou has won an education award from the Astronomical Society of the Pacific, and the newspaper down in Nova Scotia did an article profiling her and the award. It's at

www.herald.ns.ca/stories/2005/07/02/fScience120.raw.html

Official notice of the award is at

www.astrosociety.org/membership/awards/05winnerspr.html

Congratulations to Mary Lou! You know we're doing something right when our members are winning ASP awards.

:-) PJ, Prez

Family Reunion Star Party





On the July first weekend we attended a family reunion of my wife's family at Hitchcock's Hideaway on Lake Diefenbaker. This was a perfect opportunity for a star party to supplement the other activities, therefore I took with me my 8 inch Meade reflector and my 80-mm SkyWatcher refractor plus books and charts. I had a captive audience of 54 people.

Friday afternoon was mostly sunny so I set my 8-inch telescope on Venus. This was a good start for nobody thought that stars could be seen in the daytime. Friday evening turned out to be one of those rare perfect clear nights though there was some low cloud to the North and West. We started with observations of Jupiter and when it got dark enough we went to epsilon Lyrae, M57, Albireo, M3, M27, M13, several meteors, and the ISS and many other satellites until midnight when the party broke up. Saturday was cloudy but I had the Saskatoon club's slide set on astronomy and light pollution with me and showed that in the evening. On Sunday night it was clear for a while and to those who were still interested I showed Mercury, M39, the Coathanger, Mizar/Alcor, M81/82 and M51. In the middle of the trees where everyone was congregated around a fire we had no view to the South so could not show any of the interesting objects around Sagittarius.

All in all it turned out to be a good activity for a family reunion. There was much interest from all age groups. One sharp five-year-old beat everybody in being the first to find Jupiter and Venus in the evenings, making his parents very proud.

RASC-SASKATOON RAFFLE

We are raising money to build the next observatory at the Sleaford site – the dome and control room for the 16" research-grade telescope. We need about \$18,000 in total. The Saskatoon Centre is holding a raffle to help raise these funds. Tickets are \$3 each or 2 for \$5. A book of ten would cost \$25. **Buy tickets**, or better yet, **get tickets to sell** from Darrell Chatfield (ph. 374-9278). Please return the booklet and money by about September 9, 2005.

You could win:



- a Daytek PD-900 Portable DVD Player
 - a Canon A510 Digital Camera
- a Glen Scrimshaw 16x20 framed print

The draw will be made at the first fall General Meeting of the Saskatoon Centre, September 19, 2005.

Raffle licence: R05-0094. Prizes may not be exactly as illustrated.



Meteor Information for July

From NAMN Notes: July 2005

NAMN Notes is a monthly newsletter produced by the North American Meteor Network, and is available both via email, and on the NAMN website at: http://www.namnmeteors.org

2. Summer and the Aquarids...

What do we have for the summer? Well, we have lots and lots of Aquarid meteors on the agenda. We have the northern and southern delta Aquarids, and the southern iota Aquarids, for July.

In fact, it's a good idea to print yourself off some of our NAMN star charts to mark all these showers on ahead of time, before you go out observing. Set your printer to landscape mode, and grab the 4 charts from http://www.namnmeteors.org/charts.html. They show constellations, RA and Dec (our grid lines in the sky), and give the brightness of a number of stars to use in judging the magnitude of the meteors you see.

The southern delta Aquarids (SDA) reach a maximum on July 28th, with a radiant at 339 degrees, ie. RA 22h 36m, Dec -16, which is about 5 degrees to the right of the star delta Aquarius. These are average velocity meteors, at about 41 km/sec, and can be seen from about July 12th to August 19th. At the peak on the 28th, ZHR rates are about 20 meteors per hour.

What is ZHR? This is Zenithal Hourly Rate, and is the number of meteors, on the average, that an observer would expect to see in an hour if the radiant, the area in the sky where the meteors seem to come from, is directly overhead – and if an observer is out under dark country skies. If the radiant is not overhead, you will see less. If your sky is not really dark, you will see less. So – to see as many meteors as possible, get away from city lights, and try to observe when the shower radiant is higher in the sky.

The southern iota Aquarids (SIA) reach a peak on August 4th, but can be seen from about July 25th to August 15th. These are slower than the delta's, with a velocity of about 34 km/sec, but still classed as 'average' velocity.

At maximum on August 4th, their ZHR will be about 2 meteors per hour. Rates in July will be less. On July 25th, their radiant will be at 322 degrees, ie. RA 21h 28.2m, Dec -17.

The northern delta Aquarids (NDA) reach a peak on August 8th, but again, can be seen starting in July, as they run from about July 15th to August 25th. These are average velocity meteors at 42 km/sec, very similar to the southern deltas. At their peak on August 8th, they will reach a ZHR of about 4 meteors per hour, but rates in July will be lower. On July 25th, their radiant will be at 323 degrees, ie. RA 21h 31.8m, Dec -9.

The IMO, the International Meteor Organization, has maps showing all these radiants at http://www.imo.net/calendar/cal05.html#aquarid-capricornid. There is also a simple way to keep

track of these 3 showers, and the northern iota Aquarids coming in August. If you look at these 4 Aquarid radiants on any given night, they form a sort of parallelogram in the sky. However, plotting is useful when observing these meteors – and recommended.

If you want to record data on these showers for the meteor researchers, check out our NAMN Observing Guide for information on what to record. Our Guide can be found at http://www.namnmeteors.org/guide.html. We record such info as the time a meteor occurred, its magnitude (brightness), the shower it belongs to, its speed, and other comments such as train left behind, or color. General information to record includes such things as how dark your perceived sky is (limiting magnitude), and comments on weather and cloud cover. If you have any questions, drop a note to our NAMN Coordinator at meteors@comcust.net.

Forms to record your observations can be found at http://www.namnmeteors.org/namn_form.html and http://www.namnmeteors.org/appendixC.html

3. Other July Activity...

The summer sky is a busy one. Besides the Aquarid complex, there are a lot of other assorted showers to observe – and it can be quite a challenge remembering all the radiants!

[Several meteor showers skipped for they are over by the time you read this. – Ed.]

The Pisces Austrinids (PAU) peak about July 28th, but can be seen from about July 15th to August 10th. These are average velocity meteors at about 35 km/sec. The radiant at the peak will be at 341 degrees, ie. RA 22h 43.8m, Dec -30, which is about 3 degrees to the right of alpha Pisces Austrinus, the star known as Fomalhaut. ZHR rates are about 5 meteors per hour at maximum. For a map showing the movement of the radiant, check out http://www.imo.net/calendar/cal05.html#piscis-austrinids

The alpha Capricornids (CAP) peak about July 30, and range from about July 3rd to August 15th. These are wonderful, slow meteors, with a velocity of about 23 km/sec. On July 30th, at maximum, the radiant will be at 308 degrees, ie. RA 20h 31.8m, Dec -10, which is about 4 degrees up to the left of the star alpha Capricornus, the top right star of the triangle of Capricornus. ZHR rates at the peak are about 4 meteors per hour. For movement of the radiant, check out the map on the IMO website at http://www.imo.net/calendar/cal05.html#alphacapricornids. According to the IMO, in their 2005 Meteor Shower Calendar, 'the alpha-Capricornids are noted for their bright – sometimes fireball-class – events, which, combined with their low apparent velocity, can make some of these objects among the most impressive and attractive an observer could wish for'.

continued on next page

Meteor Info for July continued

Lastly, although observers tend to think of Perseids (PER) as an August shower, they start to become active about July 17th. They run through until about August 24th, with a peak around August 12th. These are fast meteors, with a velocity of about 59 km/sec. ZHR rates around August 12th will be about 100 meteors per hour. Rates in July will be much lower. This shower lasts a long time – and the radiant moves quite a distance across the sky, a little bit each night. Check out this movement on the IMO chart at http://www.imo.net/colendar/col05.html#perseids

Besides July's main activity, and other minor showers, there is also sporadic meteor activity – about 7 meteors per hour, visible to the unaided eye. Some of these are random, and some belong to old untraceable meteor showers.

Planets at midmonth, and their magnitudes, for northern

observers, are:

Venus -3.8 very low in west-northwest in evening twilight

Jupiter -2.0 in Virgo **Mars** -0.2 in Pisces

For a sky chart showing the positions of all the planets visible this month, go to http://www.heavens-above.com, select your country, then your city, and go to 'Whole Sky Chart'.

The phases of the moon for July are as follows:

Wed. July 6 **new moon**Thurs. July 14 **first quarter**

Thurs. July 21 **full moon** (largest of 2005)

Thurs. July 28 last quarter

For a great printout of moon phases for the month, check out http://stardate.org/nightsky/moon.



SSSP 2005 Update

by Les Dickson (PHOTO BY GEORGE CHARPENTIER)

This is the sixth in a series of articles on the Saskatchewan Summer Star Party, to be held August 4-7 at the Cypress Hills

Interprovincial Park (CHIPP). I will be writing a review of SSSP for the September newsletter.

As of July 2 we had 112 people registered. Our attendees are mostly from western Canada, but some come from farther afield. Provincial statistics are: ON 5; MB 1, SK 48, AB 41, BC 3 and NWT 1. Most of these people are affiliated with RASC Centres: Thunder Bay 2, Winnipeg 14, Regina 14, Saskatoon 29, Calgary 12, Edmonton 23 and Okanagan 2. We expect at least 50 more people to register before the close of early registration, which is July 15. We can also expect another 50-60 people to register at the door.

Our block of accommodations in the Resort is now full. However, there are always last minute cancellations, so if you decide at the last minute to come and want to stay in the Resort, please call and check on room availability. Call the Resort at 306-662-4477.

Our program for Saturday afternoon is now finalized. In addition to talks by Paul Campbell, Alan Dyer and Ivan Semeniuk, we will be hosting a special ceremony honouring people who have made a difference to our night skies. The **National Light Pollution Abatement Award** is being given out to the representatives of the provincial and national agencies who were signatories to the **Cypress Hills Dark Sky Preserve Declaration** which was signed September 28, 2004 at the Canada Parks Council Conference held at CHIPP. The award is being given jointly to Parks Canada, Sask Environment and Alberta Environment. We expect the following dignitaries to attend the ceremony to represent their

agencies and parks: Cheryl Penney, respective Superintendent, Saskatchewan South Field Unit, Parks Canada; David Rohatensky, Manager, Fort Walsh National Historic Site; David Phillips, Assistant Deputy Minister, Saskatchewan Environment; Brad Mason, Manager, Cypress Hills Interprovincial Park - Saskatchewan; John Christensen, Assistant Deputy Minister, Alberta Community Development, Park and Protected Areas Division, Alberta Environment; and Julie MacDougall, Site Manager, Cypress Hills Interprovincial Park - Alberta. There is also a possibility that the Minister of Saskatchewan Environment, The Honourable David Forbes, will also be in attendance. This line-up is subject to change without notice. The award will be handed out by Rick Huziak and Vance Petriew representing the RASC National Office.

We are looking for volunteers who would be willing to help out during SSSP. Those members of the Saskatoon Centre who have registered for SSSP can expect a phone call from Les Dickson asking them if they couldn't donate a few hours of their time to make SSSP work.

We always welcome people who want to give informal talks on Friday night. If you would like to be a part of our program, contact Les Dickson at 306-249-1091 or at dicksonl@susktel.net.

Prices for registration (now after the July 15 early registration date) are: Singles, \$27; Couples, \$38; Families, \$44.

For more information, you can contact Les Dickson, or our Registrars at:

Bill & Marianne Hydomako

135 Manning Crescent, Saskatoon, SK S7L 6J3

Phone: (306) 384-4781 email: wm.hydomako@sasktel.net

You can also visit our web site at:

http://www.usask.ca/psychology/sarty/rasc/starparty.html.

The Messier, H-400 & H-400-II, FNGC, Binoc & EtU Club

Join the Club! Observe all 110 Messier, 110 Finest NGC, 400 Herschel I or 400 Herschel II, Explore the Universe, or 35 Binocular objects and earn great OBSERVING CERTIFICATES!

MESSIER CLUB Certified at 110 Objects:

R. Huziak, G. Sarty, S. Alexander, S. Ferguson, D. Jeffrey, D. Chatfield, B. Christie, K. Noesgaard, M. Stephens, B. Hydomako, T. Tuomi, L. Scott, G. Charpentier

G.Charpenner	
Les Dickson	99
Mike Clancy	97
Brent Gratias	96
Mike Oosterlaken	93
Lorne Jensen	89
Brent Burlingham	85
Wade Selvig	75
Ken Maher	73
Garry Stone	57
Kathleen Houston	53
Ellen Dickson	23
Brian Friesen	15
Barb Young	6
	·

FINEST NGC CLUB

Certified at 110 Objects: R. Huziak, D. Jeffrey, G. Sarty, D. Chatfield, T. Tuomi

Scott Alexander	97
Larry Scott	61
Bill Hydomako	55
Sandy Ferguson	23
Mike Oosterlaken	20
Mike Clancy	4
George Charpentier	4

Chatfield BINOCULAR CERTIFICATE

Certified at 35 Objects: M. Stephens, T. Tuomi, M. Clancy, R. Huziak

•	
Brent Gratias	36
Ken Maher	36
Mike Oosterlaken	32
Anna Clancy	24

EXPLORE the UNIVERSE

Certified for Certificate: *M. Clancy*, *T. Tuomi*

HERSCHEL 400 CLUB

Certified at 400 Objects: D. Jeffrey, R. Huziak, D. Chatfield

Gord Sarty	251
Tenho Tuomi	197
Scott Alexander	117
Mike Oosterlaken	68
Sandy Ferguson	18

HERSCHEL 400-II CLUB Certified at 400 Objects:

Darrell Chatfield	247
Richard Huziak	211

The Messier & Finest NGC lists can be found in the *Observer's Handbook*. The Explore the Universe list is available on the National web site. The Herschel 400 list is available at the web site listed below. The Binocular List will be available at each general meeting or can be mailed out on request to distant members.

On-line Messier List – For those who'd like an electronic Messier list (with DSS images), check out: http://www.seds.org/billa/dssm/messier.html

On-line Finest NGC List – For those who'd like an electronic FNGC list, check out the Edmonton Centre's version at: http://www.edmontonrasc.com/catalog.html

On-line Herschel 400 List – For those who'd like an electronic Herschel 400 list, check out the official site at: http://www.astroleague.org/al/obsclubs/herschel/hers400.html



RASC Observing Group Notes

by Bill Hydomako, Observing Group Coordinator

Hi Saskatoon Centre Observers. The Observer's Group session on June 3 and June 4 was clouded out, again! However, we had better success with the session on June 10. Along with myself, Barbara Wright, Larry Scott, Brent Burlingham and Jim Gorkoff was out at Sleaford for the night. We had to wait until almost midnight for it to get dark enough to observe. We started with a quick tour of some of the spring and summer constellations centered around the summer triangle. Then it was off to M39, an open cluster that is easy to star hop with binoculars from Deneb. Then we took in the double stars of Albireo, 31 Cygni and 61 Cygni. 31 Cygni is interesting because it's an easy double with binoculars that looks a lot like Albireo. While still in Cygnus we took in M56, a globular

cluster just up from Albireo. Then it was off to Scutum for the open clusters M11, M26, M16 & M18. We then went into Sagittarius for M25, M22, M28, M21, M20 & M8. We rounded off the night by walking outside of the tree line around the Sleaford site and picked up M6 and M7 in Scorpius. By that time it was starting to show signs of getting light out again.

The Observer's Group sessions on July 1 and July 2 were clouded out again although I was out at Sleaford on July 1 cutting grasses and was treated later on to a particularly intense lightning show that came in from the west. The next event is SSSP05 and the next Observer's Group session that I can hold won't be until Friday, September 30.

Clear Skies!