

Saskatoon Skies

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

Vol. 41, No. 6

June 2010

Steak Night Fun(d)-Raiser



Come join the fun and fellowship at our summer Saskatoon Centre Steak Night, June 24 at Mulberry's. (See page 3 for details.)

Photo by Tenho Tuomi (2006 Christmas social)



Saskatoon Centre
The Royal Astronomical Society of Canada
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To view *Saskatoon Skies* in colour, see our Website:

<http://homepage.usask.ca/~ges125/rasc/newsletters.html>

MEMBERSHIP? IT'S NEVER TOO LATE TO JOIN!

Regular: \$77.00 /year

Youth: \$41.00 /year

Associate: \$33 /year

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, Mark de Jong, or renew through the National Office and let Mark 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 (electronic format)
- SkyNews Magazine (bimonthly)
- use of the Centre library
- rent the Centre's Telescopes
<http://homepage.usask.ca/ges125/rasc/telescopes.html>
- 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 email her at norj@sasktel.net .

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:

January-February	7:30-9:30 pm
March	8:30-10:30 pm
April	9:30-11:30 pm
May-July	10:00-11:30 pm
August	9:30-11:30 pm
September	8:30-10:30 pm
October-December	7:30-9:30 pm

SASKATOON CENTRE'S MAIN OFFICERS:

President – Barb Wright, 249-1990
Secretary – Ron Waldron, 382-9428
Vice-President – Jeff Swick, 373-3902
Treasurer – Norma Jensen, 244-7360

Bottle Drive & Canadian Tire \$

By Colin Chatfield

If you cannot make it to a meeting but would like to contribute your Canadian Tire money please call me at 934-7046.

**LIGHT POLLUTION
ABATEMENT
WEBSITE AT:
www.ras.sk.ca/lpc/lpc.htm**

Newsletter Editors – Christine Kulyk & Tenho Tuomi

Copy & Collate – Les & Ellen Dickson

Labels & Temps – Mark de Jong

Web Posting – Gord Sarty

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 material. **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 to the editor at clkulyk@sasktel.net – preferred as plain unformatted ASCII text files without line breaks. Images sent by e-mail should be attached files.

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 indicated), provided that proper source credit is given. DEADLINE for submissions for each month's issue is the 20th of the preceding month. Saskatoon Skies accepts Commercial advertising. Please call the editor 306-858-2453 for rates. Members can advertise non-commercial items free of charge.

RASC CALENDAR OF EVENTS

June 12	Observers Group – Dusk, Sleaford Observatory	Larry Scott	934-5801
June 17	New Members' Night – 8:30 pm, U of S Observatory	Patricia Gakis	249-1345
June 21	RASC Executive Meeting - 6:30 pm, 175 Physics, U of S	Barb Wright	249-1990
June 21	RASC General Meeting -7:30 pm, 175 Physics, U of S	Barb Wright	249-1990
June 24	Steak Night - 6:00 pm, Mulberry's Café	Colin Chatfield	717-6682
July 1-4	RASC General Assembly – Fredericton, NB	http://www.rasc.ca/ga2010	
July 9-11	Alberta Star-B-Q – Caroline, AB	http://calgary.rasc.ca	
July 17	Observers Group – Dusk, Sleaford Observatory	Larry Scott	934-5801
Aug 7	Observers Group – Dusk, Sleaford Observatory	Larry Scott	934-5801
Aug 7-15	Mt. Kobau Star Party – Mt. Kobau, BC	http://www.mksp.ca	
Aug 12-15	Sask. Summer Star Party – Cypress Hills park, SK	Rick Huziak	665-3392
Sep 2-6	Spruce Woods Star Party – (for RASC members only) Spruce Woods Prov. Park, MB	rcberard@gmail.com	
Sep 7-12	Northern Prairie Star Party – Black Nugget Lake, AB	http://www.edmontonrasc.com/public/nps.html	
Sep 10-12	Alberta Star Party – Starland Recreational Campground, AB	http://calgary.rasc.ca/asp2010.htm	
Sep 11	Observers Group – Dusk, Sleaford Observatory	Larry Scott	934-5801

RASC SASKATOON CENTRE GENERAL MEETING



MONDAY, JUNE 21, 7:30 PM
Room 175, Physics Bldg., U of S
“Tuning Up Your Scope”
 by Darrell Chatfield

Note: There will be an Executive Meeting at 6:30 pm.

RASC SASKATOON CENTRE SUMMER STEAK NIGHT



Thursday, June 24, 6:00 pm
at Mulberry's Cafe
 Downtown in the Sturdy-Stone Centre
 124 – 3rd Avenue North
Tickets \$16 per person

Members, families, and friends are all welcome. This will be a great time to get to know our fellow RASC members and their families. We especially look forward to meeting many of our newer members at this event! Join us for good food plus a silent auction, 50/50 draw, and door prizes. Please let us know by June 18 if you will be attending and how many will be in your party (call Colin Chatfield at 717-6682, or e-mail to colcha@sasktel.net).

Minutes of the Executive Meeting, May 17, 2010

by Jeff Swick

1. Meeting called to order at 6:32 pm by Barb Wright.
2. Approval of the minutes of the previous meeting: Moved by Jeff Swick, seconded by Rick Huziak, and carried.
3. Treasurer's Report (Norma Jensen): Norma talked about the upcoming Steak Night at Mullberry's on June 24. The cost is \$16 ea., and we need a minimum of 50 participants and need to have confirmation by June 18.
4. National Report (Rick Huziak): Second advert for the Executive Director has been published, and suspects there has been less than spectacular interest.
5. Rick Huziak also asked for \$250 to help offset cost of attending the GA as our National Rep. Les Dickson seconded, and motion was approved.
6. Sleaford Report (Darrell Chatfield): On June 5, he and Rick will be at Sleaford to do some exploratory work before forming a work bee. Darrell also reported he had obtained both a troubleshooting manual for the 16" Meade and also a supplier for a new hand control membrane.
 - Darrell and Rick will also look into whether or not we can make use of the motorized focuser.
 - Darrell will take measurements for the dome.
7. 6. Meeting adjourned at 7:15 pm.

Minutes of the General Meeting, May 17, 2010

by Jeff Swick

1. Meeting called to order at 7:30 pm.
2. Approval of the minutes of the previous meeting: Motion seconded by Ellen Dickson. Carried.
3. Fundraising (Colin Chatfield): Colin reiterated Norma's earlier comments re. the Steak Night (see Executive Minutes) and also came forward with two fundraising suggestions to be implemented at the Steak Night: a 50/50 draw and a silent auction.
4. Events (Patricia Gakis):
 - Patricia will set up a New Members Night in September during the week. Colin suggested a beginner's clinic as well. Rick offered to do a short presentation on How to Buy Your First Telescope.
 - Patricia will also set up an event for June 17 for new and temp members utilizing the classroom and space at the U of S Observatory on Wiggins Ave. Mike Clancy will do a presentation on beginning observing and binocular astronomy.
 - We will also be participating in the Relay for Life at Diefenbaker Park on May 28. Details for the membership will come via e-mail and/or the Yahoo list.
5. Observers Group (Barb Wright for Larry Scott): Larry will not be in attendance for the June 12 session. It was agreed that we would have training for the Sleaford facility and also the roll-off during the afternoon at the annual Open House in October.
6. Membership (Mark de Jong): We have 78 members, including 2 new members and 1 returning member; plus 9 temporary members.
7. Light Pollution (Rick Huziak): The Saskatoon Light Abatement Committee met with the Saskatoon Environment Advisory Committee to form a multilevel committee.
 - The application to The Saskatchewan Environmental Code for light to be declared a pollutant in EMPA was rejected. There will be a meeting to formulate a response on May 21.
8. Newsletter (Christine Kulyk): Deadline for June submissions is May 31.
9. SSSP Committee (Rick Huziak):
 - The new SSSP brochures have been mailed out.
 - There is a waiting list for resort accommodations.
 - There was discussion on the rental of scopes for SSSP.
10. Presentations:
 - Rick Huziak presented a slide show of his visit to the Medicine Hat Astronomy Club.
 - Gord Sarty gave a presentation on MRI in Space and the Moon.
11. Meeting adjourned at 9:30 pm.

Editor's Corner

by *Christine Kulyk*

I am delighted to welcome two new members to the Saskatoon Centre: **Arthur Lutz** and **Michael Schmidt**, both of Saskatoon. We look forward to seeing you at one of our upcoming gatherings!

Our Events Coordinator, Patricia Gakis, has organized a special workshop for our new and temporary members. Taking place in the University of Saskatchewan Observatory on Thursday, June 17, from 8:30 pm to 10:00 pm, this **New Members' Night** is to help welcome new and temporary members into astronomy. Family and friends are also welcome! We'd also like as many as possible of our older members to come out and help welcome everyone!

Our summer Steak Night on June 24 will be another great chance to get to know some of your fellow RASCals, as will any of our upcoming Observers Group nights, and of course the Saskatchewan Summer Star Party. Don't be shy — we're all eager to meet new members and share our own favourite aspects of the many-faceted hobby of astronomy.

Here's a special invitation to all those who've joined the Saskatoon RASC most recently (within the past five years or so):

Please drop me a line with your thoughts about the following:

1. What was the main reason you joined the RASC Saskatoon Centre?
2. What do you like best about the club so far?
3. What aspect of astronomy or the hobby of stargazing interests you the most?
4. Is there any particular activity or program that you would like to see our club organize to enrich your experience as a member?
5. Do you have a particular question about the club or about stargazing that you'd like us to answer?

Send your replies to: clkulyk@sasktel.net; or by post to 3106 Louise Place #311, Saskatoon, SK S7J 5K8.

Finally, I'd like to alert all rabid space-rockhounds that the Buzzard Coulee meteorite recovery team headed by Alan Hildebrand from the University of Calgary has resumed the hunt, and volunteers are still needed. If you are interested in joining the search team, please e-mail them at: maillet@ucalgary.ca. For details, see:

http://www.ucalgary.ca/prairie_meteorite_search/volunteer_information

President's Message

by *Barb Wright*

As summer approaches with its short nights, increasing mosquitoes, and decreased opportunity for observing time, there are still things going on within the Centre. I hope you will answer the call to do some work at Sleaford this summer. With your help, we can accomplish the goals the club has set for improvements to our observing site.

Of course, I expect to see all of you and your families at the Steak Night on June 24 at Mulberry's. It is always a good time, with a chance for a satisfying meal and a relaxing visit with everybody. See you there!



Comet C/2009 R1 McNaught
June 9, 2010
Canon Rebel camera
12" Newtonian telescope
Photo by Tenho Tuomi

Winterlight Tales

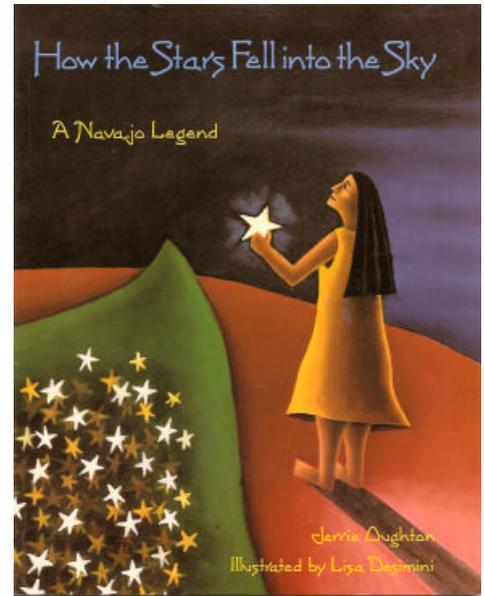
by Kathleen Houston

This year in early March, I accepted an invitation to lead an art/astronomy workshop at Elk Island, east of Edmonton, at an event called Winterlight hosted by the RASC Edmonton Centre. For this workshop, I would teach how to draw with sand and pierce black paper to make “Holes in the Night Sky” (previously featured as a collective mural at the Frances Morrison Gallery IYA show in Saskatoon).

This time, I wanted source material and legends about the night sky that demonstrated a Native perspective or had a strong kid-friendly, visual connection. I became an Internet shopper and found three books that I liked. (Do you suppose our grandparents could have predicted how catalogue shopping would become Internet global shopping?)

How the Stars Fell Into the Sky: A Navajo Legend

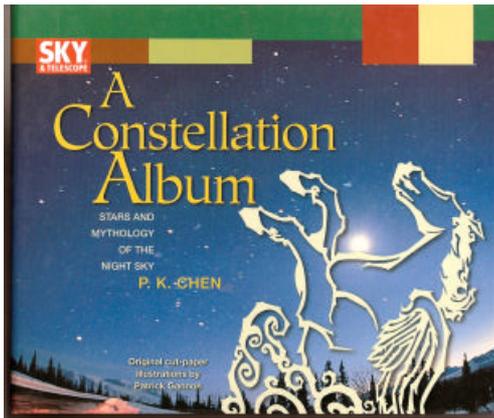
By Jerrie Oughton with illustrations by Lisa Desimini
Houghton Mifflin Harcourt Children’s Book Group/Sandpiper, 1996, 32 pages



I loved the imagery and the story about First Woman and Coyote, who tell how the Milky Way came into being. First Woman placed stars from her blanket into the sky so that the laws could be known, but Coyote had a different way of “helping” because of his nature. I am in the process of requesting permission to tell this story at my public talk this summer at the SSSP entitled — you guessed it — “Holes in the Night Sky.”

A Constellation Album: Stars and Mythology of the Night Sky

By P.K. Chen
Sky Publishing, 2007, 96 pages

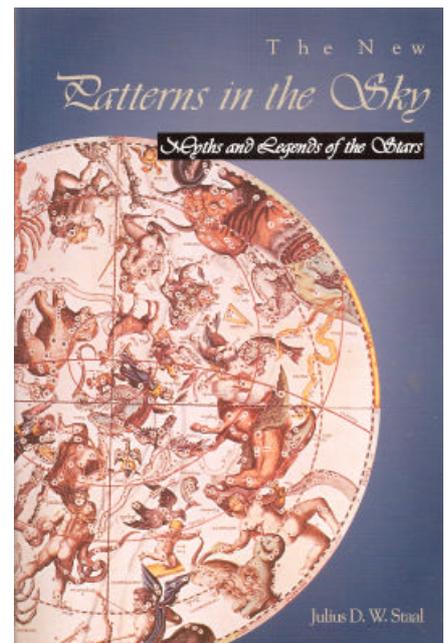


The visuals are powerful, with original cut-paper illustrations by Patrick Gannon and acetate overlays to connect imagery with the star pictures. The book is laid out visually in seasons, and serves to orient the starry-eyed reader. P.K. Chen had published an illustrated book on the constellations in Chinese, and was encouraged by astrophotographer David Malin to publish in English. Malin writes, “I had not seen anything quite like it before,” and is excited about the result.

The New Patterns in the Sky: Myths and Legends of the Stars

By Julius D.W. Staal
McDonald & Woodward Publishing, 2005, 300 pages

On a more scholarly note, I enjoyed this one also. I was particularly interested in diverse interpretations of the constellation shapes and cultural legends that shape the stories. The Great Bear, for example, had stories from Kootenay, Iroquois, and Micmac that explain how the Bear changes position throughout the year, as well as Tezcatlipoca, a “troublesome Aztec god and his pattern of endless dance around Polaris” (p. 135).



Peek Into the Depths of the Universe With Your iPhone

(News Release from the University of Arizona)

With a new application for the iPhone or iPod Touch, you can view pictures of a supernova exploding in Orion, a star moving through Cassiopeia, or a cloud of interstellar dust flaring up while being gobbled by a black hole. The application, called Transient Events, uses real-time observational data from the University of Arizona's Catalina Sky Survey (www.lpl.arizona.edu/css) to monitor transient objects, or objects that change in brightness or position.

"With Transient Events, amateur and professional astronomers can monitor what's happening in the night sky," said Stephen Larson, founder of the Catalina Sky Survey. "If they see something of particular interest, they can point their telescopes at the object to take a closer look."

Transient Events was developed in collaboration with the Large Synoptic Survey Telescope, or LSST (www.lsst.org/lsst), a Tucson-based non-profit group that's building a telescope to survey vast stretches of the universe. With a mirror that measures 8.4 metres in diameter (now under construction at Steward Observatory's Mirror Lab) and the world's largest digital camera that will have more than 3 billion pixels, the instrument will probe deep into space and detect the faintest of objects.

"When the LSST comes online," says Suzanne Jacoby, the LSST's manager for public education and outreach, "it will issue tens of thousands of alerts every night for transient objects. The Transient Events application is a prototype for the way the LSST is going to work, allowing us to practise now with a manageable number of alerts."

The developers are hoping to add additional surveys as they come online in the future, for example near-Earth objects such as asteroids and comets travelling nearby. The application is available to download for free through the iTunes store. To learn more, visit the LSST application Website:

<http://itunes.apple.com/us/app/transient-events/id360158038?mt=8>



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Jupiter Impact Caught on Camera

(News Release from NASA Space Weather News)

Veteran amateur astronomers Anthony Wesley of Australia and Christopher Go of the Philippines have independently observed an impact event on Jupiter. The strike occurred at 20:31 UT on June 3 and produced a bright flash of light in the giant planet's cloudtops. For images and video visit, <http://spaceweather.com/archive.php?view=1&day=06&month=06&year=2010>

Get Ready for Saskatchewan Summer Star Party 2010

August 12-15

by Rick Huziak

Hear ye! Hear ye! Hear ye'all!

Time to organize your summer and plan to attend the best darn star party in Saskatchewan! SSSP 2010 is ready to take your money, and in return, we'll throw you a humdinger of a great star party, if we do say so ourselves! The star party is held on the New Moon weekend of August 12

-15! Do you need a better reason than observing in a 7+ magnitude naked-eye sky from the Cypress Hills Dark Sky Preserve? And since we are not working around Starfest dates this year, we have chosen a weekend where rain should not be an issue, not that we're still sore about last year's soggy GA/SSSP!

Our Fr. Luke Kemble keynote speaker is Stan Shadick (University of Saskatchewan). His talk is "Investigating Exoplanets With Small Telescopes." All of our popular activities are back: solar observing, swap table, wienie roast, the "Under the Living Skies" lecture, Friday presentations, Saturday talks, under-the-stars clinics, photo contest, red-light café, on-site astro-vendors, 10-year awards, door prizes, moose, and much more! Come have a blast!

The star party is held at the Cypress Hills Interprovincial Park, 20 kilometres south of Maple Creek, Saskatchewan. Everyone is welcome: we cater to the entire family, from seasoned observers to ripe newbies, and we don't forget about the spouse and kids! And the best news: park admission and the SSSP registration fees are the SAME as the 2008 prices! (Sorry for the banquet increase, but we charge only what the resort charges us!)

Register early, and decide NOW if you are coming. If you are tenting, no sweat — there is room for hundreds of tents. Resort accommodations — another story! Most of the rooms were booked long ago (as they always are for SSSP). And the resort continues to renovate cabins this year, so we have a bit of a room shortage. If you need a room, e-mail me (sssp.sk@sasktel.net ; or rickhuziak@shaw.ca) or phone me (306-665-3392 evenings), and I will

put you on our waiting list. In the past, we've usually found a way to fit everyone in.

Registration forms are up on the Website, so take a look and see what we offer, or pick up your brochure at the RASC General Meeting in June!

Success speaks for itself: 85% of our attenders come back year after year. Join your 275 closest friends at SSSP 2010! Everyone welcome!

SSSP 2010 Details:

<http://homepage.usask.ca/~ges125/rasc/sssp2010.html>

Straight to SSSP' 10 Registration:

<http://homepage.usask.ca/~ges125/rasc/2010SSSPRegistrationForm.pdf>

Just print it off, fill it in, and send it off with your cheque. (Sorry, no credit cards.)

SKY BUYS & MIRROR CELLS

The Saskatoon Centre's Swap and Sale Page

FOR SALE: Discovery 12.5" f/5 PDHQ Split-Tube Dobsonian. Bought in 2007 and used six times. Made some modifications to stiffen the box. Nice views from an excellent mirror, but too much scope for me. Will ship at buyer's expense, or willing to deliver for gas money. Scope currently lists for \$1,699; I would like \$1,000. Contact Norma: norj@sasktel.net

FOR SALE:

5" Astroscan telescope. Red exterior. Good condition.
8" Celestron Celestar Deluxe S/C telescope. Includes many extras and upgraded items, such as finder, W/O diagonal, Feathertouch focuser, Telrad, Bob's Knobs, Dry Eye dew heater system, padded main scope case, and tripod bag. This scope has great optics, as attested to by a former Celestron employee at a previous SSSP. This scope has seen me through 3 certificates, and will track for hours on end. If you want a great scope, then please consider this one. Over \$3,300 invested. Asking \$1,700. Will consider offers. Please contact Darrell (306-374-9278; novachat@sasktel.net).



The Planets This Month, June-August 2010

by Murray D. Paulson, RASC Edmonton Centre

Mercury is coming out of greatest western elongation and will head for its date with the Sun on June 28. On August 6, Mercury will reach greatest eastern elongation, shining at magnitude 0.3 and showing a 7.6" 49 percent-illuminated disk in the eyepiece. This is a good time to have a look to see if you can see details on it in the daytime. It will decline from its 27-degree distance from the Sun to a September 3 inferior conjunction.

Venus starts off the month of June up by Castor and Pollux in Gemini, shining at magnitude -3.9 and showing a 13.5" gibbous disk in the eyepiece. Venus will continue on its way out from the far side of the Sun and will grow in the eyepiece. By the beginning of July, Venus will expand to 16.2" and shine at magnitude -4, sitting 41 degrees from the Sun and high in the evening sky. On August 19, Venus comes to greatest eastern elongation, 46 degrees from the Sun, and shines at an amazing magnitude -4.3. In the eyepiece, you will see Venus at 24.3" and 48.8 percent illuminated. It will pick up speed from here on in to its conjunction with the Sun later in the year. Some interesting dates over the summer are: August 8, when Venus is in conjunction with Saturn and they are 2.7° apart; exactly 10 days later on August 18, Venus and Mars will be in conjunction, separated by 1.9°.

Mars started off the month in conjunction with Regulus on June 6. Mars shows a 5.8" disk in the eyepiece. Mars continues to dim and shrink in size over the summer. On July 30, Mars will pass 1.8 degrees below Saturn. At the time, it will be at magnitude 1.4; and in the eyepiece, it will have a 4.7" disk.

Jupiter enjoys a close conjunction with Uranus on the morning of June 8. It will pass only 26 seconds of arc below Uranus. At this time, Jupiter will rise 2 hours before the Sun. Over the month, the morning twilight will chase Jupiter up the sky. By the end of the month, Jupiter will rise at 1:00 am, shining at magnitude -2.4. In the eyepiece, Jupiter presents a 41.5" disk. By August and the summer star parties, Jupiter will rise at a more opportune time of 10:00 pm and show a 47.6" disk in the eyepiece, shining at magnitude -2.8 and sitting prominently below the circlet of Pisces. It will be the planetary showpiece of the summer star parties.

Saturn left the stationary point of its western retrograde on June 1. At the beginning of June, Saturn was shining at magnitude 1.0, with its disk subtending 17.9". We are leaving Saturn behind in its orbit, and it will continue to

slide into the west. By early July, Saturn sets at 1:00 am, with the NLC rising in the north. At this time, Saturn shines at magnitude 1.1 and shows a 17" disk in the eyepiece. You will notice that Saturn's rings are now tipping back up.

Jupiter and **Uranus** have been in a dance over the last while, and they will stick close together for the balance of the summer. If you go to the southeast corner of the circlet of Pisces and look with binoculars, you will see a sprinkling of 5 to 6 magnitude stars. In a star atlas, you can locate 19, 22, 25 and 21 Pisces. Uranus is located along the line connecting 19 Pisces through 25 Psc and continuing another 3.5 degrees to the south. You should be able to locate the stars in the *Observer's Handbook* finder chart with binoculars. Uranus shines at magnitude 5.8 and will show a 3.5" disk in the eyepiece. It will move around its eastern retrograde position on June 30, then head back west over the summer (slowly, that is). Uranus is always nice to hunt down at the summer star parties, that hard-edged blue disk that pops out in the eyepiece. If you get a particularly transparent night, look for its largest moons, Titania (mag 13.9), Oberon (mag 14.1), Ariel (mag 14.4), and if you have aperture, Umbriel (mag 15.0). Make up some finder charts before you go, or take your laptop to the field with a sheet of Ruby Lith (red filter material). Make drawings so you can check the moons' positions from night to night.

Neptune comes to opposition around the time of the star parties, so it is definitely worth the trouble to find as well. This year, Neptune made it into a new constellation!!! It crossed the border into Aquarius in April and will cross back into Capricornus in mid-August. Around opposition, Neptune shines at magnitude 7.8 and will show you a 2.4" blue-green disk in the eyepiece. While you are there, look for Neptune's moon Triton. It shines at magnitude 13.4 and is fairly easy to see on a clear, transparent night. Neptune is much dimmer than Uranus, and its moon is brighter, so this challenge is much easier to observe. Good luck.

Pluto is at opposition on June 25, but summer twilight will interfere with its hunt. I will wait till the summer star parties. Pluto is a faint magnitude 14 mote in the eyepiece. This year, it will be interesting. Pluto just happens to be transiting the M24 star cloud, so there will be numerous stars to try to distinguish it from. Of particular note is that Pluto crosses Barnard 92 over the week from July 3 to 9. It will make the hunt much easier and be a pleasure to see it cross the inky blackness of B92.

Enjoy the summer! See you under a dark sky somewhere.

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 II, 140 Lunar, or 35 Binocular objects, or Explore the Universe 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. Hydromako, T. Tuomi, L. Scott, G. Charpentier, B. Johnson, M. Clancy, L. Dickson, B. Burlingham

Ken Maher	Done!	110
Norma Jensen		108
Ron Waldron		105
Kathleen Houston		90
Margo Millar		77
Wade Selvig		75
Garry Stone		57
Barb Wright		40
Wayne Schlapkohl		36
Ellen Dickson		32
Jeff Swick		24
Bruce Brandell		5

FINEST NGC CLUB

Certified at 110 Objects:

R. Huziak, D. Jeffrey, G. Sarty, D. Chatfield, T. Tuomi

Larry Scott	Done!	110
Scott Alexander		97
Sandy Ferguson		23
George Charpentier		13
Ken Maher		10
Mike Clancy		7

Chatfield BINOCULAR CERTIFICATE

Certified at 35 to 40 Objects:

M. Stephens, T. Tuomi, M. Clancy, R. Huziak, K. Maher

Isabel Williamson Lunar Observing Certificate / 140

Tenho Tuomi		84
Norma Jensen		80
Jeff Swick	Up!	19

EXPLORE the UNIVERSE

Certified at 55 to 110 Objects:

M. Clancy, T. Tuomi, K. Maher, B. Gratias

Wayne Schlapkohl	Done!	55
Sharon Dice		31

HERSCHEL 400 CLUB

Certified at 400 Objects:

D. Jeffrey, R. Huziak, D. Chatfield

Tenho Tuomi	Done!	400
Gordon Sarty		251
Scott Alexander		117
Sandy Ferguson		18

HERSCHEL 400-II CLUB

Darrell Chatfield	Up!	340
Rick 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 website.

On-line Messier and Finest NGC lists, charts and logbooks – check out:

<http://www.rasc.ca/observing>

On-line Herschel 400 List – check out the official site at:

<http://www.astroloague.org/al/obsclubs/herschel/hers400.html>

The Binocular List will be available at each general meeting or can be mailed out on request to distant members.

Copies of the Isabel Williamson Lunar Observing Program Guide can be purchased at meetings.

Program details can be found at: <http://www.rasc.ca/williamson/index.shtml>

Observers Group Notes

by Larry Scott

Stop me if you've heard this one before: May 7 Observers Group was postponed due to cloud. I haven't been keeping records, but my feeling is that was the worst May ever. Managed to get out on May 14, and caught a 26.5-hour old crescent Moon at sunset. Also viewed comet C/2009 K5 (McNaught) sliding through Cepheus. With about 20-30 minutes of observing, I confirmed the motion of the comet against the background stars, and then it clouded over. (DOH!) That was it for me; however, I believe there were observers out on the 8th and 15th.

Next Observers Group is scheduled for July 17. Again, if weather is fair, I will most likely be out to Sleaford the weekend before that as well. (Didn't want Observers Group to interfere with anyone going to Star-B-Q on the 9/10th.)

To any members, new or old, wanting to check out Sleaford, please contact me and we'll make it happen. E-mail larry.scott@sasktel.net, or call me at 934-5801. Cheers, and have a great summer.