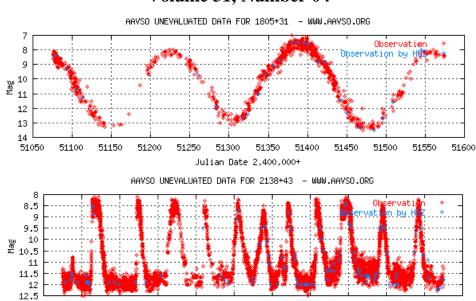
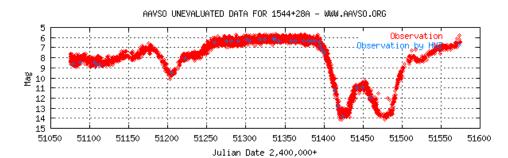
Saskatoon Skies

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

April 2000

Volume 31, Number 04





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RASC Calendar Happenings			
Date (2000)	Event	Contact	Telephone
Apr. 14	Junior/Youth Astronomers Meeting -	Sandy Ferguson	931-3184
	7:30 pm at Nutana Collegiate		
Apr. 17	Executive Meeting - 6:30 pm, Rm 8313	Les Dickson	249-1091
Apr. 17	General Meeting - Dale Jeffrey's Living	Les Dickson	249-1091
	Skies Observatory - 7:30 pm		
Apr. 22	Zodiacal Light Season begins	Rick Huziak	665-3392
Apr. 29	Living Skies Observatory Grand	Dale Jeffrey	223-4447
	Opening - Laird, SK - 7:30 pm		
May 6	Astronomy Day at Circle Centre Mall	Brian Friesen	384-2963
May 15	General Meeting - BYO Telescope!	Les Dickson	249-1091
May 22	Noctilucent Cloud Season Begins	Rick Huziak	665-3392
Jun. 19	General Meeting	Les Dickson	249-1091
Jun 30 - Jul 2	General Assembly, Winnipeg	Ken Noesgaard	931-4755
Jul 29 - Aug 6	Mt. Kobau Star Party, Oosoyos, BC	Rick Huziak	665-3392
Aug 25 - 27	Sask. Summer Star Party 2000, Cypress	Les Dickson	249-1091
Aug 31 -Sep 3	Alberta Star Party, Caroline, AB	Rick Huziak	665-3392

Sky Buys and Mirror Sells

The Saskatoon Centre's Swap and Sale Page!

For Sale: 1 1/4" eyepieces: Edscorp 25mm Orthoscopic, 21mm - 3 element "Siebert" (Kellner?), Meade 12mm MA, Celestron 6mm Orthoscopic. \$30 each. Call Ken Noesgaard at 931-4755 or e-mail ken.noesgaard@siemens.ca.

For Sale: Brass-finished Carrying Trunk for C-8 or C11, Kellner 9mm eyepiece \$40.00, Antares 10mm Plossl eyepiece \$100.00. Call Darrell Chatfield for pricing and trials. tel. 374-9278.

For Sale: 2" Lumicon Deep Sky (Light Pollution) **Filter.** \$200.00 obo. Call Andrew Krochko at 955-1543.

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Saskatoon Centre

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Newsletter Editor - Richard Huziak Copy - Brian Friesen & WBM Collate - Friesens, Christie, Dicksons, Ferguson, Essar & Krochko



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Saskatoon Skies is published monthly by the Saskatoon Centre of the RASC. Distribution is approximately 165 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. 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 .GIFs, .TIFs .JPGs or similar. Send e-mail submissions to the editor at <huziak@SEDSystems.ca>. Submitted materials can be returned upon request. Please send articles in "generic" formats, with standard grammatical formatting appreciated - 5 spaces at the beginning of paragraphs, two spaces after periods, one space after commas. A separate subscription to Saskatoon Skies is available for \$12.50 per year. 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 non-commercial items free of charge.

Οβσερωινγ ατ Λαστ

by Andrew Krochko, Observing Coordinator

The Messier Marathon on April 1st didn't go very well - it was not only cloudy but also snowing! It cleared up on April 2nd so Rick Huziak and I headed out to Sleaford. I had my newly refurbished 6" Schmidt-Newtonian along (it broke last March and couldn't be collimated). While fixing it so it could be collimated again I decided to blacken the tube with velvet and modify several other things with it. When we arrived at Sleaford, Mike Stephens was already there. As darkness fell Mike set up his 10x50 binoculars and C8, I set up my 6" and Rick pulled out Eetook. After collimating on Arcturus I decided to take a look at the Orion Nebula through my 6". I was surprised how good it looked despite the small aperture and twilight, the view was very similar to the view in a 10-inch. I think this was in part due to my efforts blackening the tube and the excellent transparency we had at sunset.

As night continued to fall I started looking for galaxies, Mike started on Darrell Chatfield's binocular list with his 10x50's and Rick observed variables in Cygnus despite the fact that it was sitting just above the north horizon. From further south Cygnus can't really be observed at this time of year so there are often gaps in its variable stars light curves. Because

of our latitude we can fill in the gaps in the light curves.

I concentrated mostly on trying to see detail in bright galaxies at high power. At 150x in my 6" detail in M51 that I only suspected at lower powers became relatively easy. I could follow the arms out from the core and see the variations in their thickness and brightness. The Black Eye of M64 was also relatively easy once high power was used. It is important to shield stray light from your eyes when observing deep sky objects at very high powers. I did this by using an eye patch on one eye and pulling my coat over my head. After a minute or so of this deep sky detail became much easier to see and more of it was visible than at lower powers. Our eyes can dark adapt to fainter light levels than a normal dark sky and high powers are needed to overcome our eyes low resolution at faint light levels.

After finishing his variable stars, Rick began observing Herschel 400's. It took him nearly an hour for each one because he wanted to find every faint galaxy in the immediate area. Mike Stephens logged over 20 Chatfield objects that night. As the night wore both the aurora and transparency began to get worse. Some time way after midnight we decided to pack it in.

ON THE COVER: The cover of this issue features 3 of my favourite variable stars and their light curves from October 1998 to January 2000. Observations are visual estimates from hundreds of observers around the world. My observations are buried in there somewhere! You can check out any variable light curve you want by using the Light Curve Generator on the AAVSO site at www.aavso.org/ These curves are from the AAVSO site, and are, from top to bottom, the long period variable T Her, the cataclysmic SS Cygni and the soot ejecting carbon star R CrB.

A Yorkton Starnight

by Jim Huziak

Monday, March 27, 7:30pm, Yorkdale School, Yorkton, SK, My 13" dob, and about 20 Grade 6 kids

March 27th was actually our 3rd attempt at getting out, the weather not co-operating on the first 2 occasions. This particular Monday, however, the temperature sat just above the freezing mark with no wind, the skies were clear, Virgo was rising in the east and no moon for the next 6 hours... the perfect evening.

Nonetheless, I was a little apprehensive heading into the night, as the late March skies hold a real dearth of stuff that might keep the attention of a bunch of 11 & 12 year olds for more than a few minutes. But, with Jupiter and Saturn rapidly sinking into the west, it was now or never. Besides, Shirley, my better half, who teaches at Yorkdale promised hot chocolate would be available, and that pretty much clinched it.

The kids began drifting in in small groups, which worked out well to keep the initial lineup at the eyepiece down. I was informed that Jupiter and it's moons were "cool", and Saturn as "awesome", which they tell me is 'really' good. I guess they were, as most kids returned for repeated glimpses. Unfortunately Mars was caught in some late twilight haze, but as the current view is so-so, and no one asked, it was just as well.

I had planned to run through a loose list of the best available clusters & nebulae for some variety, but this group had other plans. A number knew that their 'zodiacal' constellation was up, and of course wanted to see it through the telescope. I spent a long time tracing out the likes of Taurus on the sky for them, and agreeing that, yes, it really doesn't look much like a bull.

The prominence of Betelgeuse, Rigel & Sirius drew questions. These first magnitude stars make a stunning impression through a telescope, and I was surprised to find myself in a discussion about the colour-temperature relationship. Someone had also heard that red stars are big, and so I told them about Betelgeuse. Of course, they didn't believe a word of it, but politely listened anyway.

I had once previously dragged the scope out in January of 1999 for a different school. Here, as well as at that gathering, there was a budding astronomer in the group who kept me on my toes with questions designed show the rest of the class how much he knew. To them, it's probably the first opportunity they've had to discuss their solitary hobby with their peers, and it all gushes out as once like they waited forever for the chance, which is probably true. In a way, you can't help but identify with him. Following young Galileo's lead, we did get back to touring about the sky after the likes of M42, the Pleiades and Double Cluster, with a few double stars thrown in. By about 9pm, all but the diehards had left, so with it being a school night, we called it quits.

With two such events under my belt, albeit with different age groups, I noticed that there are parallels I expect are universal to kids' star nights, and that I hope to remember for next time:

Ask a kid if the focus is good for them and they'll politely tell you it's o.k. even if it's not. Go figure.

- There is always a really short person that needs a box to stand on if you're using a reflector. Bring something.
- Views of the cosmos are interspersed with trips to the playground. It's nothing personal.
- Even 12-year old kids have heard of the movie Betelgeuse, and get a kick out of seeing the star named after it. Include it if it's up.
- Time goes really quickly for you, slow for the kids. There's something in Einstein's General Theory about that, but it escapes me at the moment.
- Parents who bring their kids eventually sneak a glimpse through the telescope. Be polite but firm when asking them to relinquish their place at the eyepiece so the kids can have a turn. And never let them catch your eye, or they may ask a question. Grown-ups ask *waaay* too intelligent questions.
- I'm 2 for 2 on having a young astronomer in the crowd. You can't help but instantly like this person.
- There will always be some kids who don't care about astronomy. For them, the highlights of the night are the size of the Dob itself, and the reflection of their face as seen peering down the tube. Live with it.
- However blasphemous it may be to even think, try to plan a star night for when the moon is in the sky. There is nothing like it to impress the first time crowd.
- Finally, it's exhilarating showing off the skies and talking astronomy to the uninitiated. It's a world they have never experienced, and you can tell that it will leave a lasting impression on some. It's a bit of a rush.

And then, there's the hot chocolate...

Byline: Jim Huziak is an armchair astronomer who is slowly being lured back to observing by little	9
young people. He is an occasional member of the Saskatoon Centre when he remembers to pay his dues	
Now	S
not one of those times.	

+

Wanna RED astronomy flashlight for CHEAP??

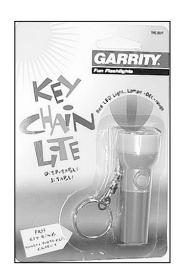
Garrity now sells this cheap and dirty "Fun Flashlight for about 3 bucks at Canadian Tire and other outlets.

Features: Red LED, cheap

Drawbacks: Momentary on only, no dimmer.

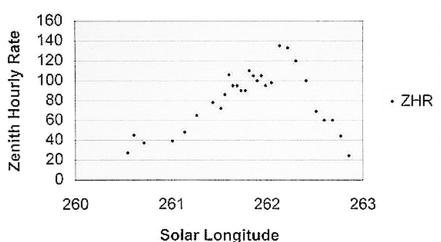
Saskatoon Helps the IMO in the 1999 Geminid Meteor Shower

by Rick Huziak



The weather during the week of the December Geminid meteor shower was not very good, but 5 members of the Saskatoon Centre managed to get in an excellent night of observing on the evening of December 13/14. Our decision to observe this shower was reached via a group consensus just after the

December general meeting. As we were leaving the meeting, the sky looked great, so Sandy Ferguson, Andrew Krochko, Mike Stephens and I decided to make the trip to the Sleaford Observatory where dark skies would give us good counts. In the mean time, Wade Selvig, member from Shaunavon southwestern Saskat-



chewan, was making his own counts.

When we arrived at Sleaford, we decided to roll back the U of S observatory roof. This proved to be an excellent idea. The 4-foot walls provided a perfect windbreak from the light breeze, and setting our chairs up on the wooden floor saved us from becoming too cold, despite the -26 degree Celsius temperature.

The counts proceeded from 11:30 p.m. to 3:00 a.m. and produced more than 120 Geminid meteors per observer, plus data from 3 other low-rate showers active at the time. We counted per International Meteor Organization rules, and a few days later submitted our results to the IMO. Wade submitted his as well.

The accompanying graph, produced from that IMO data, shows the results of the 57 observers representing 17 different countries from around the world who contributed observations of this shower. Our observations represent the *only* Canadian observations contributed. Our observations, the 5 dots clustered around solar longitude 261.9 and 262.0, show a possible pre-maximum "spur" about 1/2 day before the actual main peak. (The ZHR is the Zenith Hourly Rate - a calculated rate corrected for different seeing conditions of different observers. The Solar Longitude can be read as 'days', where one degree of longitude equates to one-day duration).

Observations of this type are valuable to meteor shower researchers, and can be done with a minimum of equipment and experience. You only need your eyes, dark skies and the will to observe. These observations represent the first true counts made by Andrew and Mike. The next observable shower is the lower-rate *eta Aquarids* on May 3/4, which peak during the new moon. Try out your eyes!

When Members Write In.....

by Rick Huziak, Newsletter Editor, <huziak@SEDSystems.ca>

Snippets of great wisdom, and pride of achievement are evident in the write-in messages I get from members each month. Here are some of them (used with permission):

About the necessity of a good star atlas:

Brent Gratias writes: "Finally took some time tonight to try out my new SkyAtlas 2000.0. Wow, does that make things easier. I was able to find M63 (mag. 9.5) with my 10x70's from in the city. You can bump my Messiers up to 34 please." [Ed - a good star atlas is essential to observing - the better the atlas, the more you see and the easier you find it! (And the more you spend!)]

Dale Jeffrey confirms this thinking: "When I got my Millennium Star Atlas, it added 2 inches to my telescope's aperture!"

About dedication and perseverance:

Ken Noesgaard writes: "Heard you and Andrew went out last night. I got up at 03:30 am [Apr. 3] and went out this morning. Started observing at 04:45, nautical twilight began at 05:15. Luckily I managed to get M62 before it got too bright. Soooo... my Messier list is done!" [Congratulations!! - Ed.]

About how astronomy and farming mix:

Ken Wiebe <wiebek@sk.sympatico.ca> writes: "I am sending you a link to my site - some pictures I have taken over the past year or so. Enjoy. http://www.skybusiness.com/wiebek/spacephotos.html>. My stuff isn't of really great quality, but it may encourage other small-timers to have some fun." [Ed. - check this site out - Ken, you are too modest! The pics are excellent!!]

Membership Updates

by Bob Christie < <christie@sk.sympatico.ca>

Welcome New and Renewed Members:

Name	Status	Address	Telephone
David Ochitwa	R	2517 - 37th Street West, Saskatoon, SK, S7L 4E9	(306) 382-4361
Nicolas Noble	Y	Box 142, Aneroid, SK, S0N 0C0	(306)
Mike Oosterlaken	Y	Box 1487, Biggar, SK, S0K 0M0	(306) 948-2944

Remember - let Bob Christie or Jim Young know if there are changes to your address or status!

Mt. Kobau Star Party 2000 by Jim Failes, President, MKAS

Here's some news on what's being planned for Mt. Kobau Star Party 2000, which begins at dusk July 29 and runs till dawn August 6.

There are so many things happening in the skies at MKSP 2000, we couldn't fit them all into the night! Only a slight exaggeration, as two highlights of Kobau this year are daytime events: a challenging occultation of Venus, and a late-afternoon partial eclipse of the sun! Add the after-dark attractions -- a beautiful pairing of Saturn and Jupiter amid the clusters of Taurus, the prospect of a naked-eye comet (Linear), and ideal placement of Kobau's spectacular Milky Way -- you've got a cosmic line-up that's just too good to miss.

Sixteen years ago, at the very first MKSP, our featured guest speaker was a well-known cold camera astrophotographer from Victoria, BC Well, Jack is back! Jack Newton is now world-renowned for his superb CCD astrophotography, and he's returning to Kobau this year as our keynote speaker. Jack and Alice are in the process of opening an astro Bed & Breakfast/CCD Photography Learning Centre just across the valley from Mt. Kobau. This will be a summer version of their Florida Imaging Centre. The Newton's' Canadian Observatory/B & B will welcome MKSP visitors for daylight tours August 3 - 6 between noon and 2 p.m. For more on the two Newton homes, go to www.jacknewton.com . For a chance to meet Jack and hear his (magnificently illustrated) story, come to MKSP 2000!

Not far from Jack's face in the group photo of the inaugural Mt. Kobau Star Party, is the smiling visage of Ken Hewitt-White. Ken returned to serve as President of the party for much of the 1990s. These days he's writing books, hosting and producing astronomical TV shows, and astronominizing at every turn. His column gets the last word in every issue of Sky News magazine – a well-deserved honor. Few people have been able to express the essence and soul of astronomy as well as Ken. Be sure to catch his talk at Kobau this year, titled, "Skywatching as a Way of Life."

The faithful just keep coming back. Kobau regulars Gary Seronik and Murray Paulson are two more shining stars of our speaker line-up for MKSP 2000. Gary takes time off from Mt. Kobau each year to spend the other 51 weeks as an Associate Editor at Sky & Telescope magazine. Murray, meanwhile, hitches up the Boler for the expedition back to central Alberta. We suspect his eclectic and apparently limitless astronomical interests need the prairie room to breathe.

Per usual, the talks and other "formal" events of the star party will be held on the final three days of the event, August 3, 4 and 5. For more information about MKSP and this year's event, please see our web site www.bcinternet.com/~mksp

I hope you'll be able to join us on the mountain for MKSP 2000.

For more information and registration:

MOUNT KOBAU ASTRONOMICAL SOCIETY PO Box 20119 TCM Kelowna, BC CANADA V1Y 9H2 Jim Failes, President
Ph. (250) 861-8277
Evenings & Weekends (250) 763-6962
E-mail: eij@bcinternet.com
MKSP WEB SITE: www.bcinternet.com/~mksp

2001 RASC Calendar - Call for Photos

by Rajiv Gupta, Editor, RASC Calendar, <gupta@interchange.UBC.CA>

All members of the RASC are encouraged to submit astronomical photos for consideration for publication in the 2001 RASC Observer's Calendar. Images can be of any type: AD deep-sky or solar system; prime-focus, piggyback, or fixed-tripod; emulsion- or CCD-based.

In order to preserve the highest quality possible, film-based images should be submitted as 8- by 10-inch prints. Electronic versions of these images may also be submitted, but prints should be available on request. CCD images may be sent in any standard electronic image format.

Prints, CDs, or disks (1.44 megabyte floppies, 100 megabyte Zip disks) should be sent to:

Rajiv Gupta, 2478 W. 1st. Avenue, Vancouver BC V6K 1G6

Photographs are to arrive by April 15, 2000. Electronic images under 1 megabyte in size may instead be sent by e-mail to gupta@interchange.ubc.ca. For further information about submissions, please contact me by e-mail or by phone at 604-733-0682.

The April 8th Sleaford Open House Attracts a Big Crowd by Ellen Dickson

A successful open house was held at the Sleaford Observatory on April 8th, despite some marginal observing weather. This open house was run at the request of Stan Shadick, since he had had many requests to visit the observatory from people who could not attend the last open house in the fall. The open house ran from 8:00 p.m. to 11:00 p.m.

RASC members who helped out were Jim Young, who helped to direct parking, Barb Young, Les and I, who handled coffee and conversation in the school, and Andrew Krochko and his mom, Joan. Andrew set up his newly refurbished 6" scope and provided excellent views of the crescent moon.

Stan Shadick and his lab assistants open the roll-off shelter and manned the telescopes for the crowds. All in all 200 to 250 people attended the open house, coming from the Colonsay community, Saskatoon, and from as far off as Vanscoy and Wakaw. Crowds of this size demonstrate the interest and support that the community has for this observatory.

U of S Observatory Hours - The U of S Observatory is open to the general public **every Saturday evening**. Admission if free. The observatory is located on campus, one block north of the Wiggins Avenue and College Drive entrance. On clear evenings visitors may look through the 6-inch refractor to view Jupiter, Saturn, the moon, star clusters and other exciting astronomical objects. For further information, phone the recorded Astronomy Information Line at 966-6429.

Hours for April, May, June, July - 9:30 p.m. - 11:30 p.m.

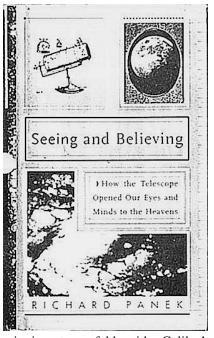
Seeing and Believing - A Book Review by Rick Huziak

Seeing and Believing, by Richard Panek, 176 pages, Viking Press, 1998, Hardcover, \$30.99.

What was the universe like before the telescope was invented? That's easy. Fixed stars revolved on crystal spheres - you could see them all by just looking up. Among the stars there existed 5 wandering planets, one sun and one moon. Their paths were quite predictable, though strange, and of course, everything revolved around the earth. This was the 'established' universe, though some doubted a few of the 'facts' here and there, but not too loudly. This was our world, and you could spend your time preparing for the next world!

In 1609, the universe changed forever with simple observations made through a newly invented 'perspective cylinder' - a simple and crude refracting telescope - and since then things have never been the same. The universe was no longer fixed, and wherever one looked, one would discover new and wonderful sights no longer fitting the status quo. As larger and more powerful telescopes were built, the universe grew in size and complexity, and it still is growing today, even though the telescope has not changed much from those early days.

But along with a new way of *Seeing* had to come a new way of *Believing*. The book is subtitled "*How the Telescope Opened Our Eyes and Minds to the Heavens*", and how true this is. Seeing was not enough. Astronomers, philosophers, theologians, scientists and all people had to make the shift and *believe* what they were seeing was real, and not just some illusion or fraud. Scientific thought and investigation had to blossom to keep up with new discoveries and the new universe. And the new creed of science became the *quest for truth*. Man's place in the universe was



just beginning to unfold with Galileo's first observations, and it continues to unfold today. This books describes the contributions of the telescope though the work of many famous (and amateur) astronomers (Galileo, Cassini, Bradley, Herschel and all of the other 'greats') and how each observation created more of a need to believe!

I read this book on a recommendation from Dale Jeffrey. Although this book is quite pricey (i.e. borrow it from Dale!), and binding leaves a bit to be desired, this book is worth it's cost and returns it to you in a well-written and very informative summary of how the world changed just because a small 'perspective cylinder' was invented a few hundred years ago.

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The Messier, FNGC & H-400 Club

Sandy Ferguson

18

MESSIER CLUB

Certified at 110 Objects: Rick Huziak, Gord Sarty, Scott Alexander, Sandy Ferguson, Dale Jeffrey, Darrell Chatfield, Bob Christie.

Ken Noesgaard *	Completed & Applying!*	110
Wade Selvig		64
Erich Keser		51
Stan Noble		28
Mike Oosterlaken (*	*NEW*)	
26		
Brent Gratias		26
Ellen Kaye-Cheveld	ayoff	23
Les & Ellen Dickson	1	20
Brian Friesen		15
Andrew Krochko		12
Debbie Anderson		8
Lorne Jensen (*NE)	W*)	6
Joey Eremondi (*NI	E W *)	2

FINEST NGC CLUB

Certified at 110 Objects: Rick Huziak

Dale Jeffrey -(*AWARDED*)	110
Gordon Sarty (*AWARDED*)	110
Darrell Chatfield (*applying*)	110
Scott Alexander	89
Sandy Ferguson	23
Ken Noesgaard	8
Ellen Kaye-Cheveldayoff	4

HERSCHEL 400 CLUB

Certified at 400 Objects: not yet!

Jeffrey, Dale	386
Rick Huziak	353
Darrell Chatfield	257
Gord Sarty	147
Scott Alexander	98
Ken Noesgaard	25

Saskatoon Skies page 14 April 2000

Join the Messier, Finest NGC and H-400 Club!

Observe all 110 Messier, 100 FNGC or 400 H-400 objects and earn your

CERTIFICATES!

The first 2 lists can be found in *the Observer's Handbook*. The Herschel 400 list will be available at each general meeting for 50 cents (covers photocopying) or **can be mailed out on request to distant members.** Each month I'll be posting updates. **Send observing numbers to:**<a href="mailto:kupaa-kupaa

Great News!

Another member has reached the top of the Messier heap! And now we've added 3 new JUNIOR members to the list!!

Congratulations to Ken Noesgaard who has observed all 110 Messiers. He will be awarded his Messier certificate in person at the GA in Winnipeg in July!

Congratulations to Dale Jeffrey Gordon Sarty & Darrell Chatfield

Dale and Gord reached the FNGC goal last month, and will receive their FNGC certificates at the April meeting! Darrell finished his last 4 FNGCs off of his neighbour's deck this month and is now applying!

Notice of the General Meeting of the Saskatoon Centre

Monday, April 17, 2000 at 7:30 p.m.

Room 8313, New City Hospital, Queen Street

Presenting: Dale Jeffrey
"Building The Living Skies

and Darrell Chatfield - "How to Observe and See Details in a Telescope"

Observatory"

This meeting is open to everyone - members and non-members. There is no admission charge.

It's not too late to join the Saskatoon Centre, RASC!

Regular - \$40.00

Junior - \$22.50

Life - \$720.00

Membership runs from Oct. 99 thru Sept. 00

Minutes of the General Meeting Monday, March 20, 1999 held in Room 8313, City Hospital, Saskatoon, 7:30 p.m.

recorded by Al Hartridge, Secretary

- 1. Presentations:
 - Darrell Chatfield -"The New Binocular Observing List."
 - Murray Paulson, Edmonton RASC "Strolling through Arizona Skies."
- 2. Financial Report: balance to date is \$9057.57
- 3. Membership Report: to date there are 80 members and 4 temporary members.
- Sleaford Report: we need a work bee this coming weekend to take care of a number odd jobs to be done on and around the observatory and warm up shelter.
- 5. Library Report: nothing new to report at this meeting.
- Observers Group Report: there will be a Messier Marathon on April 1, weather permitting.
- SSSP Committee Report: Murray Paulson will do the binocular skywalk and Jack Newton will be this year's guest speaker. The contract with the resort has been signed. The Regina club will be working a new T-shirt and possibly a new pin.
- 8. Partnership Agreement Report: don't hold your breath. The problem with the U of S Facilities Management involvement still has to be resolved.
- Sleaford Star Night for the regional community and others will be held in conjunction with an open house for the U of S Observatory on April 8th, weather permitting.
- 10. Next Executive meeting will be held on April 17th at 6:30 pm. Just before the General meeting.
- 11. Grant: has been awarded to the Sleaford Observatory project by National of \$3000.00.
- GA in Winnipeg on July 1st weekend . There will be an SSSP display at the GA.
- 13. Books: Moved by Jean Dudley and seconded by Erich Keser that up to \$400.00 is spent on reordering books. Motion was carried.
- 14. Meeting adjourned at 10:00 pm.

The Sleaford Observatory

Longitude: 105 deg 55' 13" +/- 13" W Latitude: 52 deg 05' 04" +/- 08" N, tel.: (306) 255-2045 by Rick Huziak

Scheduled Work Day was held on March 26th - Weather cooperated and a large crew managed to get a lot of work done at the observatory. In the Warm-up Shelter, Bob and Dave got more panels up inside the shelter and began installing hardboard, Darrell installed the toilet doorjamb, Bill supervised and installed the toilet heater controller

The Patterson dome also got work done to it. Jim and Al rebuilt the dome door, Rick cleaned up the inside of the dome, painted gussets and cut in the new floor trap doors. Ken, Amy, Graham & Sandy scraped paint off of the outside of the dome to allow the fibreboard to dry out, and everyone else helped out with little jobs everywhere. Bill and Brent pulled the electrical wires through the conduit to the Patterson dome. Jim, Al, Bill, Rick, Graham and Bob ran flashing around the dome skirt, and Ken installed a new main breaker box.

Thanks to Al Hartridge, Graham Hartridge, Jim Young, new member Dave Ochitwa, Bill Hydomako, Darrell Chatfield, Rick Huziak, Amy Huziak, Ken Noesgaard, Eric Noesgaard, Bob Christie, Brent Gratias and Sandy Ferguson (who besides scraping paint off the old dome, fed us all a hot soup and hot dog lunch!)

University News: Construction and maintenance of the U of S roll-off will continue in the next few weeks with the installation of a landing and stairs, realignment of the telescopes and the replacement of faulty air cylinders on the fold-down panels.

The Sleaford Observatory Receives Funding from the National Special Projects

Grant: We were informed after the March National Council meeting that our application for funding was accepted and approved, and we received a grant of \$3000.00 toward construction of the Sleaford site. We thank National Council for their consideration and generosity.

The following list shows the work we planned to do at the site. Crossed off ones are done, but don't get too excite. Bill has thought of about 30 more tasks that need attention of the next few months!

- fill and sand the toilet floor
- glue lino on the toilet floor
- cut wall panels for the expansion
- cut wall panels for the toilet (begun)
- attach hardboard to toilet panels (begun)
- attach toilet heaters (begun)
- carpet & edge expansion panels

- place a sill plate on the toilet door
- aluminum side the observatory
- build a new frame and door for obs.
- pull power wires to the observatory
- sort out junk and discard from obs.
- cut observatory floor boards to fit
- move excess materials to school basement

Stay tuned for another Sleaford Work Day in late April or early May!

The Millennium General Assembly in Winnipeg

by Lindsay Price <flprice@mb.sympatico.ca>

Summer is the season when starry skies, late nights, astronomers and mosquitoes all gravitate to each other. This year in Winnipeg we anticipate the brightest stars, the smartest astronomers and the biggest mosquitoes ever! It all comes together from June 29 through July 02. Planned for this event is an exciting line-up of speakers and paper presentations, as well as events and activities to be enjoyed and remembered by family members for years to come.

The list includes three dynamite speakers for the Assembly, lead off by Dr. Wendy Freedman, one of the three co-leaders of the Hubble Space Telescope Key Project. Recently featured in Astronomy magazine, Dr. Freedman's interests lie at the beginning of things - the age and evolution of the universe. Those beautiful images from Hubble showing distant galaxies, Cepheid variables, and the transient glow of supernovae are all part of her search for the beginning of it all.

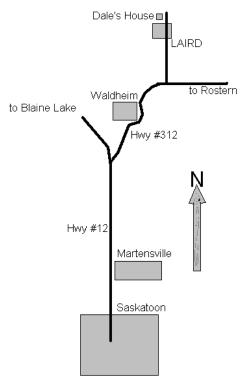
Steve Edberg and Don Parker are well-known names in the amateur and professional community. Both appear frequently in the pages of *Sky and Telescope* and *Astronomy* magazine, Don for his spectacular high-resolution images of the planets and Steve for his equipment reviews and observing tips. In his day job, Steve works for the Jet Propulsion Laboratory in Pasadena where he helps manage the Cassini probe that is now on its way to Saturn. Don is the consummate planetary observer whose first love is Mars. His work has found a place in professional journals and graced the pages of other publications as well.

The centre of activity will be the campus of the University of Manitoba. Reasonably priced accommodation is available at St John's College. Meals, residences, lectures, the banquet, the Barbecue everything is within walking distance. For family leisure and entertainment, arrangements have been made for lots of activity. Waiting for visitors is the Zoo, The Fort Whyte Nature Centre, Oak Hammock Marsh Waterbird Sanctuary, the Museum of Man and Nature, and the Planetarium. The Red River Exhibition will be in full swing until the 1st of July.

Just one hour away are the sunny beaches of Lake Manitoba, reckoned one of the best in the world with their incredible white sands. From the centre of Winnipeg, at the historic confluence of the Assiniboine and the Red Rivers, is The Forks, from which riverboat trips go down-river to the restored Hudson Bay Company fort. The Forks is also the place to be on Canada Day to join in the big party to celebrate our national identity with a Stage Show and Fireworks, or perhaps visit the shops, Children's Museum, or take in the Children's Theatre. Astronomy has not been forgotten either – the Winnipeg Centre's observatory with its 14" 'scope is always pointed up!

Information and registration packages can be found at the GA 2000 web site: http://www.rasc.ca/a2000/, by contacting Stan Runge at stan Runge at ht

FL Price 3348 Assiniboine Ave Winnipeg, Canada R3K 0B1 Tel: (204)831-0150 E-mail: flprice@mb.sympatico.ca
I-net: http://www.mwcs.mb.ca/~pricef
From "1,001 Useful Phrases in Everyday Latin"
"Hostes alienigeni me abduxerunt". ("I was kidnapped by aliens".)



All RASC members and family members are welcome to attend, and there will be many local people in attendance as well. Coffee and other light refreshments will be provided, and in the event of inclement weather, a slide presentation "A Grand Tour of the Universe", as published by

the Astronomical Society of the Pacific, will be shown.

Our priest is very keen on this event, and quite sensitive to its significance for the year 2000. A new bas-relief carving of Galileo, by Dale Jeffrey, will be

The Living Skies Observatory Dedication

Mark Your Datebooks!!!

An Invitation from Dale and Whendi Jeffrey

On Saturday, April 29th, at 7:30 p.m., Dale Jeffrey's Living Skies Observatory will be the site of a GRAND OPENING, a combined "First Light" celebration and an official blessing of the telescope and observatory by the local Roman Catholic priest.

installed in the scope room during the ceremony.

As several non-astronomers will also be in attendance, RASC members are invited to bring their observing equipment to share the night skies. The 12" LX200 will also be operating. Our house is ½ km N of Laird. Hit gravel and look left!

Come out and enjoy the great skies of Laird!!!