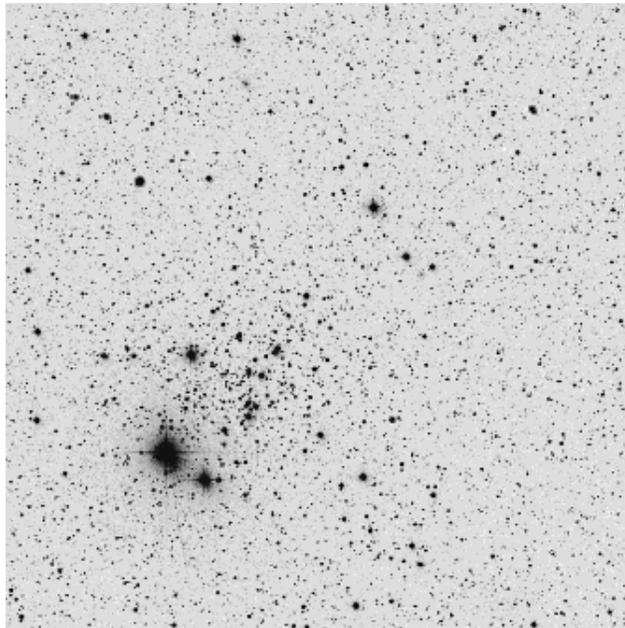


# *Saskatoon Skies*

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

Volume 31, Number 11

**November 2000**



NGC 457 is one of Andrew Krochko's favourite clusters on the sky (and mine, too!) To many people, this cluster looks like a bird in flight, and is often referred to as *the Owl Cluster*, since the two bright stars look like owl eyes. His article on page 6 describes this jewel and other great objects as they are visible (even from the city) in binoculars. This image is 15-arc minutes wide, and is taken from the Digital Sky survey.

## RASC Calendar Happenings

<b>Date (2000-01)</b>	<b>Event</b>	<b>Contact</b>	<b>Telephone</b>
Nov. 17	<b>Leonid Meteor (Storm?) Peak</b>	Rick Huziak	665-3392
Nov. 20	<b>Occultation of mu Gem by asteroid 752 Sulamitis - 5:34 am</b>	Rick Huziak	665-3392
Nov. 20	<b>Executive Meeting - Room 8313 - 6:30 pm</b>	Les Dickson	249-1091
Nov. 20	<b>General Meeting - Room 8313 - 7:30 pm</b>	Les Dickson	249-1091
Nov. 28	<b>Meteorites: Messengers from Space - Dr. R. Herd - Bessborough Hotel - 8:00 pm</b>	Rick Huziak	665-3392
Dec. 1	<b>Youth Group Meeting -UofS Observatory - 7:30 p.m.</b>	Andrew Krochko	955-1543
Dec. 18	<b>Executive Meeting - Room 8313 - 6:30 pm</b>	Les Dickson	249-1091
Dec. 18	<b>General Meeting - Room 8313 - 7:30 pm</b>	Les Dickson	249-1091
Jan. 19	<b>Youth Group Meeting -Nutana - 7:30 p.m.</b>	Andrew Krochko	955-1543
Feb. 2	<b>Youth Group Meeting -Nutana - 7:30 p.m.</b>	Andrew Krochko	955-1543

## Sky Buys and Mirror Sells

**The Saskatoon Centre's Swap and Sale Page!**

**For Sale: Brass lined trunk for SC-8 or SC-10: 9 mm Kellner eyepiece; 7X35 Marksman binoculars with case: and some very good astro books: *Skywatching* and *Advanced Skywatching*, by David Levy, *Nightwatch* by T. Dickenson, National Audubon Society *Field Guide to the Night Sky*; *the Pocket Guide to Astronomy* by I. Ridpath. All books are in excellent shape. Call Darrell Chatfield for prices at 374-9278.**

**For Sale: Nearly new Meade 10" LX200 with accessories. Hardly used. Includes 2 power supplies, 3 eyepieces, carrying bag, Meade dew shield. \$3000.00 OBO. Call Richard Allen at 665-5769.**

**Got any old .965" eyepieces sitting in the closet unused for years now? Brent needs some for an old scope. Will pay \$5 each or perhaps more for better quality ones. Contact Brent 241-8765 or <thunderb@home.com>**

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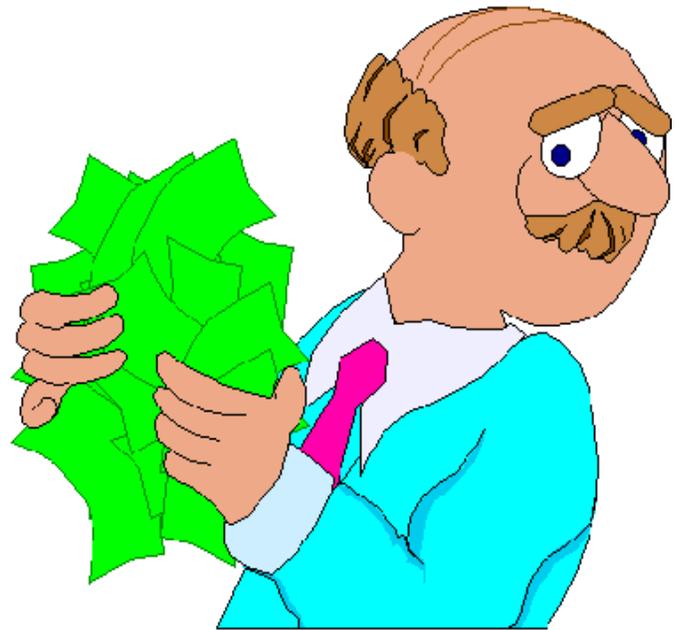
## **EDMONTON CENTRE'S ASTRONOMY WORKSHOP**

**by Sandy Ferguson**

On the weekend of October 27 - 29 Edmonton Centre members held one of their periodic astronomy workshops, this time at a Boy Scout camp at Skeleton Lake, about 100 km north of Edmonton. As the main purpose of this workshop was to assist local Grade 6 teachers in developing astronomy programs for their students, Rick Huziak and I decided to attend (the social aspects of getting together with the Edmonton group was incentive, as well)!

So, with Rick's 10" scope, binoculars, camera equipment and other astronomical bits and pieces, as well as winter gear and the necessary road snacks, we took off on Friday morning in Rick's loaded car, headed for the land of cheap gas (64.9 in Edmonton). The trip there was uneventful, passing by the towns of Innisfree and Abee, known in astronomical circles for their meteorites, and we stopped briefly in Vegreville to pay homage to the world's largest Easter egg and Rick's heritage. We were in the city by early afternoon, got lost only once, and spent the rest of the time ?til we left for the Scout camp in IKEA (another important reason for making the trip).

Our excursion to Skeleton Lake was much more interesting. We overshot the turn-off north of the city and ended up some 40 km east, near the town of Bruderheim (another meteorite site). Not particularly worried, we consulted our trusty road map and decided to take a short, direct back road that would bring us out at a major highway, which, in turn, would link us up with the highway to Skeleton Lake. One hour later, with darkness coming on, we were hopelessly lost on this back road, which was hardly more than a narrow, twisting, unmarked trail through the bush. We finally turned back, retracing the route, and came upon a refinery in the middle of nowhere. Rick flagged down the driver of a pick-up leaving the refinery to ask for directions and was informed that he couldn't help us - he was from Texas! Luckily, a second pick-up came along and we were directed to the correct turn-off, which, much like the refinery, appeared out of nowhere!



[[ Rick and his map}}----- à

We are about 1/2-hour late arriving at the Scout camp, after getting lost (only slightly) on our way in. (We decided to follow the rear lights of some four cars going into the camp, not realizing they had no idea where they were going, either)! Dinner was being served in the dining hall when we arrived and the rest of the evening was spent observing in an adjacent field to the main area. The sky mushed over around 11:00 p.m. and was socked in by midnight, so everyone ended up in either the lounge of the bunkhouse or in the dining hall, getting acquainted and chatting. Apparently, there was some good guitar music going on in the dining hall. (I was one of the lizards in the lounge; don't know where Rick was).

Saturday dawned cold and gray. Early risers helped themselves to muffins and coffee in the dining hall before venturing out to jog, walk the beach or take in some bird watching, as I did with two of the teachers. On the lake we saw ducks (common goldeneye, gadwalls), mergansers, Canada geese, and two swans. Later in the morning everyone congregated for brunch, before settling down for the afternoon talks.

There was a full slate of presentations throughout the afternoon, mainly in the basement of the dining hall. The guest speaker for the weekend was Ken Hewitt-White, whom many know as co-host with Eric Dunn of *Cosmic Highway* (Discovery Channel and STV) as well as the "back page" columnist in each issue of *Sky News*. Everyone attended his talk on *Cosmic Connections*, a description of his involvement and work with the television series, which included video clips of interviews with many prominent astronomers.

Presentations by other speakers included *Telescope Selection* by Alister Ling; *Optimizing*

*Your Telescope* by Arnold Rivera; *Photographing the Night Sky* by Ben Gendre; *Sketching* by Sherry MacLeod; *Planning an Observing Session* by David Prud'homme; and a *Telescope Clinic* by Larry Wood.

Rick and I opted to attend the talks by Bruce McCurdy on *Naked-eye Observing*, and the two "teacher" sessions--the first by Russ Sampson and the second with Ken Hewitt-White. Bruce gave a great talk on all aspects of naked-eye skywatching, with a few ideas for those with binoculars, including suggestions on recording your observations. He began and ended his presentation with readings from Leslie Peltier's *Starlight Nights* and Margaret Mitchell's *The Friendly Stars*, two astronomy classics.

Russ Sampson's session for the teachers focused on the Alberta Grade 6 curriculum for sky science. He presented ideas for teaching each of the 12 specific learner expectations of the astronomy program and provided instructions for creating learning tools and demonstrations. Ken Hewitt-White's talk for teachers concentrated on astronomy of the future, with a slide presentation on various aspects of teaching astronomy that would be useful in the classroom.

After supper we all tramped out to the observation area. Almost immediately an incredible aurora started up, which remained for the rest of the evening, until the sky clouded up around midnight. We managed lots of observing; however, between the bursts of auroral activity, Bruce McCurdy conducted his *Beginner's Observing Session* attended by some 30 teachers. One of the highlights of the evening, thanks to Larry Wood, was a glimpse of Neptune with its moon Triton (mag. 13.5). Once again, after the observing ended, we retired to various areas of the complex playing board games, talking astronomy and generally hanging out.

Sunday was another gray day, but everyone was up early to pack their cars, have breakfast and kibitz on the deck before leaving. A group picture was taken for posterity. Rick and I decided to go home by a different route through Lac LaLoche, Cold Lake, Meadow Lake and North Battleford. We discovered Cold Lake was a popular tourist spot in summer, with a marina and other interests, and the drive from Meadow Lake to North Battleford ran through beautiful, heavily forested countryside - Saskatchewan's Provincial Forest!

The Edmonton Centre's workshop weekends are highly recommended for Saskatoon members. It's not too far to go ( provided you don't get lost), the company's terrific, the presentations are super, you're well fed, and the observing sites are great (when it's clear!). The Edmonton Centre's members should be commended for hosting such a fine astronomical event.

## Binocular Observing in the Autumn Sky

Andrew Krochko <andrew.krochko@sk.sympatico.ca>

The autumn is an excellent time for binocular observing. The northern Milky Way and all the many its many star clusters are nearly overhead. Most of the binocular objects are very distant clusters located around 6000 - 8000 light years away in the Perseus Arm of our galaxy.

### *The Objects*

**Mu Cephei** has a deep orange-red color, even in small binoculars. Under dark skies I have even seen the color with the unaided eye.

**Beta Cephei** is a blue star but the color is not very obvious, try comparing it with the white star Alpha Cephei.

**NGC 7789** is one of my favorite open clusters in the sky. Through moderate to large telescopes it is a dense cluster of hundreds of faint stars. Though my 8x36 binoculars from the city it was nearly invisible. Consider this one a challenge object for binoculars.

**NGC 457** is another challenging cluster to see but for a different reason. It is fairly bright but lies just to the northeast of a bright orangish double star. It appeared as a small glow.

**NGC 654** is one of best clusters in the sky. It is surprising that Messier missed this cluster but recorded the nearby but unspectacular M103. This cluster appeared as a distinct hazy patch, the nearby M103 was invisible.

Other bright objects in this general area are the **Double Cluster**, the **Andromeda Galaxy** (M31), and the **Pinwheel Galaxy** (M33). I found the Double Cluster and M31 to be very easy and M33 to be moderately difficult.

**A few other things: the next youth group dates** are Dec. 1, Jan. 19 and Feb. 2. All youth groups start at 7:30 not 7:00 (my mistake). The Dec. 1st meeting is at the U of S Observatory. All others are at Nutana.

You might also be pleased to know that Richard Berry's book *Build Your Own Telescope: Complete Plans For Five Telescopes You Can Build With Simple Hand Tools* is now at the public library. This is probably the best telescope-making book in my opinion.

## **Another Great Observing Session (Oct. 25)**

**by Darrell Chatfield <novachat@sk.sympatico.ca>**

I thought I would give a small observing report this month and give an update on my 22 mm Panoptic eyepiece, seeing as you all know about my Panoptic "filter".

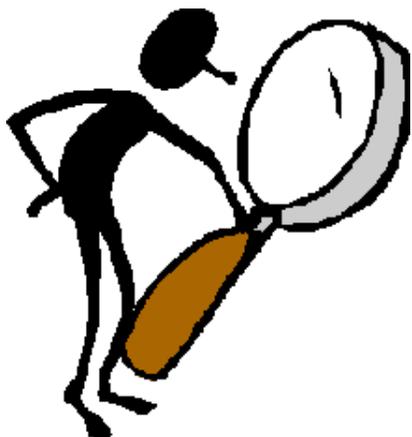
Anyway, I picked up Andrew K., and got to Sleaford around 9:30 p.m. We were met by Mike Stephens who is now quite a regular at our site. He was already set up with his binoculars on a tripod stand, and his C-8. Andrew used his 6" Meade reflector, and I used my Meade 10". The evening was quite warm, with hardly any aurora. A perfect night, yes??. Well, almost. The sky never got really dark. It seemed like there was a haze or something in the sky. We could see quite a light dome from Saskatoon, so you know that something is going on up there.

I was intent on seeing as many Herschel objects as possible, noting the change in the Herschel list that I was wrongly using. I spent most of the time on galaxies in Cetus. They varied between 10.3 to 12.0 mag. Mike and Andrew were eyeing up some Messier objects. Throughout the night, we were all trading views through each other's' telescopes.

We all looked at Jupiter in my 'scope with the Panoptic. By now it was around 12 a.m., making it high in the sky. The view was excellent. We could see the 2 larger gas bands, as well as quite a few lesser ones. We thought we could detect almost a blue tint in between the bands. The 4 main moons were present, also. Saturn was great as well. We could see 5 or 6 of the moons around Saturn. They are quite small in comparison to those of Jupiter, which is understandable because of distances. Then we had the pleasure of looking at M42 in Orion, since it was just starting to come up around 1.00 a.m. I believe that the view we all had at M42 through the Panoptic was the best any of us had seen. We could see the whole area around the Great Nebula. The gull wing effect was most evident, along with a gas spur off one side. But the main surprise was in seeing the light and dark areas within the nebula. This was all possible because of the characteristics of the Panoptic, which is a 68-degree field of view, and the black background it affords.

I tried something just for fun. I had a small operating manual for a camera that my Grandmother had passed on to me. In it was a section containing 4 color filters. So I thought that it would be fun to look at Jupiter with this arrangement. The colors were red, green, yellow, and blue. Green gave the best views, while blue had to be the 'wildest', or most unusual view. We all left at around 2 a.m. We may not have accomplished much as

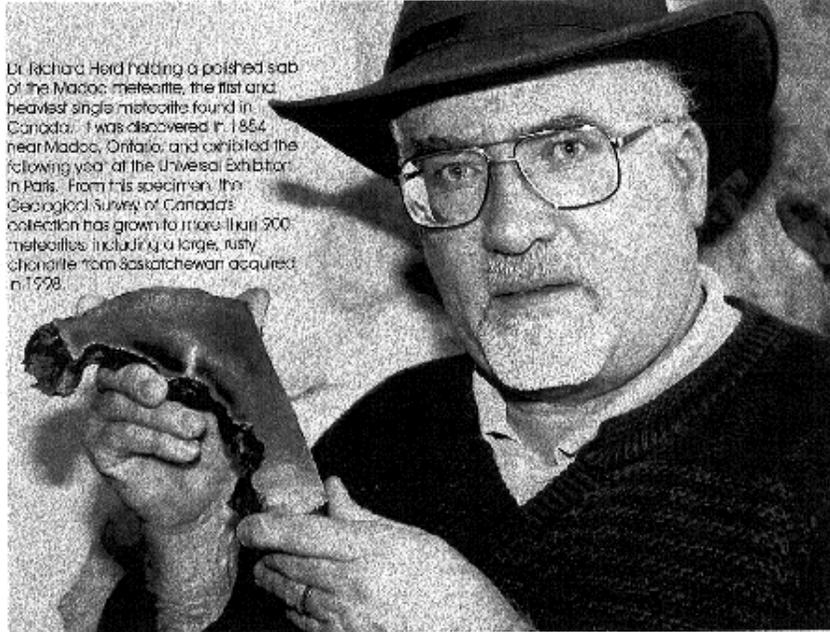
far as hunting down galaxies, or faint fuzzies as Lucien Kemble would call them. However, we all had great fun. (Isn't that the idea of a hobby??). Until next time, keep looking up!



*β Chatfield's Panoptic [Ed.]*

**Your are Cordially Invited to Attend a FREE  
PUBLIC LECTURE**

## **METEORITES: Messengers from Space**



Dr. Richard Herd holding a polished slab of the Madoc meteorite, the first and heaviest single meteorite found in Canada. It was discovered in 1854 near Madoc, Ontario, and exhibited the following year at the Universal Exhibition in Paris. From this specimen, the Geological Survey of Canada's collection has grown to more than 200 meteorites, including a large, rusty chondrite from Saskatchewan acquired in 1998.

This year's Public Lecture will be by Dr. Richard Herd who has been Curator of the National Collection of rocks and minerals at the Geological Survey of Canada since 1983. His research has made him an international expert on meteorites. His recent work includes study of a metamorphosed meteorite that fell on a Kitchener, Ontario golf course in 1998, and the carbonaceous chondrite that fell on Tagish Lake, Yukon, on January 18, 2000.

Dr. Herd will discuss the nature of meteorites, their relation to the history of our Solar System, the history of the National Collection, some important meteorites represented in it, meteorite research currently being undertaken, and probable directions in meteorite research in Canada over the next decade.

**Tuesday, November 28, 2000**

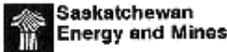
**8:00 - 9:00 p.m.**

**Battlefords Room**

**Delta Bessborough Hotel**

**601 Spadina Crescent East**

**Saskatoon, Saskatchewan**



## **November Planet Report**

**by Murray D. Paulson, Edmonton Centre <murray@dycor.com>**

Mercury started off November creeping out from the glare of the sun and to greatest western elongation in a short two weeks! Our November meeting will see Mercury just past Dichotomy, or half phase, and a rather favorable morning apparition. The morning of the 14th you can see Mercury with a 6.9" "first quarter" phase at magnitude -2.3. It turns out that in November, the morning ecliptic is tipped up steeply providing an excellent opportunity to see Mercury in the morning twilight. It will be 19 degrees from

the sun and will rise in a dark sky at the beginning of morning twilight. This is a very good apparition, and you can follow it for the next week or so. On Nov. 14th, it rises at 6:00 a.m., and by the 23rd, it rises at 6:30 a.m. This is as good a morning apparition as it gets!

Venus has been cruising farther from the sun and now is quite visible in the evening twilight. The evening before Halloween, Venus was only 7 degrees from the moon. This event will be repeated on the 28th and 29th of November. The 28th will see a 3 day old moon 8 degrees west of Venus and the 29th will reverse the pair, with the 4 day old moon just 3 degrees east of Venus. This will be a great photo opportunity for a telephoto, or a short focus refractor at prime focus. Venus will be a dazzling magnitude -4.6 with a 16.4" gibbous disk. The earth shine should make this a great photo. My calculations show that the longest focal length that will get the two in would be 640 mm, but catch it early because the moon will continue to move away.

Jupiter is at opposition on the 28th of the month. Jupiter's 48.6" disk will shine at magnitude -2.8 from a 4.05 AU distance. This particular date is very special from the vantage of a simultaneous transit and shadow transit of Io, only an hour after Jupiter's opposition! At 3:12 am local time, ingress occurs for both the shadow and the moon. The pair will ride the upper edge, south edge, of the South Equatorial Belt. If the seeing is very good, you will see the disk of the moon with a dark, off centered, halo. This will allow you to observe the moon in transit which is usually a difficult thing. Io will show a 1.2" disk at this time, so use as much magnification as the conditions will bear. There are several transits a week and they are listed in the Observers Handbook. Remember that the time listed is Universal Time (UT), and it is exactly 6 hours ahead in Saskatchewan. 0:00 hrs UT is at 6:00 PM SK time and for example, 2 :32 on the 26th is actually 8:32 p.m. on the night of the 25th. One other transit of special note is a transit of Ganymede. Between weather and scheduling, you usually are lucky to see just one transit of Ganymede during an opposition. Ganymede is 1.7" in diameter and is fairly dark. I have mistaken Ganymede for it's shadow! This transit is very close to opposition so the moon and shadow will be in close proximity. The transit will occur in the southern polar region, and from a diagram created by *Sky tools*, you can see that the moon follows the shadow by only a few arc seconds. We get an added bonus of the Great Red Spot transiting the disk at the same time. A few other transits are listed as well.

## **Nov. 26**

2:32 III.Sh.I.

2:53 III.Tr.I.

4:35 III.Sh.E.

4:38 III.Tr.E.

### **Dec. 3**

6:08 III.Tr.I.

6:33 III.Sh.I.

7:55 III.Tr.E.

8:37 III.Sh.E.

### **Dec. 4**

3:55 II.Tr.I.

4:13 II.Sh.I.

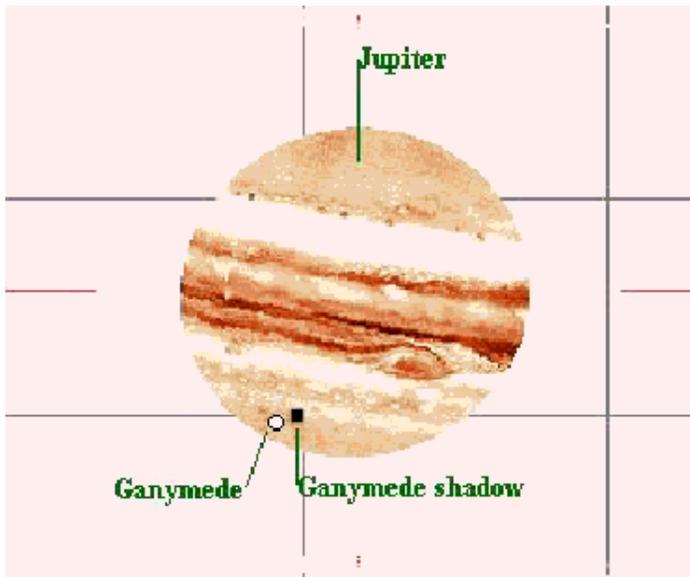
6:28 II.Tr.E.

6:49 II.Sh.E.

Saturn will be at opposition on November 19th and will present a 20.4" disk. It will shine at magnitude 0.5 from its 8.126 AU distance. Take note of the size of Saturn's disk, as Mars will swell to this size during this coming summer's apparition. Over this month you will get to see the shadow of the planet on the rings change sides as our perspective angle changes. I am impressed by how much the rings are tipped toward us, they almost extend beyond the south pole of the planet. I have been studying the rings when the seeing cooperates, and the more I look, the more subtle details I can see in the rings. I have noticed that the inside edge of the B ring is slightly darker than the outer portion and it has the look of being stranded. The width of this region is about 1/3 the width of the B ring. Cassini's division demarks the A ring and if the seeing is good, you can see the Encke minima just about 1/2 way out in the A ring. It is a subtle darkening of the ring. The Encke gap which about 1/4 the width of the A ring from the outside edge, is supposed to be all but impossible in amateur scopes. The November issue of *Sky and Telescope* magazine has a good article on the Saturn ring system. One tidbit from this article is that the Cassini's division is only 0.7" arc in width, but is visible in a 60 mm

refractor. The planet itself will show you a slightly darker polar cap on the dusky polar hood. I have noticed a subtle thin belt in the equatorial region, and I have observed a sculpted lower margin to the polar hood in years gone by. Saturn seems to stand power better than Jupiter, so try high powers on this planet and see what you can see.

This month is great for planetary observing with the added bonuses of the Leonids, or an asteroid occultation. Until next month, clear skies!



View from Saskatoon, November 26 at 02:30 UT.

### **Saskatoon's New Website Address**

by **Gordon Sarty** <sarty@prana.usask.ca>

Everyone should be aware that the old web server *maya* is apparently quite sick, so Saskatoon's web page has been moved to a new server, *prana*. So the web site is:

<http://prana.usask.ca/~rasc/>

**Books For Sale:** The Saskatoon Centre has a number of Firefly Books left over from SSSP sales, and these are now available to general members to purchase at discount rates. They make great Christmas presents! There are only one or two copies remaining of the following titles. Contact Debbie Anderson at 242-8854.

*Astronomy Quiz Book* - \$10.00

*Big Bang to Planet X* - \$10.00

*Exploring the Night Sky* - \$8.00

*Exploring the Sky by Day* - \$8.00

*Other Worlds* - \$8.00

*The Universe and Beyond* - \$20.00

*Cosmic Phenomenon* - \$25.00

*Extraterrestrials* - \$8.00

## **Sleaford Astronomical Observatory Public Open House**

**by Les Dickson**

The Department of Physics and Engineering Physics of the University of Saskatchewan held a very successful open house at the Sleaford Observatory on Saturday, November 4. **Over 250 people came out** from Saskatoon and from the Colonsay and surrounding area to visit the 4-telescope university roll-off facility. The weather favoured us this time, as the cloud cover and snowfall predicted to come early in the evening did not occur until we were all back home in bed. The crowd was treated to excellent views of Jupiter and Saturn, the quarter moon, and a number of deep-sky objects. Assisting Stan Shadick and his students were several members of the Saskatoon RASC: Barb and Jim Young, Mike Stephens, Al Hartridge and his son Graham, Bill Hydromako, and Ellen and Les Dickson. In addition to setting up and demonstrating a number of RASC ?scopes, members provided parking and crowd control, and

refreshments in the form of hot chocolate and coffee, soft drinks, juice, and donuts. These open houses provide a good opportunity for the RASC and the University to show off our excellent observing site, and we would like to encourage other RASC members to come out and enjoy them with us.

**Notice of the General Meeting of the Saskatoon Centre**

**Monday, November 20, 2000 at 7:30 p.m.**

**Room 8313 City Hospital**

**Presenting**

**Sandy Ferguson - *"Edmonton's George Moores Astronomy Workshop in Pictures"***

**Bill Hydomako - *"How to Plop at Sleaford - A User's Guide"***

**U of S Observatory Hours**

**The U of S Observatory is open to the general public every Saturday from November through February from 7:30 p.m. to 9:30 p.m.. Admission is 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 the moon, star clusters, Jupiter, Saturn and other exciting astronomical objects. For further information, phone the recorded Astronomy Information Line at 966-6429.**

***Interested in***

**Saskatoon RASC**

# Membership?

**Regular - was \$48.00 per year**

**Youth - was \$26.00 per year**

**It's never too late to 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.

## **Messier, FNGC, H-400 & Binoc Club**

### **MESSIER CLUB**

**Certified at 110 Objects: R. Huziak, G. Sarty, S. Alexander, S. Ferguson, D. Jeffrey, D. Chatfield, R. Christie, K. Noesgaard**

**Wade Selvig 71**

**Mike Stephens 68**

**Erich Keser 51**

**Andrew Krochko 42**

**Brent Gratias 39**

**Stan Noble 28**

**Mike Oosterlaken 28**

**Lorne Jensen 25**

**Ellen Kaye-Cheveldayoff 23**

**Les & Ellen Dickson 20**

**Debbie Anderson 17**

**Brian Friesen 15**

**FINEST NGC CLUB**

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

**Scott Alexander 89**

**Ken Noesgaard 24**

**Sandy Ferguson 23**

**Ellen Kaye-Cheveldayoff 17**

**Mike Stephens 7**

**Mike Oosterlaken 1**

**HERSCHEL 400 CLUB**

**Certified at 400 Objects:**

**Dale Jeffrey *WOW- COMPLETED* 400**

**Rick Huziak 376**

**Darrell Chatfield 295**

**Gord Sarty 147**

**Scott Alexander 98**

**Ken Noesgaard 44**

**Sandy Ferguson 18**

**Mike Oosterlaken 7**

## Chatfield BINOCULAR CERTIFICATE

Mike Stephens 42

*Join the Messier, Finest NGC, H-400 & Binocular Club!*

Observe all 110 Messier, 100 FNGC or 400 H-400, or 80 Binocular objects and earn your

**CERTIFICATES!**

The first 2 lists can be found in *the Observer's Handbook*. The Binocular List & 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.

***Observers Observe!***

**I haven't received any observing number updates except from Mike S. and Darrell C. The weather is till kind of nice - Observers observe!! Thus I am lending the space below to an ad!**

Send observing numbers to <huziak@SEDSsystems.ca>

*Executive Members*

**Please remember that if you are on the executive council, we meet one hour prior to the General Meeting (6:30 pm) in Room 8313, in order to discuss Centre business. If you cannot make these times for some reason, please contact President Les Dickson early enough that he may brief others on matters you may be working on in your absence.**

## **The Sleaford Observatory**

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

by Rick Huziak

**Recent Work Done at the Site:** Work continues at the site, and a few days work from Darrell Chatfield, Bill Hydromako and I have produced some further completed tasks. We have not asked for a large work crew since all large tasks for this year are complete. Only

smallish jobs remain.

**Toilet** - the toilet is functional, although we have not begun using it since a user's manual needs to be formulated. **Come to the November meeting to learn how it works**, or check out the procedure on our web page later in November. There is a small procedure to follow to assure that waste is properly managed and composted. *Everyone who uses the toilet will be required to maintain the toilet! So if you do not want to service or clean the toilet - don't use it!* The toilet room is more or less complete, requiring the addition of a storage cabinet, and siliconing of the floor. This does not impede toilet use. *The illustration at left shows proper posture for pooper use.*



**G. N. Patterson Observatory** - work continues on the wiring to update the old circuits and install local breakers, and to upgrade the low voltage light-bulbs. Bob Christie installed an outdoor plug on the west side of the building to allow for shorter extension cord runs in that area.

**Warm-up Shelter** - wiring has been completed in the expansion. Recently, Bill and I removed a panel to install "always-on" plugs to accommodate future computers or other equipment we do not want to turn off when the main power goes off. What remains is to complete wiring at the boxes, finish some exposed beams, put in a floor, install wall panels and book shelves, wire in the hand warmer/drier, and place countertops on the lockers. The University has asked to *temporarily* place a computer and warm box into the shelter to run some long-distance remote control tests. Before we get any complaints, please realize that this is temporary, and that in the meantime, a computer that runs *Earth Centred Universe* will be available for all site users.

**Winter is on Us** - Remember that during the cold months, you should let someone know you are going to the site and let them know when you expect to return. You may leave messages on my answering machine and *you can call me 24-hours a day in emergencies (665-3392) should you or your spouse think there is a problem.*

## **MINUTES OF EXECUTIVE MEETING**

**OCT. 16, 2000**

**Room 8313, City Hospital**

**recorded by Darrell Chatfield <novachat@sk.sympatico.ca>**

1. Meeting called to order at 6:42 p.m.
1. Les D. moved that we accept last meeting's minutes. 2nd by J. Young.
1. Darrell C. moved that we accept the agenda for this meeting . 2nd by Rick H.
1. Jean Dudley said that she cannot take care of the book sales this term because of time commitments. She gave an RASC calendar to the Post Mistress near her cabin for helping her out. Jean said that there are a number of Firefly books that did not sell, and recommends that we do not order from Firefly anymore. She will give a book list to Rick.
1. Les asked those members present if they were willing to stand for another term regarding their position on the executive. Most agreed, except for Brian F. He said because of time constraints, he would not be able to do another term as Activities Coordinator, but would be willing to help if needed.
1. Jim Y. gave the financial report. The figures are as follows: General account: \$10,357.40; Sleaford account: \$4804.90; SSSP funds: \$1872.51; and telescope fund \$2219.53.
1. Jim said our insurance was due on Sept. 30/00. We would need to take a vote from the general membership before we pay the bill.
1. Brian F. said that there were 48 tins of pop and some juice boxes left over from SSSP. He suggested that we take it to the Sleaford open house on Nov. 4/00 and sell it there.
1. Sandy Ferguson talked about cleaning out the library for shelf space. She suggested we keep one

issue of Sask. Skies, and 1 year of other center newsletters. Everyone agreed. She also mentioned the membership certificates from National office, and asked if we need to send in names for certification.

1. Les mentioned about getting reimbursement from National office for Alister Ling and Murray Paulson's expenses. Only one was approved. These claims were sent in last year.
1. Bill H. asked if we need a key fee to cover maintenance costs. Rick said there was one already in place. Discussion followed.
1. Brian F. adjourned the meeting.

## **Minutes of the General Meeting**

**Room 8313, City Hospital**

**October 16, 2000, 7:30 p.m.**

**recorded by Al Hartridge, Secretary**

1. Minutes of previous meeting approved. Moved by Jim Young and seconded by Darrell Chatfield and carried.
1. Approval of the agenda and addition of new items. Moved by Les Dickson and seconded by Scott Alexander (Bob) and carried.
1. Items arising from the Executive Meeting:
  - Insurance. It was moved by Les Dickson and seconded by Darrell that we pay the \$346.00 for the insurance policy.
  - Items left over from the SSSP will be taken out to Sleaford.
  - National Office: a certificate is available to members who have been continuous members for a period of at least five years. Those interested may apply for this. Key cost for Sleaford observatory. This may be paid for in service or in cash. An applicant must also be trained in opening the observatory, running the equipment and also opening and running the facilities in the warm up shack.
1. Nominations and Election of the new Executive for 2000- 2001. Those names on **BOLD** are elected. Non-bold are pending or nominated.
  - President - **Les Dickson**

- Vice President - **Darrell Chatfield**
- Honorary President - vacant
- Past-president - **Erich Keser**
- Secretary - **Al Hartridge**
- Treasurer - **Barb and Jim Young**
- Centre Rep - **Sandy Ferguson**
- Newsletter Editor - **Rick Huziak**
- Librarians - **Sandy Ferguson and Ellen Dickson**
- Youth Coordinator - **Andrew Krochko**
- Observing Coordinator - Ken Noesgaard nominated
- Activities Coordinator - Mike Stephens nominated, but refused - position is OPEN
- Membership Coordinator - **Bob Christie**
- Fundraising Coordinator - **Rick Huziak**
- Sleaford Building Coordinator - **Darrell Chatfield**
- Sleaford Site Coordinator - **Bill Hydomako**
- Publications / Sales Coordinator - Debbie Anderson nominated
- SSSP Coordinator - **Les Dickson**
- Councilors:
  - **Mike Stephens**
  - **Brian Friesen**

- **Scott Alexander** (Bob Castor)

- David Ochitwa nominated

- **Daphne Lowden**

- **Merlyn Melby**

1. Nominations were moved closed by Jim Young and seconded by Darrell Chatfield and carried.
1. Guests: Halyna Turley (Saskatoon Centre Past-president) and Ron Germaine
1. Treasures Report - given by Barb and Jim Young , brought the membership up to date on the balance in the various club accounts.
1. Lake Prize, Dept. of Physics and Engineering awarded to one student per year. This is a subscription to an astronomy magazine of the winner's choice. This year the student chose the *Journal of the RASC*.
1. Memberships: if not paid up by the October meeting the newsletter will be cut off.
1. Observers Report - Andrew reported that there were only two visits - i.e. two nights during the last new moon.
1. Meeting was adjourned at 9:24 p.m.