



NOVA

NEWSLETTER OF THE VANCOUVER CENTRE RASC

VOLUME 2001 ISSUE 2

MARCH/APRIL 2001

Messier Marathon	1
Ray Villard's Talk	2
Other Upcoming Lectures	2
President's Message	3
Looking at Stars	4
Black Sun	5
Observing Sites	6
New Telescope Loaner Policy	6
Binocular Observing in Mexico	8

Looking Ahead

Remember, you are always welcome to attend meetings of Council, held on the first Tuesday of every month at 7:30pm in the G.S.O.

March: Dr. Robert Smith of the U of Alberta speaking on Hubble's history & impact on astronomy

April: Martin Connors of Athabasca University: "Auroras"

May: Ray Villard, Director of Public Relations, Space Telescope Science Institute

Next Issue Deadline

Material for the May Nova should be submitted by Monday, April 31, 2001. Please send submissions to:

Gordon Farrell
(gfarrell@home.com)

or Bob Parry
(robpar@ballard.com)

Messier Marathon Madness

by Craig Breckenridge

Friday, March 23rd will bring an opportunity for Vancouver Centre members to do a little bit of that early spring viewing. This is an excellent chance for members to socialize and exchange views (literally) about telescopes and observing. We will be holding three separate observing events on Friday night and I encourage all members to try and make their way to one of them. Of course, due to the fact that we live in sunny Vancouver, and that weather is always predictable, we will not need to use our alternate observing night of Saturday, March 24th.

The events we have planned are Messier Marathons. For those who are new to the club, Messier objects are ones that Charles Messier compiled into his list of 110 lights in the night sky that he remarked were "objects that are not comets." How some of these objects could ever be mistaken for comets is beyond me, even excusing the poor optics he had to use... We will try to capture as many of these objects in the eyepiece as possible in one night. To fully achieve this goal might be too difficult for some of us, but to bag as many as possible in one night is still a very good accomplishment (my personal best is 31 in one night). For those who are new to the hobby, this is a great event to attend as there will be experienced observers at all locations who will gladly help you out with questions and tips. As for equipment, a large

number of these objects are easily obtainable with binoculars and anyone with a telescope will surely let a polite fellow member take a peek.

Lists of the Messier objects are published in the Observer's Handbook on pages 256 to 259. Lists showing the objects in the order of appearance above the horizon will be available for use. The three sites involved will be at the Hope Slide, Aldergrove Lake Park and Boundary Bay.

For those who wish to get away from the city glow, Lee Johnson (one of our Trustees) is your contact person for the Hope Slide site. Phone Lee at 941-5364 evenings to make arrangements for meeting locations, etc. Please ensure that you do contact Lee if you are planning on the trip up the valley, especially if you are new to the club. We would hate to have someone make the trip up and miss the companionship of Vancouver Centre members.

The Aldergrove Lake site is shown on the map of observing sites elsewhere in this issue. The contact person for this site is Doug Montgomery, Merchandising Chairman Extraordinaire (596-7058). Aldergrove Lake has a gate across the road, so arrangements to meet Doug or one of the other attendees should be made beforehand.

The Boundary Bay site is a new one that has been suggested to us by several members. The contact person there is Sean Roddick, our Vice-presi-

continued on page 7

IMPORTANT INFORMATION
about Ray Villard's May talk inside... see page 2

Ray Villard's Talk: May 8th, 2001

by Bob Parry

As most of our membership knows by now, Ray Villard will be speaking to us on the latest and greatest discoveries by the Hubble Space Telescope. Ray has been here before, most recently in 1996 I believe, and one other time just after the repairs to the Hubble's optical system. Ray is an entertaining speaker and has always brought new photos and information that have not been publicly released before.

Ray will be giving a total of three talks with the possibility of a fourth talk for the Science Teachers Association. Ray will modify his approach to the level of expertise of his audience, thus his talk to the members of the RASC, with greater average astronomical knowledge, will be somewhat different than the talk that he will give to the general public.

The first talk will be on Salt Spring Island to a group of retired professors and other interested Island folks. This will be followed by his address to RASC Members on Tuesday May 8th at the Planetarium. All RASC Vancouver Centre members will have priority for seating at this event. **Members are requested to be at the Planetarium early for this event and find your seats between 7:00 and 7:15 pm.** Visitors will be admitted on a first come first served basis after 7:15 PM. There is no charge for this event for either RASC Members, their guests or other visitors. The RASC will be holding a fund-raising raffle, as a result of a donation by Meade Instruments of an 8.8mm Superwide Angle Eyepiece. Raffle tickets will be available from the RASC or at the door.

The following evening of May 9th, the H.R. MacMillan Space Centre will be hosting Ray Villard as their keynote speaker for their annual Michael Ovendon Lecture and will not be charging admission to the general public.

The RASC Vancouver Centre is pleased to have organized this event for the benefit of our Members and thank the Salt Spring group and the H.R. MacMillan Space Centre for their support in bringing Ray to Vancouver from Baltimore, Maryland.

Please use this event as an opportunity to inspire budding amateur astronomers to participate in viewing the wonders of our universe through our ongoing Member activities. ★

Other Upcoming Lectures

Sci-Fi Lecture Series launches at the Space Centre

Spacey and spooky, futuristic and fantastic—these characteristics and more have won Science Fiction films legions of fans from across the globe. In keeping with this, starting Saturday, February 17 at 2:00 pm, the *H.R. MacMillan Space Centre*, *British Columbia Science Fiction Association*, *Videomatica*, *Monster Attack Team Canada*, *The S'harien Science Fiction & Fantasy Club*, and *The VCON Society* present a series of light-hearted and informative lectures: “**The History of 20th Century Science Fiction Cinema**”. Combining entertaining film footage and knowledgeable, humorous commentary by R. Graeme Cameron, these hour-long monthly lectures will

cover a diverse range of topics from all over the genre. Admission for the lectures is free with Space Centre admission, or \$2.00 per person without.

The lecture dates and topics are as follows:

February 17

Science Fiction Films of the Silent Era

March 17

Robots in Science Fiction Films

April 21

Visions of Mars in Science Fiction Films

May 19

The Way the Future Should Have Been: What Hollywood thought we'd be Like Today

June 16

Teenagers from Outer Space

R. Graeme Cameron, current president of the BC Science Fiction Association (established 1970), and experienced Sci-Fi presenter brings unsurpassed enthusiasm, a lifetime of knowledge, and a strong sense of humour to his lectures. Mr. Cameron has presented video lectures in the past at various science fiction conventions, participated in numerous panels and debates at these conventions, and is comfortable interacting with a diverse and interested audience. ★

The Sun through the Eyes of SOHO: New insight into our star, and its impact on the Earth's Environment

By Peter L. Smith, Harvard University
Wednesday, April 25, 2001 7:30 pm, Ground Station Canada Theatre, H.R. MacMillan Space Centre

This free presentation will feature some of the scientific highlights and the important role that the Solar and Heliospheric Observatory (SOHO)

plays as a solar watchdog for space weather events. The effects on the Earth's environment from solar eruptions will also be discussed as well as how the Sun can contribute to climate changes.

Peter Smith grew up in Vancouver, British Columbia, and was gradu-

ated from the University of British Columbia with a B.Sc. (with Honours) in Physics. He received the Ph.D. degree, in Physics, from Caltech in 1972 and, after a year of teaching, came to and stayed at the Center for Astrophysics. ★

President's Message

Hello fellow denizens of the Starship Earth.

Ah, the glorious eye candy of spring approaches. It is time to ponder our heavens above as we journey from one section of the sky to another. The great voyage of discovery continues with ample opportunity for the members of the Vancouver Centre to practice their observing skills.

We are holding a Messier Marathon the weekend of March 23rd and 24th (the New Moon sets at 6:31 PM local time). There will be several locations involved; see the article inside Nova for the details of the event you would like to attend. The three main sites will be near the Boundary Bay Airport, Aldergrove Lake Park and at the Hope Slide. This is a good chance for you to get the cobwebs off the scope and pick up a few of those missing objects from your list. There will be experienced observers at all locations so any beginners will benefit from the knowledge available. These events are weather permitting of course so check with the site organizer before setting out.

Vancouver Centre has announced its intention to host the 2003 National General Assembly. There are several committees that will need to be set up in the next couple of months. If you would like to help out with some of the chores we need to perform, please contact a member of the executive to get pointed in the correct direction. This is a big event as in addition to being a GA, it will mark the 100th anniversary of the founding of the Royal Astronomy Society of Canada. Another plus to this event is the fact that Vancouver Centre member Rajiv Gupta will most likely be holding the post of National President. We intend to hold this event at Gage residence at the University of British Columbia over June 27th to July 1st, 2003. The hosting of this event is dependent on acceptance of Vancouver as the location for the GA by National Council.

Another upcoming event that is requiring some extra work is the May

continued on page 5

2000 Vancouver Centre Officers

President		
Craig Breckenridge	437-3103	
cbrecken@home.com		
Vice-President		
Sean Reddick	946-1137	
smrgeog@yahoo.com		
Secretary/Webmaster		
Bill Ronald	733-7036	
ronaldb@home.com		
Treasurer		
Marc Verschueren	986-1485	
marcv@telus.net		
Librarian		
William Fearon	939-3154	
National Representative		
Bob Parry	215-8844	
robpar@ballard.com		
Membership		
Dan Collier	732-6046	
Chair, CARO Committee		
Eric Fuller	540-2373	
eriful@ballard.com		
Director of Telescopes		
Phil Morris	734-8708	
Public Relations		
Angela Squires	734-9726	
esquire@vcn.bc.ca		
Speakers		
Barry Shanko	271-0615	
barry.mail@intouch.bc.ca		
Merchandising		
Doug Montgomery	596-7058	
moondoug@funcow.com		
Nova Editor		
Gordon Farrell	734-0326	
gfarrell@home.com		
Councillors		
Pomponia Martinez	215-8844	
Duncan Munro	826-9523	
Marcellus Redmond	533-1830	
Norman Song	299-7924	
Trustees		
Sally Baker	324-3309	
Lee Johnson	941-5364	
Trustee, CARO		
Tony Overton	463-2358	

Web Site

<http://pacific-space-center.bc.ca/rasc.html>
or <http://www.rasc.ca> and follow the link to **Vancouver**.

RASC
1100 Chestnut Street
Vancouver, B.C.
V6J 3J9
(604) 738-2855

About RASC

The Vancouver Centre, RASC meets at 7:30 PM, in the auditorium of the H.R. MacMillan Space Centre at 1100 Chestnut St., Vancouver, on the second Tuesday of every month. Guests are always welcome. In addition, the Centre has an observing site where star parties are regularly scheduled.

Membership is currently \$49.00 per year (\$25.00 for persons under 21 years of age) and can be obtained by writing to the Treasurer at the address below. Annual membership includes the invaluable Observer's Handbook, six issues of the RASC Journal, and, of course, access to all of the club events and projects.

For more information regarding the Centre and its activities, please contact our P.R. Director.

NOVA, the newsletter of the Vancouver Centre, RASC, is published on odd numbered months. Opinions expressed herein are not necessarily those of the Vancouver Centre.

Material on any aspect of astronomy should be e-mailed to the editor, mailed to the address below, or uploaded to SpaceBase™ at 473-9358, 59.

Advertising

Nova encourages free use of its classified ads for members with items for sale or swap. Notify the Editor if you wish your ad to run in more than one issue.

Commerical Rates

1/2 Page: \$25.00 per issue
Full Page: \$40.00 per issue
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Looking at Stars

by Marc Verschueren

Once in a while we really should have a look at stars. The magazines about astronomy, the beautiful books full of incredible photographs of majestic nebulae and spiral galaxies create the impression that there is nothing else worth looking at. The exotic beauty of these unearthly objects is fascinating, but we do not really see these impressive objects in the sky we see in our backyard. My telescope is not attached to a space vehicle and does not have the size of the Keck in Hawaii. When we look from our backyard in an urban environment, we see different things and we see them in a different way—colour is not very pronounced and there is not much detail. There is so much emphasis on looking at these spectacular objects, invisible to most of us, that we forget to look at the stars. Even in books for beginners, much attention is paid to the Messier objects. Most beginners look from their backyards near a city. In the neighbourhood of a big city, with a sky which is far from dark, many of the Messier objects are just not visible or very weak. Star clusters are not too hard to find, but nebulae are another matter. Especially for the beginner, this is very disappointing. It looks as if looking at something else is just not worth it.

Let us not forget to look at the stars. To add a bit of a challenge, try to find double stars. Any star atlas, many magazine articles and books on astronomy give lists of double stars. Some double stars happen to be major stars in constellations and are very easy to find even for the least experienced. This is a good beginning. When one finds it and if it can be resolved, it shows us what a double star looks like; then we can go further afield. Looking for a double star is an excellent exercise in trying to find an object somewhere in the sky using star hopping techniques. If you look for double stars, you have a way of checking whether you really did find what you were looking for because the literature mentioned above usually describes the

angular separation and colour of the pair or multi-star. Also, the angle by which the pair is separated in the eyepiece is often given. A double star is a fascinating object to look at. The colours can be impressive. This is a good way to learn to recognize the colour of a star. The secondary star is usually of relatively large magnitude, but this can show off the colour much better. Gamma in Andromeda is a very good example of this. The companion shows like a beautiful deep blue dot. It would be difficult for the average amateur to find a star like this if it were all by itself somewhere in the sky. They are real little gems of the universe. Observing double stars also gives a good opportunity to evaluate the resolving power of your telescope. You know what you are looking for, what you are trying to find, and you will find out what you can see and what can be resolved by the telescope.

Some double stars are only optical illusions. They appear to be together but in reality they are not—they only stand in the same direction as viewed from the earth. But real double stars really belong together and revolve around a common centre of gravity. So when we look at a double star, we are looking at the effect of gravity. This is not a trivial statement. After all, we can only measure gravity directly in our own environment—say the Solar system. We cannot automatically assume that the laws of nature as they exist on earth are in effect everywhere. But double stars confirm that gravity does indeed operate in the same way out there, many light years away, as it does here close to us. It gives us confidence to accept that nature operates the same way everywhere in the universe. With our little amateur telescopes we are looking at strong support for one of the basic assumptions of astronomy. We can, of course, not actually observe the motion of the double stars—the period of revolution is usually many years and sometimes centuries—but in principle we could, if we observed for many years and if we

equipped the telescope with a device to measure the separation of the stars. Let us not underestimate our faithful equipment.

But double stars are close by, relatively speaking. If we are going to worry about the laws of nature at the edge of the universe, big equipment comes into play. We had a preview of what is in store through the lecture by Simon Lily of the DSO last month. The Next Generation Space Telescope will look at the universe at the other end, as far away as possible. Apart from all the technical detail, I found it most interesting that the new space telescope will be mostly used in the infrared area of the spectrum. The objects at the edge of the visible universe show the well-known redshift. The companion of Gamma Andromedae mentioned above would not look its beautiful blue if we were to observe it at a distance of a few billion light-years, if we could see it at such a distance. It would possibly look more like yellow. But now the NGST will not just take the redshift into account but will actually move its range of observation to the infrared where it will then see much more detail than it otherwise would. Because of that, the mirror will be at a temperature of a few degrees Kelvin because a mirror at 280 degrees Kelvin, such as the Hubble, would be radiating itself in the infrared. This is really a new step into the direction of the red. This is actually not new. The oldest object we can see is the remnant of the big bang in the form of the background radio microwave radiation. This is radiation that has been shifted into the direction of longer wavelengths so far that it ended up in the radio microwave range. So our telescopes are moving more and more into that direction.

What a distance, from our blue companion star of gamma Andromedae all the way to the red of the edge of the universe. ★

continued from page 3

8th guest speaker. We will be hosting Mr. Ray Villard, who is Director of Public Relations for the Space Telescope Science Institute (or Hubble as we all know it). This event will be free to all attendees and because we expect heavy attendance that night we would like members to arrive at 7:00 PM. At 7:30, we will open the doors to the public and allow them to fill any empty spaces there may be. The HRMSC will hold their annual Michael Ovendon lecture on Wednesday night, also free of charge, so any people that miss Ray on Tuesday night could brave the crowds then. Our past President and current National Rep, Bob Parry, has obtained an excellent door prize for that Tuesday night courtesy of Meade. Meade has donated an 8.8mm Ultra Wide eyepiece for our raffle prize that evening. Ray Villard has been brought to us with a very kind donation from Amec Dynamic Structures Ltd. (formerly know as Agra Coast and Coast Steel). The President, Bruce Jackson, has donated \$500 towards our expenses for this event, which allows us to bring this speaker to our membership free of charge.

“As a young wolf, he had lots to learn” – Rudyard Kipling, *The Jungle Book*, 1894 ★



The 2001 RASC Vancouver Centre Executive. From left to right (back row) Marcellus Redmond, Phil Morris, Craig Breckenridge, Marc Verschueren, Gordon Farrell, Bob Parry, (middle row) Sean Reddick, Angela Squires, Pomponia Martinez, (front row) Bill Ronald, Dan Collier, Doug Montgomery, Norman Song, and William Fearon. Not pictured are Eric Fuller, Barry Shanko, Duncan Munro, Sally Baker, Lee Johnson and Tony Overton.

Black Sun

Skyward went our gaze,
The moment was not far.
The upcoming event would leave us in a daze,
The eclipse of a blazing star!

On the silent sea we set sail,
Aboard a luxury liner.
We wondered; when the heavens did hail,
That moment couldn't be finer!

For quarter hour we waited,
No sign of moon's shadow.
But still we watched, our breath so bated,
While the wind whistled, like a soaring arrow.

However, our luck soon returned,
As the ship lurched forward and westward she spun.
We looked through various oculars as our hearts burned,
Awaiting the moment of the Black Sun!

Majestic sun we spotted,
And moon's shadow began creeping by.
HE began looking more and more blotted,
As he commenced his set in the western sky!

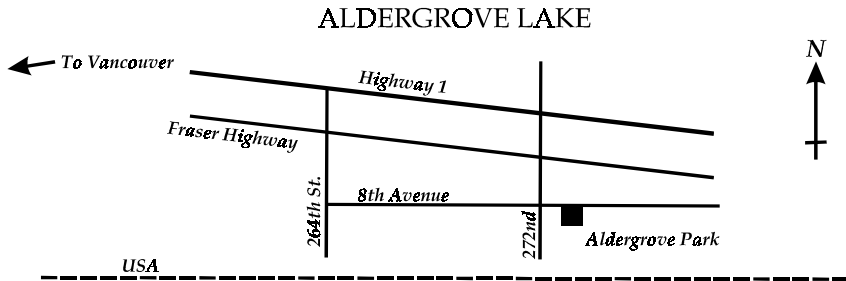
Totality approached and the sky grew dark,
We continued to watch with much transfix.
As the heavens became totally black, hark!
I could see Orion and Bellatrix!

The show was not over, but climax had passed,
Totality had ended, and the sun dipped below our ken.
However, on board, the crowd was still massed,
They wanted to see more, as I watched them yen.

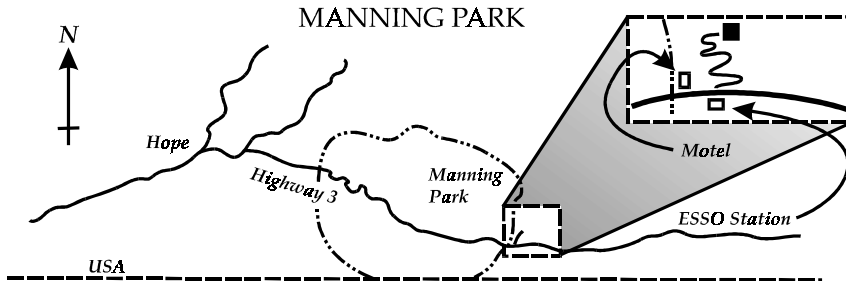
Words fail to describe my sentiment,
As I watch the constellations rise.
Now, to home we are all being sent,
After perceiving the astronomer's prize.

— Varun Ramraj, age 15

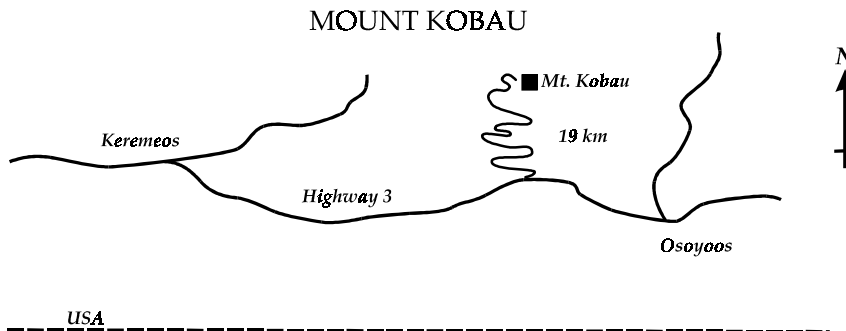
Observing Sites



Dale McNabb Observatory in Aldergrove Lake Park (RASC Vancouver Centre's regular viewing site)
Contact Mike Penndelton (888-1505) or Howard Morgan (856-9186)



Site of the annual star party organized by the RASC Vancouver Centre



Site of the annual Mt. Kobau Star Party organized by the Mount Kobau Astronomical Society

New Telescope Loaner Program Reservation Policy

Due to an abundance of reservations with respect to certain of the telescopes available to our membership for use, the Executive has had to form a reservation policy that will take effect immediately. Since this year is already underway, the policy will start with the March meeting but will work by calendar year in the future. Each and every member will be entitled to **one guaranteed** reservation per calendar year. Once you have placed your **one guaranteed** reservation for a scope for a given month in the year, you are free to place your name on other spots. You must be aware that if someone else wants the same scope as you during these additional time slots you will be bumped, provided they are using their **one guaranteed** reservation.


If no one wants the scope you have requested for your secondary choices, then the scope will gladly be lent to you. For those of you who already have more than one scope booked for the balance of the year, you must make a choice as to which space you want to be your **guaranteed** reservation. This policy is being placed to avoid the monopolization of certain of the telescopes by a limited number of members and is one that we believe will prove to be fair to all. *

lieve will prove to be fair to all. *

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continued from page 1

dent. Sean can be reached at 946-1137 and he has passed on the following directions:

From the Massey Tunnel take Highway 99 south to Exit 37 (Tsawwassen Ferry or Highway 17). Proceed down Highway 17 and turn left at the first set of traffic lights (Highway 10). Continue along Highway 10 and turn right on to 88th Street. If you have reached the Chevron Gas Station or the RCMP detachment then you have gone too far. Follow 88th (sometimes known as Smith) south until you see the cars.

If you are going to Boundary Bay from the Alex Fraser Bridge, take the Highway 10 exit towards Ladner. Continue along Highway 10, passing the Chevron Gas Station and the RCMP detachment. The 88th Street turnoff is the second one to the left after the RCMP and the 2nd set of traffic lights.

Again, I encourage all members to take part in one of these events. Remember to dress warmly, as it might be a bit chilly still. *

Observer's Group

Council has decided to form an observing group. We are looking for volunteers in several areas. We have Aldergrove lake set but would like alternate sites also. This group is for binoculars and there are certificates available. Everyone is welcome, with or without binoculars, and telescopes are always welcome.

To find out more, see Doug Montgomery (merchandise and raffle guy).

Phone: 596-7058

email: moondoug@funcow.com *

ASTROCOMPUTING

SpaceBase™ (473-9358). Affiliated since 1992 with RASC Vancouver, our link to RASC Net, RASC Members only chat area. Future data distribution hub for CARO Project. Features include latest HST images, current world space news and astronomy programs. Provides a file uploading facility for submitting articles and imagery to Nova.

LIBRARY

The centre has a large library of books, magazines and old Nova's for your enjoyment at the GSO. Please take advantage of this club service and visit often to check out the new purchases. Suggestions for future library acquisitions are appreciated.

RASCVC on the Internet

<http://members.home.net/rascvc/index.html>

H.R. MACMILLAN SPACE CENTRE

The Pacific Space Centre Society is a non-profit organization which operates the H.R. MacMillan Space Centre and Gordon M. Southam Observatory. Annual Membership (\$30 Individual, \$65 Family) includes a newsletter, Discounts on Space Camps, special programs and lectures, Vancouver Museum Discounts, and free admission to the Space Centre. Admission to the Space Centre includes: Astronomy shows, Motion Simulator rides, multimedia shows in GroundStation Canada, and access to the Cosmic Courtyard Exhibit Gallery. For Membership information, call Mahi Jordao at 738-7827, local 237 for information. You can also reach them on the Internet at <http://www.hmacmillanspacecentre.com/>

MEMBERSHIP HAS ITS PRIVILEGES!

New members, did you know? The Vancouver Centre has 6 telescopes available for loan free of charge! We have telescopes ranging from 3" to 10" diameter. For more information call Phil Morris, Director of Telescopes at 734-8708, or see him in the lobby of the GSO after the members meeting. The loaner period is for one month only. All telescopes are to be picked up and returned after the members meeting. No telescope will be allowed to circulate outside of these meetings!

Your greatest opportunity as a member of the R.A.S.C. is to take advantage of the company of other enthusiasts to increase your knowledge, enjoyment and skill in astronomy.

The best thing you can do to gain the most from your membership is to get active! Take in the club meetings; engage other members with questions; come out to observing sessions (also known as "star parties"), and, by all means, volunteer to take part in our many public events.

Observing takes place at the Dale McNabb Observatory in the Aldergrove Lake Park, located in Langley, on 8th Avenue, just east of 272nd Street. We are there most clear nights. Contact Mike Penndelton at 888-1505 or Howard Morgan at 856-9186.

Binocular Observing Under Mexican Skies

by Riyadh Abu-Laban

At midnight on the night before we left Vancouver for Huatulco, Mexico, I was busy printing star charts off the computer. My wife Carol was not impressed. I mean really not impressed. I suppose she had a point, since it was only an hour earlier that I'd been stressing out about all the packing that was left to do. Still, after all the family trips I'd lugged my Celestar 8 on, you'd think she'd have understood that a chance to observe at 16 degrees north latitude isn't something one approaches lightly. Especially someone like me who still had 17 unseen Messier objects and now had the additional chance of observing some Southern Hemisphere gems that could never be seen from Vancouver!

Well the packing eventually got done, although the 7AM departure meant we didn't get much sleep that night. Most of our luggage consisted of the paraphernalia required for our 17-month old son Max to survive a week away from home, and the material I needed for two meetings I had to attend. Needless to say that didn't leave a lot of space for astronomy gear—not that I would have risked bringing my scope to Mexico anyway. No, the observing this trip would be with binoculars so the equipment list consisted of only the bare essentials: my beloved Ultima 10 by 50's; a copy of Wil Tirion's "Bright Star Atlas 2000"; a few printouts from "Starry Night"; laminated Messier and Caldwell object cards; and of course a red LED flashlight.

Observing with binoculars is really the way to go on trips like the one we took this February. Not only are they unmatched for their portability, wide field of view, and ability to comfortably sweep the sky, but I'm constantly amazed at the faint objects that can be picked out with enough patience and a dark location. Many of Messier objects I've observed have been with binoculars—in fact I owned a good pair long before I bought my current telescope. (For members who want to learn more about binocular selection

and use, I'd recommend the excellent chapter in Terrance Dickenson's "The Backyard Astronomer's Guide" and the piece by Roy Bishop on pages 44 to 47 of the 2001 "Observer's Handbook".)

It wasn't until last summer that I realized how much observing we were missing out on by living in the Northern Hemisphere. Who could blame me? After all, Messier himself had lived in Paris and not complained. If I'd thought more about it though, I'd have realized that perhaps he never complained because he didn't want to be "distracted" by clusters, nebulae, and galaxies in his single-minded quest for comets anyway! Last summer I came across a comparison of Northern and Southern hemisphere skies in the June 2000 issue of *Astronomy*. Using a scoring system, it concluded that the observing is far more spectacular down under. That's because southern astronomers have access to a host of treasures we can only read about. And read about them I did, as I dreamed and schemed about what I might be able to see from Huatulco!

Well I'm happy to report that despite being less than a week before the full moon, the Mexican skies did not disappoint. Most of what I was interested in was towards the south and didn't rise until late in the night (actually early in the morning). Fortunately at our resort there was both a small beach and a grassy area on the higher bluffs that faced in the right direction. Despite still being in the Northern Hemisphere, the clear horizons allowed me to easily observe to about minus 65 degrees declination.

By 2AM on February 3rd, Crux (the "Southern Cross"), Carina, and Centarus had all risen along with their associated booty. Just off Mimosa (Beta Crucis) is the famed "Jewel Box" (NGC 4755), a 4.2-magnitude open cluster which resolved beautifully in my binoculars and made me wish I'd packed the scope and left some of Max's toys behind! Immediately to the south is the "Coalsack", a 7- by 5-de-

gree dark rift in the Southern Milky Way that would certainly have been spectacular without the moonlight. Further west in Carina I easily found the spectacular Eta Carinae Nebula (NGC 3372), also known as the Keyhole Nebula, an object that far surpasses the size and brightness of the Orion Nebula. Nearby are several easily visible open clusters, the most well known of which is the magnitude-1.9 Theta Carina Cluster or "Southern Pleiades" (IC 2602). Other highlights included the star Canopus, second only to Sirius in brightness, and the Alpha Centauri complex, just "another triple star" but one that long ago secured its place in history because of its proximity to our solar system. Everywhere I looked I came across more treasures, all in constellations I had never seen before! Many of these were "Caldwell" objects, appearing on a list of 109 targets developed by the famous British astronomer Patrick Moore as a post-Messier observing challenge.

Closer to sunrise, Scorpius was up in its entirety and Sagittarius was not far behind. This allowed me to take a leisurely stroll through scores of clusters and nebulae I usually have to wait until the Mt. Kobau Star Party to see from BC. As if all this wasn't enough, I also managed to catch two new Messiers, M107 and M68. In fact Carol and I found and confirmed M107 together from the comfort of our balcony while Max was dreaming of chocolate bunnies. By then Carol had long forgiven me for the star chart printing and was thrilled at the unique opportunity to share in observing without the usual freezing temperatures!

Well I've saved the best for last because there were two final sightings that were the highlight of my Mexican observing. No, not the Large and Small Magellanic Clouds—unfortunately we weren't far enough south for them. First, and best of all, was the great Omega Centauri globular cluster (NGC 5139). John Herschel wrote that it is "beyond all comparison, the

continued on page 9

continued from page 8

richest and largest object of its kind in the heavens". He was right! This thing is absolutely huge (36 minutes in diameter, to be exact) and about three times brighter than M13 in Hercules. In the binoculars it appeared as an eerily distinct orb, the size of the full moon, rising up from the horizon. Despite its low position and the moonlight, it was truly a sight to behold. Apparently it easily resolves into stars,

even in small scopes. What a monster!

What was the final observing highlight, you ask? Well it wasn't in the sky but on the ground. It turned out that the grassy area I frequented was the nocturnal foraging area for several nine-banded armadillos. Quite a sight, and not something you'd see during your average session at Aldergrove! Unfortunately Carol didn't get to see them, nor did our friends John and Dianna, despite me

repeatedly dragging everyone to the site late each night as we walked back to our rooms. I suspect they all think the armadillos were a hallucination induced by the heat and the cerveza. Oh well, what do they know? Observing a nine-banded armadillo is a lot like observing a faint galaxy... you might not come home with a photo but you know in your heart that you saw it! *

Members' Gallery



Waxing Moon with Cessna
Marcellus Redmond

Hercules & Atlas
Rick Freeman

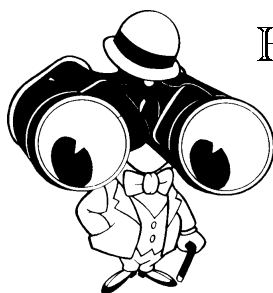
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