ROYAL ASTRONOMICAL SOCIETY OF CANADA • VICTORIA CENTRE

SkyNews

http://victoria.rasc.ca/

February 2005 Number 261 Page 1

This Month

Gail Conway

Planetary Nebulae; their evolution and morphology

Learn about Gail's favourite faint fuzzies.

Gail was born in San Francisco and lived in New York, Seattle, San Diego, Missoula (Montana), Urbana (Illinois) and Calgary before moving to Nanaimo with her husband in August of 2003.

Gail has a B.A. in Physics from the University of Montana and an M.Sc. In Astronomy from San Diego State University. She moved to Canada in 1998 to attend the University of Calgary, where she completed coursework toward a Ph.D. in astrophysics.

Her interest in planetary nebulae began at the University of Illinois studying X-ray emissions from these objects, and has since expanded to include their infrared and visible light emissions.

On the Cover!

Here's a rather sooty image of the lunar eclipse rising while my dinner was waiting nearby. Why don't they time these eclipses better?

David Lee

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President's Message

I'm a curious person.

I like to know new things: what bird is that; how do owls fly silently; why are birds dinosaurs? I particularly like it when I have a friend who can introduce me to something new, show me a new-side of something I all ready know, or remind me of something I've forgotten. It's so much more fun when you have someone to show you the tricks of the trade.

That's one of the things I get out of my RASC membership. In terms of all things astronomical, I have a bunch of new friends to help me get the most out of my stargazing.

If I want to see a faint, fuzzy nebula for the first time, Bruno will punch it into his new go-to Meade, and there it is! Bill will teach me how to find it with my dob. Brian will show me how good it would look if I had a better eyepiece. David will show me how to take a picture of it. Guy will teach me how to build a tracking platform so I don't have to keep nudging my telescope along. Larry will help me build it. Sandy will explain exactly what I'm looking at. Chuck will tell why I'd enjoy looking at M13 more. Roy will remind me how much fun it is to share the amazing wonders of the night sky with the public.

Get the most out of your RASC membership. Take advantage of the knowledge, experience and enthusiasm of your fellow amateur astronomers (they like to be taken advantage of) and share your own expertise in return. Taking part in the outreach activities of the centre is a great way to do this: drop-in to a star party at the Center of the Universe; let Sid (sid_sidhu@shaw.ca) know you're interested in helping out at school program; or, join Blaire's (pellatt@telus.net) sidewalk astronomy.

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Address Change? Information Incorrect?

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The deadline for the next issue of Skynews is

February 24 2005

Get your Skynews early and in colour. Tell David Griffiths, Treasurer, that you get Skynews on line and we won't mail you a copy

(President's Message Continued from page 3)

On April16, our centre will host Astronomy Day at the Royal British Columbia Museum. It's a great day of displays, solar viewing, presentations, telescope demonstrations, kid's activities and evening stargazing at CU— tons of fun for the public and for our members, too. If you'd like to help, contact Sandy (sbarta@shaw.ca)—you'll be glad you did.

Scot Mair

Volunteer for Astronomy Day

International Astronomy Day (IAD) 2005 is Saturday, April 16 at the Royal British Columbia Museum. Evening/night sky viewing is at the Centre of the Universe.

Let me know if you can help out and when you would be able to help out.:

Friday (time TBA):

- ❑ Set up Friday afternoon

Saturday 10:00 a.m. to 4:00 p.m.

- ❑ Information/Reception Desk
- ❑ Guide (helping the public find activities)
- ❑ Solar observing (with safe equipment!)
- ❑ Solar observer relief

Interpreters:

- ❑ Astronomy images and posters
- ❑ Telescope making
- ❑ Solar system scale model
- ❑ Star Lab planetarium assistant (if necessary)
- ❑ Amateur astronomer's booth
- ❑ Children's activities
- ❑ General relief

Take down after 4:00 pm to 5:00 p.m.

- ❑

Evening observing at the Centre of the Universe

- ❑

Thanks, Sandy

Report from the Centre of the Universe

February 2005

Happy Valentines Day everyone!

I hope you all enjoyed your January! We have been having nice nights lately, so it may be a great time to head outside! We are still open Tuesday to Friday 10 am to 4:30 pm and on Saturdays from 10 am to 5:30 pm. We are gearing up for our summer season which starts in just a couple months.

Is Love in the Stars for You?

Singles Night at the Centre of the Universe

When: February 12, 2005 from 7 to 11 pm
Where: the Centre of the Universe
5071 West Saanich Road, Victoria, BC
$9 for adults, $8 for seniors and students (18+)

The sky is full of great love stories! Did you know the moons of Jupiter are named after the Roman King's many loves and that Cupid is the son of the very beautiful Venus? With Valentines Day just around the corner, join us at the Centre of the Universe for Singles Night and see if love really is in the stars for you! Mix and mingle with other singles who have an interest the stars or just enjoy a fun time. Our evening will include refreshments, great stories and a chance to meet someone new in a unique setting. Programs include large and small telescope observation, multimedia presentations, planetarium shows and telescope tours. This is a great opportunity to meet someone right before Valentines Day! For more information, please call the Centre of the Universe at 363.8262!

Birthday Parties:

Please note: The Centre of the Universe does not provide cake or food. Extra participants will be charged at regular admission. For more information, or to book your party, please call the front desk of the Centre at 363.8262.

Looking for a unique way to celebrate an upcoming birthday? Join us for our Stellar or Galactic Birthday Celebrations!

Option 1: Stellar Birthday Party!

Cost: $100 (plus GST)

The Stellar Birthday Party includes admission for up to 2 adults and 10 kids.

We will provide your group with an exclusive 30-minute multimedia show and craft, party games and the use of our party room for an hour to do present open-

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(Centre of the Universe Continued from page 5)

ings, cake and goodies! Afterwards, you will be able to join in with the regular programming at the Centre!

Option 2: Galactic Birthday Party

Cost: $160 (plus GST)

The Galactic Birthday Party includes admission for up to 2 adults and 10 kids.

We will provide your group with an exclusive 30-minute multimedia show and craft, party games and the use of our party room for an hour to do present openings, cake and goodies! Afterwards, you will be able to join in with the regular programming at the Centre! We will also decorate our party room, provide goody bags for each participant and a birthday present from the birthday boy or girl!

Space Camps at the Centre of the Universe

When:	March 21 to 25, 2005 from 9:00 am to 3:00 pm (and also selected dates this summer)
Who:	Kids aged 6 to 10 (Space Explorers) and 11 to 13 (Junior Astronomers)
Cost:	$150 (plus GST) for the week

Looking for something fun and educational to do over spring break? Why not join us for our Space Camps!

This five-day long day camp will include fun hands-on astronomy activities and crafts, planetarium shows and many other fun presentations! Our trained staff of space enthusiast will help you make your own "Star Clock", voyage through our Solar System and teach you how to use a telescope plus much, much more!

Space is limited, so sign up early! For more information or to sign up your space explorer or junior astronomer, please call Cassie or Steve at 363.0008.

The Sky This Month: February, 2005

(All times and dates local to Victoria, BC)

February 2	Groundhog Day Last Quarter Moon
February 5	Mars above Crescent Moon just before sunrise
February 8	New Moon
February 14	Valentine's Day
February 15	First Quarter Moon
February 19	Moon near Saturn in the evening
February 23	Full Moon
February 26	Moon next to Jupiter after 10 p.m.

February gives us great views of a beautiful comet and some of our planetary neighbours.

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(Centre of the Universe Continued from page 6)

Comet Machholz is still visible in our skies. Comets are big, dirty snowballs that orbit the sun. Discovered by Donald Machholz of California using only a 150mm reflecting telescope, the beautiful green glowing comet has been visible to us since late last year. It will be overhead through April although decreasing in brightness as we head towards spring. The comet will remain visible with binoculars until the end of February, so now is the time to head outside. Look to the left of Cassiopeia, the giant "W" in the northern sky.

For more information on where to spot Comet Machholz, please visit http://skyandtelescope.com/observing/objects/comets/article_1396_1.asp.

Look to the south at 8 p.m. to see the large hourglass of Orion the hunter. Just below Orion, you will find a very bright white star. This is Sirius, the brightest star in our skies. Sirius sits in the constellations Canis Major, or the big dog. Another bright star will catch your attention just above and to the left of Sirius. This bright star is Procyon, part of the little dog, Canis Minor. Towards the East you will see a sign that spring is on its way. Just above the eastern horizon, search out a giant backwards question mark. This is the head of Leo, the lion, a spring constellation. In the northeast, the Big Dipper is still standing on its handle. Use the two upper stars in the bucket to draw a line towards the West and you will run into Polaris, our North Star. As you watch the sky over an evening, you will see this star appears to stand still while all the other stars rotate around it.

Two fabulous gas giant planets are visible in our evening skies. Saturn is the bright yellow "star" high in the southeast just above Procyon. You have to stay up a little later to catch Jupiter. Jupiter rises off the eastern horizon just past 10 p.m. Look for these to planets to have close encounters with the Moon this month!

Clear skies and happy stargazing! Cassie

Announcements

Jim Hesser mentioned that the Long Range Plan for Astronomy is again up for Parliamentary review . He invites our members to encourage their MPs to support this initiative.

Scott Mair

Thanks to David Lee, we now have the Victoria Centre Bylaws posted to the Members Only website:

http://victoria.rasc.ca/membersonly/docs/RASCVictoriaBylaws.pdf
(This is a 2Mb pdf file.)

Email me if you need to know how to access to the Members Only area of the website.

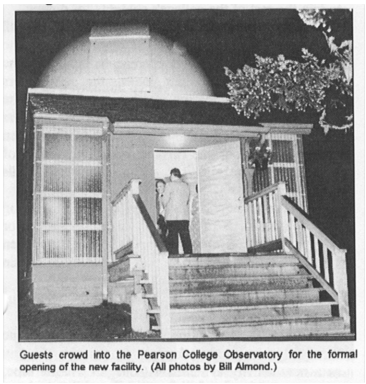
Cheers, Joe Carr

The Pearson College Astronomical Observatory

The first installment of a history compiled in September 2004, by Bill Almond, historian for the Victoria Centre, RASC.

All material presented has been taken from various copies of the Centre's monthly journal "Skynews", issues 1992 to 1998.

In the Beginning



Guests crowd into the Pearson College Observatory for the formal opening of the new facility. (All photos by Bill Almond.)

At some unknown date early in the Spring of 1993, Pearson College Director of Studies and Deputy Director, Jean Godin, and his wife Helene, got together with Jack Newton and his wife Alice, both RASC members and college patrons, to mull over the feasibility of planning, building and equipping an observatory to be built on college grounds.

From that small beginning, Jean's limitless enthusiasm drove the project onward. The Chairman of the Board of Pearson College, Galen Weston, had his interest aroused when it was discerned that the college would benefit immensely if it possessed its own observatory. With everyone keen on the idea it became clear that what was needed to get the ball rolling was a "seed", a tangible effect that would spur the project to reality.

To this end, Jack Newton approached the RASC's Victoria Centre council with an idea: would they be willing to donate the Centre's Evans-Van der Byl 500mm Newtonian telescope to the college on an extended loan agreement. On May 12, 1993, council enthusiastically adopted the proposal and Jack immediately phoned the college with the good news, to the delight of both Jean and Galen. A written agreement made between the College and the Victoria Centre, RASC, gave the College unrestricted use of the scope until such time as the Centre requested its return.

The Construction

Having obtained a telescope gave renewed impetus for an observatory to be built to house it, some 76 meters above sea level. Offers to help quickly surfaced. The ripple effect begun by the Victoria Centre prompted Galen Weston and the James Wallace Foundation to offer their invaluable financial support.

GEC Alsthom International offered to install a power cable, Construction Aggregates helped to build a winding, 460-meter access road, appropriately named The Milky Way, to the top of the hill where the observatory was to be located. Others offered books, maps and various publications. RASC member, John Pazder, offered his time and expertise to rebuild the telescope's ancient electronics and drive gear, for which the Centre had also allocated funds. And when the time came to put it all together the

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(Pearson College Observatory Continued from page 8)

Coast Guard sent in one of their helicopters to lift the scope and the dome into place on their mountings.

With access to the site in place, a start could be made to building the observatory. Starting in April 1994, a boat builder in Victoria, John Booth of Booth Enterprises, following plans drawn up by Kenney Nickerson in Sooke, constructed separately the observatory base, the two half domes and the slit door. The dome was made of balsa wood covered with a fibreglass skin. A motor rolling along a fixed chain opens the slit door in four minutes. The observatory sits on the site of an old windmill that had been abandoned years earlier and its concrete pier was put into use as a telescope pier with the observatory built around it.

Timber for the observatory and warm room came from trees cut down on campus. A portable mill produced the necessary lumber. An engineer ensured that the structure could withstand a 7.5 earthquake.

On June 14 and 15, 1994, the base, dome and telescope were assembled on the college tennis court. On June 17 a Coast Guard helicopter arrived at the tennis court to lift the parts to the top of the hill. First the base, then the scope, followed by the covering dome, was lifted into place. It took a mere 17 minutes to complete the operation.

With everything finally in place and secured, a great crowd of people gathered inside the dome, toasting the grand achievement. Everyone was overjoyed with a great sense of triumph and filled with relief, pride and thankfulness for a job well accomplished.

The original set-up inside the building was as follows: On the first floor -- an unheated covered porch giving access to a heated warm room equipped with a kettle for hot drinks, chairs, tables, bookshelves, maps, magazines, a good collection of coats and sweaters, a projection screen and a fully-equipped 486 66 MHz computer to be used for CCD image processing along with the necessary astronomical software: “Earth Centered Universe” and “Sky Pro.”

Access to the telescope was by a staircase from the porch leading to the 4.9m-diameter dome with the RASC’s telescope sitting on its pier in the centre. A 386 computer displayed “Sky Pro” to guide the scope to any chosen object. CCD equipment was run by SBIG CCDOPS software utilizing a 286 computer.

Later on a power cable was installed in the ground, donated by GEC Alstom International. Interior finishing was left to a later date, as was water and telephone service. The washroom facility and wheelchair ramp, donated by the James Wallace Foundation, were installed a year later. College students installed small, outside, concrete telescope piers during the following term.

A donated 250mm Schmidt-Cassegrain telescope was housed in the old RASC trailer that formerly was home to the 20-inch and was repositioned on a flat area near the observatory. Later, the trailer was sold and was replaced by a roll-off roof observatory that was built on the same spot to house the 250mm and two later acquired telescopes.

To be continued next month

2005 GA — Okanagan

Victoria Day long weekend—May 19-23 2005

The website for the 2005 General Assembly is now live!!
http://www.rasc.ca:8080/rasc

Okanagan Centre members are very pleased to host the General Assembly this year and we look forward to meeting you, and sharing with you, the many fine activities planned for the GA and the unique assets of our region.

Kindest Regards, Guy Mackie
Registration Committee Chair 2005 GA

Call for Sketches and Images

I would like to remind Canada's many excellent sketchers and imagers that it would be much appreciated if you could put together a selection of your best efforts for the display area at the RASC General Assembly in the Okanagan. There will be secure display space, in a high traffic area. Displays have tapered off at recent GAs and I would like to see our convention revive this long tradition. Lighting and numbers of passing visitors should be better at a General Assembly than at most star parties.

The Awards part means that you could be recognized at the banquet for your display.

Only three months and a bit to go, so please give it some thought.

Best, Alan Whitman
Displays and Awards

Invitation to Dark Sky observing

Although the 2005 GA will be held at full moon, some attendees will undoubtedly take fairly long vacations in British Columbia and the Alberta Rockies. Some have told me that they have already purchased their tickets and others are probably firming up their travel plans now too. Your chances of seeing mountain peaks in Glacier, Yoho, Kootenay, Banff, and Jasper National Parks under blue skies, cloud free to the peaks, are considerably better in early May than they are in June. (June is the wettest month of the year in most of southern interior BC. In June our semi-arid valley will actually get as much as a third of the June precipitation recorded at many eastern Canada locations and the mountains are much wetter than the Okanagan Valley is, so plan to tour in May rather than June, if possible. Early May is normally the start of the Okanagan's five-month summer and sunny early May afternoons are frequently warmer than wet June afternoons, although the June nights will be much milder.)

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Okanagan GA Continued from page 10

If you will be in the Okanagan near the May 8 new moon we would be delighted to host some serious deep-sky observing, either at the valley bottom observatories that Dave Gamble has in Summerland (18-inch NGT) and Alan Whitman has on Skaha Lake south of Penticton (16-inch Meade Newtonian), or at the superb mountain dark sites available east and west of Kelowna that Guy Mackie (12.5-inch Starmaster) and Dave Player (10-inch Skywatcher) regularly observe at. All but one of the objects on the Deep-Sky Challenge Objects list in the Observer's Handbook are visible from the best of our Okanagan observing sites. Excellent transparency is the norm in May and we still have four hours of darkness at the May 8 new moon.

If you want to arrange some May new moon observing opportunities, please email:

Guy Mackie	guy.m@shaw.ca,
Dave Gamble	winetrails@shaw.ca, or
Alan Whitman	whitmans@vip.net

One of the Okanagan Centre's most active members, Mikkel Steine of Oslo, Norway, will be observing with us at May new moon and we would be pleased to have more visitors at that time. (Please note, we are NOT arranging a star party at this time, just some casual observing in small groups. Our annual Mount Kobau Star Party will be at August new moon, as always.)

The Centre's three rental scopes will be reserved for the use of out of province visitors at May new moon (rent free, of course) so that you can observe your own list of off-the-beaten-path objects if the majority in the group want to observe the standard splendours in the bigger scopes.

Imagers may want to consider a night or three at Jack and Alice Newton's excellent Bed & Breakfast Observatory above Osoyoos, featuring the BEST view in the Okanagan Valley:

http://www.jacknewton.com

Best, Dave Gamble, Guy Mackie, Alan Whitman

Imaging Forum

Hi everyone,

A fellow RASCal has set up a new yahoo groups imaging forum for those who wish to see and upload astro images (and sketches). You can join at this URL:

http://groups.yahoo.com/group/RASCAG/

We will use this site until a more elegent solution comes along in which case I can dissolve the group. Start uploading some pics I'd love to see them!

Cheers, Mike Wirth
Ottawa Centre

Book Review

Atlas of the Skies

By TAJ Books (no individual author is listed), Cobham, Surrey, UK, 2004. 240 pages

I usually get my astronomical information from the internet. The wealth of sites dealing with everything ranging from Arcturus to asteroids or zenith to zodiac, is amazing. Sometimes though, you just need a book, something to curl up with on a cloudy winter evening.

At our January meeting, I took “Atlas of the Skies” out of the centre library. It looks great, with lots of photographs of astronomical objects, star charts and illustrations. It also provides the usual overview all things astronomical: a brief history of astronomy, a review of the earth and its place in the cosmos, an extensive series of seasonal sky charts for both hemispheres, a section on planetary astronomy and another for "stars, galaxies and beyond".

Some things I liked: the section on types of telescope and mounts (more complete than you usually see in general astronomy books); the chapter on the moon (a wonderful series of photographs with numbered features that show how different these features look from phase to phase); the illustrations are generally excellent, clearly illustrating astronomical concepts that can be very difficult to explain.

Some things I didn't like: the writing is turgid and formal. While clearly written and understandable, it is evident that the original text was not English. Nowhere is this more evident than in the illustrations, some of which still carry the original Italian labels.

All in all, definitely worth taking out—lots of unique little treasures mixed in with the usual introductory fare.

Scott Mair

Freeware

DarkAdapted, v 1.3 FREEWARE

http://www.snapfiles.com/Freeware/system/fwutilities.html

DarkAdapted allows you to quickly adjusts screen gamma settings to preserve dark adaptation. It is useful for astronomers and others who need to preserve dark adaptation while using the computer. NightVision controls the three gamma channels (red, green, and blue) independently and also provides full control over preset gamma settings, fade rate, and bailout keys.

Windows version 98/ME/NT/2000/XP

Ed Majden

Night Sky Viewing at Schools

Do you want to help with our school outreach program? Do you want the opportunity to learn about astronomy in a fun, non-intimidating atmosphere?

Let Sid know you are willing to help out with his school program.

February 23	7:00pm	Cedar Hill School (3910 Cedar Hill Road)
March 11	7:00pm	Rogers School (765 Rogers Avenue)
April 18	7:00pm	Willows School (2290 Musgrave Street)
April 19	7:00pm	Braefoot Elementary (1440 Harrop Road)
May 12	7:30pm	Royal Oak (4564 West Saanich Road)

Clear & Dark Skies, Sid

Phone: 391-0540

Email: sid_sidhu@shaw.ca

TELESCOPE FOR SALE

Celestron NexStar 114 mm reflector, with “go to” function. This telescope is unused – it’s still in the box!

Included:

- Aluminum tripod
- Eyepieces: 10 mm and 25mm (1 1/4”)
- NexStar hand control with object database
- Star Pointer finderscope and mounting bracket
- Battery pack
- Accessory tray
- The Sky™ Level I Astronomy software
- Price: $ 350

Please contact Chuck: 744-2499

Upcoming Meetings

March	Henk Hoekstra, UVic
April	Laura Ferrarese and Pat Cote, DAO
May	Russell Robb, U Vic
June	Members’ Night

House & Observatory on Pender Island FOR SALE

Keith, a long-time Victoria RASC member who moved to Pender Island 5 years ago, is moving to the dry, dark city of Grand Forks in the interior and is selling his house.

Nice older house in Magic Lake. Finished basement with large workshop, large brand new deck, open design on main floor with lots of windows, large open room upstairs, 2 baths and a 13 foot square (169 sq. ft.) observatory off the third floor. Asking $190,000.

For more info call Keith

Phone: 250-629-6875 (evenings and weekends) or
email: keithr@cablelan.net

Island Eyepiece and Telescope

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Members at Large:
Bill Almond, Jim Hesser, Ed Maxfield, Frank Ogonoski, Blaire Pellatt, Colin Scarfe, Rich Willis

New Members Liaison:
Sandy Barta

This Month

Astronomy Cafe

At Bruno Quenneville's
2019 Casa Marcia Crescent,
Victoria, BC.
Call 477-2257 for more information or directions.

Newcomers are especially welcome.

Come and enjoy!

February 23

Astro Imaging

Third Wednesday of the month
if it's clear at
Bill Almond's

354 Benhomer Drive
478-6718

February 18

New Observer's Group

At Sid Sidhu's:

1642 Davies Road (off Millstream Lake Road) at 8:00 PM.
Call 391-0540 for more information or directions

March 9

March Meeting

7:30 pm
Room 060, Elliott Building, UVic

Yes, We post important, timely, member-related news to our email list.

Online information about the RASCVic and Skynews email lists:
http://victoria.rasc.ca/
click on: 'Members Only'

Web Page of the Month

Just beginning? Want to know where to start?
Want to know how to get the most from your equipment and observing?
Want to know how to collimate a telescope?

Andy's mission is "to aid amateur astronomers-on-a-budget to get the most for their money and get the most out of their equipment".

http://www.andysshotglass.com/introduction.html

Thanks to Ed Majden, Courtenay, for this link.