

# AURORA

## A Message from the President

Well, 2003 is now winding down and as it does, another great year for the RASC-Windsor Centre.

This year will always be an especially memorable one for me, as it completes a period of three very busy years serving as your President. When I joined the Windsor Centre 26 years ago as a university student, the group included about 40 or so astronomy enthusiasts. I marvel at how it has evolved over time into a much larger organization. Now, at the end of 2003, our membership stands at 129 people, all sharing a common interest and love of astronomy.

The future looks bright indeed for the Windsor Centre. We have many talented people in our midst with a broad range of interests and abilities, and who volunteer selflessly in many capacities and give freely of their resources; be it on council, with membership meeting presentations, committees, or other special projects. I thank each and every one of you for the support you have given me during the last three years.

In January 2001, the little dome that was to become Hallam Observatory, sat forlorn and deteriorating on the lawn at St. Clair College after seeing little use in its 30 year lifetime. As 2003 ends, we now see it fully restored and expanded in size at its new dark-sky site, and sporting a brand-new, state-of-the-art, large-aperture telescope. Outside, a huge observer's deck provides an additional area from which to view the stars.

I just can't believe how far this project has come in such a short time! Yet improvements will continue into next year to make this facility even more user-friendly for the benefit of all the centre members. 2004 will also see the start of the observatory being used for the educational benefit of young people discovering astronomy through their school curriculums.

I wish Steve Mastellotto all the best as incoming President of the Windsor Centre, and I wish him as much excitement and fun as I have had during my watch. In the meantime, A Happy Holiday Season, a Merry Christmas and a Prosperous New Year to all of you.

Randy Groundwater

### *In This Issue*

A Message from the President	Cover
Calendar of Events / Maps / Submitting Articles / Membership	Page 2
Northern Lights and Solar Spots	Page 3
2004 Council of the RASC - Windsor Centre	Page 4
Windsor Centre 2003 Financial Report	Page 4
Dedication of the New Telescope at Hallam Observatory	Page 4
Windsor Centre Membership List as of December 1, 2003	Attachment



## Calendar of Events

### *Our next meeting...*

#### **General Meeting**

Tuesday, January 20, 2004  
8:00 p.m.

at  
Ojibway Park Nature Centre  
5200 Matchette Road

### *Main Speaker...*

Juliana Grigorescu

### *Topic...*

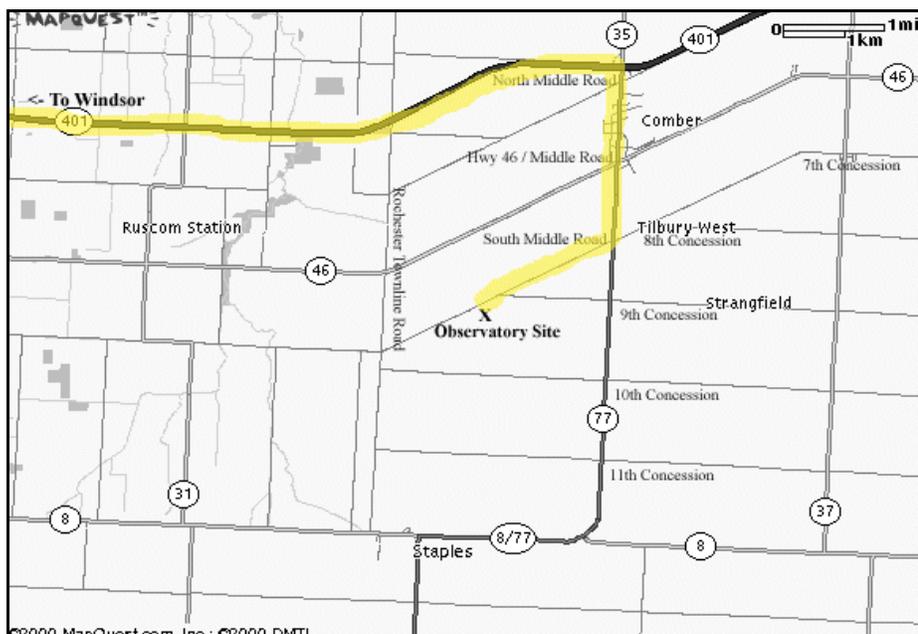
“Stellar Evolution”

### *Activities...*

**Telescope Dedication:** On Saturday, December 27th at 2:00 p.m., a formal dedication ceremony will be held at Hallam Observatory to commission our new telescope. See page 4 for details.

**Quadrantid Meteors:** The Quadrantid meteor shower peaks at 1:00 a.m. EST on Sunday January 4 (overnight Saturday January 3). This shower is often overlooked due to the cold Winter temperatures you must endure to observe these slow moving meteors. You can expect up to 120 meteors per hour however for 2004 the Moon will be full only 3 days after the peak and will affect the view this year.

**Council Meeting:** Our next council meeting will be held on Tuesday February 10, 2004 at Steve Mastellotto's house. The meeting will begin at 7:30 p.m.



### **Hallam Observatory Site**

At left is a map showing the Comber area and it includes the major highways (401, 77, 8 and 46) that are in the area of the observatory. I "highlighted" the most direct route from Windsor on this map which is to take 401 East to Highway 77 South to South Middle Road. While on South Middle Road you will cross some railroad tracks (they just removed the tracks) and just after the barely discernable point where Concession 9 joins it you will find the observatory site on the South side of the road. If you hit the Rochester Townline Road (i.e. you come to a stop sign and have to turn left or right) you have gone too far. On most clear nights someone is usually out there observing but if it happens to be a clear, moonless, weekend night you should have many observing buddies.

## Submissions

Aurora is published monthly except for August. The September, November, January, March, May and July issues are full newsletters (usually 6 pages) with a number of member submitted articles. The October, December, February, April and June issues are short flyers (2 pages) with one short article. Submitted articles can be of any length from a paragraph to multiple pages. I can scan pictures and/or diagrams (both prints and film) to support your article and the originals will be returned to you.

Submission deadline is the 1st of the month. I will accept Emails at the address below, floppy disks, or written submissions.

Editor: Steve Mastellotto

Email: [mmastellotto@cogeco.ca](mailto:mmastellotto@cogeco.ca)

## Membership

The Windsor Centre of The Royal Astronomical Society of Canada meets on the 3rd Tuesday of every month (except July and August) at the Ojibway Park Nature Centre. In addition to regular meetings the centre hosts a number of observing nights, a picnic and a December social. Members receive a copy of the Observer's Handbook, the RASC Journal, a subscription to SkyNews magazine and access to the Centre's library and telescopes.

Annual Membership Fees are Regular - \$44.00, Youth - \$27.50 and Life - \$880.00.

Contact Ken Garber at (519) 966-3478 or visit our website at: [www.mnsi.net/~rasc](http://www.mnsi.net/~rasc) for more information.

## Northern Lights and Solar Spots by Randy Groundwater

The deepening blue of evening twilight was slowly descending, and a waxing crescent moon sailed low over the southwestern horizon, as I left the little village of Gorrie, Ontario to head back to my motel in Goderich for the night. It was early Thursday evening, October 30th, and I'd had a busy day of work. Nevertheless, as I sped westward along the quiet backroads, I couldn't help but think about how lucky I was that it appeared to be turning into a brilliant night of stars and here I was, far from the smog and pollution of the city, to enjoy them.

The weather was unusually mild and breezy, so I opened the car sunroof, put in another CD, and cruised along. Soon the last traces of sunset were gone, and Mars was shining brightly over the fields to the south. As I admired its glow, I was bothered by what seemed to be a bright, hazy mist cutting a wide swath of sky farther east of the Red Planet. "Rats", I thought; "just my luck - it'll be socked in before I'm halfway back. No skywatching tonight, after all."

But as I glanced over my shoulder a few moments later, it was suddenly obvious that what I was seeing was no weather front; for a broad sword of brilliant red light, tinged with shafts of green, was stabbing the horizon to the left of Mars. The car slowed as my foot came off the accelerator, and with no cars visible in front of or behind me, I turned off the first dirt road I saw. Stepping out of the car and turning off its headlights, I realized I was looking at a sky blazing with the finest auroral display I'd ever seen. The intense solar storm bombarding the earth's magnetosphere this week was paying off, big-time!

From a forming coronal point high in the sky just south of where Cygnus flew, streamers of intense red and green colouration swept downward all along the horizon from the

northwest, across the Big Dipper now upright in the north, through the east and almost to due south. The western sky remained dark and pristine, lit only by the young moon and what seemed like hundreds of stars.

I'd already called Anita and the kids back home, and had also put a call through to Steve Mastellotto who immediately notified as many members as he could on the email membership list. As luck would have it, it was clear back home and many others had been seeing this great display as well. Perhaps most gratifyingly, after being alerted by Steve, Milica Rakic and her husband had managed a quick drive out of Windsor to enjoy what was their first Canadian auroral display! Milica had given an excellent and memorable talk on the Aurora at a membership meeting last winter, and had been frustrated on occasions since then at seeing any hint of the phenomenon from our relatively southerly latitude.

The following afternoon on my return trip to Windsor, I stopped in at Hallam Observatory. It was about 3:30 p.m. and although the sky was mostly cloudy, standing on the observer's deck outside the building I could make out the disk of the sun in moments through thick haze. With its glare comfortably reduced, two, massive, naked-eye sunspot groups were instantly obvious towards its southeast limb. I hadn't been lucky enough to see something like this since the summer of 1991.

Fellow skywatchers from more northerly Canadian locations would doubtless find aspects of my account here humorous, as the frequency of auroral activity can be a bane to observers in these places. But at 42 degrees north latitude, we'll take any displays such as that of October 30th, anytime!



*Aurora image downloaded from the internet. Photo was taken on October 30, 2003 from East Douglas, Massachusetts. Camera was a Canon AE-1 mounted on tripod with Bogen gearhead mount, 50mm lens at f/2.8, exposure 6 - 8 seconds using cable release on Kodak Gold 400. Image by John Kocur. Editor's Note - If you have internet access take a look at the online version of this newsletter to really appreciate the colour in the above image.*

## 2004 Council of the RASC - Windsor Centre

### Elected Officers

President	Steve Mastellotto
1st Vice-President	Pierre Boulos
2nd Vice-President	Robin Smallwood
Treasurer	Ken Garber
Secretary	Joady Ulrich
National Council Rep.	<i>Open Position</i>

### Councilors

Paul Preney	Susan Sawyer-Beaulieu
Henry Lee	Steve Pellarin
Peter Bondy	Rev. Harry Brydon
Ken ROUNG	Mike Mastronardi

### Appointed Officers

Honorary President	Dr. William Baylis
Past-President	Randy Groundwater
Librarian	Milica Rakic
Recording Secretary	Dave Panton
Public Education Director	Randy Groundwater
Public Relations Director	Robin Smallwood
Newsletter Editor	<i>Open Position</i>
Assistant Newsletter Editor	Tom Sobocan
Director of Observing	Steve Pellarin
Assistant D. of O.	Robin Smallwood
Alternate Council Rep.	Susan Sawyer-Beaulieu
Webmaster	Steve Mastellotto

## Windsor Centre 2003 Financial Report by Ken Garber

### Revenue

Membership Fees - National	\$2,510.04
Membership Fees - Local	748.00
Donations - Members	366.00
Donations - Corporate	5,100.00
Observatory Fees	598.00
Calendar Sales	676.22
Handbook Sales	22.00
Observer's Guide Sales	15.00
Bank Interest	2.11
Educational Activities	1,430.00
50/50 - Coffee Fund	238.91
Miscellaneous Sales	10.00
Miscellaneous	26.50
<b>Total Revenue</b>	<b>\$11,742.78</b>

### Expenditures

Membership Fees Paid to National	\$853.60
Newsletter/Postage	662.53
Equipment/Supplies	2,009.41
Office Administration	212.74
Educational Activities	35.00
Awards & Donations	61.51
Observatory Expenses	8,308.11
Miscellaneous - Loan Payback	1,500.00
Miscellaneous - Projector / Lottery Fund	1,675.37
<b>Total Expenditures</b>	<b>\$15,318.27</b>
<b>Surplus/(Deficit)</b>	<b>(\$3,575.49)</b>
<b>Balance last Year (2002)</b>	<b>\$ 6,308.29</b>
<b>Balance to the end of this Year (2003)</b>	<b>\$ 2,732.80</b>

## Dedication of the New Telescope at Hallam Observatory

On Saturday, December 27th at 2:00 p.m., a formal dedication ceremony will be held at Hallam Observatory to commission the brand new Celestron 14" Schmidt-Cassegrain telescope, mounted on a Software Bisque Paramount ME German equatorial mounting, which has now been successfully installed. This dedication will mark a major milestone in the continuing development of our dark-site facility near Comber.

After the ceremony, a demonstration of the instrument will be given and, weather permitting, some solar observations will be possible through the telescope using a full-aperture white-light solar filter.

It is hoped that as many of you as possible will make plans to come out that day and enjoy this historical occasion for the Windsor Centre!