

# AURORA

Volume 26, Number 11

The Royal Astronomical Society of Canada - Windsor Centre

July 2001



## A Message from the President

Windsor Centre Members,

Just a few months ago, the Windsor Centre embarked on what must surely be its most ambitious and exciting project, in its 56-year history. I'm speaking of course about our acquisition of the observatory that has stood on the west side of the campus grounds, since 1973.

Last April 19th, under the watchful eyes of several Windsor Centre volunteers, the building was removed from the College grounds and, under cool, sunny skies, trucked several kilometres to a site just southwest of Comber. It currently sits in a sheltered spot, while plans for site preparation continue.

It is hoped that by the end of this year, the observatory will sit on a new foundation just a few metres from where it is currently stored. It will then experience further restoration and refitting, to eventually become the centrepiece of a fine dark-sky observing site that will serve both ourselves and many others who will come to enjoy the beauty of dark, country skies.

The long-term goal over the next two or three years is to have a fully-equipped observatory with a large-aperture, state of the art telescope to be available for the benefit of all members. As well, there will be additional observing stations in the field adjacent to the main building for members to come at any time with their own instruments, to pursue their own observations of the night sky.

In addition, we'll be able to play host to other groups (school, scouts, guides, etc.) from time to time, in order that we may fulfill our mandate of public education. Just imagine being able to introduce the wonders of the night sky from such a remarkable location!

There is much work to be done; not the least of which is a variety of fundraising alternatives which will make this long-standing dream a reality.

No, this doesn't mean that for the next two or three years that you are going to be continuously asked to participate in fundraising schemes! As mentioned there are other alternatives the project committee is actively pursuing to finance this fantastic project and we are anticipating a successful completion based on a combination of sources.

But as you know, we are conducting a raffle at the moment and I would like to take this space to personally appeal to each and every one of you to do everything you can to sell as many of those tickets as possible in the coming weeks! Some of the prizes for the draw have been generously donated and this of course helps to maximize the funds we will realize.

Every ticket sale will make a difference, so please; set a personal goal for yourself and sell as many as you possibly can over the summer months. In doing so, you'll be making a positive contribution to the wonderful future of astronomy within our centre, and in the Windsor-Essex County region.

Thanks,  
Randy

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## Calendar of Events

### ***Our next meeting...***

Tuesday, September 18, 2001  
8:00 p.m.  
at  
St. Stephen's Church  
Howard Road, 1.4 kms. south of  
Hwy # 3

### ***Main Speaker...***

Randy Attwood

### ***Topic...***

"To Be Determined"

### ***Activities...***

**Summer Solstice:** Thursday June 21 at 3:38 a.m. EDT.

**Windsor Centre Picnic:** Saturday June 23 at Dan Taylor's house - see map below. Activities begin at 6:00 pm

**RASC General Assembly:** June 28 - July 2 in London, Ontario.

**Occultation of Venus:** The Moon occults Venus on July 17 at 2:22 p.m. EDT.

**StarFest 2001 Star Party:** August 16 - 18 at the River Place Campground, Mount Forest, Ontario.

**Stellafane Star Party:** August 17 - 18 in Springfield, Vermont

**Great Manitou Star Party:** August 21 - 25 on Manitoulin Island.

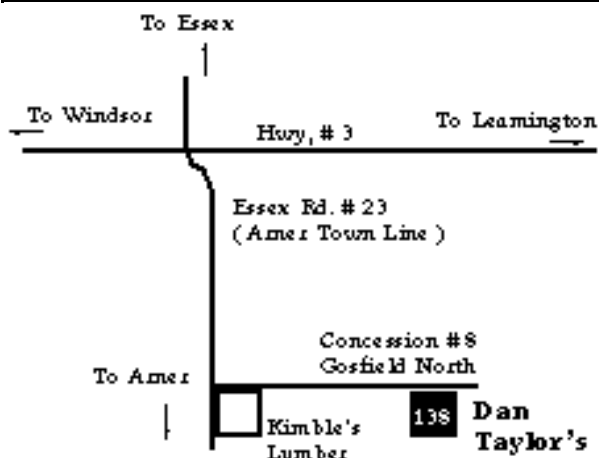
**Astrofest 2001 Star Party:** September 13 - 16 at Camp Shaw-Waw-Nas-See near Kankakee, Illinois.

**Council Meeting:** Tuesday October 9 at Tim Bennett's house. Meeting begins at 7:30 p.m.

**Raffle Drawing:** Tuesday October 16 at 9:00 p.m. during our regular membership meeting.

**Public Observing Night:** Saturday October 29 at Malden Road and Forest Glade Parks.

## Maps



### ***Observing Nights***

**Frank Shepley's.....Last Quarter Moon**  
**Dan Taylor's.....New Moon**

(please call before showing up)

## 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: [smastell@wincom.net](mailto:smastell@wincom.net)

## Membership

The Windsor Centre of The Royal Astronomical Society of Canada meets on the 3rd Tuesday of every month (except July and August) at St. Stephan's church. 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.

Membership is \$40.00 - 1 year, \$80.00 - 2 years and \$120.00 - 3 years. Life memberships are also available.

Contact Frank Shepley at (519) 839-5934 or visit our website at: [www.mnsi.net/~rasc](http://www.mnsi.net/~rasc) for more information.

# Earth's Moon Occults Eta Geminorum by Dave Panton

Of course the Moon occults stars all the time but Friday April 27th was a special occasion. Robin Smallwood Mike Pataky and I ventured to the new dome location near Comber to try the sky and chase down some elusive Messier objects in the Virgo cluster of Galaxies. It was my first visit but I also had a very special target. Per an alert forwarded on the Web by Steve Mastellotto the Moon was to be the main event this evening. It would only be four days old and occult the third magnitude star Eta Geminorum under nearly perfect viewing conditions.

The site holds wonderful promise. The wind happened to be blowing stiff and cold from the Northwest. We soon found shelter behind the big building. The telescopes were located and set up trying to anticipate the Moon's position at the event. The building would later slice off our view of the Moon.

The sky was nearly perfect and the Moon's bright crescent sliced along the glowing darker side. The crescent's light cast our shadows along the ground. As the great event approached, the Moon seemed to be running early. No wonder, my recall of the Detroit time was late by six minutes, bad planning on my part.

The three of us anxiously kept at our eyepieces as the Moon literally rushed towards Eta Geminorum in the last few remaining seconds. The star was shining brightly and then vanished behind the Earthlit edge of the Moon. Robin and Mike's exclamations of awe combined with my own glances at the sweep second on my wristwatch caught the time to a second. Later at home radio station WWV was checked and a watch correction included in the final accounting.

Detroit observers were predicted to see the event at 10:32:19 EDT. We saw it 22 seconds later at 10:32:41 EDT. For the record our location was North 42 deg. 12 min. 25 sec. and West 82 deg. 34 min. 37 sec.

The fact we were 22 seconds later than Detroit felt counter intuitive. After all, the Sun sets in Comber earlier than in Detroit. It seems the Moon's eastward motion blocking off light from stars

is faster than our own eastward motion on Earth. Detroit therefore came first. You have to admire Copernicus, Galileo and others who puzzled out solar system motion from the confusing motions in the sky. In our age, we also have to admire the people able to work out the timing of events we enjoy.

The little event became history. Professional observer's timings far more accurate than ours help learn a little more about our universe. For me, it was a simple and very impressive experience.

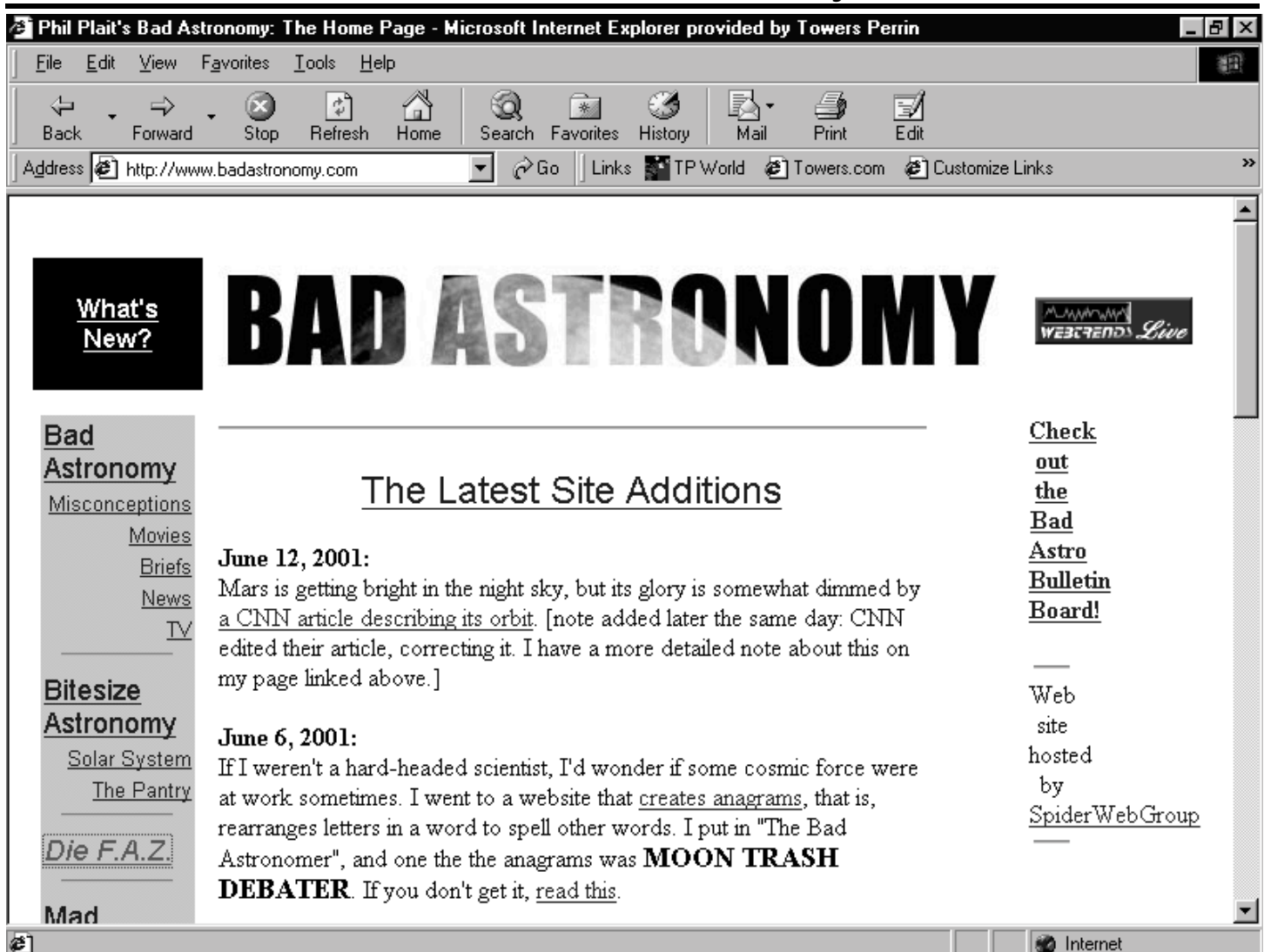
Robin and Mike claimed it was their first timing event. Randy Groundwater

originally inspired me to try one from his astronomical writings in the pages of the Windsor Star a few years ago. That night the Moon occulted Aldebaran. Try a Moon/star occultation some night, it's neat to see the instant cutoff. If you are patient, wait to see the star reappear. Timing it all adds a bit of tension and excitement to the event. Try it, you might like it!



*Photo of the occultation of Eta Geminorum by the Moon by Steve Mastellotto. Steve took the photo at 10:22 p.m. EDT on Friday April 27th using his 4" Televue Genesis refractor with a 20mm eyepiece (25x). The camera used was a Nikon 990 digital camera with the lens at 8.2mm (35mm equivalent of 40mm), f/2.5 and an exposure of 1/16th of a second.*

## Web Site Recommendation - www.badastronomy.com



Ken Garber emailed me the details of the Bad Astronomy web site a while back suggesting that I might include it in a future issue of Aurora. I checked it out and found a number of interesting articles. I especially like the coverage of mistakes, hence the name "Bad Astronomy" found in movies and TV but the web master Phil Plait (a professional astronomer) also covers media coverage of Astronomy related news stories. Check out the coverage of the recent hype around the burning issue of "Did we ever go to the Moon".

I think Phil describes the purpose of his web site best as follows and I particularly like the Mark Twain quote at the end:

*Editor - Steve*

### Welcome to the homepage for Bad Astronomy!

As an astronomer, teacher, lecturer and all-around science junkie, I am exposed to all sorts of people and their ideas about what goes on in the sky around them. I have been delighted to find that most people are very curious about the night (and day!) sky, but unfortunately a lot of misinformation is spread about astronomy. Sometimes this information is just plain silly, but many times it makes just enough sense that people believe it. Sometimes the news media help spread these ideas (like the one that you can spin or stand an egg on end during the Vernal Equinox), sometimes it's TV and sometimes it's plain old word of mouth, but the misinformation does get around.

I feel obliged to right these wrongs when I can. The Bad Astronomy web pages are devoted to airing out myths and misconceptions in astronomy and related topics. At the moment, I have no desire to tackle here such thorny topics as astrology, alternate views of

*(Continued on page 5)*

## Web Site (continued)

*(Continued from page 4)*

the universe that are clearly in contradiction to observations, and the like. I *may* add something like that eventually, when I have more time (translation: "never").

In this site you will also find Bitesized Astronomy, a weekly-updated essay, short and sweet, that describes some simple-to-understand aspect of the *real* oldest profession. Just click on the word Bitesize on any page's left-hand-side navigation menu. The Mad Science pages are questions I have answered as part of an "Ask A Scientist" group. I also have a section with info about me, a search engine for these pages, how to contact me and what's in my schedule (I *am* available for talks and lectures).

But enough from me. Mark Twain said it best:

*"In the space of one hundred and seventy-six years the Mississippi has shortened itself two hundred and forty-two miles. Therefore ... in the Old Silurian Period the Mississippi River was upward of one million three hundred thousand miles long ... seven hundred and forty-two years from now the Mississippi will be only a mile and three-quarters long. ... There is something fascinating about science. One gets such wholesale returns of conjecture out of such a trifling investment of fact."*

### *Escape to the Outer Limits*

Upside down along the Milky Way  
the starry stallion Pegasus carries me away.  
We'll go and visit Hubble, window to the stars.  
There we'll see a closeup of Jupiter or Mars

Fly with the Eagle, soar with the Swan,  
play a tune on Lyra, then its off and gone.  
Beyond our Milky Way, leave our galaxy behind.  
Visit neighbour Andromeda, see what we can find.

Will we find answers? Or have we gone too far?  
Are we treading in hallowed space to see the birth of the star?  
The splendor of the firmament, has lured me this night.  
To let imagination saddle up and then take flight.

Martha Pinch

### For Sale

**New Still in Box! NewStar 70mm Deluxe:** 70mm f/13 refractor, 1 1/4" focuser, 5x24 finderscope, 25mm Kellner (36x) and 10mm Kellner (90x) eyepieces, 45 deg. erect image diagonal, fully adjustable aluminum altazimuth mount with slow motion controls. Asking \$250. Contact Bob Morris at (519) 974-3110.

**Telescope Parts and Mirror,** 10" f/6 mirror and mirror cell, 1 1/4" secondary mirror and focuser. Asking \$650.00; Contact Satish Shonek at 736-0753.

# UNIVERSAL SCIENCE

Windsor's Astronomy And More Store

*We are moving! We still have inventory on most items  
10% off on all in-stock telescope accessories and binoculars*



**NEW! In-Stock - Skywatcher 8" DOB:** 200mm (8") F6 Parabolic Reflector C/W Dobsonian Mounting, metal tube, 2" focuser with 1.25" adapter, 6x30 finder, SMA 25mm and SMA 10mm eyepieces, eyepiece shelf, integrated self balancing system. Suggested List Price ~~\$599~~ **Special Low Price \$499.99**

Preowned Celestron CELESTAR 8" SCT in excellent condition. Includes 25mm eyepiece, 6x30 finder, hand controller, RA and DEC motors. (\$2,000+ value) Asking \$1,500 tax included.

Preowned but little used, MEADE 10" LX50 complete with 26mm Super Plossl, 8x50 finder, Magellan II computer system and tube balance system. (\$4,300+ value) Asking \$3,600 tax included.

Contact Robin Smallwood  
Monday - Friday 9:00 a.m. - 5:00 p.m., Saturday 9:00 a.m. - Noon, Closed Sunday  
Telephone: (519) 967-1655 Fax: (519) 967-1657  
Email: unisci@sympatico.ca

# May Meeting Minutes

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## GENERAL MEETING MINUTES

May 15<sup>th</sup>, 2001

*1<sup>st</sup> Vice-President* - Steve Mastellotto called the meeting to order at 8:04 p.m.

Vice-President asked the membership to review the minutes from the April 17<sup>th</sup>, 2001 general meeting.

Steve extended Randy's regrets for his absence, as he had to be out of town on business.

Motion #1, 5-15-2001. Steve LeBoeuf put forth a motion to accept the minutes of April 17<sup>th</sup>, 2001 meeting as printed in the newsletter. Tim Bennett seconded the motion. Motion carried.

### Reports

**Secretary** - C. Joady Ulrich

Nothing to report at this time.

**Librarian** - Tom Sharron

Nothing to report at this time.

**Director of Education** - Randy Groundwater

No report as Randy is out of town.

**Editor** - Steve Mastellotto

Pleading for articles. Would like everyone over the summer to take notes of their activities and write a little paragraph or two about anything your doing, would like to get some personal observations.

**Phone Committee** - Steve Mastellotto

Everyone should have received a phone call or e-mail.

**National Council Rep. & Treasurer** - Frank Shepley

2 members renewed their membership & paid by cheque. Using the form you receive to renew makes the job much easier. The GA in London, June 29<sup>th</sup> to July 2<sup>nd</sup>. The deadline for registration was extended to May 23<sup>rd</sup>. Proxies should be forwarded to Frank or Tim Bennett if you wish to vote on a particular issue. Tim gave a brief overview of the workshop activities scheduled for the London GA.

**Director of Observing** - Robin Smallwood

A handout was passed out covering the Planets & the Virgo Galaxy Cluster along with the SkyNews chart of the Virgo Cluster and a good section on Mars. Robin asked if members had been able to get out to do some observing even though there has not been many clear nights. Robin asked if anyone has viewed Mars. Mars is to be in prime viewing location in mid June. Robin gave a few tips on what to look for in this area of the sky and how to locate these objects. Steve Mastellotto commented that Mercury will be in a good viewing position in the evening sky for the period of May 12 - 24.

## Business

There will be a Council Meeting at Randy's June 12<sup>th</sup> at 7:29 p.m. sharp.

Peter Bondy discussed the fund raising issues for the Observatory Development Project. Raffle tickets (5,000 of them) are available for sale. Also a report was given on the progress with the Township of Lakeshore for zoning amendments.

Steve Pellerin spoke on the Science Centre which is located on Mercer street off of Erie across the street from the old Windsor Utilities yard.

The Windsor Centre annual picnic will be held at Dan Taylor's house, June 23<sup>rd</sup> at 6:00 p.m. More detail will be provided at the June meeting.

**Short Presentation** - Robin Smallwood - "Looking for Man Made Objects". Robin listed things you can track. 1.) Satellites 2.) International Space Station 3.) Space Shuttle 4.) the dazzling bright Iridium flares. On the web sight [www.heavens-above.com](http://www.heavens-above.com) you can locate what may be above in this area to observe. An brief explanation of the web sight was discussed providing a list of information, dates & times.

50/50 draw was won by Dave Panton , \$15.50.

New member Jean Walker-Gagnon was introduced .

Thanks to Tom Sharron for preparing the Coffee & Hot Chocolate for break time.

Steve Mastellotto introduced National President

**The Guest Speaker** - Dr. Robert Garrison - on his philosophy of Discovery "The Romance of Astronomy is Where It's At" .

Discovery is what astronomy is about. Discovery is divided into two categories; one a spectacular discovery and second, the private or personal discovery. Looking at Stellar spectra is the game, Galactic structure, Peculiar Stars and Fundamental properties of nearby Stars. Dr. Garrison discussed his involvement and work at various observatories around the world. In the second half, a slide presentation of the Chile sight was given. Also assorted stellar slide shots were shown e.g., Jupiter with a moon taken from a 24" telescope and a shot of the Centre of the Milky Way.

Tim Bennett thanked Dr. Garrison for his presentation and presented him with a pen & pencil set.

Meeting was adjourned at 10:25 p.m.

Thanks to those volunteer members for the clean-up of the hall after the meeting.