

# VollieNews

NEWSLETTER OF THE POVG - THE PERTH OBSERVATORY VOLUNTEERS' GROUP INC.

## PERTH OBSERVATORY ANNUAL REPORT

(excerpt from CALM Annual Report)

### HIGHLIGHTS

- New annual star-viewing attendance record.
- Construction and implementation of an Internet sky camera.
- Internet broadcast of the transit of Venus.
- Three new supernovae discovered.

Outcome achieved by Astronomical information and services for the benefit of the community.

### Output description

Providing public information and awareness directly beneficial to the WA community, and contributing to scientific research in astronomy by cooperating with national and international institutions in the acquisition, analysis, interpretation and dissemination of information.

Observatory activities during 2003–2004 remained focused on its three core functions of education and public outreach, information services and research. Some areas experienced significant improvement, while others continued with relatively steady output or increased capability.

In 2003–2004 a new star-viewing attendance record of 7,246 was achieved. This accomplishment was mainly the result of significant public interest in the two-month period that recurs about every 15 years, when Mars is relatively close to the sun and significantly larger and brighter than usual. These Mars viewing sessions were conducted towards the end of winter 2003 and included an up-to-date computer presentation. The Observatory's display room was modified to house a model of the Martian land-

scape to complement the special viewing sessions.

Star viewing was provided to rural and metropolitan schools and communities. In total, more than 1,520 people viewed the stars with Observatory telescopes transported to their locality for one of 19 'astronomy field nights' conducted during the financial year.

Observatory staff also conducted 49 lectures to a total audience of 1,283 people. These lectures included a basic astronomy course conducted off-site, an Honours-level astrophysics course at Curtin University and a multidisciplinary first-year course containing a large component of astronomy at the University of WA. Three university students were supervised in their research projects.

Public awareness of the Observatory remained high. In 2003–2004 the number of people who visited, phoned for information (22,511 calls), attended talks or astronomy field nights totalled 35,068 compared to 26,240 in 2001–2002. Observatory staff informed the public of astronomical events in 82 radio and two television interviews, and 63 newspaper articles. A significant portion of this media interaction concerned the opposition of Mars in August 2003, the lunar eclipse of 5 May 2004 and the transit of Venus on 8 June 2004. Observatory visitors' satisfaction remained high as in previous years with 98 per cent satisfied with both their visit and the educational quality of the services in which they participated. Volunteers again most ably assisted permanent staff in many activities, notably the star viewing nights, archiving and at displays. Volunteer assistance totalled 0.8 FTEs in 2003–2004 and continued to make an important contribution to the Observatory output.

A new initiative in Observatory astronomy service provision was the establishment of an Internet sky camera. This instrument, built in the Observatory workshop, operated from the roof of the Observatory's main building and acquired a wide-angle image of the night sky every 15 minutes. These images were forwarded to the Observatory website where they could be accessed by the public. This generated significant community interest and has the added advantage of being accessible to the disabled who can actually view what is visible in the sky from their home. This project will be developed in the future as resources allow.

On 8 June 2004, the planet Venus passed in front of the sun (called a transit). This event was well publicised because of its historical association with Captain James Cook and his voyage that discovered eastern Australia.

The Internet system developed for the sky camera was employed in the daytime for this project. Images of the sun (with Venus superimposed) were acquired by the Observatory's solar telescope at around one-minute intervals. These images were made accessible on the Observatory's website and also transferred to Swinburne University in Victoria. There was great public demand on the Internet for access to the live images from the Observatory. In total, this resulted in about 30Gb of Internet traffic for the Observatory's city internet service provider from the approximately 300 images (that totalled 15Mb) acquired during the event. Automation of the telephone accounting system used to tally the number of telephone calls led to a more accurate measure of incoming telephone calls, the vast majority of which concerned requests for astronomy information or enquiries

# 2004 ANNUAL REPORT (CONT.)

about Observatory services. Operation of this new system also reflected the significantly increased tally of telephone calls received.

Research activities were more productive in terms of useful observations acquired. Following the successful installation of the cloud detector and the implementation of a scheduler, the number of PLANET observations doubled in comparison to previous years. The PLANET project is an international collaboration that involves searching for planetary transits (where a planet blocks out the light of the star it orbits, for a few hours at a time) as well as the previous gravitational microlensing-based technique (where a star's brightness is enhanced by the passage of a faint foreground star in front of it). Perth Observatory hosted this project's homebase (team coordination and data management) in June 2004 and also constructed and updated the web pages for the PLANET site. Two refereed papers were published from this program that provided unique insights into the atmospheres of stars.

Three new supernovae (SN2003jg, SN2004S and SN2004ch) were discovered during the 2003-2004 financial year, and two other new supernovae were detected just after their discovery by other researchers. Also, a detailed set of photometric light curves

(brightness as a function of time) was determined for SN2004S and preparation of a paper detailing this began. The collaborative project with Mt Stromlo Observatory to automatically optically detect newly discovered Gamma Ray Burst (GRB) supernovae continued.

Work on variable stars led to the publication of a refereed paper concerning the evolution of a particularly unusual star, zzCeti. Also, a student project was conducted to search for transient brightness variations from the star SS2883 that orbits around a pulsar. Comet and asteroid observations were undertaken as appropriate targets became available.

Site testing was conducted over several nights at a site in WA's Midwest. An additional set of site testing observations also was undertaken at various locations on the Perth Observatory site. These data were analysed during the course of a student project and indicated that the remote site experiences atmospheric conditions of comparable, if not better, quality than at existing major Australian astronomical facilities.

Dr James Biggs: Government Astronomer for Western Australia/Director  
Perth Observatory

## 2005 ALMANAC HAS ARRIVED

All active Volunteers are most welcome to obtain a free copy.

Please remember to assist the Observatory's auditing and accounting requirements and write that you have received a copy on the back of your current sign-on sheet.

## VOLUNTEER NAME BADGES

Any volunteers who requires a name badge, or their old one needs replacing, should contact Di Johns ASAP. Orders in by Friday 17th December please.

You can collect them sometime in January from the filing cabinet/cupboard under the volunteer notice board.

## VOLUNTEER REWARDS

You may recall that in your volunteer Job Description there is the following section:

### REWARDS:

The following rewards apply for service rendered in a given calendar year, or until the end of the next calendar year for new volunteers just out of probation (ie from September in the starting year until December the next year).

**They must be claimed within 4 months of the end of the year in which they were earned.**

### FORTY HOURS OF SERVICE

will be rewarded by the following:

- \* Observatory funding of further appropriate training, eg Senior First Aid certificates - subject to the approval of the Star Viewing Nights Volunteer Co-Ordinator, and
- \* Observatory (or CALM) items to the

value of \$20.

### SIXTY FIVE HOURS OF SERVICE

will be rewarded by the following, subject to the forty-hour reward not being claimed:

- \* Rewards as for the forty hours of service,
- \* additional Observatory (or CALM) items to the value of \$20, and
- \* a visit to the Observatory accompanied by up to 3 others, out of hours, subject to the permission of the Government Astronomer and those using telescopes, etc.

It gives me great pleasure to recognise the following volunteers for their outstanding contribution to the Observatory in the financial year 2003/2004.

### 65 hours and above (in decreasing order):

John MORRIS  
Richard BOELEN  
Bevan HARRIS

Tony BESTON  
David EMRICH  
Mike FREEMAN  
Lloyd ROBINSON  
Jacquie MILNER  
Jeff ALCROFT  
Bert HOLLEBON

### 40 to 65 hours (in decreasing order):

Rob LONEY  
Joseph COLETTI  
Dick ALDERSON  
Mark HASLAM  
Len MARTIN  
Frank BILKI

Please let me know if I have failed to recognise anyone. Please collect your goodies from Janet and Di before December 31.

Thanks again, Jamie Biggs.

# POVG MINUTES

**Perth Observatory Volunteer Group Inc.**  
MINUTES OF MEETING NOV 8th 2004.

**Present.**

J.Alcroft. E.Walker. J.Biggs. G.Lowe.  
A.Williams. T.Beston. D.Emrich. R.Tanello.  
T.Beardsmore. L.Robinson. K.Ford.  
D. Alderson.B.Harris J.Morris.

**Apologies.**

M.Freeman. L.Martin. G.Coletti. J.Bell.  
R.Boelen. M.Haslam. A.Mcnaughton.  
J.Milner. M.Zengerer.

**Confirmation of Minutes.**

It was agreed that the minutes were a true and correct record Moved D.Alderson. seconded L.Robinson.

**Business arising from the Minutes.**

J.Biggs reported that to follow on from the previous meeting where there was discussion regarding the possibility of obtaining Lottery Commission Funds to cover the cost of maintenance on the Astrograph Dome , it now appeared that a prior requirement was to obtain a Conservation Plan for the whole Observatory. With this in hand an application to the Lotteries Commission for Conservation funds could be successful.

**Treasurer's Report.**

B.Harris stated that there was no change to the financial position as tabled last month, but that the \$9.00 Banks Fees debit would have to stand as we had exceeded our 15 free transactions per month.

**General Business.**

J.Biggs told members that the 2005 Almanac

had been delivered and all members should obtain a copy , and to indicate on their time sheet that they had done so.

- 15 Applications had been received following the Advertisement for new Volunteers, the close off date was the end of the present week, following that the applicants would be interviewed and selected.

- K.Fords suggestion that the fastening of one of the hand held Lasers to the top of the Calver telescope would make it much easier to locate even faint objects , started much discussion , with the consensus being that it was worth trying.

There being no further General Business the meeting closed at 7.40pm. Next Meeting December 6<sup>th</sup>.

## NEW CRIMINAL SCREENING LAW TO PROTECT CHILDREN FROM ABUSE

Community Development Minister Sheila McHale has welcomed the passing of the 'Working with Children - Criminal Record Checking Bill 2004' by State Parliament.

The new law will ensure checking of criminal convictions and all relevant past and pending criminal charges of anyone working with or volunteering to work with children.

"This law is the toughest in the nation and is essential in protecting children against possible sexual abuse or harm by employees, volunteers or others entrusted with their care," Ms McHale said.

The Minister said the new law would check all employees and volunteers coming into close or regular contact with children - across private, not-for-profit, religious, Government and voluntary sector organisa-

tions. The new requirements would be phased in with the law to take effect from January 1, 2006, preceded by a comprehensive community education campaign. Government of Western Australia Media Statement  
The Hon. Sheila McHale MLA  
Minister for Community Development, Women's Interests, Seniors and Youth; Disability Services; Culture and the Arts  
27/11/04

## PHASES OF THE MOON FOR 2004

New Moon	First Quarter	Full Moon	Last Quarter
Jan 22 05:05	Jan 29 14:03	Jan 7 23:40	Jan 15 12:46
Feb 20 17:18	Feb 28 11:24	Feb 6 16:47	Feb 13 21:40
Mar 21 06:41	Mar 29 07:48	Mar 7 07:14	Mar 14 05:01
<b>Apr 19 21:21</b>	<b>Apr 28 01:32</b>	<b>Apr 5 19:03</b>	<b>Apr 12 11:46</b>
May 19 12:52	May 27 15:57	May 5 04:33	May 11 19:04
Jun 18 04:27	Jun 26 03:08	Jun 3 12:19	Jun 10 04:02
Jul 17 19:24	Jul 25 11:37	Jul 2 19:09	Jul 9 15:33
Aug 16 09:24	Aug 23 18:12	Aug 1 02:05	Aug 8 06:01
Sep 14 22:29	Sep 21 23:53	Aug 30 10:22	Sep 6 23:10
Oct 14 10:48	Oct 21 05:59	Sep 28 21:09	Oct 6 18:12
Nov 12 22:27	Nov 19 13:50	Oct 28 11:07	Nov 5 13:53
Dec 12 09:29	Dec 19 00:40	Nov 27 04:07	<b>Dec 5 08:53</b>
Dec 12 09:29	Dec 19 00:40	Dec 26 23:06	

<http://www.wa.gov.au/perthobs/fpc5m03.htm>

**HAVE YOU JOINED THE POVG NEWSGROUP YET?**

If you've got any news, information or pics post them on the newsgroup.

To join simply send your email address to Bevan Harris at:  
**ngc2070@bigpond.com**

To unsubscribe send an email to:  
**perthobsvolllies-unsubscribe@yahoo.com.au**

To modify your subscription, visit the group website at:  
**http://au.groups.yahoo.com/mygroups**

# PERTH OBSERVATORY VOLUNTEERS' GROUP

## 2005 Volunteer Training & Meeting Nights

Training is important for our volunteers, they enjoy it and we need to support these staff members in return for the assistance they render.

**Generally, these training nights are scheduled for 7pm the Monday after the week of Last Quarter.**

This list (or a part thereof) is also displayed on the volunteer notice board. Your cooperation is appreciated.

Jamie Biggs. Govt Astronomer.

### 2005

10 Jan;  
7 Feb;  
14 Mar;  
4 Apr;  
9 May;  
30 May;  
4 Jul;  
1 Aug.

## PERTH OBSERVATORY STAFF

Dr Jamie Biggs	Director and Govt Astronomer
Peter Birch	Astronomer
Ralph Martin	Astronomer
Dr Andrew Williams	Astronomer
Rick Tanello	Astronomer Assistant
Greg Lowe	Astronomer Assistant
Janet Bell	Administration Officer
Di Johns	Clerical Officer
Arie Verveer	Technical manager
John Pearce	Mechanical technician
Marc Appelhof	Maintenance Person/Cleaner

## POVG VOLUNTEERS

Mike Freeman	Chairperson
Elaine Walker	Vice Chairperson
John Morris	Secretary
Bevan Harris	Treasurer and newsgroup moderator (contact: <a href="mailto:ngc2070@bigpond.com">ngc2070@bigpond.com</a> )
Jeff Alcroft	Newsletter Editor (contact: <a href="mailto:callides@iinet.net.au">callides@iinet.net.au</a> )

## OBSERVATORY'S VOLUNTEERS' LIST

Jeff Alcroft	Mike Freeman	John Morris
Dick Alderson	Lynda Frewer	Lloyd Robinson
Trevor Beardsmore	Bevan Harris	Sascha Schediwy
Lyall Bell	Mark Haslam	Val Semmler
Frank Bilki	Bert Hollebon	Patricia Turner
Tony Beston	Karen Kotze	Elaine Walker
Ric Boelen	Vic Levis	Sandra Walker
Eve Cowlshaw	Rob Loney	Matthew Zengerer
Giuseppe Coletti	Andrew MacNaughtan	
David Emrich	Len Martin	
Keith Ford	Jacque Milner	

