

# ORWELL ASTRONOMICAL

## SOCIETY IPSWICH

Charity No 271313

### MARCH 2004

OBSERVATORY  
ORWELL SCHOOL.



### Society News

#### 1 Next Committee Meeting Saturday 6<sup>th</sup> March 2004

The next committee meeting will be held on Saturday 6<sup>th</sup> March at 19:30 in a classroom in the courtyard. This is an open meeting and any one who is interested is invited to attend

#### 2 Events for 2004

Meeting	Venue	Date
5 <sup>th</sup> Astronomy Workshop	Pete Richards Astronomy - Some Basic Concepts	Wednesday 3 <sup>rd</sup> March
<b>Open Weekend</b>	<b>Orwell Park Observatory</b>	<b>Saturday 27<sup>th</sup> Sunday 28<sup>th</sup> March 19:00 to 22:00</b>
BAA Winchester Weekend	King Alfred's College Winchester	April 2 <sup>nd</sup> to 4 <sup>th</sup>
6 <sup>th</sup> Astronomy Workshop	Bill Barton Rainbows and Other Natural Wonders	Wednesday 7 <sup>th</sup> April
7 <sup>th</sup> Astronomy Workshop	Paul Whiting The Radio Universe - A Look At Radio Astronomy	Wednesday 5 <sup>th</sup> May
Lecturer meeting Fonnereau Road	Transit of Venus by Peter Hingley	Friday 14 <sup>th</sup> May
Opening of new Society Library	Opening by Peter Hingle following by a lecture on RAS Library Collection	Saturday 15 <sup>th</sup> May
Society Excursion	Venue?	May
The Web society Annual Meeting	Institute of Astronomy Cambridge	June 19 <sup>th</sup> from 10:30
BAA Exhibition Meeting	The Cavendish Laboratory Cambridge	June 26 <sup>th</sup> 11:00 to 18:00
FAS Convention	Institute of Astronomy Cambridge	Saturday 2 <sup>nd</sup> October

### FOR SALE

#### VARIOUS ASTRONOMY MAGAZINES

Phone: Nigel on Felixstowe

after 6pm

#### SKY & TELESCOPE

1980 - 81 - 82 - 83 - 84 - 85

1993 - 94 - 95

#### ASTRONOMY NOW

JAN 1988 - SEPT 1997

#### ASTRONOMY

FEB 1984 - 85 - 86 - 87 - 88 - 89 - 90 - 91 - 92 - 93 - 94 - 95 - 96 - 97

## Open Weekend 2004

This years Open Weekend is to be held on Saturday and Sunday  
March 27<sup>th</sup> and 28<sup>th</sup>. Opening times are 19:00 to 22:00.

The Moon will be at first quarter in the 28<sup>th</sup>. Venus, Mars, Jupiter and  
Saturn will visible during the evening

As usual, help from as many members as possible is required

If you can give a hand in helping looking after our visitors  
please come along

The Observatory will be open for visitors form  
19:00 to 22:00

Areas to be manned / womaned

Area	Approx. numbers
Car park	3/4
Reception desk	2
Balcony telescopes	3/4
Observatory	2/3
Star Party Site on the School playing field	4
Floating members who are able to relieve other members	Any number

### Rising and Setting Times

Object	Approx. Rise Time	Transit Time	Approx. Setting Time
Sun	06:00	12:16	18:35
Moon	07:50	16:30	00:15
Mercury	06:15	13:20	20:30
Venus	07:00	15:00	23:20
Mars	07:40	16:00	00:15
Jupiter	15:55	22:45	05:40
Saturn	10:00	18:20	02:50

## FOR SALE

### TASCO 'LUNAGROSSO' REFLECTOR TELESCOPE

4 ½ " (11cms) MIRROR MODEL 11TR

With an assortment on eyes pieces including Barlow lens, with 5 x 24mm finder scope

With a fully adjustable tripod

Price ..... £85 ono

One careful owner from new.....

Phone: Nigel on Felixstowe [redacted] after 6pm

[redacted] daytime 9am to 5pm

Mobile ... [redacted]

Or

E Mail [redacted]

**MUST BE SOLD BEFORE 14<sup>TH</sup> APRIL 2004**

### Night Sky (March)

All times GMT

#### Sun

The sun will be rising approximately between 06:50 to 05:40  
The sun will be setting approximately between 17:30 to 18:30

#### Moon

Full Moon	3 <sup>rd</sup> Quarter	New Moon	1 <sup>st</sup> Quarter
6 <sup>th</sup>	13 <sup>th</sup>	20 <sup>th</sup>	29 <sup>th</sup>

**Mercury** Mercury will be at superior conjunction on the 4<sup>th</sup>. Buy mid month it will be visible in the evening sky. Greatest eastern elongation is on the 29<sup>th</sup> (19°)

**Venus** Venus reaches greatest eastern elongation also on the 29<sup>th</sup> (46°). By the end of the month Venus will be setting at about 23:00.

**Mars** Mars will be setting at about 00:00 at the end of the month. Magnitude fades to 1.4 this month.

**Jupiter** Jupiter will be at opposition on the 4<sup>th</sup>. Magnitude -2.5  
**Saturn** Saturn remains prominently visible this month in Gemini By months end it will be setting at about 02:00 Saturn will be at magnitude -0.1.  
**Uranus** Uranus returns to the morning sky this month, but remains to near to the sun to be seen.  
**Neptune** Neptune returns to the morning sky this month, but remains to near to the sun to be seen.

### Meteor Showers

There are no prominent meteor showers visible this month

### OCCULTATIONS DURING MARCH

The table lists stellar occultations which occur during the month under favourable circumstances. The data relates to Orwell Park Observatory, but will be similar at nearby locations.

D / R	Date & Time (UT)	Lunar Phase	Sun Alt (°)	Star Alt (°)	Star	Mag
D	01 Mar 00:32	0.67+	-45	28	ZC 912	7.0
D	01 Mar 02:16	0.68+	-38	13	ZC 926	7.1
D	02 Mar 19:32	0.82+	-19	59	76 Gem, c Gem	5.3
D	23 Mar 20:28	0.08+	-20	7	ZC 340	6.9
D	24 Mar 21:24	0.14+	-27	9	53 Ari, UW Ari	6.1
D	27 Mar 21:38	0.39+	-27	35	ZC 849	6.4
D	28 Mar 00:18	0.40+	-35	12	ZC 869	7.3
D	28 Mar 19:34	0.48+	-12	59	ZC 994	6.6
D	29 Mar 22:12	0.59+	-30	45	ZC 1131	7.3
D	30 Mar 20:58	0.68+	-22	58	Hip 40756	7.2
D	30 Mar 21:57	0.68+	-28	52	19 Cnc, lambda Cnc	5.9
D	30 Mar 23:54	0.69+	-34	36	Hip 41244	7.5

James Appleton

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### Seeing the light - not the light pollution

A parliamentary committee has recently highlighted the problem of light pollution and called upon the government to act. So what is the background to this issue?

The leading UK conservation group the Campaign for the Protection of Rural England ([www.cpre.org.uk](http://www.cpre.org.uk)) is championing the case for reducing light pollution as is the British Astronomical Association's Campaign for Dark Skies - CFdS (<http://www.dark-skies.org/> - You may be interested in joining the mailing list or getting more involved: see the website).

It is important to realise that many of the local successes (up and down the country) in controlling and reducing light pollution have been achieved by a number of people acting individually with or without the help of organisations (astronomical, conservation, wildlife) in tackling the owners of polluting light. If you are concerned you should express your concern on your own behalf to the appropriate parties. A polite approach to the owners of the source of the problem is the first thing to do in the case of a specific local problem. A few letters to your councillors, MP, MEP, PM, etc. is the first approach to the general problem. If you are not sure what to write just say - in your own words - that you are concerned about light pollution and would like to know what is being done to reduce it. Some people ask if there is a standard letter they can write but in practice a stock letter will be treated as a single petition. It is much more effective to write a letter in your own words even if you just say that you are concerned and would like to see action taken on the issue.

Many non-astronomers have also indicated that they are concerned about the level of light pollution. A significant number of non-astronomers have expressed their concern about skyglow as well as other problems about light pollution. As someone who is an astronomy enthusiast, if your key concern is astronomical, then make this clear. If you are worried about the adverse effect of light pollution which is not related to astronomy then concentrate on that issue instead. Note the CPRE (as well as raising awareness about the urbansing effect of skyglow) is collating reports from people plagued by nuisance from other peoples external lights.

Of course, it would be very strange if OASI were not concerned because we are all aware of the effect of astronomy and many members have asked what we are doing in response. OASI is doing its bit. For a number of years we've had a dark skies committee post (3 people have led this in the past). More recently, it was decided that the issue was important enough to be a general committee responsibility rather than having the onus put on one person.

Key detrimental effects of light pollution are:

- \* Damage to the global environment through wastage of energy.
- \* Loss of an area of outstanding natural beauty - the night sky - through urbanisation of rural areas at night (it is often detrimental to the urban scene as well);
- \* Negative effects on wildlife: in the natural world some of the damaging effects on

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flora and fauna are now recognised apart from the general one of the loss of the characteristics of the nocturnal environment;

\* In some cases, negative effects on human health and safety. (Recent medical research has shown that, as well as detrimental psychological effects due to night-time artificial light, there is an adverse physiological effect which reduces the body's resistance to disease. (It is common sense that badly directed over-bright lights are the cause of many accidents but recently a security light has been proven in a court of law to be the main cause of a fatal accident.)

Remember that an unspoilt the night sky is something which the wider community can enjoy: not just astronomers.

An example issue: Lighting: a deterrent to crime? The Government's Home Security & Crime Reduction website agrees with CfDS that:

- 1) Harsh, glaring floodlights are not a deterrent to criminals;
- 2) Most break-ins take place in broad daylight (peaking in the early afternoon), suggesting that being seen is the least of the burglar's worries.

Also of interest a significant number of people ("man/woman on the street") have experienced situations where the received wisdom on lighting and crime is clearly wrong. Some crime prevention professionals and criminologists have recently questioned the idea of light as a universal "cure" for crime. Glare can mask crime and skyglow can help criminals find their way. Perhaps what is required is an understanding that in some situations lighting is beneficial and in others it has no effect or is detrimental to security. Also a better understanding of the fact that - in those cases where artificial light has some benefit - that it needs to be the right amount neither too dim nor too bright.

Many things could be done to reduce the problems of light pollution:

- \* Use flat glass and ultra-low profile light fittings for exterior use and in particular for all street lighting (this makes for clearer, safer, less glaring lighting);
  - \* Switch off lights if there are times during hours of darkness that they are not needed,
  - \* Prevent 'overlighting', i.e. use only the correct amount of lighting for the task in hand,
  - \* In particularly sensitive (i.e. rural) areas ensure that lighting is used only when there is no better alternative,
  - \* Make external lighting subject to planning control,
  - \* Encourage industry to use efficient lighting and to minimise the amount of wastage associated with light pollution,
  - \* Make light pollution a statutory nuisance and make lighting a planning issue.
- Fortunately a few professionals in this field () have begun to suggest
- \* The right amount where it's needed. Not where and when it isn't.

The CfDS have a number of suggestions about what you could do:

\* Write to local planners, lighting engineers, MPs, councillors and major firms asking about their lighting policies. Let them know you are concerned about the level of light pollution. You may like to quote or send CfDS literature, ILE Guidelines and BS5489.

\* Explain to those who see efficient modern, less glaring lights as dimmer that these lights are in fact more efficient, better directed, are at least as effective at providing real security, safer for drivers - and can save money.

\* Write to the DoE, 2 Marsham St., London SW1P 3EB, asking why, in spite of their campaign "Wasting Energy Cost the Earth" and mentions in the 1995 "Rural England" white paper of the need to save energy and control light pollution, they still refuse to take action about the total lack of regulation on outside lighting. "Education not regulation" cannot work.

\* Ask your MP to insist on the UK's adherence to European measures on energy saving and heritage protection, through firm and proper action on skyglow.

\* Find out the approach to lighting of your local police and Watch schemes - the arguments for good-quality security lighting are contained in the CfDS' security lights leaflet.

\* Try to forestall poor lighting on new developments by studying planning applications and forging links with your council.

\* Help CfDS directly by subscribing to its newsletter, donating to its fighting fund, becoming a local officer and distributing its literature.

\* If dealing with local media insist on some editorial control to avoid headlines such as "Star-gazers Call for Big Switch-Off". If you are concerned about light pollution as it affects other non-astronomical issues make that clear.

\* Tell astronomers and non-astronomers about the skyglow issue, stressing energy and money wasted. What would they think if water mains leaked every few metres?

\* Convince interested parties that astronomers are normal people with the same lighting needs as them. We do not want to switch off all the lights everywhere.

\* Ask libraries, electronic bulletin boards, environmental offices, education departments etc. to carry CfDS information.

\* Offer to speak in schools. Astronomy is part of the National Curriculum, and you can introduce light pollution into the discussion.

\* Ask neighbours about lighting plans, and show them, at the telescope, why you enjoy the night sky.

\* Approach those with obtrusive lights. Many individuals and organisations will not even know that there is a problem. Those who have done so often report improvements.

\* Remember, carping criticism and "broadsides" don't win friends. Friendly and persistent persuasion just might. With all those experts on our side (Institution of Lighting Engineers, BSI, CPRE, Countryside Commission, Highways Agency, major supermarket chains, Commission Internationale de l'Eclairage.....), we shall reclaim the night sky through reasoned argument and strength in numbers.

OASI/CJDS/BAA/CPRE/PRR

### Astronomy Workshops 2004.

The first workshop of the year took place on Feb 4<sup>th</sup>. Twenty or so members were treated to an excellent presentation by James Appleton on the 'constellation close-up' theme, looking at Gemini. Even those familiar with 'The Twins' were given information and thoughts to add to that already known. Gemini is also the subject of an Observing Project, which James has invited members to undertake, and a star chart with suggested targets was enclosed with last month's newsletter. There has been a lot of cloud about this month, so we must make the best of opportunities.

The Workshop on March 3<sup>rd</sup> will look at some basic aspects of astronomy, and will be especially useful for those fairly new to the subject. Pete Richards will be the presenter, and has asked that experienced members attend, as the 'interactive' nature of the workshops means that those who know a thing or two can help those less experienced. From the brief discussion at the Feb workshop, it is likely that Pete will be looking at, amongst other things, the classification of stars.

So if you are puzzled why some stars are named 'Zeta Geminorum', while others in the same constellation are known simply as '20', and some just have names – then this workshop is a 'must'

The April 7<sup>th</sup> workshop will be presented by Bill Barton, and shows the variety of subjects we cover, and is entitled 'Rainbows and other natural wonders' May 5<sup>th</sup> completes the present series (our sixth), with Paul Whiting presenting 'The radio universe', a general look at radio astronomy. As usual, a reminder of the topics will appear on the back page of the newsletter. Ted Sampson.

## ONE WAIT'S FOREVER AND TWO BUSES COME ALONG AT ONCE! – *Or so it would seem...*



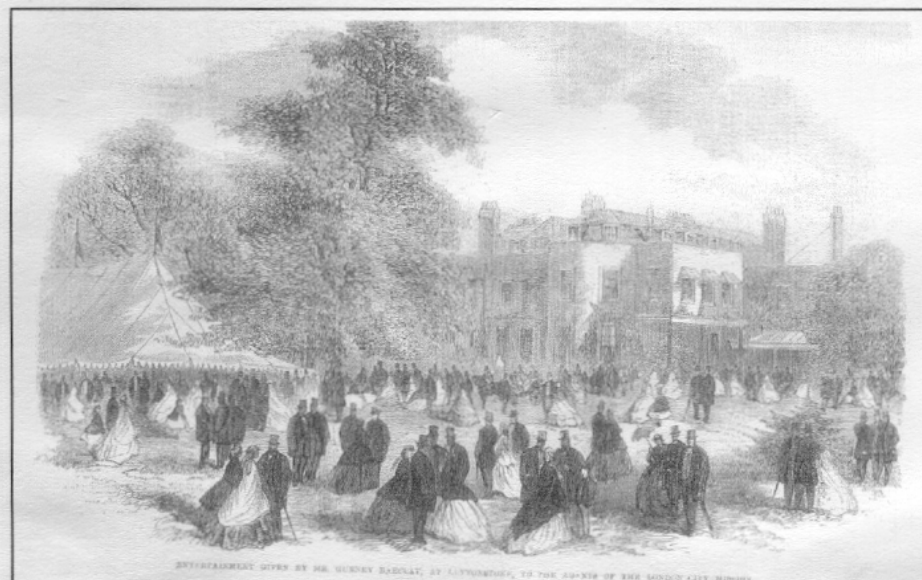
Joseph Gurney Barclay FRAS  
(1816 –1898)

Reproduced by kind permission  
of Mr David Barclay

Readers may recall my article on Joseph Gurney Barclay's Observatory at Leyton, Essex in the December edition of this newsletter. In the article I said that some day a portrait of Barclay or pictures of his home or his observatory may come to light.

*Hey Ho* - the images on this page have just come into my possession – two out of three isn't bad!

Kenneth J Goward FRAS.



A garden party at J G Barclay's home, Knotts Green House, Leyton. The house eventually fell into disrepair and was knocked down in the 1960s to make way for Livingstone College. The Observatory is not shown.  
From the Illustrated London News 15<sup>th</sup> July 1865.



## OASI COMMITTEE RESPONSIBILITIES

Kenneth J Goward	Chairman	Press Publicity with the Secretary. Open Weekend.
Roy Gooding	Secretary	Main point of Society Contact. Press Publicity with the Chairman. Observatory Decoration. Visits by potential new members.
Garry Coleman	Treasurer	Finance. Supervision of Grant Applications.
James Appleton	Committee	Committee Meeting Minutes. Web site.
Martin Cook	Committee	Membership. Tomline Refractor Maintenance.
Neil Morley	Committee	Equipment Curator.
Ted Sampson	Committee	Workshops. Tomline Refractor tutoring.
Eric Sims	Committee	Newsletter
Mike Whybray	Committee	Librarian.
Paul Whiting	Committee	Visits by outside groups.
Monica Lustig	Committee	Safety & Security
Peter Richards	Working under Committee direction but not Co-opted	Lecture Meetings.

## DIARY FOR 2004 MARCH

### OBSERVATORY CLUB NIGHTS

Wednesday 3<sup>rd</sup> 10<sup>th</sup> 17<sup>th</sup> 24<sup>th</sup> 31<sup>st</sup>

☎ Martin Cook

### OBSERVATORY OPEN WEEKEND

Saturday 27<sup>th</sup> and Sunday 28<sup>th</sup> 7pm to 10pm (both evenings)

☎ Ken Goward

### ASTRONOMY WORKSHOP

Wednesday 3<sup>rd</sup> Commencing 7.30pm

Astronomy – Some basic concepts. Peter Richards

☎ Ted Sampson

### COMMITTEE MEETING

Saturday 6<sup>th</sup> 7.30pm Classrooms. Open to all members

☎ Ken Goward

### SMALL TELESCOPES OBSERVING NIGHTS

(Observatory balconies)

Monday 1<sup>st</sup> Canis Major & Hydra

Monday 15<sup>th</sup> Hydra & Cancer

☎ Paddy O'Sullivan

### OBSERVATORY VISITS BY OUTSIDE GROUPS

Thursday 4<sup>th</sup> 8PM Colne Community School

Thursday 11<sup>th</sup> 8PM Bramford Road Methodists

Thursday 25<sup>th</sup> 8PM 36<sup>th</sup> Ipswich Explorers

☎ Paul Whiting

### SOCIETY PRIMARY CONTACTS

**CHAIRMAN** Kenneth J Goward FRAS ☎

(daytime & evenings)

**SECRETARY** Roy Gooding ☎ (daytime)

(evenings)

**E-MAIL QUERIES** [ipswich@ast.cam.ac.uk](mailto:ipswich@ast.cam.ac.uk)

**WEB SITE** [www.ast.cam.ac.uk/~ipswich](http://www.ast.cam.ac.uk/~ipswich)

*Contact details for the full Committee may be found on the inside back page*

**Registered Charity No 271313**

**Society Trustees**

Roy Adams David Brown David Payne

**Hon President**

Professor Allan Chapman D.Phil MA FRAS

**Volunteers to help stage our Open Weekend on Saturday 27<sup>th</sup> and Sunday 28<sup>th</sup> would be very much appreciated...**

**ORWELL ASTRONOMICAL SOCIETY ( IPSWICH )**  
<http://www.ast.cam.ac.uk/~ipswich/>

## **PUBLIC OPEN WEEKEND**

Visit One of the Few Remaining Operational Victorian Observatories  
Located at Nacton off the A1156 between Ipswich and Felixstowe

**THE ORWELL PARK OBSERVATORY WILL BE  
OPEN TO THE PUBLIC ON**

**SATURDAY 27<sup>th</sup> March From 7:00pm to 10:00pm**  
**SUNDAY 28<sup>th</sup> March From 7:00pm to 10:00pm**

**The weekends programme includes:**

**OBSERVATIONS OF THE  
MOON, VENUS, MARS, JUPITER, SATURN  
and the NIGHT SKY**

**Observatory Tower using the 10" Tomline Refractor and other small telescopes  
and in the field using naked eye and small telescopes**

**If you have a pair of binoculars we recommend that you bring them with you  
and please come with warm clothing**

**An alternative programme of talks and slide shows will be arranged  
if weather conditions are not suitable for observations**

**Entrance by Donation**  
**Child & Senior Citizen**  
**Adult**

**£1**  
**£2**

**Honorary Secretary**  
**Roy Gooding**  
**168 Ashcroft Road**  
**Ipswich**  
**IP1 6AE**