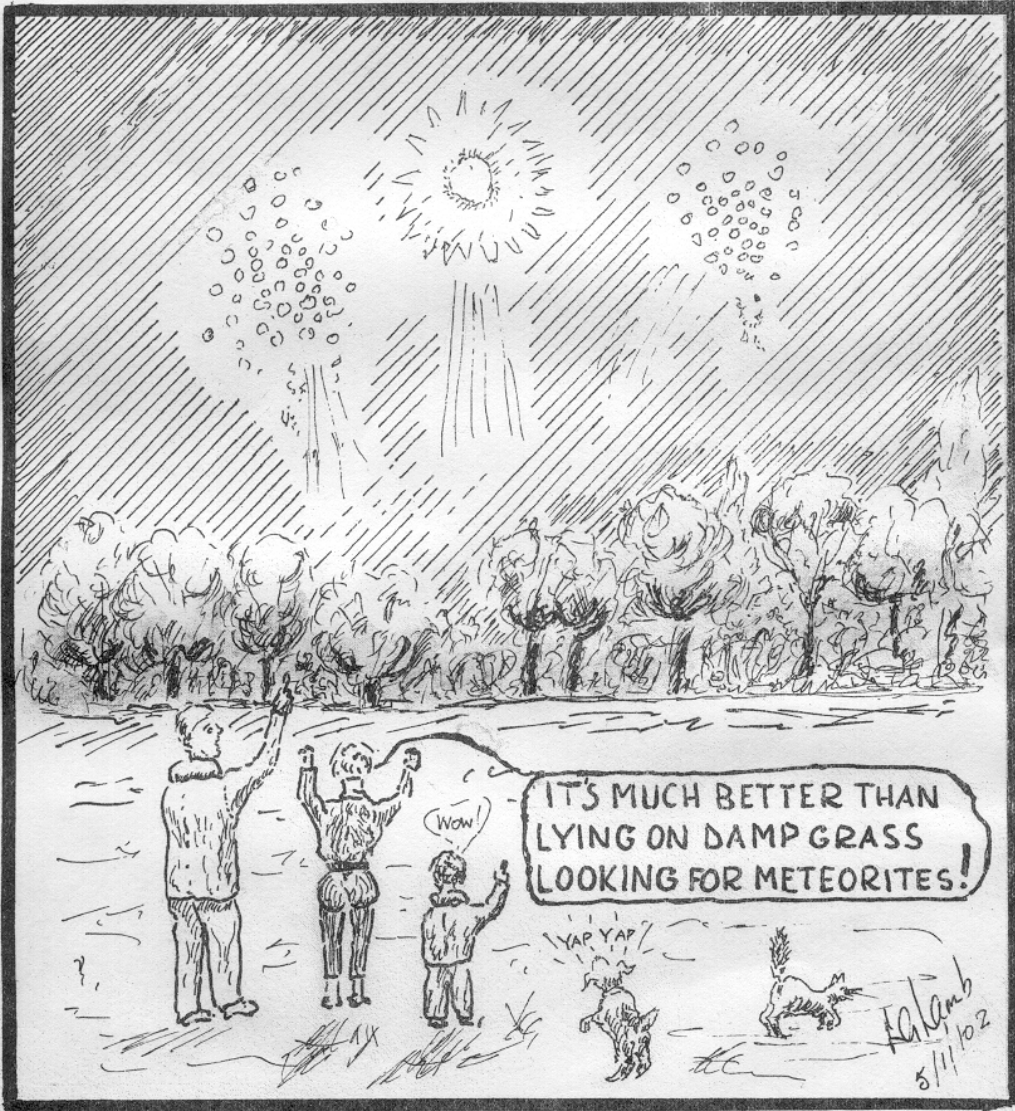


ORWELL ASTRONOMICAL SOCIETY IPSWICH

Charity No 271313

NOVEMBER 2002



Society News

Open Weekend 2002

Our annual fund raising event this year is being held on Saturday 9th and Sunday 10th November.

This event needs ALL members to assist, if it is to go smoothly. Many areas have to be manned (or womaned) continuously, with enough members to assist as relief.



Help needed

*this means you !
even if it is only for a short time*

Areas that require manning

Car Park
Reception Desk
Exhibits and displays
Telescopes in the court yard or in other out side areas
Telescopes on the balconies
Tomline Telescope
Floating members who are able to offer relief to others and to talk and answer visitor enquiries.

Open Weekend !!!



As much help as possible will be required for this year's event to run smoothly. If you are able to help, please contact any committee member, so that your name can be added to the rota, or come on the day

Dates:- Saturday 9th November from 17:00 to 22:00
Sunday 10th November from 17:00 to 22:00

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Events for 2002

Event	Details	Date
Astronomy Workshop	Constellation Close Up Presented by James Appleton	Wednesday 13 th November
Open Weekend	Members help will be needed again this year, to prepare the displays.	Saturday 9 th and Sunday 10 th November
Lecture Meeting Friend's Meeting House, Fonnereau Road	Members Meeting Titled Size Matters Large Telescopes Old and New Ken Goward: The Birr Observatory Neil Morley: The Millennium Telescope	Friday 15 th November 20:00 start
Astronomy Workshop	Inside the Sun Presented by Mike Whybray	Wednesday 4 th December
Christmas Meal	Provisional date	11 th December

Christmas Meal

The Christmas meal this year will be at the Oyster Reach Restaurant Bourne Hill Wherstead Ipswich. The start time is 20:00 and will cost £14.95

If you wish to come please contact Roy Gooding

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Events for 2003

Astronomy Workshop	Collimation of Telescope Optics Presenter St John Robinson	Wednesday 8 th January
Astronomy Workshop	Transit Telescopes Presented by Bill Barton	Wednesday 5 th February
Astronomy Workshop	Hertsprung Russell Star Sequences Presented by Paddy O'Sullivan	Wednesday 5 th March
First Presidential Lecture	Dr. Allan Chapman The Victorian Amateur Tradition At Orwell Park School	Friday 7 th March 2003
Astronomy Workshop	Comets, Asteroids and Impacts Presented by Richard Lyzinski	Wednesday 2 nd April
Astronomy Workshop	Radio Propagation Presented by Paul Whiting	Wednesday 7 th May

2 Society Lecture Co-ordinator Vacancy

The job of organising a society Lecture programme has arisen. If you would like to fill this job, please contact any committee member.

Night Sky

All times GMT

Sun

The sun will be rising approximately between 07:00 and 07:34

The sun will be setting approximately between 16:30 and 16:00

Moon

New Moon	1 st Quarter	Full Moon	3 rd Quarter
4 th	11 th	20 th	27 th

Mercury Mercury will be superior conjunction on the 14th. It will not be visible this month.

Venus Venus moves back into the early morning sky this month. It will be rising at about 03:00 at the end of the month. Magnitude -4.4

Mars Mars is visible in the early morning sky as well. By the end of the month it will be rising at about 04:00. Magnitude 1.7

Jupiter Jupiter will be rising about 21:30 at the end of the month. Magnitude 2.1

Saturn Saturn will be rising at about 18:00 in mid month. Magnitude -0.2

Uranus Uranus will be setting at about 22:00 at the end of the month. Magnitude 5.7

Neptune Neptune will be setting at about 20:30 in mid month. Magnitude 7.8

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John Dobson Visit on Sunday 29th September 2002

Meteor Showers

Shower	Maximum	Limits	ZHR
Taurids	November 3 rd	October 20 th to November 20 th	10
Leonids	November 17 th 21 ^{hr}	November 15 th to 20 th	+100 ?

Meteor source is the BAA Handbook

OCCULTATIONS DURING NOVEMBER

The following 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 (°)	Min Dist rad	Star	Mag
D R	11 Nov 17:18 18:27	0.48+	-11 -21	16 17	0.50S	35 Cap	5.8
D R	27 Nov 01:22 02:24	0.56-	-54 -46	29 38	0.36N	eta Leo	3.5

James Appleton

The Society was ingratiated with a visit from John Dobson, the inventor of the Dobsonian Telescope on Sunday 29th September. Neil Parker and Lesley Vertue from the Green Witch Cambridge Astronomy Centre who were hosting John Dobson at the time had contacted Pete Richards earlier that week regarding a possible visit on the 29th. This was achieved at very short notice.

John Dobson was visiting out observatory towards the end of what can only be described as a "world/whirlwind tour" originating in the Eastern Russian town of Irkutsk near the Chinese border and ending at the Whirlpool Star Party, Ireland, the following weekend. His closing comment at the Whirlpool Star party echoed his thanks to "all those amateur astronomers who helped me get here!" as he was largely staying with society members during the tour.

As many of you will know, my Sundays are taken up with gliding at Wormingford airfield near Colchester, but the lure of such an opportunity could not be missed so astronomy won the day! I arrived home around 3:30 p.m. and as if on cue, Pete called to advise Neil, Lesley and John had set off from Huntingdon and were due to arrive at Orwell park about 4:45. I packed everything I could think of into the car and set off. John, Neil and Lesley arrived on time.

For someone of 87, John Dobson comes across as fully mobile; he had no difficulty whatsoever in ascending our observatory stairs even counting them on the way! He comes across as a humble man, approachable, a mystic, an environmentalist, an eccentric with a great sense of humour, but also a pragmatist with strong views on what is right and wrong including what makes telescopes work at their best. His mission is to make astronomy as accessible as possible to the general public, particularly the younger generation who can't afford expensive instruments. Scrap and recycled materials are used as much as possible in his telescopes. At the same time, he is passionate about raising the profile of global threats such as asteroid impacts to the general public and is clearly frustrated by the lack of funding being applied by governments and agencies across the world.

The observatory tour started in the Balcony with the history of Orwell Park then concluded with the Tomline and Transit Refractors in the Dome. Thanks to Pete for an excellent rendition! John took a keen interest in the observatory and instruments listening attentively and interposing many questions and comments. I never knew the 200-inch at Mount Palomar was made from "French wine bottles"! Nor did I

know John regularly sleeps in his telescope tubes. In fact the 18-incher he regularly carts around the USA and he has covered 100k miles with has slept three people on more than one occasion. In his words, "The neatest thing about sleeping in a telescope is you can't roll out of bed!"

When told about our Millennium Telescope project, his first question was "What's the focal ratio?" On being told F/4.5, he looked slightly quizzical for a moment then said "That's too short!" I thought his was the end of conversation. It transpired his preference is for much longer focal ratios as they provide higher contrast images at higher magnifications than shorter focal length equivalents "which is why the refractor people got it right", and this can aid viewing of some of the less diffuse deep sky objects. However, he acknowledged, our 19" F/4.5 telescope will be around 7 feet tall!

After we had descended the stairs, and were walking around the grounds, John suddenly displayed an interest in the bush tucker in the Orwell Park reservation. Perhaps this harkens back to the days when he was a monastery gardener. The conversation went along something like this...

JD: "Is that a Yew Tree?"

Me: "Well, yes, we think it is"

JD: "Does it have berries?"

Me: (somewhat perplexed) "I don't know (thinking this guy is a total nutcase!)"

At this point, almost before anyone else could speak, John disappeared into a clearing behind the tree, and started picking and eating yew berries and spitting out the odd stone or two.

Me: "How do they taste?"

JD: "These are delicious... They taste really sweet. You know, the only part of the plant that is not poisonous is the flesh of the berry, everything else including the leaves and the bark is. I reckon the stones would probably pass through your system OK..!"

I tried a yew berry myself and found it to have a strong sweet flavour but can't see them appearing in Delia Smith's Summer Pudding for quite some time! John also admitted he has a liking for Nightshade berries. "Surely not deadly nightshade?" I enquired. "Well, I don't know of that particular variety!"

The next page shows some photographs taken during the visit (spot the berries!)





John Dobson

John Dobson was born in China in 1915 to missionary parents. His family returned to San Francisco in 1927 and he attended Lowell High School and later the University of California at Bezzerkly (John's own term for Berkeley) to study biochemistry. Obviously displaying the traits described earlier at this young age, he rejected conventional institutions and joined the Carol Beals dance group! However, a lecture by Swami (chief monk) Ashokananda changed his mind, igniting his interest in astronomy and cosmology, and sending him on a lifetime quest to establish the reality behind the universe. The Swami advised returning to school to gain qualifications, and in 1943, Dobson graduated with degrees in chemistry and mathematics. Shortly afterwards, he found work at Berkeley, later transferring to Caltech then the Berkeley Radiation Laboratory.

The lure of astronomy was never far behind. In 1944, John Dobson quit his job and entered a monastery as a monk of the Ramakrishna order at the Vedanta monastery. At the monastery, Swami Ashokananda assigned him the task of uniting the ancient thinking of India with atomic physics and astronomy, the sciences that deal most closely with the "first cause" of the universe!

In 1956, whilst at the monastery, John Dobson built his first telescope. The mirror was made from a 12-inch disk of porthole glass using the instructions found in Allyn Thompson's "Making Your Own Telescope". The sight of the moon through this instrument helped him decide everyone in the world had to see the heavens through a telescope. In 1958, Dobson was transferred to the Vedanta Society's monastery in Sacramento where he served as the monastery's Gardner and surreptitiously built instruments with cardboard hose-reel barrels and porthole glass mirrors.

At night, Dobson trundled his reflectors on wagon wheels around the monastery neighbourhood and taught local children how to build telescopes. But monastery rules forbade leaving the monastery grounds without permission, and in 1967 after 23 years as a monk, Dobson was expelled. At the time, he had constructed fifteen 12-inch and two 18-inch telescopes from salvaged junk.

On his own again, Dobson returned to San Francisco. On every clear night, he rolled his 12-inch "Stellartrope" to the corner of Jackson and Broderick Streets and showed the heavens to anyone who would look. One of the thousands of passers-by realised that Dobson could teach others how to make telescopes and arranged for



him to begin teaching telescope making and astronomy at the Jewish Community Center, and later, at the Lawrence Hall of Science and the California Academy of Sciences.

The following year, two of Dobson's friends insisted that he join them in forming a club to be named the San Francisco Sidewalk Astronomers. The club met at Jackson and Broedrick Streets, on the sidewalk (American term for Pavement), and brought telescopes for public stargazing. Among the telescopes were Cyclops, a 16-inch and The Little One, one of Dobson's original 18-inchers from Sacramento. During the 1970s and 1980s, the Sidewalk Astronomers toured national parks in the West, showing tens of thousands of people the sights of the universe.

Another decade passed before the Dobsonian design finally received nation-wide exposure with two short articles in the newly founded American magazine, "Telescope Making".

Dennis di Cicco had seen Dobson's large telescopes at the 1978 Riverside Telescope Makers Conference, and had been sufficiently impressed that he based a 16-inch telescope on Dobson's ideas and exhibited it at Stellarphane. Richard Berry, the editor of "Telescope making", saw di Cicco's telescope, and that autumn, re-mounted his own 12.5-inch F/7 Newtonian on an alt-azimuth mount. Although neither of these telescopes was a true Dobsonian, they confirmed to Berry that Dobson's concept worked for large telescopes.

Millennium Telescope Update

The Committee have authorised the purchase of HVHC (hardwood veneer hardwood core) plywood measuring some 1.2 metres square and 18mm thick which will be used for the construction of the wooden side bearings and secondary cage.

More information to be provided in a future update, the MMT contribution this month has been somewhat overshadowed by the John Dobson visit and my subsequent visit to the Whirlpool Star Party in Ireland!

Neil Morley.

12th October 2002.

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OPEN WEEKEND 2002

Saturday 9th & Sunday 10th November

From 5pm - last public admissions 9.30pm

**This year we celebrate 30 years of Open Weekends being staged by the society – quite a milestone eh?
And – just to make you all feel old – it's also the 30th anniversary of the last manned mission to the Moon.**

The connection?

On display in the exhibition area will be NASA lunar rock samples gathered on that very mission (Apollo 17), along with photographs and video footage of the EVAs.

That's besides having all our instruments available for public viewing – the Moon will be at 1st quarter and Saturn will be well placed (well, surely the weather – at least – couldn't be any worse than last year!).

Three trade stands will be in attendance:

Anglia Cameras - who will present an impressive array of telescopes, including a new range of Maksutovs, and other observing equipment for sale at special Open Weekend **discount** prices.

Earth & Sky Books - Purveyors of new/current astronomy & Spaceflight books.

Aurora Books – Purveyors of second hand, end of line and rare astronomy & Spaceflight books.

Perfect to kick start your Christmas shopping... (Groan!)

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Other Displays include:

- *Orwell AS Stand.*
- *Society for the History of Astronomy.*
- *Radio Astronomy, including a recording of signals being pinged from the lunar surface.*
 - *Lunar Occultations.*
 - *The Constellation Orion.*
- *30 years of Orwell AS Open Weekends.*
 - *Hands on Computers.*
- *The Millennium Telescope Project.*

Once again we have been generously supported by:

PPARC (loan of NASA Samples and provision of astro literature for handouts)

Springer Verlag Publications (supply of books for display and a fund raising raffle)

Orwell Park School (allowing the use of their classrooms)

A well-received feature at last year's event was the provision of a volunteer's rest and refreshment area (free beverages/squash & biscuits), which will be provided again this year.

Once again our much-valued 'usual suspects' group of volunteers have offered their services to man the stands and observing equipment etc. We still require more members to come forward and offer their services, even if just for an hour or two.

The Open Weekend is a crucial part of the society's fund raising effort – a much looked forward to local event – and GREAT fun. PLEASE SUPPORT US

*Ken Goward FRAS
Open Weekend Coordinator*

WANTED

Back issues of astronomy/spaceflight related magazines

Old or unwanted astronomy/spaceflight related books

To sell at the forthcoming Open Weekend to raise much needed funds for the society

If you have an item to put on **private** sale during the event, please contact Ken Goward – we ask for a small commission on sale price

Please bring any donations along to the observatory, either on the Wednesdays leading up to the event or on the Saturday afternoon of the event

Attention Open Weekend Exhibitors and Volunteers

We will have access to the classrooms (exhibition area) and can begin setting up from 1PM on Saturday 9th November.

Please wear your membership lanyards.

A refreshment & rest area will be provided at the back of the end classroom (geography room)

Astronomy Workshop – Wednesday November 13th

The third workshop in the present series will be held on the above date, a break from the usual pattern of the first Wednesday in the month to avoid conflict with our Open Weekend preparations. The topic will be **Constellation close-up: Taurus**. It will be led by **James Appleton**, one of our most experienced observers. The emphasis will be on observing - by naked eye, binoculars, or telescope. The aim will be to enthuse everyone to get out into their backyard, or to use the facilities at the observatory to look at Taurus and find for themselves the beauty which this constellations holds. In these days of stunning pictures of the sky taken from space probes, or orbiting telescopes, it is easy to dismiss backyard observing as being less than impressive. But there is no substitute for finding objects yourself, and knowing their vast distances, age, and composition. As you see from the papers enclosed with this newsletter, James has in mind an ongoing observing schedule on the constellation of Taurus for anyone wishing to take it on. The enclosure speaks for itself, and gives the opportunity for any of us to do some real observing. **The small telescopes nights** on Monday 18th November, and Monday 9th December will be dedicated to the project, and there will be plenty to talk about even if the sky is not friendly. It may be helpful to bring your own charts, planisphere, constellation books, or whatever you use, or wish to use, to the workshop, and the STN. (But make sure you have your name on anything you bring). Ted Sampson.

2002 COMMITTEE

		Home Phone	Work Phone
CHAIRMAN	D Payne		
SECRETARY & WORK PARTY ORGANISER	R Gooding		
TREASURER & PUBLICITY	K Goward		
MECHANICS	M Cook		
NEWSLETTER CO-ORDINATOR	E Sims		
ASTRONOMY WORKSHOP	T Sampson		
VISIT CO-ORDINATOR	G Coleman		
EQUIPMENT CURATOR	J Walsh		
LIBRARIAN	M Whybray		
CO-OPTED MEMBER			
LECTURE CO-ORDINATOR & DARK SKIES	P Richards		
JOURNAL ARTICLES TO CORRESPONDENCE ADDRESS	E Sims		Ipswich Suffolk IP1 4HA
	R Gooding		OASI Secretary Ipswich Suffolk IP1 6AE
MEMBERSHIP	M. Cook		Ipswich IP4 5PZ

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Observing Programme For November

Dates	Observing Director	Activities
Monday 18th November		Small Telescopes Night
Tuesday		Nothing Booked
Wednesdays 6th 13th 20th 27th	M Cook D Payne	Nebular & Faint Objects
Thursday	7th November St Mary's School 14th November Triangle Motorcycle Club 21st November 1st Orwell Cubs	Group Visit
Friday		Nothing Booked

All members are welcome on any night, but on nights other than Wednesday please check with the appropriate director that the observatory will be open.

Special Events

1. OPEN WEEK END 9th & 10th NOVEMBER

The open week end is the 9th - 10th November from 5.00pm to 10.00pm on both the Saturday and Sunday. Any body who can turn up to help on either night to help will be much appreciated.

2. ASTRONOMY WORKSHOP 13th NOVEMBER

The Astronomy Workshops starts at 7.45pm on Wednesday 13th November. The topic is " Constellation Close Up : Taurus " The presenter will be James Appleton,

3. COMMITTEE MEETING 26th NOVEMBER

The next Committee Meeting is to be held on Saturday the 26th of October at 7.30pm in the club room at the observatory. All members are welcome to attend.

Society Contact Details

		Home Phone	Work Phone
Chairman	D Payne		
Secretary	R Gooding		

Contact details for the full committee are inside the back page.

e-mail queries: ipswich@ast.cam.ac.uk
 WWW address: <http://www.ast.cam.ac.uk/~ipswich/>

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