

ORWELL ASTRONOMICAL SOCIETY IPSWICH

Charity No 271313

JULY 2000



Society News

1 Next Committee Meeting

The next committee meeting will be held on Saturday 9th September from 19:30 in the clubroom. This is an open meeting and any one who is interested is invited to attend.

2 Events for 2000

Event	Details	Date
Summer Barbecue	Alan Smith has volunteered the use of his garden again this year. Alan lives at [redacted] Grundisburgh	22 nd July 14:00 onwards
Visit to Norwich AS observatory	To be arranged for October	
Summer Excursion	Visit to the Whipple museum in Cambridge.	23 rd September
Open Weekend		7 th & 8 th October
Equinox Star Party	Thetford Organiser; Loughton A.S	22 nd September to 1 st October
Lecture Meeting	Mars and the Amateur Astronomer, Richard McKim, Director of the BAA Mars Section.	Friday 24 th November
Christmas Meal	Provisionally set for the 13 th	
Allan Chapman Talk	Orwell Park School	18th May 2001

Summer excursion



The summer excursion this year will be Saturday 23rd September. At the last committee meeting it was decided to go to Cambridge. This will be a combined, visit to the Whipple museum, a look round any colleges that may be open and a shopping trip, for those who wish.

Please contact Roy Gooding if you are interested in coming along. This will give me an idea on numbers so the correct size coach can be booked.

Equinox Skycamp

Location: Dower House Touring Park
East Harling
Thetford

Coat: £7.25 pre-booked per night Contact: Mike Cook
 £7.75 on day
 Main Event: 23rd September
 Speakers:- Martin Mobberly Havering-Atte-Bower
 Jerry Workman Essex
 Pete Simmons RM4 1QL
 Tel. [redacted]

OCCULTATIONS DURING JULY 2000

One stellar occultation occurs during the month under favourable circumstances. The table provides disappearance details for Orwell Park Observatory; these will be similar at nearby locations.

D or R	Date & Time (UT)	Lunar Phase	Sun Alt (°)	Star Alt (°)	Min Dist (rad)	Star	Mag
D	08 Jul 20:57	0.50	24	0.67S	ZC 1923		6.8

Night Sky

All times GMT

Sun

The sun will be rising approximately between 03:40 to 04:20
 The sun will be setting approximately between 20:20 to 20:00

Moon

New Moon	1 st Quarter	Full Moon	3 rd Quarter	New Moon
1 st	8 th	16 th	24 th	31 st

Mercury Mercury is at inferior conjunction on the 6th. It moves to greatest western elongation on the 27th. Magnitude 0 It may be visible low down in the north west twilight

Venus Venus will be setting about an hour after the sun this month, and will not be visible

Mars Mars will be at conjunction with the sun on the 1st.

Jupiter Jupiter will be rising at about 00:00 by the end of the month. Magnitude -2.1

Saturn Saturn will be rising at about an hour before Jupiter. Magnitude 0.2

Uranus Uranus will be rising near sunset this month. Magnitude 5.7

Neptune Neptune will be at opposition on the 27th Magnitude 7.8

Meteor Showers

Shower	Limits	Maximum	ZHR
Ophiuchids	May 19 th to July	June 9 th June 19 th	5
α Cygnids	July to August	July 21 st to Aug. 21 st	5
Capricornids	July to August	July 8 th July 15 th July 26 th	5
δ Aquadis	July 15 th to August 20 th	July 29 th Aug 6 th	20 10

Meteor source is the BAA Handbook

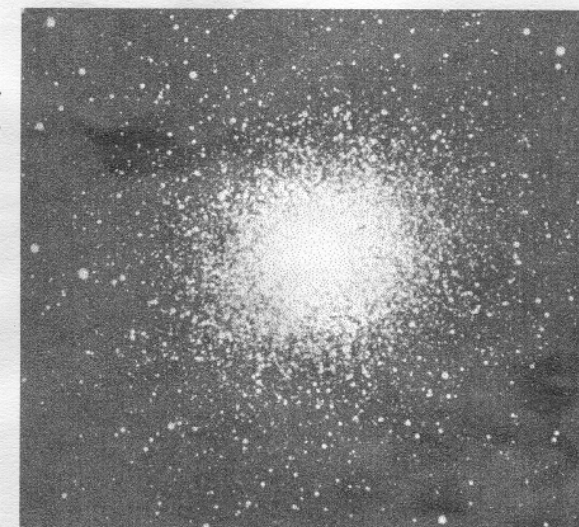
Roy Gooding

Two Messier Objects to find on July evenings

David Payne

The two objects I have chosen for July are both easy to find and provide practice for beginners getting into finding Messier objects. The light nights of July are somewhat compensated by the warm evenings that make observing in the summer so pleasant although it does require late night observing for deep sky objects. The first object is M37

The globular cluster M13 is the finest object of its type in the northern hemisphere. It is easily found south of Eta Herculis about a third of the distance along a line extended from Eta to Zeta Herculis and can be seen unmistakably in binoculars as a fuzzy 6th magnitude star (the integrated visual magnitude is 5.7) M13 can be seen with the unaided eye under clear conditions, with dark skies free from light pollution.



M13 in Hercules

The easiest way of finding this object is to scan down

the line from the Eta Herculis (the top right "shoulder" star of Hercules) to the right hand "belt" star Zeta Herculis. Having found it in binoculars it should be easy to find in the telescope.

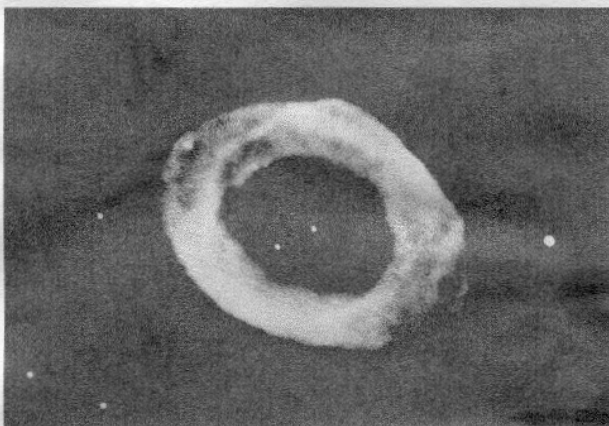
M13 is a large globular cluster probably containing over one million stars and is estimated to be around 25,000 light years away. The diameter of the cluster is about 160 light years, visually a circular object about 10' diameter.

The other object is the "Ring Nebula" M57, the famous planetary nebula Lyra. This object has an integrated magnitude of 9 and is fairly easy to find with a telescope using a low power of about 50 to 60x. Although it is visible in good

binoculars it is indistinguishable from the faint background stars and it needs use of the telescope to find it. A telescope with 50x magnification will reveal the disk shape and will also give a reasonable field of view for finding the object. The easiest way to find it is to identify Vega in the constellation Lyra the identify the parallelogram forming the main body of the Lyre. M57 lies about 7° SE from Vega and is situated almost mid way between the bottom two stars, Beta and Gamma Lyrae. By scanning the area around the mid way point between these two stars it should be easy to identify M57 as a pale disk of light. A six inch will clearly show the ring structure and large aperture will show nebulosity inside the ring and structure in the ring itself including the fading at the edges of the major axis of the ring. A six inch will also clearly reveal the elliptical shape of the ring which has apparent dimensions of 80" x 60".

The central star is magnitude 15 and requires an aperture of about 18 inches or greater to reveal it visually.

The distance of planetary nebula are always uncertain as they are too far to be measured by parallax methods. The estimated distance of the "Ring Nebula" is around 1500 light years which would give a true diameter of the nebula of about 0.5 light years.



M57 The "Ring Nebula" in Lyra

OASI MAINTENANCE DAY

Are you busy on the afternoon or early evening of Saturday 15th July? Would you like to contribute your time and effort to a very worthwhile cause? Then read on....

By common consent, the observatory dome is generally acknowledged to be scruffy. Paintwork needs renewing, the telescope needs cleaning, cobwebs are in need of removal, the window frames need touching up,.... In short, there is work to be done before the open weekend 7-8 October when we open our doors to the public once again!



Volunteers are needed. Anyone with aspirations in painting or decorating is encouraged to come to the observatory on Saturday 15th July, 2pm – 7pm, to assist in work to freshen up the observatory. Previous experience is not necessary – materials will be supplied and any required training will be given!

If you can attend and contribute to a major effort to smarten up the observatory, please inform Roy Gooding (contact details on back page) with an indication of the hours that you can contribute.

Remember.....

Saturday 15th July is OASI Maintenance Day.

Your support is needed.

The Summer Barbecue

Saturday July 22nd from 3.00pm.

Alan Smith has again offered to host the above event in his garden in Swilland near Grundisborough. It is a good dark sky location, and given the weather we had last year, some viewing with Alan's ten inch reflector may be possible - for those who stay that long.

Some food will be provided - rolls, salad, various relishes.

Please bring your own main item - sausages, drum sticks, fish, burgers, which the cook[s] will attend to, or you may wish to 'do' to your own liking.

Also bring drink to suit your own needs - beer,wine, soft drink.

In addition bring folding chairs and tables[small] if you wish: also toys and games to keep the junior members - and perhaps the adults amused. It is of course a family occasion. If sunny [or raining] some form of shelter or gazebo would be of benefit.

It helps greatly to know roughly how many will be coming. Would you please therefore make your intentions known by any of the following means:-

Put your name and number of guests [excluding the very young] on a list - which will appear on the observatory notice board - by Wed July 19th.

Phone or e-mail Ted Sampson on [redacted]
[redacted]

Directions will be made available on the notice board and e-mail.

Contributions towards the cost can be made on the day.

2000 COMMITTEE		Home Phone	Work Phone
CHAIRMAN	D Payne	[redacted]	[redacted]
SECRETARY & WORK PARTY ORGANISER	R Gooding	[redacted]	[redacted]
TREASURER & PUBLICITY	M Cook	[redacted]	[redacted]
MECHANICS	E Sims	[redacted]	[redacted]
NEWSLETTER CO-ORDINATOR	T Sampson	[redacted]	[redacted]
BEGINNERS MEETING CO-ORD & VISIT CO-ORD	G Coleman	[redacted]	[redacted]
EQUIPMENT CURATOR	J Walsh	[redacted]	[redacted]
LIBRARIAN	J Appleton	[redacted]	[redacted]
CO-OPTED MEMBER	P Richards	[redacted]	[redacted]
LECTURE CO-ORDINATOR & DARK SKIES			
JOURNAL ARTICLES TO CORRESPONDENCE ADDRESS	E Sims [redacted] Ipswich Suffolk IP1 4HA R Gooding OASI Secretary [redacted] Ipswich Suffolk IP1 6AE		
MEMBERSHIP	M. Cook [redacted] Ipswich IP4 5PZ		

Observing Programme For July

Dates	Observing Director	Activities
Mondays from 7.30pm	T Sampson [redacted]	General Observation
Tuesdays from 7.30pm	G Coleman [redacted]	Group Visits
Wednesdays from 8.00pm	M Cook [redacted] D Payne [redacted]	Nebular & Faint Objects
Thursdays from 7.30pm	G Coleman [redacted]	Group Visits
Fridays from 7.30pm		Double Stars

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. Committee Meeting

The next committee meeting is going to be held on Saturday 9th September in the club room at the observatory at 7.30pm. All members are welcome to attend.

2. Work Party

A work Party has been arranged for 15th July from 2.0pm to about 7.0pm to paint the observatory walls and any other bits of decorating that can be done. Please contact Roy Gooding if you can help.

3. Summer Barbecue

The Summer Barbecue is to be held on the 22nd of July in Alan Smiths garden the same as last year. More information inside news letter.

Society Contact Details			
		Home Phone	Work Phone
Chairman	D Payne	[redacted]	[redacted]
Secretary	R Gooding	[redacted]	[redacted]
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/		