



OASI News

The newsletter of the Orwell Astronomical Society



Trustees: **Mr Roy Adams** **Mr David Brown** **Mr David Payne**
Honorary President: **Dr Allan Chapman D.Phil MA FRAS**



Auroral glow in Iceland

More aurora pictures

Martin Richmond-Hardy

These were taken taken about 20km east of Vík on Saturday 1 March 2014. The best display was on the previous Thursday evening in Reykjavik - but I only had the iPad with me :-)



Ah, young love!



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Society Contact details

Observatory (meeting nights only)
07967 519249

Email queries: info@oasi.org.uk

Facebook.com/orwell astronomical

Twitter: @OASlpswich

Forum: forum.oasi.org.uk/index.php

Other contact details will be issued to members on a separate printed list.

**Please send material for the OASI
web site and newsletter**

**e.g. observations, notices of events,
general interest articles, to**

news@oasi.org.uk

Access into the School Grounds and Observatory Tower

Please use the third gate into the school grounds, The code for the gate, is on the back of your membership card. If the Black door entrance at the base of the observatory tower is locked, please phone the observatory mobile, 07967 519249 during meeting hours.

Key for Toilet Access

We now have a key to the toilets in the school gym. It is located in the seating area in the Belvedere room.

Message from the new Chairman

David Murton

As I take over the chairmanship of OASI from the capable hands of Neil Morley, to whom I am sure we would all extend our sincere thanks, for the hard work and dedication he has brought to the post, I would like to take this opportunity to introduce myself to the members who don't know me and set down some of my aims and aspirations for the society during my chairmanship.

I have only been a member since June 2012 having come along to a taster evening. Up until that time I only had a passing interest in astronomy. In early 2013 I bought a second hand 200mm reflector tube and constructed my own Dobsonian base. This lasted until later that year when a growing interest in astrophotography led to the purchase of an equatorial mount and new tube. As you can tell, I have gotten the bug!

My primary interests are viewing and imaging the night sky, principally, deep sky objects, although I respect the fact that members pursue many differing aspects of the hobby. This is what makes OASI such a strong and vibrant society and is to be encouraged.

As chairman I would like to promote the observational aspects of OASI more with additional opportunities for members to observe as a group, both at club nights and public events. I would also like these public outreach events to spread their wings further and for OASI to try to have activities in other towns and villages in Suffolk. Our members come from all over the county and I feel we should be promoting our hobby to a wider audience.

This is not to say we should ignore those members who are interested in other aspects of astronomy. The historical side is followed and researched by several members and we must not forget that some members have put many hours of work into the restoration of the Orwell Park Observatory and its telescopes. While we have the opportunity to use them we must endeavour to do so as it is a facility that many would love to have.

I intend to ensure that new members are welcomed into the society and encouraged to join in with all its activities. As a relatively new member I can understand that it can be a bit daunting at first, especially given the physical restrictions imposed by the observatory. Therefore I hope to encourage new and prospective members to attend the Newbourne observing evenings where they can more easily be given a warm welcome and be introduced to this great hobby.

Finally I know that many members have a dream that one day the society will have the permanent use of a piece of land on which it can construct its own observatory dome, hard standings, etc. To that end the committee will endeavour to start the search for a suitable home. This may well be a long task, but hopefully, one day, it will bear fruit. If any members know of any suitable land or have contacts that may be of use in this search, please speak to any committee member.

David Murton chairman@oasi.org.uk

Articles for OASI News

News, pictures and articles for this newsletter are always welcome. Please send them to news@oasi.org.uk

The CLOSING date is the 15th day of the month

Please submit your articles in any of the following formats:-

Text: txt, rtf, rtf, doc, docx, odt, Pages

Spreadsheets: xls, xlsx, OpenOffice/LibreOffice, Numbers

Images: tiff, png, jpg

Please send tables as separate files in one of the above formats.

Paper vs pdf

The Newsletter is published 11 times a year - currently about 170 copies per edition - at a cost, in 2013, of £1,083 including postage (£794). Costs for printing will increase this year due to using a commercial printer.

I would encourage readers to take the e-version (pdf file) which can be read by any type of computer/tablet (Windows, Mac, Linux, iMac, Kindle, Android, etc.) You can always print it yourself if you have an aversion to tablets and screens. We appreciate that some members are only able to accept the paper version so there are no plans to stop.

From January 2014 the maximum size of a printed newsletter will be 24 pages and only the cover (both sides) will be in colour. This is due to the cost of printing.

Newsletter archive on DVD

James Appleton

The electronic archive of OASI *Newsletters* is complete from edition 1 (February 1972) to edition 484 (April 2013) inclusive. From May 2013 onwards, *Newsletter* production was undertaken electronically and editions are available for download from the OASI Yahoo files. The archive contains a scan of every non-blank page of the *Newsletter* and an index in the form of an Excel spreadsheet. The spreadsheet facilitates locating articles by keyword searches using the Excel *Find* function. The archive can now be searched online at www.oasi.org.uk/NL/NL_form.shtml

A DVD containing the archive is in the OASI library for loan to members. Anybody wanting their own copy, please let me know and I can either provide an additional DVD or load the archive onto a memory stick.

Committee 2014

Chairman	David Murton	Chair committee meetings, represent OASI to external bodies
Secretary	Roy Gooding	Respond to enquiries, Press & publicity, Outreach meetings, Open days
Treasurer	Paul Whiting FRAS	Finance, Visits by outside groups, Supervision of applications for grants, Taster evenings, Public appreciation of astronomy.
Committee	James Appleton	Web site
	Bill Barton FRAS	Safety & security
	Martin Cook	Membership, Tomline refractor maintenance
	<u>Tina Hammond</u>	Librarian
	<u>Peter Richards</u>	Lecture meetings, Email distribution lists
	<u>Martin Richmond-Hardy</u>	Newsletter
	John Wainwright	Equipment curator
	<u>Mike Whybray</u>	Workshops
	Mike Norris	Newbourne Observing Group

Committee Meeting: Tuesday 25th March (note change)

All members are invited to attend the next Committee meeting. Start time 20:00 Venue: Shepherd & Dog, Nacton.

The removal of Junior membership from the society constitution will be discussed.

Constitution changes

The first committee meeting in 2014 will discuss changes to the constitution e.g., remove junior membership in order for the FAS child protection guidelines to be adopted (see below). The proposals will be put to the membership either at an EGM or the next AGM.

Society Notices

The Newsletter

The society is trying to move from paper newsletters to electronic.

We now use an outside printer. The cost of doing so means that only the cover pages can be printed in colour. The full colour version is available from the OASI Yahoo group.

To receive the electronic version of the newsletter (which you can also print in A4 or A5 booklet format) you will have to be a member of the oasi yahoo group.

To subscribe to this group please email oasi-subscribe@yahoogroups.com

For those who don't like Yahoo, a Dropbox link will be emailed to those who have expressed a wish to receive the e-version.

Discussion Forum

We have a new web-based forum for general discussions and some initial specialist areas. OASI members can join this forum at <http://forum.oasi.org.uk/index.php>

- OASI General
- Newbourne Observing Group
- Observing - Night Sky
- Observing - Solar
- Events
- Imaging
- Small Telescopes Observing Nights
- For Sale / Wanted
- Equipment

Welcome to New Members

Greg Hughes

Some Astronomy Guides

The One Minute Astronomer

oneminuteastronomer.com/

Stargazers lounge

stargazerslounge.com/

Society for Popular Astronomy

www.popastro.com/index.php

UK Astronomy Directory

www.uk-astronomy.co.uk/directory/

Heavens Above (satellites, astronomy & time data) heavens-above.com/

Society Events

For the latest event details, please see www.oasi.org.uk/Events/Events.shtml

For other astronomy news and astro pictures try our

Twitter feed

<https://twitter.com/OASIpSwich>

Facebook page

<http://www.facebook.com/Orwell-Astronomical/>

Discussion Forum

<http://forum.oasi.org.uk/index.php>

Date and Time	Location	Contact	Event
Weekly, every Wednesday, 20:00	<u>Orwell Park Observatory</u>	Martin Cook, Roy Gooding	General observation (weather permitting) using a variety of telescopes.
Thursday 27 March 19:00-late	Newbourne Village Hall	Mike Norris Mike O'Mahony	Newbourne Observing Group. Bring your telescope to our dark-sky site. Indoor activities if cloudy.
27-31 March	Kelling Heath	www.starparty.org	Spring Star Party
Tuesday 25 March 20:00	Shepherd & Dog, Purdis Farm, Ipswich	Roy Gooding	Committee meeting
Tuesday 01 April, 20:00	Orwell Park Observatory	Gerry Pilling, Paddy O'Sullivan & Dave Robinson	Small Telescopes Observing Night. Main observing targets: Saturn, Mars and Sasco.
Tuesday 01 April, 20:00	Orwell Park Observatory	Paul Whiting	Taster evening for people considering joining OASI.
Monday 14 April, 19:00-late	Newbourne Village Hall	Mike Norris Mike O'Mahony	Newbourne Observing Group. Bring your telescope to our dark-sky site. Indoor activities if cloudy.
Friday - Monday 25-28 April	Haw Wood Farm Caravan Park, Hinton, Saxmundham IP17 3QT www.hawwoodfarm.co.uk	www.brecklandastro.org.uk/	Breckland Astronomical Society Spring Star Party See page 14 for details
Thursday 01 May, 19:00-late	Newbourne Village Hall	Mike Norris Mike O'Mahony	Newbourne Observing Group. Bring your telescope to our dark-sky site. Indoor activities if cloudy.
Friday 09 May, 20:00	Methodist Church Hall, Black Horse Lane, Ipswich	Pete Richards	Lecture Meeting. Prof Ralph Spencer: Black Swans - Black Holes in the Constellation Cygnus.
Saturday 17 May	National Space Centre, Leicester	BAA 020 7734 4145 See www.britastro.org/radio/	BAA Radio Astronomy Group's General Meeting

Date and Time	Location	Contact	Event
Saturday-Sunday 17-18 May, 11:00-16:00	<u>Christchurch Park, Reg Driver Centre</u>	Roy Gooding	Public access event: observing the sun safely. (Will postpone to 24-25 May if weather unsuitable.) Booking not necessary.
Saturday 12 July 13:30-23:30	<u>Newbourne Village Hall</u>	Pete Richards	Summer BBQ
Friday 8 August 19:30	Foxburrow Farm in Melton		Suffolk Wildlife Trust Outreach meeting
12 September	Westbourne Library		Public Outreach
Friday - Monday 19-22 September or, if poor skies in Sept: Friday-Monday 24-27 October	Haw Wood Farm Caravan Park, Hinton, Saxmundham IP17 3QT www.hawwoodfarm.co.uk	www.brecklandastro.org.uk/	Breckland Astronomical Society Autumn Star Party See page 14 for details
22Sept - 3 Oct Main weekend 26-28 Sept	Kelling Heath	starparty.las-astro.org.uk	Autumn Equinox Sky Camp
Friday 21 November 2014, 20:00	<u>Methodist Church Hall,</u> Black Horse Lane, Ipswich	Pete Richards	Lecture Meeting. Alan McGuire - Using the Sloan Digital Sky Survey to Study Quasars and the Early Universe.

Outreach Meetings for 2014

Astronomy in the Park – Christchurch Park

Our yearly event that gives the public a chance to observe the Sun safely

Option 1

Saturday 17th and Sunday 18th May

Time: 11:00 to 16:00

Set up time from 10:30

Venue: On the hill above the Reg Drive centre

Option 2

Saturday 24th and Sunday 25th May if the 1st option is cloudy.

Time: 11:00 to 16:00

Set up time from 10:30

Venue: On the hill above the Reg Drive centre.

Other Outreach meetings

The Suffolk Wildlife Trust event is at Foxburrow Farm in Melton on Friday 8th August. I will have more details later in the year.

Westbourne Library event Friday 12 September details TBC

Night Sky in April

Roy Gooding

Moon

1st Quarter
7th

Full Moon
15th

Last Quarter
22nd

New Moon
29th

Sun and planets

Object	Date	Rise	Set	Mag.	Notes
Sun	1	05:31	18:29		
	30	04:28	19:19		
Mercury	1	05:12	16:16	1.1	Mercury is too close to the sun this month to observe
	30	04:37	19:51	0.0	
Venus	1	04:07	14:06	-4.4	
	30	03:22	15:06	-4.1	
Mars	1	19:06	06:14	-0.5	Mars is at opposition on the 8 th
	30	16:18	03:56	-1.3	
Jupiter	1	09:48	02:26	-2.2	Jupiter can be observed to after midnight
	30	08:11	00:45	-2.0	
Saturn	1	22:00	07:18	1.0	Saturn moves in to the mid evening sky this month.
	30	19:56	05:20	0.9	
Uranus	1	05:38	18:28	5.9	Uranus is too close to the sun this month to observe.
	30	03:47	16:43	5.9	
Neptune	1	04:39	15:02	8.0	Neptune is too close to the sun this month to observe.
	30	02:46	13:12	8.0	

See in-the-sky.org/risesetcharts.php for some nice graphs

Meteor Shower

Source: BAA Handbook 2014 p95-7

Shower	Maximum	Limits	ZHR
Lyrids	April 22 nd	April 18th to 25th	10

2014 Comets

2014 does not offer much for the visual observer in the way of returning periodic comets, with the most interesting one being 209P/LINEAR, which could reach 11th magnitude when it passes 0.06 AU from the earth in May. See www.ast.cam.ac.uk/~jds/preds14.pdf

The latest edition of the BAA Comet Section Journal can be downloaded from www.ast.cam.ac.uk/~jds/tail33.pdf

Occultations during April

James Appleton

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

Date	Time (UT)	D/R	Lunar Phase	Sun Alt (d)	Star Alt (d)	Mag	Star
03 Apr	19:02:21	D	0.17+	-5	34	5.9	ZC 610
	20:06:24	R		-14	24		
03 Apr	21:14:56	D	0.18+	-23	14	6.1	ZC 620
11 Apr	19:50:53	D	0.88+	-10	38	7.1	Hip 52574

2013, Another Busy Year for OASI

Roy Gooding

2013 was another very busy year for OASI. During the year we held 158 meetings of various types. These can be broken down as follows:

Event	Meeting numbers	Break Down
Observatory Opening	110	Club evenings Taster, group visits OPS open days and events Orwell park school astronomy club
Newbourne Observers Group	14	Newbourne village hall
Other Meetings	2	Warbleswick observing evenings
Outreach observational meetings	8	Various venues: parks, golf courses
Outreach Lecture Meetings	10	BBC stargazing Talks to various schools and adult groups.
Lectures	1	
Committee meetings	4	
Workshops	6	Nacton village hall
Field trips	1	Graze occultation
Social Events	2	Barbecue and Christmas meal

This breaks down to an average of 3 meetings a week. I am sure that as a society, we hold the most meetings of any astronomical society in the country. Our present membership is 170, the largest number we have ever had in our 47 years of existence.

Unfortunately, many of our members are infrequently seen at any of our meetings. We have a very large number of meetings arranged again for this year. All meetings are open to all members with no extra charge, except for the summer barbecue. You do not have to book, just turn up. If you have any questions you can contact any committee member, add a query to the OASI forum or email info@oasi.org.uk

Meetings are listed in the Newsletter and on the OASI web site.

Astrofest 2014

Roy Gooding

Astronomy Now magazine have been organising Astrofest at the Kensington Conference centre for many years. I have not been to this event for over 15 years, and decided to go only on a whim on the Friday 7th. Luckily the weather on the Saturday morning was fine otherwise I may have stayed at home. I left early for the 07:09 London train

The weather remained fine in London so I walked to Kensington. It took me about 100 minutes going via Holborn, Piccadilly, Hyde Park and Kensington. The Astrofest web site said that all the tickets for the afternoon lectures had been sold so the visit would only be for a look round the trade stands.

I did not know how many of our members would be at the event, however I did speak to all of them before the day was out. They were Abigail Lee, Peter and Nicky Richards and Andy Gibbs.

I purchased two items another red headlight (hopefully this one will not be quite so bright as the last one I brought) and a 9x50 finder scope. This finder scope is different than most as it gives an erect image. I have been looking for one of these for some time.

I left for home around 15:00 arriving back at Liverpool street a little after 17:00.

National Astronomy Week 1st to 8th March

Roy Gooding

Every few years a National Astronomy Week is held. This year it was between the 1st and 8th of March and had the theme of observing Jupiter.

I had decided last year, to organise a star party in Christchurch Park, on either the first or second Saturday depending on the weather. The weather for the 1st gave clear skies in the evening.

The event was advertised with posters and handouts in the Tourist Information offices in Ipswich and Felixstowe, and in the Reg Driver centre in the park. BBC Radio Suffolk was informed and our new Chairman, David Murton was interviewed at 09:30.

Come the evening, the event was very well supported by members. There were about a dozen telescopes in use on the park. The society's millennium 480mm reflector was given its second public star party outing. Martin Cook and Matt Leeks again looked after this. This was the first telescope the visitors would see after entering the park. All the other telescopes were much smaller but John Wainwright's 450mm Dobsonian was running a close second

As usual here is the list of equipment in use. This list is only partially complete as I did not make a complete list of all equipment in use

Martin Cook, Matt Leeks	480mm Dobsonian Reflector
Eric Sims	11 x 80 Binoculars
Roy Gooding	140mm Maksutov Cassegrain
James Appleton	250mm Meade Schmidt Cassegrain
John Wainwright	380mm Dobsonian reflector
Bill Barton	100mm Refractor
David Murton	200mm Reflector
Andy Gibbs	100 Meade Schmidt Cassegrain

In total we had four different designs of telescope in use.

There were several other members present with a selection of reflecting telescopes from 100, to 150mm. I did not have time to go round and collect names.

An estimated 90 to 100 visitors arrived during the two hours we were open.

The second event was at Gainsborough Library on Friday 7th. The meeting was in two parts. The meeting began with a talk given by Paul Whiting and concluded with an observational session. The

original plan was to hold the observations in Landseer Park, but this was some distance away from the library and people may not have wanted to walk there.

However the solution was just outside the library's main door. Outreach meetings are intended to get the general public to look at the night sky, so for the first time OASI set up as pavement astronomers. In a very small area five telescopes were set up. This is probably the first time the streets of Ipswich had seen a sight such as this. As well as the attendees of the talk, many passers-by hesitatingly paused as they walked by, before coming over to see what we were doing.

Members at this event included

Paul Whiting
Bill Barton
Mike Norris
Pete and Nicky Richards
David Murton
Steve Shapland
Mike Norris
Martin Richmond-Hardy

As usual I would like to thank all members who were able to come along to these two events.

OASI Field trip to see the Northern Lights (hopefully)

By Paul Whiting FRAS

I am still taking names for the Aurora Field Trip that will take place in February 2015. There are still a few spare places.

Depart: Wednesday 11 February 2015 [next year!]
Return: Monday 16 February 2015

This will include 3 nights on board ship, followed by 2 nights in Tromsø, a total of 5 nights at or above 70° North.

Details of the initial itinerary are below, and may be found on the website. Flights will be from Gatwick. I need to know names, numbers of cabins (single / double, inside / outside).

Costs will be: £1247 outside twin (per person) £1495 outside single. Cheaper inside cabins available.

There will be an opportunity to add excursions later. I will need an initial 20% deposit.

Paul

trip@oasi.org.uk

Initial itinerary

Day 1 Tromsø, the gateway to the Arctic

Day 2 Honningsvåg and the North Cape

Day 3 Kirkenes, the voyage turning point

Day 4 Hammerfest and Tromsø

Day 5 Day in Tromsø

Day 6 Depart

Newbourne Observing Group

michael.norris17@btopenworld.com omahony.mike@gmail.com

We meet at The Newbourne Village Hall, Mill Lane, Newbourne, IP12 4NP

March Meeting

Another cloudy one but telescope advice given and new members recruited.

Full Newbourne programme is on the OASI web site.

Our meeting dates are listed below and start at 7pm. All welcome, with or without telescopes.

Thursday 27th Mar

Monday 14th Apr

Thursday 1st May

Small Telescope Observing Nights (STONs)

By Gerry Pilling

April 1st Targets Saturn, Mars and Sasco

Lecture Meetings

These take place in The Methodist Halls, Upstairs room, Black Horse Lane, Ipswich

Spring – 8pm Friday 9th May 2014

Professor Ralph Spencer (University of Manchester)

Black Swans – black holes in the constellation of Cygnus

Autumn Lecture – 8pm Friday 21st November 2014

Alan McGuire

Using the Sloan Digital Sky Survey to study Quasars and the early Universe

Workshop Meetings

Mike Whybray

Thank you, Paul, for your well researched workshop on Exo-planets and making the audience think. About 30 people attended.

And thank you, Pete and Nicky, for the expert catering services once again!

That's the last of this season's workshops. We start again in the autumn. Let me know if you have any ideas for future ones.

If you are a new OASI member, or haven't been to one of these informal workshops before, they are a mixture of events of different characters including beginners talks, interactively workshops, films, etc., suitable for all. They are also a chance to chat with other members over a cup of tea and a biscuit, in a venue rather warmer than the observatory dome on a winter's night!

Do you have a subject you could workshop? Give Mike Whybray a call!

workshops@oasi.org.uk

Breckland Astronomical Society



2014 SPRING & AUTUMN STAR PARTIES

Friday 25th – Monday 28th April

Friday 19th – Monday 22nd September

Friday 24th to Monday 27th October
if poor skies in September



Come earlier or stop later if you want. Pitches £10 per night with hook up.
A Dark Sky Discovery Site.

Naked eye visibility 5.73, averted 5.99, best SQM reading 21.75

We had 6 clear all night sessions out of 7 in autumn 2013

Booking

Direct to David Wiggins or Sue Orman at Haw Wood Farm.

Haw Wood Farm Caravan Park, Hinton, Saxmundham. IP17 3QT

Email, davewiggins@hotmail.co.uk Phone 01986 784 248

Website, www.hawwoodfarm.co.uk

Go to Haw Wood news for latest update and reviews of our star parties.

For information see the BAS website, www.brecklandastro.org.uk

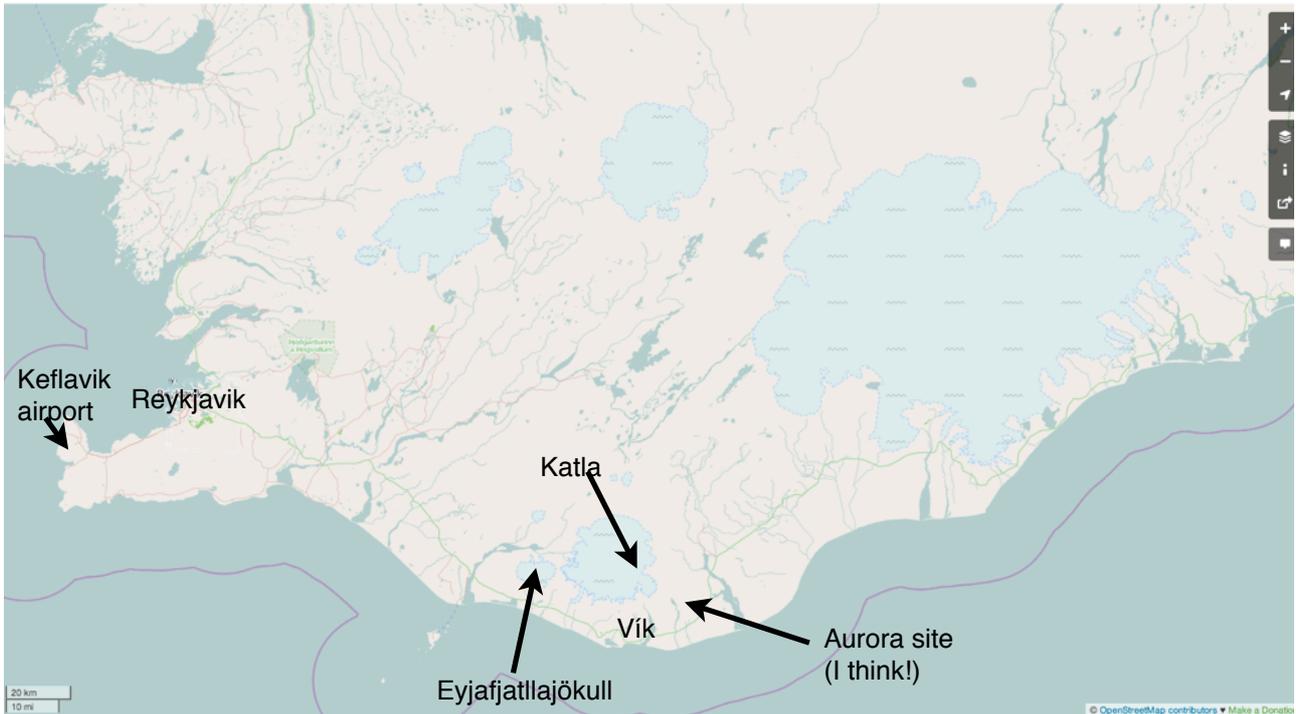
Northern Light Winter Wonders

Martin Richmond-Hardy

With a wedding anniversary coming up (note to self: order flowers!) we decided a mini break was in order. Norway/Sweden sounded a bit cold so we opted for Iceland. Having picked up a leaflet from www.nordicexperience.co.uk/ at the Essex AstroFest III last year, I booked a late 4-night trip for Feb/March.

We flew from Gatwick on the Thursday morning and arrived at Keflavik airport 30minutes early in the afternoon and after a 40-minute coach ride (with free wifi!), arrived at our hotel in time for Happy Hour (beer half price). After a walk around the city and harbour, we checked out a few restaurants and were invited to view the buffet at www.restaurantreykjavik.is/. Sold!

An extra treat after was an auroral display over Reykjavik. But I only had the iPad with me.



Next morning at 9am we were picked up by coach and taken via various sites to our hotel for the next two nights a few km east of Vík (pop about 120), in the shadow of two volcanoes (Eyjafjallajökull - pronounced eya-fyatluh-jurkultluh) and Katla, beneath the Mýrdalsjökull. Katla has not had a sizeable eruption since 1918, and the current repose period of 94 years is the longest known since reliable records began. We hoped it wouldn't choose early March.

After dinner we piled on the coach for an aurora hunt. But the clouds rolled in and all we saw were greenish clouds (you may have done better in the UK). Never mind, astronomers have good imaginations and on the next night foray into the darkness we were rewarded with clear skies (just a few clouds) and spectacular aurora show - my first time. See cover pictures.

Lessons learned.

1. iPad's are no good for photographing the aurora.
2. Practice with your camera at home so you know what to do in the dark and any artifacts that your camera exhibits on long (30s) exposures.
2. Check the airline's (WOW) baggage conditions before you leave. We got charged £40 for an extra bag on the return journey even though the only limit listed was 20kg/person (not exceeded).
3. Iceland isn't that cold by the coast - +5C during the day. Bearable if you suffer from Reynard's Syndrome.

Martin RH

OASI Corporate Clothing

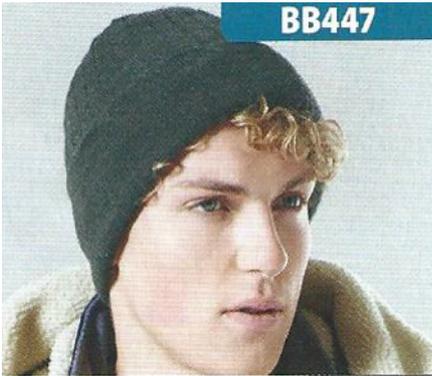
The Society now carries a stock of OASI clothing as below:

Order from Mike Norris michael.norris17@btopenworld.com Tel: 01473 726596

Sweatshirt by Maddins, easycare, crew neck, raglan sleeve with cover seam finish around neck, welt and reglan. Herringbone taped neck. 45% Acrylic, 40% Regen 15% Polyester. In Oxford Grey with Embroidered OASI Logo in Yellow.

Sizes: Small, Medium, Large & Ex Large.

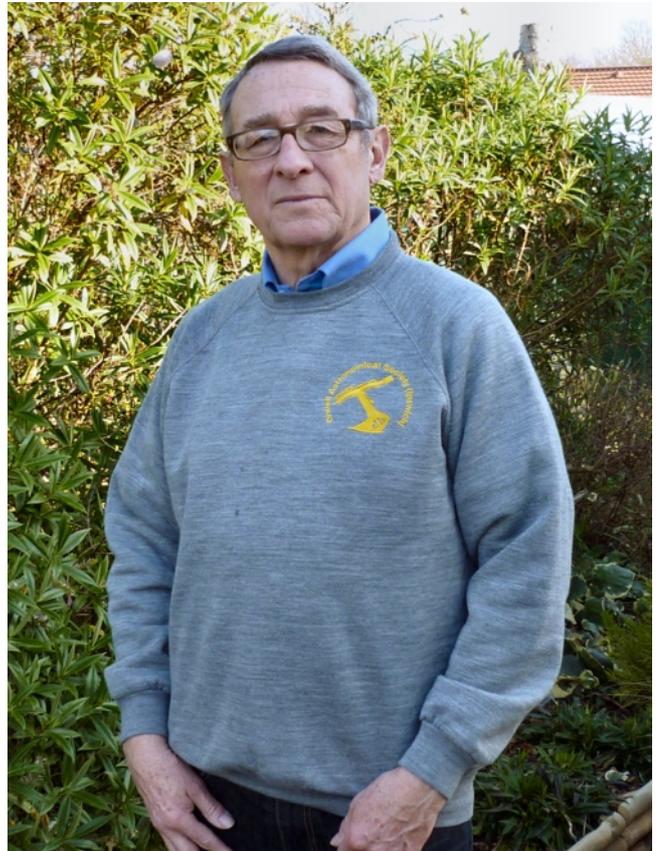
£18.00 each



Thinsulate Beanie in 100% soft feel fabric Thinsulate lining Non-ribbed turn up in Dark Graphite with OASI embroidered in matching Yellow.

£8.00 each

Purchase both for £25.00



Discussing
The Equation of Time
at the February Workshop,
Nacton Village Hall

Photo: John Wainwright