

Astronomical Society of Edinburgh

Annual Report for 2001

The Astronomical Society of Edinburgh was founded (as the Edinburgh Astronomical Association) in 1924 and is governed by a Constitution adopted in 1937 and since modified (most recently on 13th January 1995). A copy of this Constitution has been supplied to each member and may be referred to in the Society's Library at the City Observatory and on the Society's web site. Copies may be obtained from the Secretary.

Clause 1 of that Constitution is:

The name of the Society shall be "The Astronomical Society of Edinburgh" and its objects shall be to advance the education of the public about the science of Astronomy and to promote astronomical research chiefly in Edinburgh and its neighbourhood. In furtherance thereof:

(a) to circulate information on astronomical matters by the publication of articles, books etc.;

(b) to encourage astronomical study and observation; and

(c) to increase popular interest in astronomy.

The Management of the Society is vested in a Council, elected from the Ordinary Membership of the Society. The following were elected at the AGM in March 2001 and served from 1st April:

President	Lorna McCalman 20 Hillside Crescent, Edinburgh, EH7 5EB Telephone: 0131 556 3790 Email: lmccalman@blueyonder.co.uk
Secretary	Graham Rule 105/19 Causewayside, Edinburgh EH9 1QG Telephone: 0131 667 0647 Email: Graham.Rule@ed.ac.uk
Treasurer	George Grant 42 Bonaly Road, Edinburgh, EH13 0EQ Telephone: 0131 441 6542 E-Mail: george@grantfire.com
Vice-Presidents	Peter MacDonald Alan Ellis
Councillors	Alison Duncan (Press Officer) Ray Fenoulhet Charlie Gleed Jim Nisbet Adrian Weatherhead

The following Council members elected at the AGM in 2000 held office during the early part of the year (from 1st January to March 31st): Lorna McCalman, Graham Rule, George Grant, Charlie Glead, Duncan Hale-Sutton, Johnnie Bradley, Alan Ellis, Raymond Fenoulhet, Pete MacDonald, Jim Nisbet, Adrian Weatherhead

The Society's principal address is:
c/o Graham Rule,
105/19 Causewayside,
Edinburgh, EH9 1QG

Our meetings take place at:
The City Observatory
Calton Hill
Edinburgh EH7 5AA
Telephone 0131 556 4365
(there is currently no post box at the observatory which the post office can reach.)

The Council would like to express its thanks to Johnnie Bradley and Duncan Hale Sutton for their work on the Council.

Membership

24 new members were welcomed into the Society this year: Adelaide Webster, D.G. Macleod, Stewart Gillan, Dr Apurva Goswamy, Gordon McGowan, Hunter McAuley, Arthur McCready, Marissa Di Fillipo, Anastasia Pappa, Mr William Dowdall, Brian Doyle, Kevin Johnston, Rachel Thomas, Donald Ian Scarr, Henry George McKenzie, Colin Charles McKenzie, Frank Mitchell, Dr Jochen Liske, Scott R. McCallum, Colin C. Brown, Mike White, Glen D. Donachie, Patrick Smythe and Janis Pedersen.

We were sorry to note the death of Len Munday who died 22/9/01.

On the 31st December 2001 the membership of the Society was 147 of which 7 are honorary members. A number of members are more than one year in arrears.

Honorary Members

Honorary members are Dr M. Brück, Dr H. Ford, Dr D. Gavine, Prof D. Heggie, and Mrs E. Jenkinson. The Honorary Presidents are Prof Andy Lawrence BSc PhD FRAS FRSE (Regius Professor of Astronomy at the University of Edinburgh) and Prof John Brown BSc PhD DSc FRSE FRAS (Astronomer Royal for Scotland).

Publications

Two editions of the Society's Journal were published in 2001 (issue no 43, April 2001, and issue no 44, December 2001) under the editorship of Dr D.M. Gavine.

Members are issued with the latest edition of the Federation of Astronomical Societies "Astrocalendar" on payment of their subscription to the Society.

In addition to being a councillor, Alison Duncan has been appointed Press Officer to the Society. Alison will communicate Society news and events to the Astronomy magazines and will be responsible for Press releases.

Electronic Communication

The Society continues to have a presence on the World Wide Web and a new Domain Name has recently been purchased.

The website may be found at <http://www.astronomyedinburgh.org/>

Email contact addresses have also been set up for some Society Officers:

- president@astronomyedinburgh.org
- secretary@astronomyedinburgh.org
- treasurer@astronomyedinburgh.org

For those who have WAP enabled phones a small amount of information (including meeting details) may be found at www.astronomyedinburgh.org/wap/

Full details of the Society's activities and information about how to join is on the website.

The Society e-mail list is used to contact members about announcements, observing sessions and forthcoming events. Members of the Society can subscribe free of charge to this list. To join, please contact the Secretary of the Society.

The Council wishes to thank Graham Rule and Horst Meyerdierks for their work in supporting the web and email sides of the Society's on-going internet use and expresses its thanks to the Royal Observatory, Edinburgh for continuing to provide web space and email forwarding.

Details of Society meetings are available on our answering machine at 0131 556 4365.

Meetings

The Society has held the following meetings during 2001:

January 5th

Graham Rule. Secretary of the Astronomical Society of Edinburgh.

Astronomical publishing in Edinburgh

Attendance 35

February 2nd

Dr John Cooke - University of Edinburgh

Mapping the nearest Stars

Attendance 57

March 2nd (AGM)

Lorna McCalman - Presidential Address

Dark Secrets

April 6th

Dr Dave Gavine - Astronomical Society of Edinburgh

Daft Astronomers

Attendance 62

May 4th

Dr Mary Brück

Mary Evershed and the Astronomy of the Divine Comedy

Attendance 67

June 1st

George Grant - Treasurer of the Astronomical Society of Edinburgh

Telescope making part 2

Attendance 46

July 6th

BBQ and social evening

August 3rd

Member's Night

Contributors to the evening were, Dr D. Gavine, Jim Nisbet,

Des Loughney and Dave King.

September 7th

Ron Livesey - Astronomical Society of Edinburgh

A Space odyssey

Attendance 55

October 5th

Dan Hillier - ROE Visitor Centre Manager

ROE Visitor Centre heritage Lottery Bid

November 2nd

Brian Kelly - Former Dundee City Astronomer

The Search for the Nebulae

December 7th

Mrs Margaret Morris FRAS - The Astronomical Society of Glasgow.

An Accretion Disc on Two Legs

Attendance 66

Thanks to Alan Pickup for kindly presenting the "Monthly Sky map" talk to the Society each month.

Council Meetings

The Council of the Society met on January 26th, February 2nd, February 22nd, March 30th, April 27th, May 25th, June 29th, July 27th, August 31st, September 28th, October 26th, and November 30th.

Equipment

The 6 inch Cook telescope continues to be regularly used by members of the Society. Demonstrations on how to use this instrument proved to be very popular and it is hoped that members will enjoy using this telescope on clear nights.

The 8 $\frac{3}{4}$ inch Dobsonian remains out at the dark observing site at Earlyburn.

Due to the outbreak of foot and mouth disease, Earlyburn was out of use until June. With the agreement of the local farmer, the site is now open and accessible to members.

The 4 inch Newtonian has been in use at the Calton Hill on clear Friday nights.

The 12 inch "Lewis" Newtonian reflector (which the Society bought from the widow of one of our members) will soon be ready for use. The primary mirror has been re-aluminised, a new secondary mirror purchased and at present, we are awaiting delivery of a skeleton tube, Dobsonian mount for the telescope.

The intention is to take this large aperture telescope out to Earlyburn and bring back the 8 $\frac{3}{4}$ inch Dobsonian for use at the observatory.

The Society has this year, also purchased a "Nearstar" Hydrogen Alpha Solar Telescope costing £2260. Although this represents a large capital outlay, the telescope fills a gap in the equipment owned by the Society, allowing direct observation of the Sun's disc. It is hoped that this instrument will prove popular with Society members and visitors alike, allowing daytime observing as well as summer nights observing.

Warning notices have been printed in several languages, explaining that the Solar Telescope is a specialised, dedicated instrument and extreme caution should be exercised when observing the Sun.

Observing

The observatory is open to members of the Society and the public on most Friday evenings between 8 and 10pm.

The imaging group co-ordinated by Dr Neil Grubb, and the Messier observing group, co-ordinated by Dave King, have been holding joint meetings at the observatory at 8pm on the Monday evening following the main Society meeting.

These groups provide an excellent forum for sharing ideas and helping less experienced members learn practical techniques. The meetings have proved to be very popular with members who bring along their own telescopes and gain experience in their use. Both groups accommodate beginners as well as the more experienced observers but it is not necessary to own a telescope or binoculars to participate.

All members of the Society are encouraged to participate in these activities.

Dr Neil Grubb co-ordinator of the CCD imaging group has recently set up a web site at <http://geocities.com/betsymatosis/webcams.html> showing his latest digital images and explaining how to use a webcam.

The new notice boards purchased by the Society are filling up with some excellent work produced by the imaging and observing groups.

The notice boards are also proving to be very useful for general notices, keeping members informed about what is happening in our own Society as well as providing information on National and International Astronomical matters.

General observing forms, as well as notes on Aurora and Noctilucent Clouds are available in the City Dome. A box in which to put completed observing forms is located in the hallway of the City Dome. Members are encouraged to submit their observations as these can be used in the Journal or passed on to the British Astronomical Association.

A major Aurora was observed from Edinburgh, on the 11th April. Persistently cloudy weather prevented much observing in the autumn, resulting in disappointment for observers, as news of an aurora, on 21st October, was seen as far south as Devon.

A very bright Noctilucent Cloud display was noted on 25th June. Smaller displays were also observed in July and August.

The Perseids, Leonids, Geminids and Quadrantids were all clouded out. This was most unfortunate because last year, moonlight affected observations of all the meteor showers. This year in theory at least, conditions were favourable. Observers were looking forward to meteor

watches but persistently cloudy weather has badly affected observation of the major meteor showers.

The Occultation of Saturn by the Moon was observed by 11 members of the Society who came up to the observatory on 3-11-01. Several members had some excellent images of the event. There was another occultation of Saturn by the Moon on 1-12-01 but the sky in Edinburgh was cloudy.

This year we enjoyed stunning views of the planets. Venus and Mercury were outstanding in the pre-dawn sky. Mars was also on view although not especially favourable for observing.

Jupiter was very favourable for observation, being near opposition. Several members of the imaging and observing group observed a shadow transit of one of the Jovian satellites on Monday 10-12-01 / Tuesday 11-12-01 through the Cook telescope.

Saturn with its rings wide open provided memorable and impressive views for visitors and members alike.

Library

The library continues to be housed in the City Dome because the main building is still out of use due to the dry rot. Several titles have been added to the collection during the year.

The Society continues to subscribe to a number of Astronomy magazines and periodicals such as Astronomy Now, Astronomy, The Astronomer, Sky and Telescope.

Visitors to the Observatory

On 6th March a group from the Bentley Drivers Club and on 26th March the Broughton History Society visited the Observatory.

On Saturday 8th September, the Society hosted the Aurora Section meeting of the British Astronomical Society. More than 40 delegates from all over the U.K attended this very successful meeting, which was organised by BAA Section Director and ASE member, Ron Livesey. We were very pleased to welcome Dr Nick Hewitt who attended the meeting in his capacity as President of BAA.

The Society has continued to forge closer links with other Scottish Astronomical Societies, in particular Falkirk and Stirling who have joined us for lecture meetings as well as participating in the observing sessions.

Other Events

The Lorimer Medal is awarded by the Astronomical Society of Edinburgh, to people who have made an outstanding contribution to the public understanding of science. We were delighted to present Dr Mary Brück with the Lorimer Medal at the May meeting. Dr Brück is a champion of women in science and has written and co-written several authoritative books on astronomy. She is an outstanding teacher and has inspired more than one generation of students.

Dr Brück is only the 11th recipient of this award since 1938.

The Society has purchased some updated slide sets from the Armagh Observatory. These sets are very useful for giving short talks to the general public and casual visitors to the observatory. The "wee lecture room" in the main building has been set up for this purpose. The slides have already been put to good use during Doors Open Day and used for the talks given by members of the Society at Vogrie Country Park.

In October, Dr Dave Gavine began a series of evening classes in Astronomy at the Jewel and Esk Valley College.

Graham Rule gave a talk to Lapidary Club on 25th September on the History of the Calton Hill.

Lorna McCalman, Graham Rule and Ken Thomas gave a public talk at Vogrie Country Park Midlothian.

Lorna McCalman gave a talk on astrophotography to the Edinburgh Photographic Society on 20th November

Non-Astronomical Events

In May, Unique Events had access to the grounds to prepare for the Beltane Festival

The student radio group "Fresh Air FM" used the observatory as a transmitter site in May/June and October/November.

Lorna McCalman, Graham Rule, Pete MacDonald, Jim Nisbet and Adrian Weatherhead, spent several evenings clearing the overgrown garden and tidying up the observatory in preparation for Doors Open Day and the BAA Aurora section meeting. Sincere thanks to all who worked so hard to make the observatory look presentable for our visitors.

Our contribution to "Doors Open Day" was organised by Jim Nisbet. Talks were given throughout the day by Graham Rule and Horst Meyerdierks. Members of the society who helped were; Yvonne Warner, David Small, Anastasia Pappa, and James Nisbet. We had an estimated 400 - 500 people visit the observatory. Thanks again to those members who helped make it such a success.

The observatory grounds were used by Unique Events, for a firework display at the end of the pre-hogmanay torchlit procession.

City of Edinburgh Council Business

In January, at a meeting with the City of Edinburgh Council, the Recreation department agreed to help with maintenance and upkeep of the observatory buildings and grounds. Dorothy Marsh was the CEC appointed manager for the observatory.

We received the draft of new terms of lease for the City Observatory, but this was returned to CEC Property Services as being unacceptable - particularly as the Society would have been responsible for insuring the observatory. A revised lease is awaited.

East of Scotland Water gave a written apology and a £900 refund to compensate for their inept handling of our water rates account. A water meter is to be installed and the City Council will look at the possibility of taking over the water rates. The Society will still be liable for the "ordinary" rates.

In April, new alarm systems were installed in the Playfair Building and the City Dome. Each key holder has a separate PIN number for the alarm.

The Conservation plan for the Calton Hill is available on line on the City Council's website (a link to it is in the 'links' page of our site).

The Society has only two paintings in its possession by our benefactor John Henry Lorimer but for some time these have been in storage in the City Arts Centre due to the continuing dry rot problem in the main building at the observatory. It is hoped that they may be loaned to the National Trust for Scotland for display in Kellie Castle (for many years the Lorimers' family home). If agreed it is likely that the loan will be for a period of 6 to 10 years. Ray Fenoulhet, treasurer of the ASE Trustees, is liaising with NTS on this matter.

The Astronomical Society of Edinburgh Trustees

A former Vice-President of the Society, Mr John Henry Lorimer RSA left a substantial bequest to the Society when he died in 1936. This bequest has been assigned to "The Astronomical Society of Edinburgh Trustees" and is managed by them under conditions set forth in a Deed of Trust granted in favour of Rev Dr James Patrick DD BSc and others, dated 10th December 1937.

The following are the trustees in terms of that deed:

Mr Raymond Fenoulhet (Secretary and Treasurer)

Dr John Rostron

Dr David Gavine FRAS

Dr John Hunter

All of the above trustees are members of the Society.

In April, the Trustees requested a meeting with the Council of the Society, to discuss the future role of the Trust.

The affairs of the Trust had been in a disorganised state for some time, due to the illness and subsequent death of the Trust Treasurer, David Todd. The Council of the Society became concerned that the Trust was not meeting the legal requirements as laid down by Charity Law, by failing to hold regular meetings, and not producing annual, independently examined accounts. Since the death of David Todd, Ray Fenoulhet has begun looking after the Trust Fund and has brought all the accounts up to date. The meeting agreed that the Trust should continue to operate but stressed the importance of keeping within the relevant laws and regulations regarding Charities.

Financial Report

The Society continues to have reasonable funds at its disposal, although there has again been an overall decrease in funds over the last year. Relative to the year ending 31 December 2000, the annual income has dropped by some £1200 (approximately 20%). On the expenditure side, the Society's annual outgoings have increased by £844 (approximately 14%). Overall, in the year to 31 December 2001, the Society's expenditure exceeded its income by some £2300, compared with a figure of around £300 for the previous 12 months. It must be stressed however, that the ASE's financial situation is not as bleak as these bare figures might suggest.

The largest single item of expenditure this year was for the Coronado 'NearStar' solar telescope, which was finally delivered in December. Once the instrument is suitably mounted, it will be available for solar observing at Calton Hill in the forthcoming sunny months. The next highest expenses were for the non-domestic rates, the electricity supply to the Observatory, insurance, costs associated with meetings, telephone, society subscriptions etc. Although still rather high, our electricity consumption has dropped by 50% compared with the previous year, principally through discontinuing the use of the de-humidifiers in the Playfair Building. Gas consumption has also been minimal in the last year, due to the inoperation of the gas fire in the Library (this fault has now been rectified ... thanks Ray!). The upshot of ASE's dispute with East of Scotland Water during 2000 is that no water charges have been levied this year; this state of affairs will continue until a water meter has been installed and it is to be hoped that from that point onwards, the City of Edinburgh Council's Department of Arts & Recreation will assume responsibility for this service.

Subscription income has decreased by around 13% compared with last year, however some monies continue to be received in response to the reminders sent out in December. The question of raising the annual Subscription Rate was discussed in the previous year's financial report, although no increase was effected. However as from October 2001, the ASE Council agreed to increase the subscription rate to £15 with a £7 concessionary rate. It was felt that this level of increase was reasonable, given that the Society continues to incur significant annual running costs and that any increase in subscription had been deferred for a number of years. The Society continues to issue FAS Astrocalendars to members when subscriptions are renewed.

Income from users of the Observatory was zero this year, not because the Observatory was not used but because the Society has not yet received any donations from the groups involved. The ASE Council remains optimistic that the Society will receive the donations promised by these groups. The Society's Council will continue to seek donations from users of the site to meet the rates and other charges related to the Observatory.

This year also saw discussions take place between the ASE Council and the ASE Trustees as to the future management of the Trust Fund. Specifically, it had been suggested that the Trust Fund should be absorbed by the ASE and that the responsibility for its future investment be transferred to the ASE Council. The reasons for this suggestion were twofold: firstly to restructure the management of the Trust in order to facilitate a possible future transition of the Society to 'Limited Company' status and secondly to ensure a more 'hands on' management of the investment portfolio so that the Society maximised its investment return. The outcome of this debate was that the Trust should remain 'as is', but with the appointment of some 'new blood' to the Board of Trustees. However, the Society can continue to claim funds from the Trust's income whenever deemed necessary. This year was a case in point and the ASE Treasurer gratefully acknowledges the receipt of almost £2600 from the Trustees, which more than covered the Society's investment in the solar telescope.

The Society continues to incur some expenditure related to the renovation of the 'Lewis 12 inch Newtonian' and the Cox 13 inch reflector. Once again, the generosity of members in giving up their time to undertake work has meant that we have not had to meet labour charges as well.

We acknowledge with thanks the continuing support from the City of Edinburgh Council, although the Society no longer receives a grant towards the running costs of the Observatory.

Details of the Society's finances can be found in the Statement of Balances and the Receipts and Payments Account included in this Report.

Note to the Statement of Balances and the Receipts and Payments Account for the Year to 31 December 2001

General Notes

The form of presentation conforms to the requirements of the Charities Accounts (Scotland) Regulations 1992.

The following statements are required to be made:

i. Nature and Purpose of each of the Major Funds

Current Account : Bank of Scotland Treasurer's Account

Society Investment Account : Bank of Scotland Business Investment Account

ii. Remuneration and Expenses of Trustees

(in the Society's case this refers to members of the Council)

Aggregate re-imburement of expenses to Council Members: £1294.03

These expenses cover costs incurred by Council Members on Society business which are later re-imbursed.

It should be noted that the split of expenditure under the headings of Society and Observatory is an historical decision which was made a number of years ago to attempt to show an estimate of the costs falling on the Society through its occupation of the City Observatory. The proportions of items which are split between the categories are identified in the specific notes below.

Specific Notes

(Numbers refer to items on the Receipts and Payments Account)

1. Comments relating to the Trustees can be found in the preceding Financial Report.
2. This item includes the cost of tea and biscuits following meetings.
3. The Society continues its policy of offering to take the speaker for a meal before the monthly meetings - a tradition very much appreciated by our speakers.
4. Cost of refreshments provided by the ASE for the BAA's Aurora Section meeting in September 2001.
5. Including display boards for the Observatory and 'Quicken' accounting software.
6. Repair and servicing of the gas fire in the Library.
7. Includes the Coronado 'NearStar' solar telescope and an initial payment for a Dobsonian mount for the Lewis 12 inch Newtonian.
8. Sundry expenses related to the Lewis 12 inch Newtonian refurbishment project.
9. See discussion in Financial Report.
10. See discussion in Financial Report.
11. Includes outstanding payment for previous year's non-domestic rates.
12. Includes items such as gardening and cleaning equipment, replacement light bulbs etc.

Statement of Balances for the Year Ended 31 December 2001

Bank Balance		£
At 31 December 2000		
Current Account		1,764.69
Business Investment Account		<u>17,325.04</u>
		19,089.73
Less Liabilities for 2000		00.00
Plus Receipts for 2001		4,729.03
Less Payments for 2001		<u>7,049.63</u>
		16,769.13
At 31 December 2001		
Current Account		722.85
Business Investment Account		<u>16,108.74</u>
		16,831.59

Transactions Outstanding at 31/12/2001

Unpresented Cheques	Cheque No 011677	99.46
Uncleared Deposits	Members Subscriptions	37.00
Net Total Liabilities		<u>62.46</u>

Receipts and Payments Account for the Year Ended 31 December 2001

Receipts	Notes	£
Membership subscriptions		1214.50
Grants (see note 1):		
City of Edinburgh Council		0.00
Astronomical Society of Edinburgh Trustees	1	<u>2591.18</u> 2591.18
Investment Income:		
Interest on Current Account		28.55
Interest on Business Investment Account		<u>283.70</u> 312.25
Other Income:		
Donations		325.00
Income tax rebate ('Gift Aid')		124.10
Sale of badges		1.00
Sale of raffle tickets		161.00
TOTAL RECEIPTS		<u>4729.03</u>

Payments	Notes	£
<u>Society Expenditure:</u>		
Lectures & meetings	2	91.63
Hospitality	3	254.43
Costs of meetings hosted by ASE	4	22.32
Audio-Visual		120.26
Cheese & wine-BBQ		212.95
Printing & duplicating		132.20
Insurance		352.03
Gift to external examiner		25.00
Office equipment	5	180.58
Equipment (not office)		26.91
Lorimer medal		68.15
Postage		90.21
Raffle costs		19.99
Repairs & Maintenance	6	102.23
Secretary's expenses		11.10
Society subscriptions		142.40
Telephone		271.36
Telescope purchases	7	2309.95
Telescope refurbishment costs	8	16.74
Travel		9.60
Total Society Expenditure		<u>4460.04</u>
<u>Observatory Expenditure:</u>		
Cleaning		4.39
Electricity	9	617.98
Gas	10	2.03
Keys & security		5.25
Rates	11	1499.83
Repairs & maintenance	12	87.77
Total Observatory Expenditure		<u>2217.25</u>
<u>Shared Expenditure:</u>		
Cost of journals		57.45
FAS astrocalendars		191.00
Library		123.19
Treasurer's expenses		0.70
Total Shared Expenditure		<u>372.34</u>
TOTAL PAYMENTS		<u>7049.63</u>
OVERALL TOTAL		<u>-2320.60</u>

This report was approved at a meeting of the Council of the Astronomical Society of Edinburgh held at the City Observatory on 25th January 2002.

Lorna McCalman
(President)

For and on behalf of the Council of the Astronomical Society of Edinburgh

The Astronomical Society of Edinburgh

REPORT OF THE INDEPENDENT EXAMINER
to the members of the ASTRONOMICAL SOCIETY OF
EDINBURGH

I have examined the accounts of the Astronomical Society of Edinburgh, and according to the best of my knowledge and belief in accordance with the information and explanations given to me, confirm that they have been properly prepared from the records of the Astronomical Society of Edinburgh and are in agreement therewith and comply with The Charities Accounts (Scotland) Regulations 1992.

David Thomson
10/2/2002

The Astronomical Society of Edinburgh
City Observatory, Calton Hill, Edinburgh

Telephone: 0131 556 4365

**Please address correspondence to the Secretary at
105/19 Causewayside, Edinburgh EH9 1QG**

**A Large Print version of this
Report may be obtained from the
Secretary on request.**

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