

Chairwoman's report 2006

As requested at the AGM last year, the Chairwoman's report is to be sent to all members before the AGM in April this year. Probably a very good thing as it's longer than ever - but then we do a lot of things.

This year we have had a Science Festival, hosted the Scottish Astronomers Group Weekend, listened to many interesting talks, had some excellent observing sessions and have become a Charity after travelling a long and winding road.

Perhaps our most difficult assignment this year has been the decision concerning the new observatory. We had originally proposed a fully equipped professional level observatory, requiring funding of about £100,000 which would have necessitated the Society to become a Limited Company. The process of looking into this was quite a minefield and I would like to thank Maarten de Vries, Andy Ferguson and Don Toonen for their help and advice.

However, after consultation with members and listening to their concerns, and after a Committee meeting where the new observatory was discussed in detail, all options considered, and running costs looked at, it was felt that we had to go for an observatory that was more manageable both in terms of costs and commitment. We realised that we did not therefore need to become a Limited Company but still required Charitable Status for which the Constitution had to be updated. In fact the Constitution had to be virtually re-written following guidelines given to us by the Scottish Council for Voluntary Organisations. Once drafted, it was put to you at an Extraordinary General meeting in September where some articles were debated and altered accordingly. It was then sent directly to the HMRC Charities (Her Majesty's Revenue & Customs) in Edinburgh.

A couple of months and a few bitten fingernails later, we were told that Charitable Status would be granted. However, final confirmation plus charity number didn't actually appear until mid March! I would like to thank my Committee for their help with the Constitution, especially Pat Williams.

Proposed observatory

The observatory itself consists of two parts. The 'dome' is octagonal in shape and resembles what we would perhaps consider a real observatory to look like. The whole structure rotates like our present observatory and also has an opening in the roof. The second part is a slightly bigger building, which will house the computer, store our equipment and provide shelter during the cold evenings. It will also have a toilet which we hope will use filtered rainwater, and by bringing in drinking water, we will therefore not need to pay for a water supply but this is subject to a little more research. Electricity, in the most part, will be provided by solar power with a back up generator when necessary. One of the most important considerations was the ongoing costs and this observatory with its 'eco' features makes it affordable to run.

Finalising the details and drawing up the designs has proved a long process. This is because both Maarten and Rob Nuttall are very busy working people and their time has been extremely limited. I would like to thank Maarten and Rob for the time they have spent on the observatory and Rob for drawing up the plans. Thanks also to Andy for all the work he put into the observatory before he stepped down from the Observatory Sub-Committee.

Present observatory

Arthur Milnes and Bill Jappy continue to look after our current observatory. To ensure an adequate electricity supply, two more solar panels were added last year and we are now completely self-sufficient. Another coat of paint was given to the outside of one of the panels, which looked particularly weather beaten.

Arthur has also carried out some maintenance of the Society telescope and Rob has sorted out some of the backlash as well as collimating and aligning the telescope thus keeping it in tip top condition over the observing season. Many thanks to Arthur and Bill, (the present observatory Sub-Committee), David Hughes and Rob.

Observing sessions

Last year we decided to make more use of the observatory over the spring and autumn months. Although it doesn't get dark enough to look at deep sky objects, it's still possible to get good views of the Moon, planets and brighter stars. The evenings were a little warmer and many members brought along their own observing equipment. One particularly good evening in spring saw about a dozen members emerge from the woodwork to enjoy the clear skies with the Moon, Jupiter and Saturn visible. The session was rounded off with some satellite spotting which included an Iridium flare and we also watched the International Space Station pass low in the southwest.

Thanks to the observing team of Maarten, Rob, Trina Shaddick, Antony McEwan, Alan Mumford, Bill, David, Tom Hunt and recent recruits of Les Gamble and Eric Walker. David has now taken over the organisation of the observing sessions and although I'm still part of the team, it leaves me with a little more time to do things like this AGM report.

Child Protection

Having looked further into the Child Protection issue and talked with the relevant people, it seems the members of the Committee have to fill in disclosure forms so that we can continue to have unaccompanied children under the age of 18. This is required by the Protection of Children (Scotland) Act 2003, the last part of which came into force on the 11th April 2005. We now have a form to send home to parents of unaccompanied children and a separate sign-in sheet for parents or guardians of unaccompanied children.

Stargazey Pie

Many of you have commented on the newsletter and its welcome appearance when you've been unable to attend a meeting. Antony is still going strong after two years and I would like to thank him for all the hard work he puts into writing them.

Notices

Simon Urry suggested printing out the notices to negate the need for having to decipher your hastily scribbled notes about something you wished to follow up. These now appear on the back of the Skymap.

Website

Our website is still proving popular and not just with members. A couple of Universities have set up links to certain articles on our website and the number of 'hits' per day is still increasing. We now have a new and improved message board as the previous one wasn't quite so friendly, there is a 'for sale' section and the Gallery is displaying your wonderful photographs. Thanks to all of you who take the time to use the website, interact with the message board and provide

the great photos. Thanks to Maarten, Antony and Eric (Media Sub-Committee) for maintaining the website and also to Andy for the work he put into it during the spring and summer last year.

Courier Articles

We have had a change in the authors. Maarten continues to write the articles but Andy has now 'retired' so Antony and myself have volunteered. Thank you to all contributors both past and present.

Breakout groups

To add further interest to the evenings, it was decided to introduce breakout sessions after the main talk. They usually consist of an equipment, a beginner's and a discussion group which, when possible, includes the speaker to augment the lively discussion that takes place. Thanks to Maarten, Arthur and Pat for leading the equipment and discussion groups.

Tea

Many thanks to the tea team of Linda Moncur, Rita Cameron, Jean Millwood, Rhona Fraser and Margie Macintosh, who provide the tea, coffee and biscuits most efficiently at the end of the main talk. It is simply wonderful to be brought a cup of tea and I feel very privileged to be given this special service. I have noticed that others often give a hand in helping with the tea - Fred Millwood, Don Toonen and Barbara Kennedy to name a few - thanks to you too.

It's nice when members bring various items to show other members during the tea break; this includes Jeremy Rundle who has brought in eyepieces and magazines, and Allan Thorne who has turned up with a telescope as well as a few other items. Thanks guys.

Green House

I would like to thank Enterprise Northeast Trust for allowing us to use the Green House with its superb facilities. Although the price is now £60 a month, it is still worth every penny. Thanks too, to Fiona who sits at reception until 9pm looking out for any lost souls who may appear after the meeting has started and providing us with hot water, and also to the Security Guard for checking none of us have got lost in the building, searching for lost keys and other items, and locking up after we leave which is often after 10pm and he hasn't complained yet...

Christine Clifford continues to sit at the door, signing you in and giving out any necessary information. I would like to thank her very much for doing this.

Thanks also, to Pat Williams and Pat Escott, who are also on door duty, looking after new visitors, taking your money and selling various items. Always available are mugs, garments embroidered with our logo and pens, just ask Pat Escott.

Committee

The Committee continues to work very hard making the Club run as smoothly as possible. They give up their time willingly and still continue to come up with ideas and suggestions. I know I couldn't do without them. The original Committee consisted of Pat Williams, Secretary; Pat Escott, Treasurer; Maarten de Vries, Arthur Milnes, Andy Ferguson, Simon Urry and our Junior Committee Member of Colin Donaldson. Andy stepped down half way through the year and Eric Walker is now part of the present Committee. Colin will be stepping down this year, as he will be off to University in the autumn to study Astronomy and physics at Glasgow University. We would like to wish him well and thank him for his contributions over the last few years as a Junior Committee Member.

So, what have we done over the past year?

April is always the month of the AGM. Subscriptions rose for the first time in a number of years, mostly due to the rental increase of the Green House but also so we could continue having a number of outside speakers, who have proved very popular.

The Constitution was changed slightly this month although it wasn't realised at the time it would have to be done later in the year.

Unfortunately our joint observing session with SIGMA was a wash out. So much for thinking April would have better weather than March!

Our speaker in **May** was Dr. Martin Hendry from Glasgow University. He told us how astronomers measure distance in space, the methods changing as we move ever further away from the Earth.

This was also the month we started our breakout groups.

Howie Firth gave us a talk in **June** about Copernicus, Kepler and Galileo, and their important contributions to planetary motion.

Our Society was the first to feature in a new publication called the Sky at Night whose inaugural issue was in June.

The ever-popular equipment night was held in **July** and once again the auditorium was filled with fine telescopes of all varieties as well as various other equipment used for observing. Maarten gave some of us a short talk on how to set up a telescope.

In **August** two of our intrepid members gave a short presentation each.

John Rosenfield spoke about Phobos and Deimos, the two moons of Mars.

Eric Walker showed us a series of photographs, which included some beautiful atmospheric phenomena as well as various objects in space.

Simon Urry and his wife Tracey kindly hosted our first social event, which consisted of a barbecue and star party. The barbecue was well organised and enjoyed by those members able to attend but unfortunately the star party was clouded out. However, the ever-resourceful Maarten had taken along his laptop and was able to give a preview of our proposed observatory and demonstrate some astronomical software.

It was also cloudy for the arranged observing night to view the Perseids.

Because our **September** speaker had to cancel, we watched a DVD about the Apollo 16 Moon landing instead which explained how the Astronauts filled their time with the numerous experiments they undertook during the ten days of their mission. Thanks to Andy for allowing us to borrow his DVD.

An Extraordinary General Meeting was called this month to go over the updated Constitution. After the alterations were made it was sent to the Inland Revenue.

We hosted the Scottish Astronomers Group Weekend from the 23rd to 25th September at the Thistle Hotel. 34 people attended from all over Scotland at different times during the weekend to listen to a number of varied and interesting speakers arranged by Dave Gavine from Edinburgh, and included three from HAS.

A visit to our observatory took place on the Saturday afternoon to anyone interested and this proved very popular. Unfortunately, the Sun, which had been shining brightly all morning, decided to disappear behind cloud and spoiled the chance to view our local star with Andy's Coronado Personal Solar Telescope, his refractor plus Herschel wedge to filter the Sun's light and my ETX 125 with its solar filter.

The Scottish Astronomers Group Committee have praised Pat Williams and HAS for what they have said was an excellent weekend. I know how much work Pat put into the organisation of this weekend and it's a tribute to her that it went so well. I would also like to thank everyone who helped at the weekend, Maarten for the equipment; Linda Moncur, Angela MacDonald and Joan Thomson for arranging lifts, doing the raffle and various other things; Andy for taking his telescopes to Culloden, Maarten and Eric who also gave talks and all those who came along to support the event. Lastly I must extend my thanks to Dave Gavine for his help, advice and sorting out the speakers.

Our **October** speaker was Alan Pickup, a retired Astronomer with a particular interest in observing satellites and this was indeed the subject of his talk. We learnt about the different types of satellites and how to predict their positions. Interestingly, it can be easier to gather data on 'secret' satellites than on non-secret ones.

Also this month (3rd October) was a partial eclipse of the Sun. A few determined observers gathered up at Culloden battlefield armed with properly filtered telescopes hoping to see the partial eclipse and to show other members as they popped by from time to time. The weather initially cooperated, allowing reasonable views of the Sun as it peeped out from behind scudding clouds but just as we reached maximum eclipse with roughly half the Sun covered, the clouds rolled in. Maarten's chosen holiday destination in Angus had clear blue skies with an unimpeded view of the Sun...

It was Maarten who gave us a talk in **November**. His topic was globular clusters - magnificent and enormous balls of stars. He spoke about their probable evolution and demise, and what it might be like living on a planet inside one of these 'star cities'.

John Burns, the owner of Strathspey Binoculars, brought along a number of binoculars for us to examine. He explained how they work and then went on to extol the virtues of those he had brought with him. After the meeting, he joined us at the observatory with a couple of large binoculars to let us view the sky. I would like to thank John for showing us his binoculars and for letting us try them out. Also thanks to Fred Millwood who introduced us to him.

A Science Festival was held at Horizon Scotland in Forres this month. It was organised by a newly formed company called Going Nova, run by Maarten, Howie Firth and Bill Graham.

There were three days of events. Thursday was for the business community, Friday for the local secondary schools and Saturday for the general public. There were also two talks held on each of the Thursday and Friday evenings and these were well attended.

On the Friday and Saturday, numerous activities had been arranged, including two sessions each day with the Faulkes Telescope. This involved the operation of a remote telescope in Hawaii via computer control in Horizon Scotland. Bill Leslie from SIGMA led a team of helpers to choose a number of deep sky objects, move the Faulkes Telescope to each one before photographing it. These images then had to be processed using specialised software and the results produced were superb.

There were also a number of talks on the Saturday and the speakers were from HAS (Maarten, Eric and myself), SIGMA (Ian Brantingham) and the Royal Observatory of Edinburgh (Matt Hollister).

Both HAS members and SIGMA members helped at this event on both the Friday and the Saturday and contributed to its success. I would like to thank HAS members: Arthur and Lorna Milnes, Les Gamble, David Hughes, Pat Williams, Pat Escott, Linda Moncur, Fred Millwood and Arthur Fraser. I would also like to thank SIGMA for the part they played in this and the Faulkes Telescope Team of: Rob, Eric and myself from HAS; Bill Leslie and Alan Tough from SIGMA and Matt Hollister from the Royal Observatory of Edinburgh. Eric, Bill and Alan spent a long time processing the images and many can be seen on our Gallery with the rest on Bill Leslie's own website. Thank you also to all the members who came along and supported this event and to Going Nova for organising such a fun time.

Some images have since appeared in Astronomy Now magazine on the Faulkes Telescope image page and there was a write up about this part of the event in the Sky at Night magazine.

Sadly Donald Iliffe died on the 17th November aged 83. He was one of the eight people at the inaugural meeting of the Astronomy Club, which took place at Jim Savage-Lowden's house in 1993. You may remember Donald when he cut the cake at our 10th Birthday Celebration and he has also given us a few talks.

Our **December** speaker was Gordon Gallacher, one of our own members, who gave a talk on the interstellar medium - the material that fills the space between the stars. He explained what it is and described some of the movements of this material through the plane of our galaxy.

Then we had the quiz (which Arthur had originally prepared for the last AGM...) and raffle. Congratulations to Les Gamble and John Gilmour for winning the quiz, other lucky members received mini mars bars. Many thanks to those who brought in some Christmas fare, to Tom Hunt for the huge tin of Quality Street, to Arthur for the quiz and everyone who brought in raffle prizes.

In **January**, Arthur gave us some amazing facts and figures about our universe: the number of stars it contains, the speed of our galaxy, the amount of DNA within our bodies and finally how long it would take to arrange 15 books in all possible permutations.

I gave the talk in **February** on the Cassini-Huygens mission to Saturn and Titan. The images returned from the mission are stunning and the discoveries made so far, quite astonishing. Titan appears particularly Earth-like but with methane instead of water, and some of the other moons are proving just as interesting.

On the 24th February, Mercury was at its greatest separation from the Sun, so a number of members and non-members went up to Culloden Battlefield car park in the early evening to hunt for this elusive planet. The skies were clear in the southwest and after a lot of searching it was eventually spotted. Thanks to everyone who turned up and brought telescopes, and particularly Antony and David who organised the event.

Maarten and Howie Firth spent a day at Eilean Donan Castle to take part in the making of a DVD to showcase Scottish scientific and cultural groups as part of promoting Highland Year of Culture 2007. Maarten took the HAS Dobsonian telescope with him and managed to promote our Society when he was interviewed. The DVD will be launched at the Tartan Day celebrations in New York, 6th April, and will then go all over the world. We are about to become famous.

March gave us our last speaker of the year, Dr. Jane Greaves from St. Andrew's University, who spoke to us about extra solar planets. She explained how planets are formed, told us about the extra solar planets discovered so far, including the smallest yet, which was found by the St. Andrew's team; the methods used to find them and the most likely places where they might be.

Maarten held an astronomy course in Cromarty which took place over four Thursday evenings, starting on Thursday 16th February. It was hoped that observation sessions would follow each lesson but unfortunately all were clouded out. Even the Faulkes Telescope session on the 11th March had bad weather and couldn't go ahead. Thanks to Antony for helping Maarten at the observing sessions even if there wasn't much for him to do.

Later in the month the British Association of Highlands and Moray, of which Maarten is a Committee member, organised three lunchtime talks for Science Week at Horizon Scotland. On the Wednesday, I showed a series of photographs taken by various members of the Society over the autumn and winter months. Thank you Maarten for helping me with the technical detail. Bill Leslie from SIGMA showed images taken through his Personal Solar Telescope and explained what it was we were looking at.

Thank you to all our speakers this year for another series of excellent talks. Thanks also to Pat Williams who has played hostess to a number of our guest speakers.

That concludes the report for the year of 2005 - 2006 and I hope I have included everyone who has contributed in some way to the Society over the past year. It just leaves me to thank all of you, the members, for your continued support and help. It is you who make this Society what it is.