

# Stargazey Pie!

*A slice of Highlands astronomical life!*

Tues 1<sup>st</sup> Feb 2011

## INTRODUCTION

February's meeting at Smithton Culloden had one major advantage over January's – it was warm in the hall! This was thanks to it being full of exercising ladies before we arrived. Sadly there were no exercising ladies during the meeting but we did get to hear a fascinating talk on 'Animals in Space' by relatively new member Michael Marett-Crosby. There was a big turnout and lots of news, as well as the customary tea and biscuits...

- **HAS Secretary Roles.** Rolls where? Downhill? Happily not, as we can now happily announce that Pat Williams has adopted the new role of Membership Secretary (fighting off dozens of other applicants to do so). In addition, James McTaggart and Michael Marett-Crosby will act jointly as Programme Secretary(s?) and Pat Escott will co-ordinate external events. We are grateful to all four of them for taking on these important roles without even the lure of million-pound bonuses to entice them.
- **Venue.** Notice that the words Venue and Venus have only one letter different? Well don't worry, we're not relocating to Venus (though it would be warm there every month). It is, however, probable that the March meeting will held at our previous venue – the Smithton-Culloden Free Church! Their enlargement works are proceeding well and the Committee will visit the site in February to evaluate whether they are ready for us to return to the fold. Look to the website for final confirmation (no pun intended) of March's venue.
- **Night-time Observing Sessions: JSL Observatory** – sessions open at 8.00pm with last admission at 10.00pm. Finish time is around 11.00pm. Please check the website for the most up to date information.

Fri	4 <sup>th</sup>	Feb	-	public & members	supervisor: Gerry
Sat	5 <sup>th</sup>	Feb	-	members & guests only	supervisor: Paul
Fri	25 <sup>th</sup>	Feb	-	public & members	supervisor: Rhona
Sat	26 <sup>th</sup>	Feb	-	members & guests only	supervisor: Rhona

- **Last Meeting** was attended by 43 people, comprising 39 members, 2 visitors and 4 Youngstars.
- **HAS Seeing Stars article** – The next of these pieces was published in Friday 4<sup>th</sup>'s edition of The Inverness Courier and will be uploaded to our website shortly thereafter. It's by Pauline Macrae and started out being called "Signposts in The Sky", but they do have a habit of changing the titles. Also please note that the Seeing Stars article is shorter this month and will be in the future too, due to a reorganisation of the way it is presented in the pages of the Courier.
- **Astronomical Events & Highlights** – an easy to read and use guide is provided by Manchester University and can be found at [www.jodrellbank.manchester.ac.uk/astronomy/nightsky/](http://www.jodrellbank.manchester.ac.uk/astronomy/nightsky/).
- **BBC2 Stargazing Live.** We have had a thank-you from the BBC for participating in this event.

- **Joint Meeting.** We are invited to attend a joint meeting with SIGMA on Sat 2<sup>nd</sup> April from 19:00 – 21:00 in the Nairn Community Centre. The talk is “Black Holes – No Need to be Afraid” by Ian Morrison from Jodrell Bank. No entrance fee is expected but donations will be gratefully received.

### **Other Important Updates**

Arthur has asked that we all remember to sign in and out of the meetings. Failure to do so contributes much chaos to the proceedings and may actually result in the world spinning off its axis, which we would like to avoid if at all possible.

He also reminded us that in the last bout of “thank-you”s at the last meeting some people were missed out and so thanks were expressed to all the people who were involved in the organisation and running of the observing sessions during the Open Day weekend in January. Much appreciated folks!

Maarten de Vries was then awarded his Silver and Gold Messier checklist certificates! Yes, he has been busy and has only the Platinum sheet left to complete before achieving total success! As far as I can tell all his observations have been made with a 102mm achromatic refractor too, proving once again that it’s not what you’ve got but how you use it that’s important.

Gerry Gaiten’s Observatory Report was brief and uplifting. “Everything’s fine” he said, and certainly everything seemed to be working fine for the recent observing sessions. He mentioned that plans are afoot to get the video astronomy cameras up and running on a regular basis, allowing viewers in the Observing Station to view remotely what the telescope is pointing at.

## ***The Main Event***

### ***‘Animals in Space’ by Michael Marett-Crosby***

Michael Marett-Crosby is a fairly recent recruit to HAS, having been caught hook, line and sinker by a view of Saturn through the Society’s large telescope one night at the observatory. After such an event resistance is usually futile and he allowed us to assimilate him. Michael has a doctorate from Oxford, is a published writer and reports that he is able to “make a living at it”. A bit like J.K. Rowling, perhaps? He divides his time between Jersey and the Highlands.

The subject of animals in space goes right back to the first days of the Space Race. It is now fifty years since Ham, the American Rhesus monkey, made history by becoming the first primate in space. Many other animals, often of surprising types, have earned their astronaut wings over the decades since, including fruit flies, honey-bees, crickets, snails, fish, spiders, tardigrades and several dogs. Oh, and one cat too. The French did that.

As we (humans) have progressed with space exploration, it has often been the animals that have prepared the way for us. For example, what were the first living beings from planet Earth to orbit the Moon? A pair of tortoises in 1968.

As to “why” we have sent animals out into space ahead of us, there are different answers. When the USSR launched Laika into space to orbit the Earth in 1957, it was because they wanted a “repeat triumph” after their memorable success with the first man-made satellite, Sputnik. Laika’s trip succeeded in this but at the cost of her life, as she died within hours of take-off due to a failure in her life-support system. The Russian propaganda released at the time stated that she only died

after all her oxygen had been used up and even that they had euthenised her prior to that. Laika's sacrifice did prove that it was possible for living creatures to endure spaceflight and weightlessness, thus paving the way for manned spaceflight.

Some animal launches have been attempts to answer specific questions. Can spiders spin their webs in zero gravity? Apparently they can and are more likely to do so if they are fed steak! Fine, let's send them all up there and be done with them then. How do honey-bees cope with weightlessness? They actually adapt and learn and are soon able to produce honeycomb in their new and strange habitat.

As to why the French sent a cat, Felicette, into space, it seems no-one knows, although it's interesting to note that it's never been repeated.

All these creatures endured their trips inside the vehicle carrying them, until being returned to Earth (alive, if lucky). One species has actually been exposed to the vacuum of space during its extraterrestrial journey, and it suffered no harm! Tardigrades are about 1.5mm long and live on lichens. A number of them were launched in a special chamber that opened out onto space once orbit was achieved. The tardigrades were then exposed to vacuum and cosmic rays, with no ill effects being recorded. It remains to be seen, however, if they went on to develop special powers and will now take over the world.

We would like to thank Michael for his interesting talk on an often-ignored subject. We were left to wonder if animals will continue to precede us as we explore further into space, and will they accompany us as we embark on journeys to other planets? Most importantly, one day will there really be "Pigs in Space"?

### ***Next Time***

The next meeting may well be at the Smithton-Culloden Free Church, but please check the website before then to be sure. It will take place on Tues 1<sup>st</sup> March at 19:30 with the Youngstars (for 8-14 year-olds) meeting at 19:00 as usual. The subject of the next talk is "Space Camps USA" by Nick Forward.

Until then, keep watching the skies!

**Antony McEwan**