

Written In The Stars

With the winter months providing a clearer outlook, there is no better time to look to the skies. Made spoke to Mansfield & Sutton Astronomical Society about their passion for astronomy and the Observatory at Sherwood that provides their window into the night sky.



A photo of the Moon, taken earlier this year by Ricard Field with a 600mm Minolta AF APO f4 lens, Sony full frame camera for 1/600th second.

The night sky provides us with a dazzling display giving us the opportunity to see myriad planets, stars and galaxies. Luckily, there are groups and organisations here in north Notts to help get you started.

One of these groups is the Mansfield and Sutton Astronomical Society. Its base is the Sherwood Observatory, home to its telescope and club building. One of the largest in private hands in the country, the telescope was built from scratch by members over a number of years and completed in 1983.

The society itself was formed in 1970 and is home to more than 100 members who meet up weekly at the observatory. Richard Field is one such member. Currently the group's secretary, he joined in 2014 and has been attending meetings ever since.

As a retired physics and cosmology teacher interested in astronomy from the age of seven, I wanted to find an observatory and get involved in astronomy outreach. With Mansfield and Sutton Astronomical Society being local, they were the obvious group to join, and have the best facilities in Nottinghamshire.

"It's also about meeting with like-minded people, the camaraderie and socialising. We obviously chat about

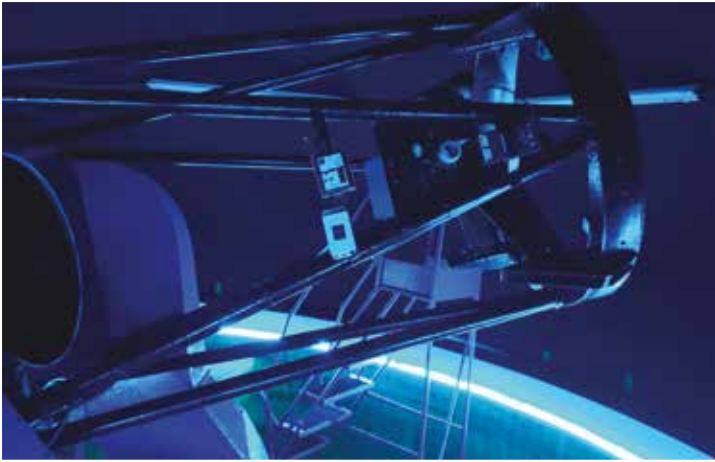
astronomy and we learn from each other. All of this together means its all very involving."

The group's telescope was, essentially built from spare parts. Its all-important mirror came from an old World War II searchlight, and its turning and rotating mechanism was once a lorry axle.

The telescope itself is set up in what is known as a 'Newtonian configuration', with the main 61-cm diameter mirror collecting light from whatever object is being observed. Light is then reflected back to reach an optically flat oval mirror inclined at 45° to the light path. All this combined allows members to see stunning views of the night sky.

The telescope has been in use regularly ever since it was completed and adds a new dimension to what the group can do and see.

"It enables us to see, certainly hundreds of millions of light years away," says Richard. "The telescope is pointed in the direction of the North Star. You can then set it to rotate at the same speed the earth rotates, and it will follow any object it's fixed on."



Top left: The telescope and equipment inside the observatory.
Top right: The Observatory.
This image: The secretary of Mansfield and Sutton Astronomical Society, Richard Field.

The telescope can even accurately follow even fainter objects in deep space, using a computerised tracking system, which takes into account the Earth's rotation to stay on track.

The group does a lot of work with local groups and organisations such as scouts and guides, inviting them to the observatory for various evenings and events. Evening classes also prove very popular and once a month they hold an open evening.

"For members it's very much a social thing," says Richard. We're all trying to build our own observatories, that sort of thing, so we pass round information and things for sale will be passed around – it's very much a club set up."

A number of members are keen photographers and have their own telescopes that enable them to take a whole host of imagers of the night sky. They build up their library of images

through society competitions, regularly highlighted 'photos of the month'.

Members of the society are currently involved in looking at a project that will involve transforming a Victorian water tank that sits next to their existing base. The plan is to cover the water tank, which is around 25 metres in diameter and five metres high, into a planetarium and workshops. "The new planetarium would be a fantastic facility for the East Midlands and a great addition to what we already have here at the observatory," says Richard.

Richard and the rest of the members of the society are continuing to fundraise for the project.

For more information on Mansfield and Sutton Astronomical Society, visit: www.sherwood-observatory.org.uk