

# **A Day of Astronomy: A Joint Event with Perth Observatory (April 2009)**

Some sixty people (RSWA members, their families, interested scientists, and members of the public) attended the Joint RSWA / Perth Observatory Event at Perth Observatory, Bickley on Sunday 19th April 2009. Vic Semeniuk greeted the attendees at the front of the Perth Observatory, introducing them to the Royal Society of Western Australia, and the International Year of Astronomy 2009, and provided them with introduction kits to promote the Society. Representing the Perth Observatory, Andrew Williams and Greg Lowe, astronomers from the Observatory, greeted the excursion attendees at the steps of the Observatory. The excursion commenced with an account of the history of the Perth Observatory.



**Attendees listening to the history of the Perth Observatory as presented by Greg Lowe.**

Inside the Observatory, the attendees examined several displays, including a museum-style room with interesting photographs, paintings and artifacts of interest. Andrew Williams described the Perth Transit Meridian Telescope, and its function as Perth's first timekeeper.

The guided tour then moved to the Perth- Lowell Automated Telescope, which is the main telescope at the Observatory, a 61 cm Cassegrainian Reflector, mounted in a dome high above the ground.



**Queue climbing to the Perth-Lowell Telescope**

Andrew explained the history of the Perth- Lowell Automated Telescope, and its original function as part of the global network of such telescopes at the time it arrived in Perth. He explained how he had designed and built the first digital camera that was to function with the Lowell Telescope. The whole system including dome operation have now been automated by computer, which allows automated programs like the Supernova Search Program to activate when the telescope is not being actively used.



**Andrew explaining the Perth-Lowell Automated Telescope**

The next instrument to be examined was the Astrographic Telescope. Greg Lowe provided an entertaining and animated account of how the dome housing the telescope worked, how the telescope was mobilised, and how in the times before digital cameras and pellicular film, photo-sensitive glass plates were used to obtain images of stars and other apparitions.

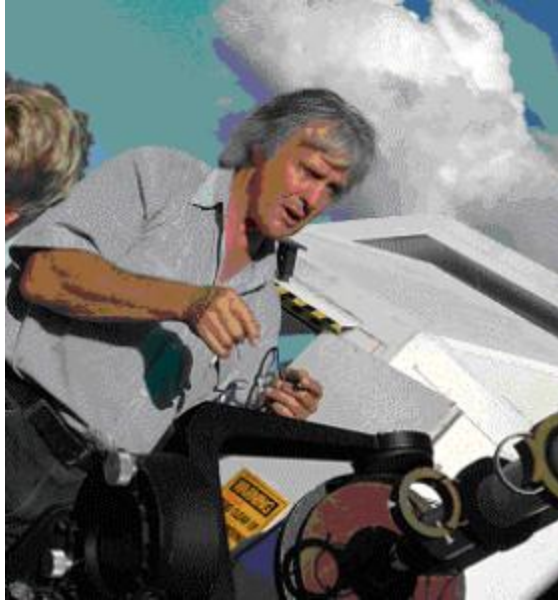


**The Astrographic Telescope**



**Greg Lowe in action explaining the workings of the Astrographic Telescope: inserting a plate.**

The tour then moved to outside viewing to see an image of the Sun projected onto a screen through the Solar Projection Telescope. With such apparatus, sunspots can be observed. For the day's events, the Moon was in the wrong part of the sky, and Venus had just moved out of telescopic view. Greg explained how Venus was visible as a sky object during daytime, and that if the telescope had been trained onto it, it would have been visible as crescent.



**Greg preparing the Solar Projection Telescope**

The day's events were followed by refreshments in the Perth Observatory Administration Building where questions and answers followed. More information on the Perth Observatory can be found in the following link: <http://www.perthobservatory.wa.gov.au/>



**Greg Lowe (PO), Vic Semeniuk (RSWA), Margaret Brocx (RSWA), Andrew Williams (PO)**