Obituary

Alan Winfield Heath (1931–2024)

Teacher, renowned visual observer and former Director of the BAA Saturn Section Dr Alan W. Heath died on 2024 November 26.

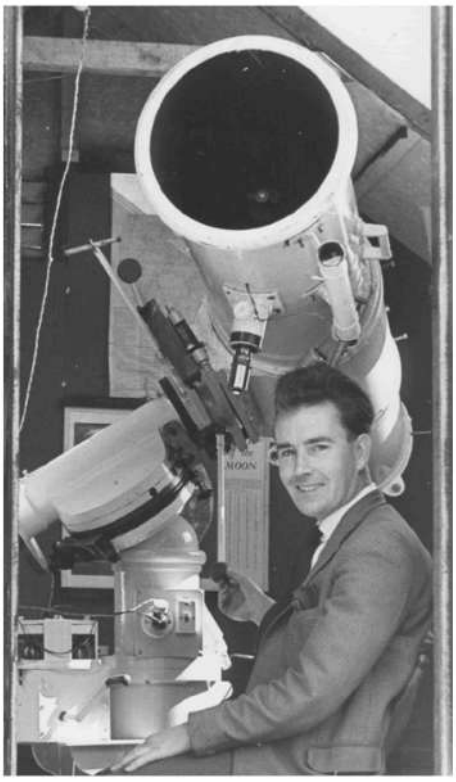
With the passing of Alan Heath last November, the Association has lost a warm-hearted and much respected amateur astronomer. His interest in the subject dated from the 1940s, and he became a member of the BAA as far back as 1953.

Alan was born on 1931 March 25, and he spent his early years living on a barge, the *Alfresco*, moored on the Erewash canal. While at school, at the age of 14, he was appointed weather monitor, a foretaste of things to come. He completed a period of compulsory National Service in the medical section of the RAF before joining his father George's hairdressing business. Although Alan remained loyal to the family firm for many years, it was not his choice of career. When the corner salon was demolished for a council road-widening scheme, Alan took the opportunity to pursue a Bachelor of Education degree in teacher training. In 1974, he became a teacher at Shardlow Primary School, following a profession that he loved, and which he continued until retirement. It was his true vocation. He loved teaching, the interaction with children, and the nearly complete freedom he had to create innovative lessons and activities. He never learned to drive and cycled the ten-mile round trip to work every day, regardless of the weather.

The wartime blackout in Nottingham got Alan interested in the stars. He observed a partial solar eclipse in 1945 July and, by projecting through an opera glass, saw the great sunspot of 1947 April. In 1954, two local friends, David Turner and the late John Brown, built a 6-in reflector from scratch, and Alan shared their enthusiasm for observing with it. (Later employed at Oundle School, John Brown was a teaching colleague of RM's for many years.) Alan soon made his own 8-in reflector on an alt-azimuth stand. In 1952–53, he joined the Nottingham Astronomical Society (of which he would later serve as President), the British Interplanetary Society, and the BAA. Through the first of these organisations, he came into regular contact with veteran planetary observer Bill Fox, then the BAA Jupiter Section Director, and A. W. Lane Hall, both of whom became his mentors. Bill suggested that Alan, living in an urban location with some light pollution, should take up planetary work. So Alan made systematic observations of Jupiter, and by the end of the 1960s had become Bill's Assistant Director. He was also a keen lunar observer and enjoyed searching for previously uncharted domes. For a time, he served as Secretary of the Lunar Section, often receiving telephone calls at all hours of the night from Patrick Moore or another observer, asking him to check out a suspected transitory lunar phenomenon. It was fitting that he later had a chance to shake the hand of James Irwin, a crew member on *Apollo 15*, at Trent College in Nottingham.

The Association lent Alan the 12-in reflector that had famously been used by the Reverend T. E. R. Phillips, and later by F. M. Holborn. He set up a rotating observatory for it in his back garden in Trowell Grove, Long Eaton, and wrote an illustrated paper about the project for the *Journal*. Alan also contributed a chapter to the book *Small Astronomical Observatories*, edited by Patrick Moore. His planetary work was becoming widely known, and in 1964, when the directorship of the Saturn Section fell vacant through the death of M. B. B. Heath (no relation), Alan was the natural choice as his successor. With Saturn's increasing northern declination working in his favour, Alan soon built up the Section's membership, and its contributors energetically followed the ringed planet, particularly during the ring-plane passages in 1966. Alan had keen eyesight and was one of the few people ever to witness a shadow transit of Saturn's moon Rhea visually, as well as seeing Dione and its shadow simultaneously in transit. He had a great talent for encouraging new observers, got his Section reports into print quickly, and although he rarely managed to get to BAA gatherings other than the annual Exhibition Meetings, he was a vigorous correspondent.

During his teacher training, an acute lack of spare time meant that Alan felt obliged to step down from the directorship of the Saturn Section. However, his successor, chosen by Council, was neither energetic nor successful, and the number of contributors diminished significantly. In 1975, now firmly established as a teacher, Alan was asked to resume the role of Director. He willingly agreed, and within a year the backlog of reports had been cleared, and the future of the Section was again secure. In 1976, one of us (RM) wrote to Alan to request to join the Section, and from that moment on, for many years, we would exchange several letters per week. Alan was an excellent mentor. He would constantly praise and encourage, discuss his own work, and sometimes send prints of his current photographs. He held the post until 1993, by which time he had achieved the unique distinction of publishing an unbroken series of reports over an entire Saturnian year. To assist with another crisis, Alan took charge of the BAA Solar Section for a year in 1988.



Alan with the Association's 12-in reflector in his home observatory in 1964.

Alan was a keen advocate of using colour filters. In the early 1960s, their employment for visual astronomy was controversial, but Alan, along with his collaborators (particularly the late J. Hedley Robinson), maintained that they enhanced faint colourations that would otherwise go unrecognised through direct observation in white light. Moreover, drawings of Venus with different colour filters showed variations in the cloud patterns. This variation in appearance would later be confirmed through narrowband CCD images, which revealed a progression in the pattern of markings from the blue-violet to the red end of the spectrum. Alan discussed the story of the colour filter work in a 2017 *Journal* paper.

Alan had three children with his first wife, Margaret, who worked in a photographic studio in town and whom he had married in 1959. Alan was also a keen photographer and set up a darkroom and laboratory in the attic of

the family home. However, in the early 1990s, Alan and Margaret divorced, and in 1997, he married Joan, the widow of his lifelong friend Bill Adcock. As a result, Alan relocated from one suburban home in Long Eaton to another. He passed on his 12-in BAA telescope and started using a 10-in Cave reflector and an 8-in Celestron, placed in a newly constructed observatory. Alan's observatories were each built upon a sturdy metal ring, so that the entire wooden buildings rotated. To the uninitiated they were simply garden sheds, and they always worked very well. Joan's garden plot was a large one, and the only potential drawback was that it was bounded on one side by the flood bank of the local river. The flood bank was generously high, yet Alan kept a careful eye on the river level. From his garden, from 1960 to 2024, he also made regular meteorological observations, particularly of temperature, cloud cover, and rainfall. For some years, he wrote a weather column for a local newspaper.

But Alan was not content with merely observing the world of the very large. Like many astronomers before him (within the BAA, one might think of N. E. Green and A. A. C. Eliot Merlin), he was also fascinated by the world revealed by the microscope. So another aspect of Alan's busy life was his regular work as a naturalist. For 28 years, he served as chairman of Long Eaton Natural History Society, his local wildlife association. His nature work primarily focused on microscopic pond life, which he recorded at Forbes Hole from 1958 to 2020, at Ticknall Lime Yards with Bill Adcock from 1958 until Bill's death in 1990, and at the Attenborough Nature Reserve from 1965 to 1987. He often carried out pond dipping, measured the dissolved oxygen content (always by titration, using Winkler's iodometric method), and identified all the aquatic species using a large microscope. He also took photographs through the microscope, all of which were developed and printed in his home darkroom. His most striking microscopic portraits – and his personal favourites – were of the common water flea, *Daphnia* (see overleaf).

Alan was the epitome of the old adage: 'If you want something doing, give it to a busy person'. He would never turn down the chance to cooperate on a new project, check calculations, make copies of his observations or photos, or take on extra work. He could never be bored. His pond analyses proved valuable in showing how local aquatic populations had varied over the decades. He found time to teach evening classes for the Workers' Education Association and give numerous talks to astronomical societies. His labours did not go unrecognised. Alan won several awards, including the Walter Goodacre Medal from the BAA, the Walter Haas Award from the Association of Lunar and Planetary Observers and the Fred Best Award from the Society for Popular Astronomy. He was also made a Fellow of the British Naturalists' Association. In 2022, he was delighted (and completely surprised) to receive an Honorary Doctor of Science Degree from Nottingham Trent University, and he was able to attend the awards ceremony and give a speech. ▶

From left to right: David Turner, Alan Heath and John Brown with John's 6-in reflector in 1953.

Left: Jupiter in 1965, drawn by Alan.

Right: Saturn's edgewise rings with Titan and its shadow in transit, drawn by Alan in 1966.

▶ Additionally, since 2003, Minor Planet 8110 has carried his name.

By the early 2020s, Alan had typed out his memoirs on his trusty typewriter, as he could never be persuaded to learn to use a computer or the internet, although he often made videos of solar phenomena through a hydrogen-alpha filter. He was keen that the facts of his life be accurately recorded for posterity. One of us (JD) converted his typescript into digital form, and much to the delight and gratitude of his family, it was privately published in 2023 as the book *Memoirs of an Astronomer, Naturalist and Weather Recorder*. RM was honoured to be asked to write the Foreword.

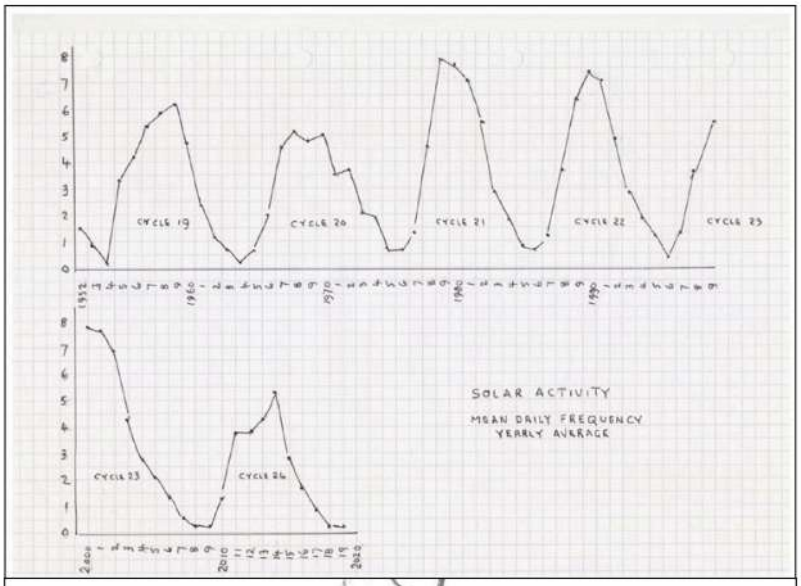
Alan and Joan enjoyed many happy years together. In her final years, Joan suffered from dementia, and Alan was her devoted carer. Towards the end of 2023, after a period of exceptionally heavy rain, the local river burst its banks and flooded first the garden, and then the house. Many local homes were affected, and Joan had to be evacuated by a fire and rescue team. Sadly, she passed away before she could return home. After staying with his daughter Karen for several months, Alan eventually moved back in. Although he had to have the observatory dismantled permanently and find a new home for the 10-in reflector, he was able to resume regular solar observing with the 3-in refractor given to him years ago by Bill Fox. Since the 1950s, he contributed over 12,000 solar observations to the BAA, and he once described this massive legacy in a paper for the *Journal*. His plot of monthly mean daily frequency is certainly impressive.

Alan enjoyed visiting many places, but he particularly liked Guernsey, where he would stay at Castle Cornet. At that time, his uncle was the keeper of the castle, and Alan spent many holidays exploring the island with his family. Many years later, his enthusiasm for solar work took him on more exotic trips, including several total solar eclipse expeditions: to Peru in 1994 and Turkey in 1999.

Alan's last monthly set of solar observations – for 2024 October – was sent off promptly, as had been the case for many years previously, to the Section Director, Lyn Smith. Lyn remarked how Alan had never made any numerical error of any sort over the years. He passed away suddenly, peacefully and completely unexpectedly, on 2024 Nov 26. His last contribution to the BAA *Journal*, about his home observatories, appeared, rather poignantly, in the December issue. His funeral was attended by many of his family (including his children and six grandchildren) and many BAA and other friends.

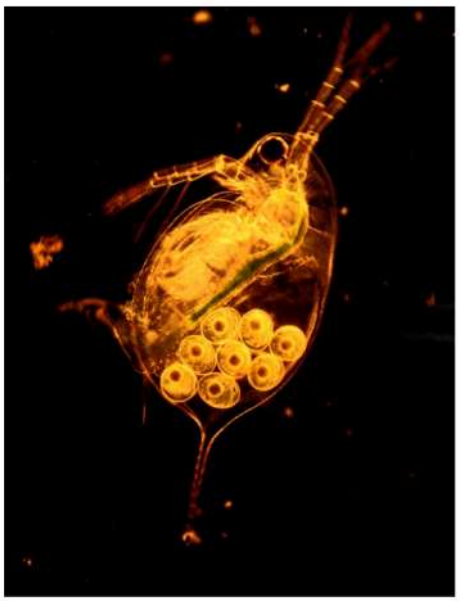
We have appreciated Alan for his true friendship over many years, and for his generosity of spirit. In the funeral address, it was said that Alan had been a man who was loved by everyone he met, and that his had been a life well-lived. We cannot think of a more appropriate summing-up than those well-chosen words.

Richard McKim & James Dawson



Alan's solar monthly mean daily frequency chart, covering many years.

With Walter Haas and the new home observatory in 2004. *(Tony Cook)*



One of Alan's many photographs of microscopic subjects: *Daphnia*.

Alan with his 3-in refractor in 2018, which he used for solar observing. *(James Dawson)*