

Falling in Love Again ... with Astronomy

by Bruce Renowden SDM #11

North of Coolah, NSW

Perched high above in the eucalypts, the local bird population performed their habitual morning ritual. Crisp calls pierced the morning stillness welcoming a new day... I felt privileged being with them, their calls seemingly for my ears only.

It was dawn on a balmy and still autumn morning in a stunning part of central New South Wales. How could I wish for more than being here alone on my walks, in the silence, happily awaiting any call from the trees to interrupt the inner peace? The early morning walks around sunrise commenced down a long and winding red dusty driveway of the rural small acreage property where I was staying. It was in parts noticeably eroded by a recent welcome deluge of rain. My regular walk would then continue right – my chosen direction, for a kilometre or so. The abundant eucalypts both on the roadside and in the vast paddocks opposite, soaked up the first sunlight of the day and stirred their feathery inhabitants. It was magnificent; serene. All felt good in the world at this place. As I walked, my thoughts were that here, by morning as by night, it is magical and stirring. For just as when the Sun rises and the world is waking, in the evening after the Sun has set, a whole new sensory experience awaits, when the stars come out.

I had never attended one of these “star party” events before. But nearly a year ago when I received an email from someone I didn’t know, I knew immediately all that was about to change. Allan Wade, a proud recent new owner of an SDM telescope, was organising a star party at his country property exclusively for SDM owners. It was to be some twelve months hence. With a lengthy list of owners for all email recipients to see, I received this compelling,



The best Dobsonian Telescope maker in the world ... Peter Read

very appealing invitation. SDM (Size Does Matter!) telescopes are Dobsonian-style telescopes made for the enthusiast who likes to “look” at the sky as opposed to “image” its nighttime vibrant and delicate distant objects of beauty. As such, SDM Dobsonians are of large aperture by normal amateur telescope standards and have a clear mission for their passionate owners – show me! Since becoming a club amateur astronomer I have discovered that whilst the two groups may have some overlap, they are almost different species. There are photographers and there are visual folk and it seems you gravitate to either one or the other.

That delineation meant that Allan’s star party was clearly going to be a “visual” event. It also meant that a sizeable number of magnificent machines with their knowledgeable, enthusiastic owners would be present at the same time in the same place. And this place is no ordinary place. It is in the premier telescope viewing part of Australia, near Coonabarabran in New South Wales, home to the Siding Spring Observatory. It took me no time to decide *I will be there!* The option was open for owners to attend without their scopes. I was in this category. Even so, of the some-35 owners in attendance there were 16 to 18 superb instruments. They ranged



Allan Wade (left); all-round top fellow, with “Black Widow” and the author



Mike Lockwood; Mirror-maker to the stars



Accommodation varied, but you could be lucky and live next door to someone with a good kitchen!



At dusk astronomers become active

from the “baby” 12-inch diameter mirror to Allan’s superb 32-inch $f/3.3$ machine named “Black Widow”. Aptly named because no astro object stood a chance of guarding its secrets once this superbly crafted telescope was pointed in its direction. These telescopes were all made by one man; SDM business owner and craftsman extraordinaire Mr Peter Read.*

Without doubt, Peter makes some of the best Dobsonians in the world. His attention to detail is nothing short of extraordinary... and legendary. Mirrors are separate. Peter will recommend high-calibre mirror makers for the client to choose from. One of the renowned large-aperture mirror makers he will suggest is Mike Lockwood from the USA, Lockwood Custom Optics Inc. Mike has made mirrors up to 50 inches in diameter and like Peter is a sole operator who is hands-on and a perfectionist with everything that he produces. The mirror in Allan’s scope was made by Mike and the views are stunning. Both Peter and Mike were special guests at the four-day event.

Formally, the star party commenced on Thursday 4 April 2019 as SDM owners trickled into this idyllic location north of Coolah, on the road to Coonabarabran. Weary travelers had made their way from Brisbane and surrounds to the north, Adelaide to the west, Melbourne to the south and a healthy number from Sydney, Newcastle and surrounds in the east. Caravans, mobile homes

and tents lined the eastern perimeter of the property as guests arrived and established their digs for the next four days. The “camping” area was comfortably removed from the telescope viewing area and main buildings. Other guests chose to stay at the caravan park in the nearby town of Coolah, electing to travel back to Allan’s each day. Three guests however had travelled much further to enjoy some Aussie hospitality. Indeed Dave from Canada and Ed and Mike from the US had met up with our host several days earlier. They were incorporating this sojourn in various different travel plans.

By late Thursday afternoon, all telescopes were set up in readiness. As with every evening, each did their own thing with meal preparation, some in the relative luxury of a fully equipped van, others such as the author of this piece, with slightly more basic equipment. Happily I was fortunate enough to be alongside a very cheerful Englishman to whom, as luck would have it, I had spoken with five years earlier when I was considering buying an SDM scope. (He owns an SDM 20” $f/5$, the telescope size I was considering.) Jonathan Bradshaw was most welcoming in permitting my use of his gas stove on the couple of occasions gastronomical assistance was sought. I was most grateful and felt the very least I could do was ensure his wine glass was never empty for too long once evening was upon us. I found he offered very little resistance to my

act of reciprocity and a wonderful neighbourly relationship was born!

Just as the early morning was magical, the fact remains we were there for the nights. And we were not disappointed. They were spectacular, all three of them. Allan’s property is not only well located for dark skies and good seeing conditions but it also enjoys near-to-the-horizon vistas in many directions. To me, this is a key ingredient to a spectacular sky and the magnificence it can offer. Often, we find ourselves frustrated by structures or trees which have a right to be there, but simply get in the way. The whole sky is one big slow-moving picture and the less in the way, the bigger and better the impact.

We enjoyed a very expansive view here and the result was superb. One evening, a chorus of oooohs and aaaahs was heard as more and more pairs of eyes set upon a magnificent meteor passing directly overhead traversing the sky like a New Year’s Eve firework, moving from north to south. Such was the length in time and distance of its journey, the growing chorus of spectators had enough time to be heard by others who then looked up to see the meteor continue its path. It was spectacular, ending its display in Centaurus. A massive cheer of approval went up across the observing field. We were in the right place and were very glad to be here!

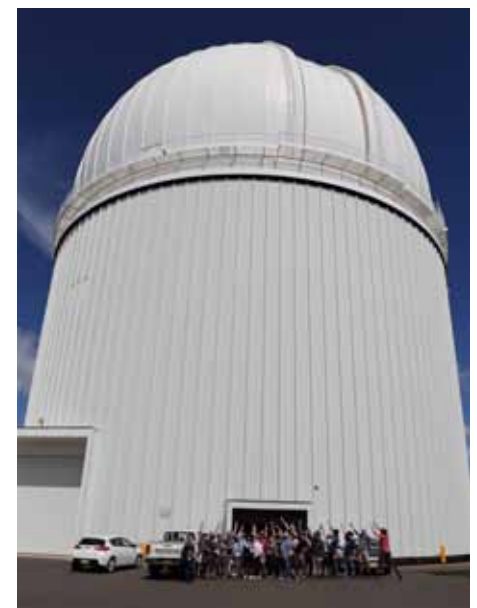
Those with scopes moved from one rich target to another. Nebulae,



Robin charts the night ahead.

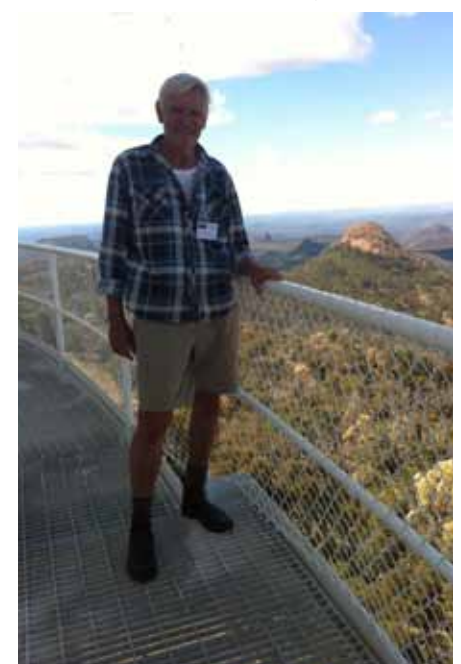
Omega Centauri, Tarantula Nebula, are simply stunning big-ticket objects. But so too are planetary nebulae, the Homonculus Nebula and the Leo Triplet M65, M66 and NGC 3628 to name a few. We also viewed the elusive Horsehead Nebula, but this continues to remain for me, illusive.

Over three nights we gorged ourselves on beautiful bright skies and mild autumn temperatures. At the end of my first night's viewing, I stood in front of my tent and had a long last look up at the sky. I thought to myself I have never seen it looking this good.



Above: *The 3.9m Telescope. The elevated external walkway is not for the faint hearted. Photo by Mike Lockwood.*

Below: *But the walk around it is worth every anxious minute! Photo by Kim Read.*



double stars, galaxies, planetary nebulae, globulars... there was much movement as owners visited other scope owners to look and discuss. M42, the Great Orion Nebula was an early target given the time of year. The E and F stars of the Trapezium were visible easily in all the scopes, as expected. The massive swirling and expansive gas clouds and myriad tiny white stars embedded in them are miraculous and M42 remains my most-preferred object in the sky. A greater challenge was splitting and seeing Sirius A and B. Occasionally the pesky B star can sit very close to or on a diffraction spike. At one ten-thousandth the brightness of Sirius A, this adds to the fun. On Jonathan's scope, three of us (or was it four?) were in debate over where the companion was actually located. I think in the end we all agreed with Jonathan's stated position as it was after all, his scope and he had let me use his stove! Robin Broberg, the only other MPAS contemporary present and wife Christine were active in the observing field. Robin was also engaged in the Sirius debate. I'm not sure who agreed with whom in the end. That little Sirius B appears and disappears in front of your very eyes. I poured another red ... or was it a port???

Telescopes at the gathering varied in size from 12" to 32". All were enjoyed by their owners and passing observers. Interestingly, my own experience was one possibly (or likely)

shared by some others, depending how well you knew the company, of course. Although we all wore name badges, by night all you had to go by was a voice and general shape of a person. Even red lights were to be kept to a minimum where possible. I therefore had a number of occasions chatting to someone and looking through their lovely telescope, but the next day not knowing which person had kindly shared their scope and knowledge with me the night before. It's a curious thing about astronomy. Tragically, with age, one forgets names all too easily too. Oh dear.

For all, there's no doubting a view through Allan's Black Widow with the Mike Lockwood optics was much anticipated. Having now achieved that, I think I have come to the ghastly realisation that I will not be content until I have a 200" mirror in my garden!

SIZE DOES MATTER!! If I recall correctly, the first object I saw with Allan's superb instrument was the Sombrero Galaxy, M104. At a mere 30 MLY distant, it's a canter across the universe to get there. Well, that's how close it looks through his scope. I was amazed. Detail in the dust lane was clearly visible and the central bulge and core of the galaxy far exceeded my expectations. Allan was using an 8mm Delos eyepiece to yield a magnification of ~330x. This appears to be his eyepiece of choice for objects such as this. Centaurus A,

Allan also had a program of activities lined up for us. For those who “signed up” and paid their \$20, a guided tour of Siding Spring was organised for the Friday morning. We convoyed in cars to the observatory complex and were taken on a two-hour inspection which included internal inspections of the two large telescope domes of the 3.9m and 2.3m telescopes. It is surprising to learn that there are 70 telescopes working at Siding Spring performing very different roles for various countries, companies, universities and private individuals, all paying for the privilege of having technical staff carry out works for them as required. The walks between different sites was hilly but the distant views of the Warrumbungles National Park were breathtaking. It is spectacular and dramatic.

To finish the tour, a walk around the exterior of the dome on the steel walkway of the 3.9m adds a nice adrenalin rush for those with a “thing” about heights. But now is the time to overcome those fears. The views are once again too good to miss!

Saturday was “Star Party” party day. Glasses were charged and pizzas from the local Coolah pizzeria were ordered in by Allan. At \$10 a head it was once again a good-value activity! Following lunch we had the great pleasure in having two amongst us present excellent informative talks. Accompanied by visual presentations, Mike Lockwood started off giving an in-depth description of how telescope

mirrors are made, from start to finish. It begins with the highest quality glass made just right and that’s before it gets to Mike. It’s a long process and much patience and expertise is required to get the finished product as required by the customer. As one of the most highly regarded mirror makers for large aperture telescopes, it was fascinating to listen to Mike describe the long process and how he approaches it.

Our second speaker was our very own Dr John Carr. I had not met John before but discovered he enjoys the rare distinction of owning no less than *two* SDM telescopes. (You can’t get much better recommendation than that!) John spoke very engagingly on the subject of the probability/possibility of life existing elsewhere in the universe: More particularly, “intelligent” life... with the billions of galaxies and stars and planets that are out there, surely, intelligent life must exist? Statistically one might think so. The fascinating realisation is that although a planet may exist for billions of years, by the time it has become “habitable” and life has evolved to an “intelligent” level, the time frame or window during which such a (intelligent/advanced) life form *lives* on the planet may only be a few thousand (a million?) years. Not much time out of several *billion* years. That narrows “planets having intelligent life” down considerably. It may only accommodate intelligent life for a small fraction of one per cent of its entire existence in time. A

fascinating subject.

Also on Saturday was a third event very apropos to what the Star Party was all about. Peter Read was delivering a brand new scope to Gavin Bray. First light for Gavin and his scope was on Saturday night under one of the best skies he will likely experience. Not a bad way to start out and congratulations to both he and Peter.

After three nights of stargazing and early morning walks, with lots of stimulation during the day, one might expect to be feeling a little weary. I suppose in a way I was. However, I was also feeling intensely stimulated by the preceding four days and my senses were somehow considerably enlivened by the whole experience. I managed a drive home to Melbourne of 1000km on the Sunday quite comfortably; even allowing a small diversion to collect my dog from the kennels in Dubbo. Four or five twenty-minute stops helped, no doubt... I thought much about the time I had had and the people and adventures. I felt refreshed and invigorated and a love for astronomy was reborn.

Allan Wade had done a wonderful thing and achieved it with great style and devotion. Peter Read inspired us all, by not only building all of our telescopes, but even providing workshop repairs at the star party. He is a tireless giver.

Is it possible that after such a memorable few days I could have

Below: SDM Star Party Portrait Coolah 6 April 2019. Photo by Mike Lockwood. **Right:** En route to Coolah, a night in Parkes, 3 April. Within minutes this massive structure turned 270 degrees, clockwise. Image by Bruce Renowden.



any regrets? Yes, but only one. I will never borrow a blow-up mattress again from someone without first

knowing for a fact it does not deflate every three hours!

Clear Skies to all new friends at SDM.

*For readers new to the ASV, Peter Read constructed the new 40" telescope at LMDSS. ☺

Library Update

By Barry Cleland

Come and borrow items from the Library – after all, it is your Library

Your library is the largest of any astronomical society or club in Australia. No matter what area of astronomy or cosmology fascinates you, you are sure to find a book or DVD that will interest you. We have more than 3400 books, about 170 sets of DVDs and a large number of astronomy magazines and bound copies of *Australian Sky and Telescope*, *Astronomy*, *Sky and Telescope* and other magazines. Included in the sets of DVDs are 34 sets of the *Great Courses* series of lectures, which are very popular. This includes the latest sets added this month; see below.

Any section director can ask the library to buy items for their section and members. The Junior, Radio Astronomy and Instrument Making sections have done this.

Further any ASV member has the right to ask for a favorite book or DVD to be purchased and placed in the library. After all, the Library is for ASV members to use. Quite a few members have done this. Also, we place many books and DVDs donated by members and others, into the library each year.

You can find what's in your library, books and DVDs, on any topic, by going to the ASV website. Just go to **Library** and then **Categories**. Then either look for the category you want, to find a book or DVD, or go to **Search for**, and type in the topic, title of the book or DVD, or even

the author's name, to find any book or DVD you want. Further, if you type **Great Courses** into **Search for**, you will see the 34 sets of the *Great Courses* now in your library.

New entries to the Library for June and July

Two DVD sets of the *Great Courses* series of lectures and two new books:

- *Understanding the Quantum World* – 24 lectures from the *Great Courses* on DVDs, and transcript book and course guidebook – by Professor Erica W. Carlson.
- *Superstring Theory – The DNA of Reality* – 24 lectures from the *Great Courses* on DVDs, and transcript book and course guidebook – by Professor S. James Gates, Jr.
- *The Smithsonian History of Space Exploration – From the Ancient World to the Extraterrestrial Future* – by Roger D. Launius.
- *Apollo 13 – “Houston, We Have a Problem”* – by James Lovell and Jeffrey Kluger.

Four donated books – the first from John Cavedon, the second from Barry Cleland and the last two from the estate of Murray Fenner:

- *Observing and Cataloguing Nebulae and Star Clusters – from Herschel to Dreyer's New General Catalogue* - by Wolfgang Steinicke.
- *Introductory Astronomy & Astrophysics* – fourth edition - by Michael Zeilik and Stephen A. Gregory.
- *Edmond Halley – (British men of science series)* – by Angus Armitage.
- *The Heavens on Fire: The Great Leonid Meteor Storms* – by Mark Littmann.

Library Open Times

During June and July the library will be open on the dates and times shown in the Events Calendars in this issue of *Crux* and on the ASV website. These will be:

- Prior to the Monthly Meetings on Wednesdays, 12 June and 10 July from 6.30 to 7.45pm.
- After the Monthly Meetings in June and July from about 10.00pm to 10.45pm.
- Prior to the Members' Nights on Fridays 14 June and 12 July from 7.00 to 7.50pm.
- The Library will be open on Sundays, 30 June and 28 July from 2.00 to 4.00pm.

Library Contact Details

Barry Cleland:

Email librarian@asv.org.au or barrycleland@bigpond.com

Phone 9870 7451

Mobile 0418 356 832

John Cavedon:

Email jcavedon@bigpond.com

Phone 9882 8108

Mobile 0418 176 972 ☺