URBAN ANTICS

Ever lain back on a summer night and stared at the sky?

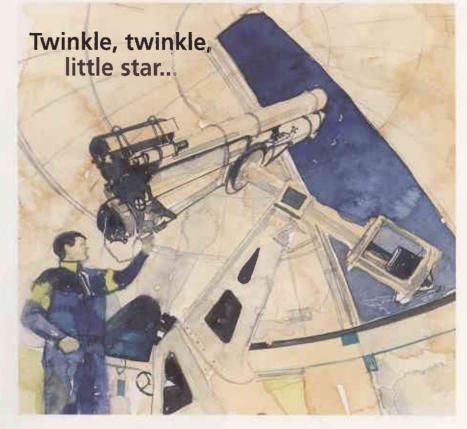
So quiet, so beautiful, so big, a place where so few, if any, have been.

As you search in wonder, a feeling of anguish disturbs your mind. The image in your mind's eye is not a place, because to see a place, you must perceive its shape or extremities. And you can't. This great 'cover' adorned with thousands of lights that your mother used to sing about, is not really 'there'. Apart from the twinkling lights, what you can see is something you can't really see ... a theory ... a science in which some ideas are so removed from human experience as to be unimaginable.

The heavens and its occupants were of great value to ancient people and early civilizations, but were also responsible for much superstition and mystery. After astronomy became a science in about the 6th century BC and telescopes were invented some 400 years ago, much has been learned about the possible origins of Earth, its heavenly partners and the Universe itself. Equally, as new phenomena are discovered, recognised and accepted, the new information is perhaps significant in changing conclusions, as well as confirming the accuracy of existing answers.

Although astronomy is a rapidly growing science where techniques and discoveries have grown in sophistication, the beauty of the heavens has remained accessible to all. The songs, paintings and poetry that have emanated from an evening moon, a sunset, or the sheer expanse of the Milky Way in a night sky, are evidence of that.

It is now accepted that the Earth, and everything on it, is part of the Universe which is all matter, light and other forms of radiation and energy that exist everywhere and anywhere in time and space. The Universe also includes all the stars of which the sun is only one of more than a million million stars that form our own giant spiral galaxy called the Milky Way. This galaxy is about 100 thousand light-years across, one light-year being 9.46 million million kilometres. In addition,



recent observations indicate that there may be about 100 thousand million galaxies in the visible universe. How's your maths? That's a bit bigger than the average back yard chook run or an outback nature reserve.

Though we feel secure and content in knowing that the seemingly unmoving stars above are always 'there', we are yet thrilled to witness a close encounter with a shooting star (blazing grain of space dust or meteor) the dusty puff of a visiting comet, or a solar eclipse.

The urban environment above has more to offer than anyone yet knows. Whether it is by the naked eye, telescope or binoculars you are encouraged to spend some time gazing into the future. Or is it the past? Let's hope that light pollution, that stealthy by-product of human activity, doesn't grow to such an extent that it obscures the light of the stars.

The Perth Observatory (CALM's non-terrestrial section) holds Star Viewing Nights, Astronomy Field Nights and other special tours over summer and throughout the year. If your curiosity and interest has been

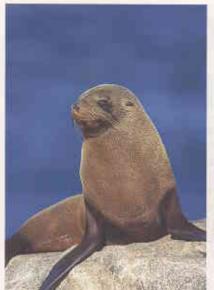
aroused, call the Observatory to book for a magical experience.

With terms like cosmological theories, superclusters, red shifts, quasars, relativity, nebulae and spectroscope, you will find that the Universe is perhaps not the final frontier, but the beginning of forever.

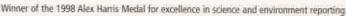
BY JOHN HUNTER

DID YOU KNOW

- Hans Lippershey in Holland made the first telescope in 1608.
- Dark matter is all that which may exist in space in some form and has not yet been detected.
- © Bright, unusual objects called quasars are the most distant objects in the universe found to date. They may be as far away as 16 billion light years from Earth.



How many seals or sea lions are there around WA's coasts? See 'A Tale of Two Seals' on page 42.





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"What I wasn't prepared for was the magic of the experience." See 'Desert Impressions' on page 35 for the story of a LANDSCOPE Expedition.



The malleefowl has declined to 46 per cent of its former range. Read about the combined effort to save it on page 17.



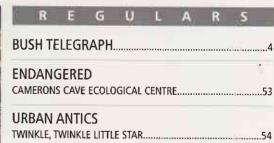
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Enjoy the WA environment—and don't get hurt! See 'Balancing Act' on page 23.



Traditional owners are working with CALM and other agencies to manage the land. See page 10.



0 C The white-breasted sea-eagle is one of the many natural attractions of the mid-west. See page 28 for a story on one of the region's most famous places-beautiful Kalbarri National Park. Illustration by Philippa Nikulinsky

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