

David Tiggerdine at the Perth Observatory. Photo by Norm Bailey.

Pennies from heaven

WESTERN Power and Water Corporation meter readers were despatched to the Perth Observatory in Bickley to cast a critical eye over Departmental operations.

The bills had dropped so much that both utilities were concerned that something strange was going on.

What they found, however, was greatly improved efficiency in the use of water and electricity.

Perth Observatory employee, David Tiggerdine has been responsible for:

- putting heating on timers;
- using infrared light to stop condensation on telescopes;
- improving irrigation systems;
- connecting two hot water systems into one system; and
- changing refrigerators.

So far the Observatory electricity bills have been halved with an \$11,000 saving in the last two years – no mean feat as Observatory staff already believed themselves to be energy efficient. Power bills dropped from \$23,000 in 1998 to \$12,000 this year.

As a consequence, the Federal Government Greenhouse building energy rating – a computer program that measures the efficiency of space versus energy consumption – rose from 3.5 to 5 stars.

“You know you’ve done a good job when Western Power and the Water Corporation check their meters, but there are more savings we can achieve,” David said.

His new plans include:

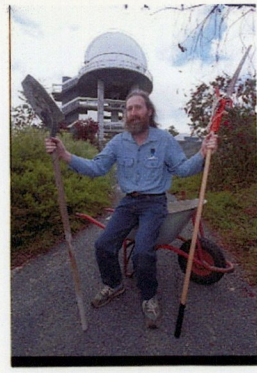
- putting electronic ballasts on triphosphor fluoroglobes to achieve a 30 per cent improvement on lighting efficiency; and
- buying a heat exchanger to reduce the air conditioning accounts by 70 per cent.

David worked with technical staff Arie Verveer and John Pearse to implement the changes. He also points out that case studies around the world showed energy efficient buildings enhanced work satisfaction and reduced staff sickness, leading to a more effective working environment.

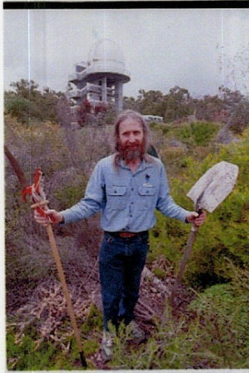
Government Astronomer Dr Jamie Biggs said that David’s work had been a big help, particularly since the Observatory budget was getting tighter.



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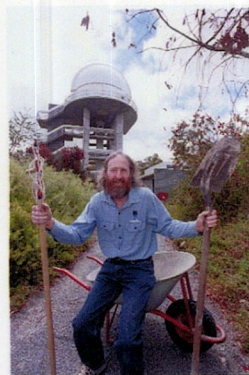
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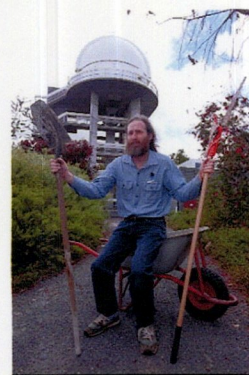
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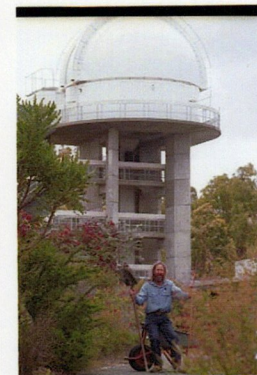
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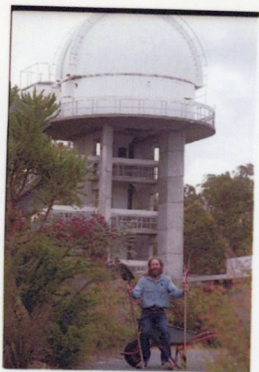


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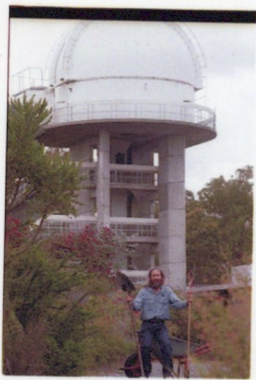
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Pix by Norm Bailey -

- 1) Dave Tiggerdine at PETH Observatory
- 2) John & Nicole Ireland, after Nicole is selected for the state basketball team.