

IN LEAGUE WITH NATURE

For two weeks each spring, a campsite, nestled in the tree-clad Bickley Valley near Perth, becomes home to 50 young students of natural history.

The camp equips students to become WA Gould League leaders in their schools, where they will put ideas learnt at the camp into practice. Upper primary school students are selected for the camp from schools throughout the State.

The Gould League promotes the study of the State's natural history. Its name commemorates famous 19th century naturalist John Gould and his wife, artist Elizabeth Coxen Gould.

The organisation's first camp was held in 1951 to mark the 50th anniversary of the Commonwealth of Australia. The campsite, 15 kilometres from Perth among the foothills of the Darling Scarp, is close to the Bickley Reservoir.

The reservoir is near the end of a deep ravine in the hills, and Bickley Brook runs along its base. The creek and dam contain various freshwater habitats for aquatic animals such as water rats, frogs and gilgies. Paperbarks, reeds and rushes fringe the wetlands, providing habitats for the reed warbler, little grebe, ducks and cormorants.

The dense scrub along the creek shelters small birds including wrens, thornbills and robins. Water rats feed on gilgies or mussels from platforms on the edge of the water.

Flooded gums and melaleucas grow on slopes near the water. Marri and wandoo, with one-sided bottlebrush as an understorey, grow a little further back, providing knot-holes and spouts for nesting



kingfishers, pardalotes, tree martins and parrots. Sittellas are usually seen in the jarrah forest on the ridges.

The camp fosters children's appreciation of nature and stresses the importance of careful observation and accurate recording.

The day's activities begin with an excursion along one of the nature trails. The children are encouraged to note items of interest such as birds nesting or bees swarming. Groups report their finds after returning from their bushwalk.

The afternoon session often begins with a short lecture by a staff member or visiting expert, on a subject such as reptiles of the area, plant pressing, bird sketching or setting up an aquarium. The evening program often includes a guest speaker from the WA Museum, CSIRO, CALM, Kings Park or one of the Universities on some aspect of their research.

Up to the mid-1970s it was possible to live-trap possums, water rats and short-nosed bandicoots. However, numbers of these animals have declined, possibly because of



Students examining the rare plant Anthocercis gracilis, (illustrated left) discovered by a young Gould League student. Photo - Kevin Kenneally Illustration - Margaret Menadue

unusual plant with pendulous, bell-shaped flowers. It was later identified as *Anthocercis gracilis*, first collected by the Colonial Botanist, James Drummond, between 1837 and 1842. This plant is now gazetted rare and endangered. One of the highlights of the 1989 camp was relocating the population and counting the number of individual plants present - a practical exercise in conservation.

The interaction between the students, staff and professional scientists is important. Some former students have become professional biologists but the camp's main purpose is to instill conservation as an attitude of mind. One former camp student is Andrew Brown, now a CALM staff member and co-author of *Orchids of South-West Australia*.

fox predation, increased urban pressures on the surrounding bushland, lowering of the water level in the reservoir and more frequent wildfires.

Some interesting observations and discoveries have been made at the camp. In the field, students collect a small piece of plant and bring it back to the classroom. They identify it using a field herbarium of specimens collected and pressed on previous camps.

One student collected an

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LANDSCOPE

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Rock-wallabies threw down the gauntlet to scientists trying to trap them for research. Who ended up winning the catch-me-if-you-can contest? See page 35.



Scientists will use modern technology to restore two rare and endangered mammals to an area in the Gibson Desert from which they have become extinct. See page 10.



Shells, tiny crabs and sundry other creatures are sure to please the curious naturalist who invades the intertidal zone at low tide. Explore the place where the shore meets the sea on page 23.



Waterbirds flock to the Vasse-Wonnerup wetlands in their tens of thousands, some travelling over 10 000 kilometres from summer breedings grounds in northern China and Siberia. Turn to page 17.



It's the burning question! Is prescribed burning in spring or autumn better for the jarrah forest? Or is there another alternative? See page 28.

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C O V E R

The designs of desert artist Benny Tjapaltjarri show events associated with the Pakuru or golden bandicoot dreaming in the Gibson Desert. The three central roundels depict rockholes and the others represent hills. The background dots show the vegetation of the area.



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