

ROTARY MURRAY-DARLING SCHOOL OF FRESHWATER RESEARCH

overview of the project

The Rotary Murray-Darling School of Freshwater Research is a five day residential school held annually at Albury for Year 11 school students. The Environmental Trust provided financial support for residential schools in 2006 and 2007 which saw a total of 88 students gain a greater appreciation of environmental management, research and sustainability. The school provided students with the opportunity to have direct involvement with scientists, lecturers and industry members, and to take part in practical field work and scientific research.

The educational program for the school was initially developed by a qualified secondary school science teacher. This program has been continually modified and refined since its inception 12 years ago. It aims to extend student skills and knowledge in environmental science, introduce them to professional scientific practices and assist them in making future career choices. Student feedback from the 2007 school indicated the highest level of satisfaction since it began.



Identifying samples of aquatic plants

how the project was carried out

Students visited two wetlands near Albury, where they were required to develop an hypothesis about the wetlands and what contributed to their differences. Students were divided into groups of six or seven and worked together to test their hypothesis using a range of parameters, with the assistance of scientists and mentors. The program also included visits to additional sampling sites and the Norske Skog paper mill in Albury. Towards the end of the program, students were introduced to the role of communication in science and required to prepare a presentation of their hypothesis and the outcomes of their investigation to an audience of scientists, lecturers, Rotary, industry and their peers.



Students with a fish sample

In 2007, the school addressed freshwater management issues from the position of water shortage as a result of continuing drought. This allowed students to gain an awareness of the complexity of scientific and water management issues that result from this situation. At the end of the residential school, all participating students received a CD of their team's pictures and presentations, and a presentation that summarised the five day event.

outcomes now and in the future

The Rotary Murray-Darling School of Freshwater Research was attended by 33 students in 2006 and 50 students in 2007. Students reported an increased understanding of natural resource management issues, environmental sustainability and the role of scientific research in achieving effective environmental management. Many past attendees at the research school have been inspired to continue into environmental studies at university.

Staff and scientists involved in running the school included industry researchers, staff and students from La Trobe and Charles Sturt Universities, and staff from the Murray Darling Freshwater Research Centre. Evaluation following the 2007 session showed that staff and mentors reported a greater level of networking amongst the local scientific and academic community.

benefits, challenges & lessons learned

The school has been operating for 12 years, and over this time the organisation of the event and the educational program has been well-refined so there were no problems that significantly affected the project.

In 2007, organisers took advantage of a significant opportunity to include a visit to adventurer Lloyd Godson who was conducting an experiment in a submersed 'biosub' at the Wonga Wetlands, the main field site for the School. Students were able to have an online discussion with Lloyd about his self-sustaining underwater environment which made use of solar panels and a biological process of gas exchange to generate oxygen. This addition to the usual program provided a unique opportunity for all involved.

The challenge for this program is to continue inspiring young students to take an active interest in freshwater research and management, and to pursue careers in science. The success of the program and the experience gained over successive years will help to ensure this challenge is met.



Students sample waterbugs from the wetland