

## Conference: 4th National Waterwatch Conference

### Title: Learning to use AUSRIVAS to assess river condition

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Description: Waterwatch groups often want to use stream animals to assess the condition of their waterways. We have developed a training course to support people wanting to use stream animals with the Australian River Assessment System (AUSRIVAS). The course is packaged for delivery and learning via the Internet, has a modular structure, uses educational software for online teaching, and also includes a 4-day face-to-face workshop. The AUSRIVAS modules cover site selection and study design; the aquatic habitat and collecting field data; collecting macroinvertebrate samples; analysing the data using the AUSRIVAS predictive models and practical field skills. The course has been structured so that, depending on the participant's need, one or all of the learning modules may be taken. The modular structure is useful because many community groups may only wish to learn about one component, for instance the standardized sampling methods. Feedback from the >80 people that have done some or all of the modules has been very positive and we found that the remote delivery is a successful training mechanism, particularly in terms of learning, time, and cost. The required theory is learnt online, which means that the face-to-face time is not wasted sitting in a lecture theatre but is spent out at the river getting wet (your local river if needed) – and learning by doing.

(Keywords: rivers, biological assessment, AUSRIVAS, training)



## The Waterwatch Conference Workshop

Presenter: Sue Nichols

Participants attending this Waterwatch Conference Workshop can learn more about the AUSRIVAS Bioassessment course and preview the online learning Website in an interactive online session. No preparation is required by participants attending this workshop.

### General information

The CRCFE and the University of Canberra offer the AUSRIVAS Online training course twice a year. The course aims to teach the skills and knowledge needed to

assess river health to an acceptable standard using AUSRIVAS methods. Those who complete its requirements successfully are eligible for accreditation from the relevant state or territory agency.

The course has been structured so that, depending on the participant's need, one or all of the learning modules may be taken. There are no prerequisites for this non-award course, other than registration and payment. The theoretical knowledge required for collecting the standardised data and assessing river health can be learnt entirely online in four interactive modules, which can be completed over 12 weeks. The 4 online modules cover the following topics:

**AUSRIVAS Module 1 - Site selection and study design.**

Learning outcome - Participants will have a strong understanding of the steps involved in study design, the selection of test and reference sites, and quality assurance/quality control procedures for AUSRIVAS assessments.

**AUSRIVAS Module 2 - The aquatic habitat and collecting field data.**

Learning outcome - Participants will have an understanding of ecological assessment, field-trip preparation, and collecting site and habitat information.

**AUSRIVAS Module 3 - Collecting macroinvertebrate samples.**

Learning outcome - Participants will understand the requirements for collecting and processing standardized macroinvertebrate samples from the various in-stream habitats. Note that this module will provide an introduction to family level macroinvertebrate identification and is not designed to provide comprehensive taxonomic training.

**AUSRIVAS Module 4 - Analysing the data using the AUSRIVAS predictive models.**

Learning outcome - Participants will be proficient in operating the AUSRIVAS predictive models and interpreting the results.

A practical face-to-face workshop is offered as a fifth module, teaching the practical skills required.

**AUSRIVAS Module 5 - Practical workshop**

The practical workshop follows the online modules – the participants are now ready to put into practice what was learnt online.

Learning outcome - Participants will gain practical experience and demonstrate proficiency in collecting macroinvertebrates and habitat data for AUSRIVAS assessments. Those participants with sufficient experience may also wish to demonstrate proficiency in macroinvertebrate identification to the standard required for AUSRIVAS accreditation.

The next AUSRIVAS Online course is scheduled to start in February 2005.

**Important note for conference organisers:**

**To run this workshop I will require a PC laboratory with computers for the participants and one with projected visual display for the instructor. Access to the Internet is also needed to access the AUSRIVAS online learning website.**