

Learners go on Bug Hunt

In celebration of World Water Day on 22 March, learners from Pretoria and Pietermaritzburg were invited to hunt for bugs in their local streams as they learned about river monitoring and the importance of ecosystem health.

A number of indices or guides are used to calculate the ecological state of a river. One of these is the South African Scoring System, also known as SASS, which is based on the presence of families of aquatic invertebrate fauna (for example, snails, worms, crabs, insect larvae, mussels and beetles) and their sensitivity to water changes. Their lifecycles are short, so changes in the composition and structure of aquatic invertebrate communities are often the first signs of change in overall river condition.

While learners in Pietermaritzburg assessed a stream in the botanical gardens, learners in Pretoria assessed the Moreletaspruit, a highly




Learners hunting for bugs in an effort to determine the health of the Moreletaspruit. The fair to poor state of the stream demonstrated the challenges faced by urban environmental managers with regard to increased stormwater runoff, sediment, and increased risk of pollution from industrial and domestic sewage as due to increased development in the city.

urbanised stream. Ramogale Sekwele of the Institute of Natural Resources assisted the Pietermaritzburg learners, while the Pretoria learners were taken through the process by Colleen Todd of Resource Quality Services at the Department of Water Affairs & Forestry and Piet Muller of the Gauteng Department of Agriculture, Conservation and Environment.

Learners made use of the mini-SASS scoring system, a simplified version

of the original technique developed specifically for school groups and others who are not sufficiently skilled to carry out a full SASS assessment.

The objective of the exercise was two-fold: to make learners aware of environmental issues, especially river health, as well as enlightening learners about the various careers that are possible in the South African water sector, especially as far as bio-monitoring is concerned. 



Colleen Todd of Resource Quality Services at the Department of Water Affairs & Forestry demonstrates the assessment technique in the Moreletaspruit, Pretoria.

For more on this and other careers in water, see *Water@Work* available from the Water Research Commission. To obtain a copy phone Tel: (012) 330-0340 or Fax: (012) 331-2565 or E-mail: orders@wrc.org.za

