



GroundTruth

*Water, Wetlands and
Environmental Engineering*

SASS5 Aquatic Biomonitoring Training Course

27 February – 1 March 2012

2nd March 2012 – Accreditation Day



Venue: WESSA - Umgeni Valley Nature Reserve
Goldfields Education Centre
Howick– KwaZulu Natal

Although based within the Umgeni Valley Nature Reserve, fieldwork will involve travel to a range of different rivers (and water quality) in the KZN midlands, where a wide selection of typical SASS5 families are likely to be found.

Presenters:

- Dr Mark Graham (GroundTruth Water, Wetlands and Environmental Engineering Consultants)
Department of Water Affairs Accredited Regional KZN SASS5 Auditor
Co-author of the standard SASS5 method (Dickens & Graham, 2002)
Developer of the recent WRC SASS5 sampling method video
- Mr Gary de Winnaar (GroundTruth Water, Wetlands and Environmental Engineering Consultants)
KZN Department of Water Affairs - SASS5 Accredited
- Mr Juan Tedder (GroundTruth Water, Wetlands and Environmental Consultants)
KZN Department of Water Affairs - SASS5 Accredited
- Ms Christa Thirion (Department of Water Affairs)
Department of Water Affairs - National SASS5 Auditor

Course Outline:

The 4 day course (27 February-1 March) is designed to provide participants with the basic skills necessary to conduct SASS5 aquatic biomonitoring techniques. The key elements of the training course offered include the following:

- Introduction and overview of biomonitoring.
 - Principles, theory, advantages, disadvantages, limitations of the methods. Comparison with classical "wet chemistry" water quality monitoring. Alternative biomonitoring tools/methods. Correct/minimal sampling equipment. Safety associated with field work.
 - Aquatic invertebrates. Adaptations to living in water. Sensitivity to pollution. Adaptations to pollution. Aquatic ecoregions. Preservation of "live" samples - how, when, where. Site selection – characteristics of what constitutes a good aquatic biomonitoring sampling site. Correct/standardised sampling procedures. Overview of using scientific/taxonomic keys. Theory and discussion about preservation of specimen samples. Labelling and curation of samples. Reference and monitoring sites - the key differences and needs of both.
- The various major aquatic orders likely to be found in the river systems, i.e. mayflies (Ephemeroptera), caddisflies (Trichoptera), aquatic beetles (Coleopterans), aquatic bugs (Hemipterans), dragonflies and damselflies (Odonata), flies (Dipterans), stoneflies (Plecopterans), and Crustaceans and Molluscs.



GroundTruth

- Testing of understanding and identification skill on live and preserved samples.
- Calculation of SASS indices/metrics.
- Data interpretation and handling.
- Methods and examples of reporting.
- Reference and monitoring sites.
- Quality control. Requirements for accreditation of practitioners.
- Design of a biomonitoring programme. Key principles. Frequency of monitoring/reporting.

For those delegates with some previous SASS5 experience and **clearly demonstrating adequate competency during the training**, an accreditation day will be available on the 2nd March.

Cost:

The cost of the course will be **R6,100** (excluding VAT). This includes all course material, a copy of the latest WRC standard SASS5 biomonitoring DVD, teas and lunches (**excludes accommodation**). The course is

Should you wish to purchase the **standard SASS5 field equipment**, the cost will be an extra **R1,200** (excluding VAT). SASS equipment will be available to use during the course if required.

Additional aquatic biomonitoring field resources, such as water clarity tubes, vertical head velocity meters (PLANK), will be available to delegates should they require it.



Delegates must bring appropriate field clothing suitable for working in rivers. Ideally waders, but minimally gumboots (which are needed if working with SASS), or alternatively river shoes, a change of dry clothing, hat, and suncream.

Bookings:

Interested delegates should complete the attached application form and email to admin@groundtruth.co.za, or alternatively fax to 086 599 2300, by no later than **10 February 2012**.

Please note that should there be insufficient response, this course may be postponed. Any delegates wishing to cancel their bookings, without a minimum of 14 days notice, are liable for a 50% cancellation fee.

Accommodation:

Recommended accommodation is available at Umgeni Valley Nature Reserve. Delegates should arrange their **own accommodation as well as getting themselves to the training venue**.

Self catering chalets are available at Umgeni Valley Nature Reserve.

Please note that breakfast can be ordered for an additional R47.00 per person per day.

(A once-off conservation levy of R20 per person will also be charged to stay at Umgeni Valley Nature Reserve)

For all accommodation queries and bookings, please contact:

Wendy Melrose

Umgeni Valley Nature Reserve

Tel: +27 (0)33 330 3941

Cell: +27 (0)72 828 9180

Fax: +27 (0)86 505 0430

Email: reservations@wessa.co.za

Alternatively, there are many other bed and breakfast options available in the surrounding areas – some within walking distance of the venue. For more information, visit the following website link for details.

<http://www.countryroads.co.za/content/midlands-meander-accommodation.html>



GroundTruth



GroundTruth

*Water, Wetlands and
Environmental Engineering*

P. O. Box 2005, Hilton, 3245, South Africa

Tel: 033 342 6399 • Fax: 086 599 2300

E-mail: info@groundtruth.co.za

www.groundtruth.co.za

SASS5 Aquatic Biomonitoring Training Course Booking Form

(Does not cover accommodation)

Name of Delegate : _____

Company : _____

Postal Address : _____

Telephone Number : _____

Email Address : _____

Fax Number : _____

Company Vat Number : _____

Bookings :

Please make note of the late cancellation clause as indicated above.

Invoices will be forwarded on receipt of your booking.

Signature of delegate

Date