

Snails

Kingdom: *Animalia*
 Phylum: *Mollusca*
 Order: *Gastropoda*



Interesting facts: Snails 

When conducting a miniSASS assessment, the focus is on searching for and finding freshwater snails - specifically in flowing waters (also known as lotic habitats). Snails are soft-bodied creatures that live in shells and can be found in water apart from marine habitats.

An important physical feature of a snail, is its' large muscular "foot" that extends from under the shell. You will also notice the tentacles, eyes and mouth that extend from the foot when the snail moves.

Different species of snails have different coloured pigments and patterns on the surface of their shells. Freshwater snails are able to breathe through gills, while others need to come up to the surface to breathe.

Most freshwater snails are highly tolerant of polluted waters and therefore have a low sensitivity score of 3-5.

New data entries on the miniSASS website!

When entering results onto the miniSASS website, take a look at the new river and stream parameters that can now be recorded! These include water clarity, electrical conductivity, pH, dissolved oxygen and temperature.

<u>Measured Parameters</u>	
Water clarity:	cm
Water temperature:	°C
pH:	pH units
Dissolved oxygen:	
Electrical conductivity:	

By measuring a few or all of these parameters, you will be able to gain a better understanding of the health or condition of the stream/river you are trying to assess.

Well done TriWaters adventurers- mission complete!



Photos provided by: Franz Fuls

From left Franz Fuls (South Africa) and Brett Merchant (Australia) after finishing the tour.

For a detailed account of their incredible journey, be sure to see their Facebook page (<https://www.facebook.com/triwaters>) as well as their website (www.triwaterstour.com).

Well done TriWaters team- you make us proud! ☺

Workshop for building capacity in the uMngeni catchment



Photo provided by: Jim Taylor

The Tri waters team, Franz Fuls and Brett Merchant have successfully completed their 79 day kayaking journey down the Vaal and Orange Rivers! Beginning at the source of the Vaal River near Breyten (Mpumalanga) and ending where the Orange River enters the Atlantic Ocean at Alexander Bay - the intrepid kayakers paddled approximately 2,500 km. The team highlighted the plight of the Rivers - where some sections had to be walked or driven by car due to the low water levels.

The team also engaged with local communities along the rivers, and facilitated a series of "Riverside Talks". These Talks focused on educating local people about water resources and empowering schools and communities to monitor their rivers and streams. The team would demonstrate how to use the miniSASS tool, as well as hold discussions about the importance of monitoring water resources in our water scarce country.

In February, delegates from the Msunduzi local municipality and from the Duzi uMngeni Conservation Trust (DUCT) attended an 'Ecological Infrastructure' workshop hosted by WESSA and GroundTruth.

Held at Umngeni Valley Nature Reserve in Howick, this workshop formed part of an environmental education initiative under the uMngeni Ecological Infrastructure Partnership (UEIP). Organisations including SANBI, WESSA and the eThekweni municipality aimed to facilitate a series of workshops such as these to build the capacity of key role players in the uMngeni catchment. In order to see first-hand the condition of the catchment, a miniSASS assessment was conducted on the Mthinzima stream below the township in Mphophomeni. At the end of the workshop, the delegates walked away with a better understanding of the water challenges facing the overall catchment.

World Wetland Day- educating youth about wetlands and other water resources.

The "Friends of Colbyn Valley" facilitated an exciting wetland and river education tour at Colbyn Valley Nature Reserve near Pretoria in February this year. Over 50 children from different scout groups, including two children's homes, took part in the activities and tour.

The focus of the event was to educate local youth about the importance of wetlands and other water resources, while encouraging them to protect their natural heritage.

Activities and lessons on the day included: creating a pseudo river channel; learning about nutrients in rivers; capturing and identifying invertebrates in streams; going on a wetland tour; and learning about different types of wetlands, by looking at various wetland soils and vegetation.

Colin Cloete (age 13) commented on his experience finding little creatures in the river: "I saw damselflies, dragonflies and it really was amazing what you can find in water!"

Following on from this event, let's keep encouraging children to experience and learn about the importance of our precious water resources!



Left: Children looking at the nunu's in the river.



Photos provided by Tamsyn Sherwill

Right: Children and adults going on the wetland tour.

Ethembeni HIV/AIDS Family Centre uses miniSASS!



Photo provided by: Sofë Lanham

The Place of Hope or Family Life Centre Ethembeni in Mphophomeni Township has recently launched an exciting education programme for the local children supported by the centre.

One component of this new initiative is educating children about water resources. In order to inspire learning, a miniSASS outing was organised on the Mthinzima stream. The event was led by local EnviroChampion, Ayanda Liphiyana and facilitated by Sofë Lanham (Programme Coordinator of the Ethembeni Education Programme).

The children were thrilled when they tested their first site along the stream- capturing nunu's with their nets and identifying them in plastic trays. After another two sites were assessed, scores showed that as the river approached and passed through Mphophomeni, so the miniSASS score and health of the Mthinzima decreased. Issues that were noted as affecting the health of the stream included miss-management of refuse and the high number of spilling manholes.

After a full day the children walked away well informed and excited to play a part in monitoring the condition of the Mthinzima stream. From now on the children plan to regularly sample the river near the Centre, in order to track the health of the stream.

Celebrities take on miniSASS - thanks to the "Journey of Water"

On the 11th of May celebrities from around South Africa joined the WWF/Sanlam "Journey of Water" campaign, walking from the Drakensberg to Pietermaritzburg. Celebrities included popular rapper ProVerb, Miss Earth of 2015 Ilze Saunders and multiple Dusi winner, Andrew Birkett.

The walk was done over four days, exposing participants to the journey that water takes from rain falling in the upper reaches of a catchment, all the way to the point where an individual opens a tap to drink that water. Celebrities were also exposed to the challenges faced in maintaining water quality. While passing through Howick the participants were shown the work being done by the Duzi-uMngeni Conservation Trust (DUCT). This was followed-up by the celebrities getting their feet wet carrying out a miniSASS assessment, led by Liz Taylor of DUCT.

For more info on the "Journey of Water" initiative and to see the full report, be sure to follow this link:

<http://www.journeyofwater.co.za/blog/7>.

Right: Rapper ProVerb and other celebrities with the clarity tube and miniSASS equipment.



Left: Multiple Dusi winner Andrew Birkett learning how to use the clarity tube.

Right: Miss Earth of 2015 Ilze Saunders learns about miniSASS.



Photos provided by Liz Taylor

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