



Adopt Moreletaspruit Forum

Newsletter 29, February 2024

Wetlands

World Wetlands Day (WWD) is celebrated on 2 February each year. A wetland is an area of land where the soil is saturated with water for all or part of the year. Although there are different types of wetland, most of us think of the marshy type with reeds and bulrushes as this is the type we get along the rivers in our Moreletaspruit catchment. About 87% of the world's wetlands have been lost and it is incredibly important to conserve what is left. Wetlands store water and release it slowly thus contributing to flood attenuation and prevention of erosion. They also mitigate climate change since wetlands, especially peatlands, can store more carbon than any other ecosystem – up to 50 times more than rain forests! They provide many ecosystem services including habitat and breeding areas for very many species of birds, animals, amphibians and insects. Many wetland plants have adapted to the anaerobic soil conditions by having hollow stems so that they can transport oxygen to their roots. These plants help to trap pollutants and take up the excess nutrients in the water.



The Adopt Moreletaspruit Forum celebrated World Wetlands Day on 2 February in the Mhangele Nature Area in Moreleta Park. Sixty learners from Eastside and Glenstantia Primary Schools and Laerskool Constantiapark, were divided into groups and did four different activities led by experts in their fields. Dr Piet-Louis Grundling of the Environmental Management Inspectorate of the DFFE (*left*) explained the importance of wetlands and how they function and showed them how to make models of wetlands. Dr Althea Grundling, Research Team Manager, Water Science, of the ARC and two assistants took the children on a walk through the wetland, showed them the wetland soil and which plants, birds and animals are found in this ecosystem.



(Left) Walking into the wetland. (Right) Althea Grundling with assistants, Jason and Tebogo.

Noloyiso Mbiza, Citizen Science National Monitoring Programme Coordinator, DWS, together with Tebogo Mashiane and others from the DWS, explained that the DWS is the custodian of South Africa's water resources and showed how to test the health of river water using the MiniSASS. The DWS generously brought gift bags for the children. The WRC also generously donated "Splash" books for the children.



(Left) Noloyiso Mbiza (blue hat), Tebogo Mashiane (black cap) and Abulele Mbiza (in black) at the MiniSASS site. (Right) The children were fascinated by the invertebrates in the MiniSASS trays.



(Left) Tebogo impressed by a good answer from the children at the MiniSASS site. (Right) Adelene Marais, Functional Head of Nature Conservation in Region 6, explained how to find directions using nature. The children had to follow clues to find puzzle pieces hidden in the field. When they completed the puzzles they received small prizes donated by Eastside Primary School.

World Wetlands Day was also celebrated in Colbyn Wetland Nature Reserve

On Saturday, 3 February, around 160 children visited the Colbyn Wetland Nature Reserve in Pretoria to learn about wetlands and why we need to restore and protect them.

This annual event, held to celebrate World Wetlands Day, was hosted by the WESSA-affiliated Friends of Colbyn Valley and the Agricultural Research Council's Institute for Soil, Climate and Water, assisted this year by the South African Wetland Society, Southern African Young Geomorphologists, Youth Engaged in Wetlands and BirdLife Northern Gauteng, and sponsored by Ocean Breeze Food Merchants. A number of environmental professionals and students volunteered as leaders and facilitators at the event, including, among others, specialists from the Agricultural Research Council, the Department of Forestry, Fisheries and the Environment, the Department of Water and Sanitation, the University of Pretoria, and various environmental consultancies based in Pretoria and beyond.

The event was aimed at children aged 8–13, drawn from various school and youth groups across the city. The day's activities were designed to create awareness about the value of wetlands, how they are formed, how they function and how to protect them. The children were taken on a wetland discovery walk, where they learnt about the soils and plants that indicate the presence of wetlands; built a simple model to show how wetlands work; became 'citizen scientists' by performing MiniSASS (Mini Stream Assessment Scoring System) to classify the water quality of a stream based on the kinds of invertebrates ('goggas') that they found living there; and competed in a quiz to test their knowledge on wetlands.



(Left) Looking at a soil sample taken with an auger. (Right) Setting off on the wetland walk



(Left) Dr Piet-Louis Grundling showed how to make models of wetlands. (Right) A team of children walking like crabs during the wetland quiz, watched by Philip Calinikos, chairman of Friends of Colbyn Valley, and Dr Althea Grundling of the ARC.

In the words of Dr Piet-Louis Grundling, who has been involved in wetland conservation activities in the Colbyn Valley Wetland since the late 1990s: “When we engage with children from a young age on environmental matters we foster a love and passion for the Earth – we should not underestimate the ability of children to make environmental matters their own: like wetlands they are sponges soaking up fundamental concepts on environmental conservation and they become the agents of positive change at home, at school and in society.” Photos and report by Tamsyn Sherwill, Friends of Colbyn Valley.



On the eve of World Wetlands Day a short film **“The Plight of South Africa’s Peculiar Peatlands”** was launched. It was produced by the Agricultural Research Council – Natural Resources and Engineering as part of the Nexus for Wetland Management Project. It was funded by the Embassy of the Federal Republic of Germany Pretoria and produced in partnership with the Dept of Forestry Fisheries and the Environment and the Water Research Commission.

To watch the film, click this link: <https://www.youtube.com/watch?v=JQCKAjCC89c>

State of the Rivers

A virtual State of the Rivers Workshop was held on 1 February, addressed by Mark Graham of Ground Truth, Ilona Milner of UNICEF, Bonani Madikizela of the WRC, Noloyiso Mbiza of DWS and attended by citizen scientists from all over the country. Citizen scientists will be doing MiniSASS testing once a month from 4 March to 21 June and uploading the results on the revamped MiniSASS website: minisass.org. From 28 June to 26 August, the project team will produce a **State of the Rivers Report**. For more information email: sor24@groundtruth.co.za

WaterCAN Testing

On 7 February a virtual meeting was held between Ferrial Adam and Nomsa Daele of WaterCAN, an OUTA initiative, with citizen scientists from all over the country who are doing regular testing of tap or river water using the WaterCAN test kits. These test results will also be available for the State of the Rivers Report. Anyone wanting more information can contact Nomsa Daele – email: nomsa.daele@outa.co.za

News from WESSA Friends Groups

All the Friends Groups have worked on removing invasive aliens and several are doing water testing.

Friends of Moreleta Kloof N R had an Eco Day for children and their parents on 24 February.



(Left) Piet-Louis Grundling cut pieces of the plants' hollow stems and showed that they are like snorkels.

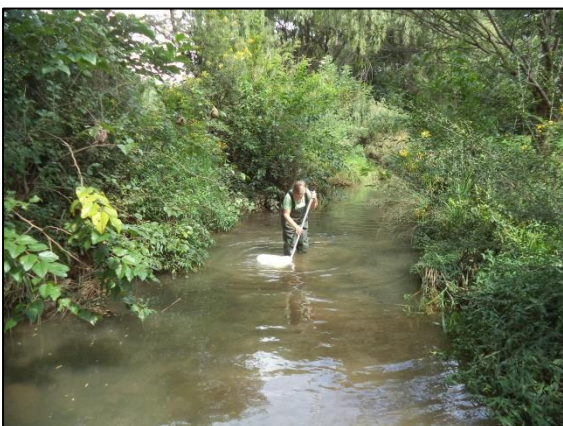
(Right) Noloyiso Mbiza, Piet-Louis Grundling, Jeannie du Plessis and Althea Grundling at the Eco Day.

The Friends have also had success with applying biological controls to the pompom weeds.

Friends of Faerie Glen N R had a Wild Flower Walk in January, a Scorpion Walk on 24 February and will have a Bird Walk on 16 March. A biological control has been applied to the Red Sunflowers.

Ecoglen Association organised regular clean-ups of litter and invasive aliens, a SASS5 test in February and a Bats Event for World Wildlife Day on 2 March.

Friends of Skuilkrans are doing regular hacks on Skuilkrans Koppie.



Friends of Serene Valley had a Bird Walk and have worked on removing invasive alien plants which were flourishing after the late rains. They are also doing regular testing for the State of the Rivers Report and WaterCAN. (Left) Collecting invertebrates in the Moreletaspruit for a MiniSASS test.



Damselfly nymph (left) and dragonfly nymph (right)

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Facebook Group – Adopt-a-River Moreleta