



Adopt Moreletaspruit/ Neem Moreletaspruit Aan

Newsletter/Nuusbrief 19, February/Februarie 2017

Among the aims of the Adopt Moreletaspruit Forum are to encourage **stewardship of our rivers** and **citizen science**.

A member of an SABC TV crew filming our Mandela Day event, said afterwards that it had never before struck him that water came from rivers! Probably many people don't realise that most of the water coming from their taps once ran in a small stream such as the Moreletaspruit somewhere along its way to a dam and water treatment plant. The water in the Moreletaspruit flows into the Roodeplaat Dam where a portion of the dam water is treated and becomes drinking water for our city's northern suburbs.

Stewardship: Safeguarding a city's water begins with protecting the land which surrounds the streams, fountains and dams to keep the water as clean as possible. Citizens can help by reporting any pollution incidents to the municipality at **012 358 9999** and reporting them on our Facebook page: Adopt-a-River Moreleta; helping Friends Groups and the CoT Nature Conservation Dept to remove alien vegetation and recycling responsibly so that plastics, packaging, glass and tins do not end up in the river.

Every stream, however small, is precious as it carries our country's water.

Citizen Science: Anyone, old or young, can become a citizen scientist. One way is to send your photos and observations to the Animal Demography Unit (ADU) www.adu.uct.ac.za Whether you are interested in birds, butterflies, reptiles, frogs, trees, mammals or *Odonata* (dragonflies and damselflies), or all of the above and whether you use a mobile phone or an expensive camera, your photos and reports are valuable. To conserve a species we need to understand the distribution and abundance of the species and you can add to this knowledge. Another citizen science activity is to add to the data on the water quality in our streams by doing miniSASS assessments and submitting the results to www.minisass.org Equipment for doing the miniSASS such as nets, trays and loupes can be ordered from GroundTruth at www.groundtruth.co.za



Broad Scarlet – Breë Bloesie – *Crocothemis erythraea* (dragonfly/naaldekoker) left, and Swamp Bluet – Vleiblouetjie – *Africallagma glaucum* (damselflies/ waterjuffers) right. Photographed along the Moreleta in Serene Valley by Helena Coetzee.

Dragonflies and Damselflies (Odonata), of which there are 159 species in South Africa, are being photographed along our waterways by passionate citizen scientists such as Helena. They are also two of the species which we use to monitor the health of aquatic ecosystems in the miniSASS assessment as their larvae live in water and are sensitive to pollution. In the second photo the Swamp Bluets are in the “wheel” mating position where the male grasps the female behind her head and she brings the end of her abdomen around to lock with his secondary genitalia. The damselflies for the most part deposit their eggs in vegetation associated with fresh water while dragonflies may deposit their eggs into water. The Odonata, together with mayflies which we also use in water quality assessment, are among the oldest insects on earth, dating back to 300 million years ago, before the days of flowering plants and dinosaurs, and were among the first animals to evolve the ability to fly! They are voracious predators, both in the adult and larval stages. The larvae have an extendable lower lip or “mask” with teeth on the end, which they shoot out to catch prey – see link showing a dragonfly larva hunting: https://www.youtube.com/watch?v=W557aSVdW_g

To distinguish between adult dragonflies and damselflies: (in general) dragonflies are more robust, their large compound eyes may touch in the centre and they hold their wings at right angles to the abdomen when at rest while damselflies are more slender, their eyes are far apart and they hold their wings parallel to the body at rest.

Mandela Day in July 2016: A very interesting and informative day with good opportunities for networking was organised by the WRC with help from our Forum, the DWS and CoT. The morning began at the Aurecon offices with presentations on the Moreletaspruit catchment, the future role of the WRC as a member of our Forum, a perspective into 2055 on the water resources for CoT, threats posed by invasive alien species and citizens’ role in managing water resources amongst others. Then everyone moved to the Faerie Glen Nature Reserve for the practical half of the morning which concentrated on river monitoring and 67 minutes of litter collection.



Photos by
Jeff Morris
and
Carol Martin



Photo top left: Louise Kritzinger (light hat) from Friends of Faerie Glen, Bonani Madikizela (dark blue shirt) from WRC and Ntswaki Dtlhale (light blue shirt) from GroundTruth outlined the programme and demonstrated the latest equipment. *Top right:* Participants set off to the two monitoring sites armed with yellow bags for litter collection. *Bottom left:* Collecting samples of invertebrates in the river. *Bottom right:* Dhesigen Naidoo (green pants), CEO of the WRC, gave a vote of thanks at the end of the morning. In addition to the other activities, 30 birds were identified during the 67 minutes by Philip Calinikos, Chairman of Birdlife North Gauteng. Quote from Nelson Mandela: "Our clean flowing rivers must be known by my grandchildren's children."

Diesel Spill into the Newlands Spruit from Menlyn Shopping Centre: Because of a faulty pump an estimated 2000 litres of diesel ran into the Moreletaspruit via the Newlands spruit on 28 August. The spill event was properly handled by Menlyn management which contracted African Horizon Technologies, specialists in industrial effluent control and oil pollution to manage the clean up. Diesel Electric Services carried out the work of deploying more than 400 m of booms, 300 oil absorbent pillows and over 8000 litres of Dissoil (microbes, enzymes and probiotics). The diesel spread as far as Meyerspark and took many weeks to be removed. *Top:* Workers removing diesel from the surface of the water in Lynnwood two weeks after the spill. *Bottom:* booms and absorbent pillows (right bottom corner) in Meyerspark.



Citizen science: Members of our Forum did a miniSASS test in Ecoglen two weeks after the spill. Usually our sample tray is teeming with invertebrate life. This time there was nothing but two aquatic earthworms and a crab, both of which can tolerate high levels of pollution. We carried out another assessment three months later on 4

December 2016. To our relief we found leeches, minnow mayflies, damselflies, dragonflies, caddisflies, true flies and snails as well as aquatic earthworms and crabs. The score was 4.4 which indicates that the river health is in a poor condition but at least it was a great deal better than in September.

Other pollution events: There was a large **sewage spill into the Constantiaspruit** at the end of November when a two-metre section of 33cm diameter sewage pipe broke and fell into the river. This was repaired after 4 days.

On 2 December a strong chemical smell was reported at the Newlands spruit and the next morning it was found that chemicals from a sump in the basement of **Menlyn Maine Central Square** were being pumped directly into the stormwater drain which led to the river. The chemicals, thought to include SO₂, burned the skin, mouths and noses of the investigating team.

With all the development going on around the river and the aging water and sewage infrastructure, it is of the utmost importance for anyone noticing odours or discolouration of the river water to report the occurrence immediately to the authorities at 012 358 9999 or to alert your ward councillor, Nature Conservation and/or our Forum.

Guided Hike along the Moreleta on 17 September 2016



The guided hike along the Moreletaspruit from Moreletakloof to the Pioneer's House in Silverton was a great success and many participants remarked on the excellent organisation. This is testimony to the planning and work put in by Helene Gertenbach of Brookside Meander who led the project, Nature Conservation, particularly Richard Ndhlovu (*left*) and his team who built bridges, put in stepping stones and cleared

vegetation, leaders of Friends Groups along the way, some of whom did a pre-hike, cleared vegetation and cleaned up in their sections, others provided coffee and rusks at the start, watermelon and fresh dates at the stop, and helped with the transport back to Moreletakloof at the end. The entrance fees were donated to Friends of Moreletakloof and will go to a different Friends Group each year.



(*Left*) Hikers arrive at Meyerspark and (*right*) have a short refreshment break before the last stretch to the Pioneer's House in Silverton.

Evening with Ward Councillors on 10 November

Our Forum invited the newly elected councillors for wards within the catchment areas of the Moreletaspruit, Pienaars River and Edendalespruit which flow into the Roodeplaat Dam to a get-together evening where the councillors and leaders of Friends Groups introduced themselves and presentations were given on the Moreleta catchment by Anneli Kühn and on the Moreleta Apies Pienaars (MAP) Forum by Erica Bergman. Afterwards there was a good buzz of conversation over the delicious snacks sponsored by the CCBC and made by Forum members. Thanks to the Dutch Reformed Church Lynnwood which generously sponsored the use of the venue.

Environmental Special Days for early 2017

February 2 – World Wetlands Day

March 3 - World Wildlife Day

March 22 – World Water Day - The International Theme is “**Waste Water**”

March 25 – Earth Hour 20:30 to 21:30

Water Week

Anneli Kühn, Judy Scott-Goldman and Carol Martin of the AMF are working with the JNF Walter Sisulu Environmental Centre (WSEC), representatives from Umkariso Women in Water, the WRC, DWS, SANBI and community members in Mamelodi on a programme of events for the week around World Water Day in March. Friends Groups along the

Moreletaspruit and tributaries are encouraged to organise events in their own areas and to inform Anneli (anneli.kuhn@gmail.com) – these events will then be marked on a map to be displayed at the final event at WSEC in Mamelodi on 25 March.

“Waste Water”: This theme is to discourage wasting of water and to encourage clever use of waste water such as grey water from baths and showers. Did you know that a running tap can waste 8 litres of water per minute?

Here is an innovative idea for swimming pool owners reproduced with permission from the sender, Lynn Hardwick, and WESSA which first sent it out to members in November.

The Hardwicks re-plumbed their backwash to an 800 litre JoJo tank with a creepy hose on the outlet. A normal backwash takes about 400 l so one can do two backwashes into the tank, allow it to settle overnight and the next day allow the first 10 litres into the garden as they are full of sludge and put the remaining 790 litres straight back into the pool. One can also fill up the pool using rain water from a nearby gutter down pipe by putting a container under the down pipe with a creepy hose from the container into the pool. This is both inexpensive and temporary.



Friends Groups/Vriendegroepe

Vriende van Faerie Glen N R het 'n grasveld uitstappie, gelei deur Petru Lemmer, op 12 November aangebied waartydens interessante nuwe spesies uitgekien is. Hulle het indringerplante op 27 November en 10 Desember verwyder. Nog 'n aksie teen indringerplante sal saam met 'n kerkgroep op 4 Februarie gehou word.

Friends of Colbyn Valley will hold a World Wetlands Day Event on 4 February. This will be aimed at children from 6 – 13 but everyone is welcome. Participants will go on a bird walk, have a presentation about wetlands and build models of wetlands.

Vriende van Moreletakloof het 'n geologie-uitstappie met Chris Siebert op 26 November gehou en is besig om 'n vol program vir 2017 te beplan.

Vriende van Skuilkrans se Gunther Trumpelmann het meeste van die indringerplante tussen die N4 en die Pioniershuis verwyder. Hy het ook die staproete van Meyerspark tot by die Pioniershuis oopgemaak. Hy is tans besig om **Vriende van Brookside Meander** te help om die indringerplante tussen Brooksidestr en die N4 te verwyder.

Friends of Serene Valley had a bird ringing demonstration on 16 December. They will have a clean up on 4 February for World Wetlands Day and a bird walk on 25 February.



Indringerplante

Al die vriendegroepe is tans besig om indringerplante te verwyder, voor die plante se saad kan versprei. Daar word veral aandag gegee aan pompoms, rooi sonneblomme en Skotse dissels wat nou blom. Die Vriendegroepe kan raad en die korrekte onkruidodders van Natuurbewaring verkry wanneer hulle toestemming van

Tshwane Natuurbewaring vra om indringerplante te verwyder.

Contact Details/ Kontak-besonderhede

DWS: Gauteng Region – Tel 012 392 1362. Email: RakgothoT@dwa.gov.za

CoT: Nature Conservation – Tel: 012 358 1510. Email: AdeleneL@TSHWANE.GOV.ZA

Adopt Moreletaspruit Forum – Email: anneli.kuhn@gmail.com - Tel 012 472 0069 or

083 750 2873. Secretary of the Forum: moreletaforum@gmail.com

Website: www.riv.co.za/ms

**Facebook Group – Adopt-a-River Moreleta
The Committee/Die Komitee**