

MATOBO



SOCIETY

PO Box FM 648, Famona, Bulawayo, Zimbabwe
matoboconservationsociety@gmail.com

Welfare No: W/0 30/94
www.matobo.org

NEWSLETTER 92 / MAY 2015

1 - COMMENT

I undertook to run the Matopos 33 Miler – many said I was crazy to do so, and I think they were probably right. But I persevered, and in much pain completed the Ultra-marathon. Wearing a specially designed shirt to reflect the MCS, I joined the real athletes at the start, on Sunday morning. But it is not that which I wish to write about, but the joy of running in the early morning within the Park. At 5:30am, when the race starts, the sun is yet to rise, and so you set off in the dark. Slowly the sky brightens, and as you climb from the Mtshleleli valley so the soft pinks and blues emerge in the sky behind you. I had to cast a look back to the massive brooding Shumba Shaba, a great dome against a softening sky. The morning bird chorus gets underway. Just after the World's View turnoff the sun rises in the east, throwing a golden light over Inungu, setting the aluminium cross ablaze in dazzling silver, whilst the valley is still in shadow. There was little breeze this year, and it was warmer than in prior years, making it all the more pleasant. The run goes past Lower Outspan, and now with the sun on your right, it's the turn of Efifi and Itali to come into view, bathed in soft light their golden lichen reflects the sun. And then down towards the McDonald memorial, early morning in the Matopos, dew on the grass. Keeping a sharp look-out for rhino we head for the Sandy Spruit Gate; 21 km's down, and the best part of the day, and the run is behind you.

But what an exceptional way to enjoy the Matopos!

2 – MATOBO PARK NEWS

Early May saw the sad loss of a male rhino in the Matopos Dam Recreational Park, opposite REPS. This particular animal tended to roam on his own, and in the past had returned safely to the Park. Sadly, this time his happy munching's were brought to a cruel end with a poacher's bullet, so bringing to an end a successful 18-month poacher free period in the Matopos.

Members have asked why the rhino was not within the protected area. It is felt that the less dense grass associated with the Recreational Park is preferred by the white rhino. Generally, the bush within the National Park is very thick, not the preferred habitat. This is due to the absence of large herbivores in any meaningful numbers. Many decades ago, the Matopos hosted buffalo, and these herds would have provided this function. Has the removal of the buffalo had a negative impact on the veld?

We remain confident that the rhino within the Game Park remain more secure than they were in the past, and hope that the fence project, with its community involvement, will prove to be successful.

What the sad loss of this animal means is that we can never be complacent, and the battle to save the Matopos Rhino's carries on.

In other news from the Park roads are being graded and fire breaks cut. Repairs have been carried out on the Whitewaters road, and accommodation at Maleme is being refurbished.

3 – PARK FEES

If you are staying in the park, the entry fee has been reduced to \$2 per person, per day. Pensioners pay \$1, and children U/12 also pay \$1. Regional visitors pay \$6 per day, and international visitors \$8.

Please note that this fee now applies to every day spent in the Park for which accommodation is proven. Single day entry remains \$3.

4 – www.matobo.org

The Matobo Conservation Society also has a Facebook page. So, look us up and see what's happening.

5 – SUBSCRIPTIONS

You are reminded that subscriptions for the year 1 October 2014 to 30 September 2015 are now overdue and payable. There has been no change from last year.

US\$ 20	Individual/Family
US\$ 5	Special Member (Pensioner/Student)
US\$100	Corporate

6 - NEXT EVENT

Date	31 st May 2015
Venue	Lumane valley ruins
Meet	8:15am to leave by 8:30am, Ascot Car Park
Travel	All vehicles, trucks preferred
Details	Provide own chairs, tables, meals and drinks. Don't forget your hat!

We will be travelling to the southern edge of the Matopos to visit the stone ruins located south of the Lumane Falls. Our Paul Hubbard will accompany us to shed some light on the site.

In the afternoon, members are welcome to visit the Lumane Falls themselves, though of course, river volumes will be much reduced. There is an entry fee.

Those wanting to travel out on the Saturday afternoon to Camp Dwala and enjoy a week-end out are asked to liaise with the Chairman who will coordinate the accommodation at the camp for the week-end. From Camp Dwala members will travel across to the Lumane via Dula.

7 – REPORT BACK

Sedges for the beginners!

With appreciation to Adele Edwards

For our MCS outing on 12 April we were joined at Camp Dwala by Dr Jane Browning, who was accompanied by her niece Tessa Ball and Cathy Sharpe. Jane is a remarkable woman; at the age of 63 she decided to get her Masters degree, and followed that a few years later with a doctorate. She has spent the last 35 years of her life studying a little known group of plants – sedges, and is now an honorary research associate at the Royal Botanical Gardens at Kew.

The sedge family, Cyperaceae, is the third largest monocot family. According to the Zimbabwe Flora web site worldwide there are 4,350 species in 98 genera; of these 28 genera and 267 taxa have been found in Zimbabwe. Jane admitted that one of the reasons sedges have not received a lot of attention is that they are dull and hard to identify – they don't have brightly coloured flowers or any easily identifiable features. For many of the sedges, identification to species level, and often genus, can only be achieved by studying their structure under a microscope.

Jane taught us that as a general rule '*sedges have edges, rushes are round, grasses are hollow right up from the ground*'. Unfortunately, she then went on to tell us that very little in nature follows the rules! Jane told us that sedges can vary in height from 3cm to 1m and can occur anywhere from the mountains to the coast. One of the most surprising things I learnt was that my preconceived notion that sedges grow in or near water was incorrect – while most abundant in wet places they can be found in dry, arid areas. In fact, those rounded clumps of long, drooping, silver-grey grass that occur high up on the kopjes are not a grass at all but a sedge (*Coleochloa setifera*). Other examples of sedges are papyrus and bulrushes, while Chinese water-chestnuts are the edible tubers of another sedge. A number of sedges from the East were imported into Africa with rice.

So armed with a little bit of knowledge, and magnifying glasses supplied by Cathy, we set off on a ramble. The scenery in the Matopos is so grand we often get caught up with the big picture. Jane, Cathy and the magnifying glasses opened up a magical, microscopic world at our feet. In addition to stopping to roll stems between our fingers feeling for edges, we also stopped to look at numerous dainty, beautiful, brightly coloured but tiny flowers. We were even shown an insectivorous plant, sundew (*Drosera*), whose leaves are edged with stalks bearing sticky 'dew drops' which trap insects. We all felt very pleased with ourselves when we correctly identified our first sedge: you could feel the triangular shape of the stem; it had little brown 'heads' (actually a cluster of minute flowers arranged in spikelets) below which were three green pointed leafy bracts; and when looked at from above, three leaves at the base of the plant where it came up from the ground. Textbook stuff. We didn't do so well with many of the others and had to rely on Jane's superior knowledge.

After a leisurely lunch in camp, we headed off in another direction, never moving too far as there was so much to see in a small space. It was a lovely end-of-summer day, sunny but not too hot. Late rains meant all the streams were running and pools of water lay all around. Some sedges grow under water, rooted in mud, with only the flowers showing above the surface, for wind pollination. Jane was particularly keen to see if she could find some of these. We didn't but a surprise discovery was a few small terrapins, only 4 – 5 cm long. (Jane remained on at Camp Dwala for another four days and did eventually succeed in finding one of these sedges). The Old Gwanda Road had recently been graded so we didn't even have to worry about the drive back to town.

Sincere thanks to Jane for her patience with us and so generously sharing her knowledge, and likewise to Cathy. Thanks also to the Stephens family and Surrender for hosting us at Camp Dwala.

A Treasure Trove of Sedges

With appreciation to Cathy Sharp.

Our week of sedge-collecting at Besna Kobilu began at Camp Dwala on Sunday 12th April with a few stalwart members of the Society. They were determined to learn something different and the wetlands always guarantee that you will. Of course, it's only through the learned eyes of Jane Browning that one will even see the plant let alone recognize it as a sedge rather than a grass!

The Cyperaceae family is where most of our sedges are placed taxonomically but with molecular research on a roll, this may change. There are two significant sedges one should try and remember as they are so much a part of the Matobo Hills. *Coleochloa* is the beautiful species that form rounded tufts growing out of cracks in the rocks. There are actually two species that often grow together, *C. setifera* and *C. pallidior*! They were green at the time but change to yellow then to brown in the dry season and we're all familiar with that sight. This is NOT a grass as we'd all assumed!

The other notable genus is *Isolepis* which grows submerged in slow-flowing streams or in pools. This is nothing like what we'd imagined to be a sedge, but is more like a water plant you'd see in a fish-tank.

The sedges all had lovely names and when enthusiastically rolled off Jane's tongue, sounded like a symphony of music..... *Schoenoplectiella*, *Fimbristylis*, *Lipocarpha*, *Scleria*, *Cyperus*, *Bulbostylis*, *Fuirena*..... This all emphasizes the importance of this ecosystem as a 'Hot Spot' of biodiversity within the Matobo Hills.

Thank you, Gavin and family, for allowing us to share the magic of your patch of heaven. Thank you Jane, for sharing your knowledge and passion, you're a real inspiration to all of us.

(We are awaiting a report from Jane on the field trip, which will only materialise after all the "back-room" work is completed. For a copy of the report from Cathy, with pictures, or further information please contact her directly on mycofreedom@yoafrica.com.)

8 – FUTURE EVENT

Event	Park Clean Up Day: World Environment Day
Date	Saturday, 6th June 2015
Venue	Matobo National Park
Meet	8:15am to leave by 8:30am, Churchill Arms
Travel	All vehicles
Details	Provide own chairs, tables, meals and drinks. Don't forget your hat!

Last year the Society coordinated with National Parks to tackle the cactus within the Maleme Rest Camp. A very useful exercise was carried out that saw the removal of the entire cactus rosa, but was unable to tackle the other cactus in the area.

Some of the cactus rosa has returned, as expected, and the remaining exotics need to be tackled. So join your Society in some meaningful conservation work at Maleme. Bring gloves, forks and spades – and a cup of tea.

9 – CALENDAR 2015

Herewith the proposed dates for the 2014 field trips –make a note in your diary!

Sat 06 th June	World Environment Day (MCS Park Clean Up)
Sun 23 rd Aug	Stone Hills
Sun 29 th Nov	AGM (venue to be advised)

Other dates

30 th – 31 st May	Matopos Mountaineering
28 th – 30 th August	Matopos Classic MTB

10– MATOPOS CLASSIC

The next major MTB event held under the auspices of the MCS will be the Matopos Classic over the weekend of 28 -30 August. Contact the Secretary if you need more detail.

11 – THE MATOPOS GAME PARK FENCE

Whilst the Game Park fence has been completed, we are yet to receive information on the remainder of the project that would protect the Park.

12 – MATOPOS MOUNTAINEERING / CLIMBING EVENT

Event	Matopos Mountaineering and Rock Climbing
Date	30 th and 31 st May 2015
Venue	Shumba Shaba Lodge
Meet	Shumba Shaba Lodge, 8km's off the Old Gwanda Road from the Matopos Mission. It is signposted along the Quaringa Road.
Travel	All vehicles
Details	Provide own chairs, tables, meals and drinks. Don't forget your hat!

A team of determined rock climbers led by Dominic have explored and opened up a number of climbing routes near Siloti, north-western Mtshabezi Gorge. A week-end of climbing has been arranged with routes that will enthuse beginners, and challenge the more serious. Instructors will be on hand to “show you the ropes” and assist. This promises to be a fun week-end and all are welcome.

Those wishing to attend can stay for the whole week-end, or visit for just a day. Accommodation can be booked at Shumba Shaba Lodge, Camp Dwala or Morning Star.

13 – NEW SIGNS

We have three more signs to erect, to bring the project to a close, bringing the total to twenty signs. The erection of the new signs was made possible through the generous donations of Market Force, National Fencing (Vernon Hammond), and Stray Dogs Furniture (Mark Swannack and Elton Lightfoot).

14 – THE MATOPOS 33 MILER ULTRA-MARATHON

The Matopos 33 Miler attracted 482 participants this year, a steady increase in numbers. The event comprises five races:

- 1) The 33 Miler Ultra-marathon which is for the committed runner, and attracted 66 athletes. The route is an accredited IAAF course, and within specified times, will qualify the runner to enter the Comrades Marathon. The race started at 5:30am at the MOTH Shrine and goes clockwise around the Circular Drive and back to BAC for the finish.
- 2) The Relay comprising five runners, each doing 10,6km's. This also starts at 5:30 am with the 33 Miler. 70 runners too part in this event, making up 14 teams.
- 3) The Half Marathon starts at 7:00 near the Khami River on the Matopos Road, and the 21,1km race finishes at BAC. There were 117 runners, more than double last year.
- 4) The wheelchair race, also 21,1km's, attracted 6 competitors.
- 5) The Fun Run started at 8:00am at Hamilton High School with the largest number of participants – 223 participants took to the streets for the last 5km's of the route, finishing at BAC.

This year the event was screened on Supersport which provided tremendous exposure.

A number of Matopos lodges took up water points within the Park. This included Amalinda, Matobo Hills Lodge and Big Cave Camp.

15 – AMAGUGU INTERNATIONAL HERITAGE CENTRE

Twenty-seven murals painted on the perimeter wall were unveiled at the Amagugu International Heritage Centre on 9th May. The 27 images depict various cultural scenes - men drinking traditional beer, boy milking a cow, young boys riding a tame ox, women harvesting maize, women fetching water from a river and a traditionally painted hut among many other images. The project is supported by HIVOS and the Norwegian Embassy. Visual artist, Bhekitshe Ntshali, completed the colourful murals. The centre is located on the Kezi Road, south of the National Park, and about 60km's from Bulawayo. The AIHC was founded by well-known local historian Pathisani Nyathi and opened in February 2012.

16 – RAINFALL

At the end of April rainfall figures in the Matopos were significantly different to those when we reported at the 25th March. The Eastern Matopos is now on 654mm, (80% of average), up from 445mm in March, an increase of 209mm. The Western Matopos is at 475mm (80% of average), up from 326mm by 149mm, with Bulawayo (Burnside) at 695 (or 115% of average), up by 115mm over March of 580mm. On Easter Sunday afternoon a single storm was measured at 100mm in the eastern Matopos, the heaviest fall of the year, but not uncommon in that area. A further fall of 50mm was recorded in mid-April. The vleis and streams have received a good boost and hopefully will now flow through the winter months. As a result the hills look surprisingly green for so late in the year, and after what has been a poor year. The failure of the January rains, our wettest month, that were less than 50% of average, had a severe impact on the water sources and river flow, and devastated the crops in the hills.

'Substantial' El Nino event predicted

By Helen Briggs BBC Environment Correspondent, 12 May 2015

The phenomenon arises from variations in ocean temperatures. The El Nino is still in its early stages, but has the potential to cause extreme weather around the world, according to forecasters.

US scientists announced in April that El Nino had arrived, but it was described then as "weak".

Australian scientists said models suggested it could strengthen from September onwards, but it was too early to determine with confidence how strong it could be.

"This is a proper El Nino effect, it's not a weak one," David Jones, manager of climate monitoring and prediction at the Bureau of Meteorology, told reporters. "You know, there's always a little bit of doubt when it comes to intensity forecasts, but across the models as a whole we'd suggest that this will be quite a substantial El Nino event."

An El Nino comes along about every two to seven years as part of a natural cycle. Every El Nino is different, and once one has started, models can predict how it might develop over the next six to nine months, with a reasonable level of accuracy.

A strong El Nino five years ago was linked with poor monsoons in Southeast Asia, droughts in southern Australia, the Philippines and Ecuador, blizzards in the US, heat waves in Brazil and extreme flooding in Mexico. Another strong El Nino event was expected during last year's record-breaking temperatures, but failed to materialise.

Prof Eric Guilyardi of the [Department of Meteorology at the University of Reading](#) said it would become clear in the summer whether this year might be different. "The likelihood of El Nino is high but its eventual strength in the winter when it has its major impacts worldwide is still unknown," he said. "We will know in the summer how strong it is going to be."

Weather patterns

The El Nino is a warming of the Pacific Ocean as part of a complex cycle linking atmosphere and ocean. The phenomenon is known to disrupt weather patterns around the world, and can bring wetter winters to the southwest US and droughts to northern Australia.

The consequences of El Nino are much less clear for Europe and the UK.

Research suggests that extreme El Nino events will become more likely as global temperatures rise.

Matopos

The El Nino effect results in drought within the Matabeleland region. The failure of the January rains this year could be the result of the then existing, all-be-it weak, El Nino, but if the forecasts are right, then next year does not look hopeful. Our rainfall is also affected by the Southern Ocean Oscillation and we wait to see if that has been impacted upon by the El Nino.

How can we predict El Nino?

In the tropical Pacific Ocean, scientists operate a network of buoys that measure temperature, currents and winds. The data - and other information from satellites and meteorological observations - is fed into complex computer models designed to predict an El Nino. However, the models cannot predict the

precise intensity or duration of an El Nino, or the areas likely to be affected. Researchers are trying to improve their models to give more advance notice.

17 – CLIMATE CHANGE: PARIS LAST CHANCE FOR ACTION

By Helen Briggs BBC Environment Correspondent ;22 April 2015

Scientists are calling on world leaders to sign up to an eight-point plan of action at landmark talks in Paris.

The key element is the goal to limit global warming to below 2C by moving to zero carbon emissions by 2050. The UN meeting in December is "the last chance" to avert dangerous climate change, according to the [Earth League](#).

Scientific evidence shows this can be achieved, but only with bold action now, says an alliance of climate researchers from 17 institutions.

The statement involves eight calls for action:

- Limiting global warming to below 2 degrees Celsius
- Keeping future CO2 emissions below 1,000 gigatonnes (billion tonnes)
- Creating a zero-carbon society by 2050
- Equity of approach - with richer countries helping poorer ones
- Technological research and innovation
- A global strategy to address loss and damage from climate change
- Safeguarding ecosystems such as forests and oceans that absorb CO2
- Providing climate finance for developing countries.

Chair of the Earth League, Johan Rockstrom, of the Stockholm Resilience Centre in Sweden, said the statement set out the scientific stance on what needed to happen at the Paris talks.

"Six years after the failure at Copenhagen, the world now has a second chance to agree upon a safe pathway towards a future that does not undermine human well-being in the world."

He said the statement summarised what the group of scientists believe has to happen at the Paris talks to avoid the risk of severe climate change linked with sea-level rise, heat waves, droughts and floods.

"The window is still open but just barely," he said. "There is still an opportunity to transition into a safe, reasonably stable climate future."

He added: "The statement says very clearly that 2 degrees is the absolute upper limit that the world should aim for."

'In this together'

The Earth League includes 17 scientific research institutions around the world, including two in the UK.

Professor Sir Brian Hoskins of the Grantham Institute - Climate Change and the Environment, Imperial College, London, said to achieve the goal, global carbon emissions would need to peak around 2020 and fall very rapidly to near zero by around 2050.

He said rich countries would have to take the lead on this and help the less developed world.

"We're all in this together - we share one planet, we share one atmosphere, we share one climate system."

The statement was released to coincide with Earth Day, an annual event to demonstrate support for environmental protection.

WWF-UK said governments around the world must agree a fair deal at Paris, but should take action beyond this. Head of climate and energy policy, Emma Pinchbeck, said: "The next UK Government must reaffirm our leadership on this key international issue, and commit to decarbonising policy in line with the science.

"When it comes to government action on climate change, we will benefit from ambition and will regret inaction."

18 - CO2 LEVELS REACH MONTHLY HIGH

7 May 2015, From the section [Science & Environment](#)

Global carbon dioxide (CO2) concentrations have reached a new monthly record of 400 parts per million, according to scientists.

The milestone was announced by the US National Oceanic and Atmospheric Administration (Noaa).

They said it was the first month that the entire globe broke 400ppm, reaching levels that haven't been seen for about two million years.

Noaa's Pieter Tans said that reaching the mark was "a significant milestone".

Scientists announced that CO₂ had passed the 400 ppm level for the first time in the Arctic in 2012, and then at Mauna Loa in Hawaii in 2013.

"It was only a matter of time that we would average 400 parts per million globally," said Mr Tans, lead scientist at NOAA's Global Greenhouse Gas Reference Network.

He added that CO₂ has risen more than 120 parts per million since pre-industrial times.

"Half of that rise has occurred since 1980," he said.

NOAA collects its data on global carbon dioxide concentration on air samples taken from 40 sites around the world, including some remote islands.

19 – MCS APPAREL

You are reminded that the Society has a stock of fleece sleeveless jackets, in olive green with orange MCS logo. They are ideal for the cool mornings and evenings. These are available at \$20 each. We still have stocks of hats and caps (at \$10 each). CD's are also available.