

## Editors Column

It's been an interesting year thus far; celebrating World Wetlands day at Monovale Vlei and World Pangolin Day on the 2<sup>nd</sup> and 16<sup>th</sup> of February 2013 respectively. This month we look at the issue of sustainability, particularly food sustainability and we ask what the 21<sup>st</sup> diet will look like and the role genetically modified organisms may play in feeding the world. Lastly, there are some great DIY recycling tips that you can use in your home.

We welcome your comments and environmental contributions which you may kindly send to The Editors on:

infor@blackcrystal.co.zw

Thank you and happy reading!



Environmental Consultants  
Caring for the environment beyond today

Black Crystal Consulting is one of Zimbabwe's leading reputable companies offering a quality service in environmental and socioeconomic consultancy services. Black Crystal Consulting believes in **caring for the environment beyond today** to ensure that biodiversity is maintained and that natural resources are not depleted for the next generation to come.

Black Crystal Consulting (Pvt) Ltd  
1 Fairbairn Drive  
Mount Pleasant  
Harare  
Phone: +263 4 334261 / 291 5265

## World Wetlands Day 2013 – Visit to Monovale Vlei: COSMO

The Richard Kevin Rugube and Marjorie Fadziso Mutemererwa Trust (RKRMTF), to which Ms Ngoni Mararike of Black Crystal Consulting is a Trustee and Environmental Advisor, celebrated the World Wetlands day on Saturday 2<sup>nd</sup> February 2013 at Monovale Vlei in Harare. The RKRMTF Trust was formed in December 2012 in memory of Ms Marjorie Mutemererwa's son, Kevin who was sadly electrocuted in 2011, at their

Greendale home following a ZESA fault. Because Kevin loved nature and wildlife, the trust aims to promote and raise awareness on environmental issues as well as support existing organizations already involved in environmental and wild life awareness and protection. At the time of his tragic death he had just celebrated his 17<sup>th</sup> Birthday.

Monovale Vlei is protected by a group of citizens concerned about the degradation of the Vlei from development and agricultural activities. The citizens initially came together in 2001 and formed the Monovale Residents' Environmental Action Group in 2001, which was later constituted into the Conservation Society of Monovale (COSMO) in 2005. Through COSMO the Monovale Vlei has become an important wetland of outstanding natural beauty and enormous biodiversity and the fantastic news is that it has just been declared as a Ramsar site (protected wetland) under the international Ramsar Convention.



Monvale vlei courtesy of?????

On the morning of the 2<sup>nd</sup> of February members of the RKRTMF trust were taken on a guided walk of the Vlei by Mrs Dorothy Wakling, the COSMO Manager where she explained to the trustees the history of COSMO and the importance of wetlands as well as the need to manage development around wetlands. After the walk Trustees met with the COSMO KIDS club.

Jimmy, the Monovale Scout on behalf of COSMO presented Mrs Marjorie Mutemererwa with an Inyanga flat top *Acacia Abyssinica* tree to plant in memory of Kevin.

## Food Glorious Food

Ever wondered what the 21<sup>st</sup> century diet will look like? Will it be organic? Will it consist of genetically modified food? Will it include any meat? Will it just be grains, vegetables and fruit? The most pressing question of all

is will there any food to sustain the world's population at all?

Food is only part of the challenge. Our current global food system is destroying biodiversity and our environment. Whilst millions of people in developing countries starve, Westernized countries are developing life-threatening illnesses like obesity and diabetes. The way food is distributed must change if we are to survive the centuries to come.

There are no simple solutions to these challenges, but as a society we must be engaged. Patrick Holden, director of the Soil Association is grappling with finding solutions to these questions and in doing so has set up the Sustainable Food Trust (SFT). Patrick recently spoke at an event in Harare, which he explained we need to get back to basics. We need to create a new forum, a social movement for change that tackles food shortages, the growing world population, scarce energy reserves and dwindling water supplies head on.

He explained that the SFT was created with four main goals in mind: to communicate and promote a collective global vision that inspires and supports increased local action, informs and strengthens the influence of public opinion and, lastly, one that works to elevate the status of food and farming policy.

The key principles for sustainable food systems are that they should:

- Optimize the production of high quality safe food
- Minimize the use of non-renewable external inputs
- Maintain and build soil fertility
- Enhance food security and a high degree of resilience against external shocks
- Support plant and animal diversity and animal welfare
- Minimize environmental pollution
- Promote public health

As consumers, our decisions about how and what we eat matter more now, than ever before. We are all in a position to influence a change. If we are to transform our food systems to feed the world in the right ways, we need to work together, share ideas, pool resources and

connect as part of a global food movement. Every voice counts.

For more information visit [www.sustainablefoodtrust.org](http://www.sustainablefoodtrust.org)

## Genetically Modified Organism (GMO)

A genetically modified organism (GMO) is an organism whose genetic material has been altered using genetic engineering techniques. You have probably been eating GMOs without realizing it. Is that a good thing?

The question is: where do you stand on GMO's? Do you agree that they the solution to the world's food needs? Or are they harmful to the environment and human health? Do you know how often you eat them? Do you really understand what they are and the implications? Should they be allowed at all?

There are many controversies around GMOs on several levels, including whether making them is ethical, whether food produced with them is safe, whether such food should be labeled and if so how, whether agricultural biotech is needed to address world hunger now or in the future, and more specifically to GM crops—intellectual property and market dynamics; environmental effects of GM crops; and GM crops' role in industrial agricultural more generally.

Why not get educated today and research into GMO's and find out where you stand!

## Recycling Tip – DIY

**Miniature greenhouse** made from used CD holders. A good idea if you have chickens or other animals walking around



## Geo-engineering - An Insurance Policy For Planet Earth?

Geo-engineering is the deliberate large-scale intervention in the Earth's natural systems to counteract climate change. There are a wide range of proposed techniques which aim to cool the planet by bouncing a fraction of the sun's light back into space or by removing CO<sub>2</sub> from the atmosphere.

We will look into this issue in more details in the next Crystal newsletter.

## New GMO Working Group: Genetically Modified Organisms

A new Google group has been set up called foodmatterszimbabwe. Please join if you are interested in food matters in Zimbabwe and if food matters to you. It is an email listing that will share information and debate on a variety of issues. The initial focus will be on the critical issue of GMOs and understanding what they are and what they mean. It is likely to become a very good source of information on GMOs and a range of other topics related to food.

If you would like to join all you need to do is to send an email to saradavies05@gmail.com and say 'Yes, I'd like to join the foodmatterszimbabwe Google list' and then you will receive an email with the link which you click on and you have joined.

In due course the aim is to set up some kind of citizens' food group that becomes more and more active around issues of food, which is so central to all our lives and which is being more and more controlled by fewer and fewer players, as the centralization of commerce continues to wreak havoc on the future sustainability of food systems at many levels. This group will link farmers and consumers into a vibrant force. It's vital that we build a strong food movement because it is only citizens in Zimbabwe and across Africa acting together who will change attitudes, policies and practices.

Sharon Waterworth of Black Crystal has been invited to on the GMO Working Group Committee (WG) so we will be posting information on the progress of the Committee from time to time on the Black Crystal website and face book page. The WG is committed to providing a platform to discuss the issues around GMOs in Zimbabwe. The WG is interested in all types of GMOs,

including food production. The WG plans to hold public debates on the subject where information will be presented on the health, environmental, political and social impact of GMOs. The WG is working towards forging 'smart partnerships' with other interested organizations and is it is planning to undertake awareness raising campaigns.

For further information please contact Ms Sara Davies, email address: saradavies05@gmail.com.

## Recycling Tip – DIY



This is a great idea for preserving your food be it in the fridge or in the cupboard. The cap makes it easy to pour out if its grain that is stored in them.

## Sustainability: Paradigm Shift

As the precarious state of global economy and the on-going political upheavals in many parts of the world are grabbing headlines, there is one neglected — yet absolutely critical — feature of successful risk management: playing safe with our planet.

A few years ago, a group of 28 scientists at the Stockholm Resilience Centre identified and quantified a set of nine planetary boundaries within which humanity can continue to develop and thrive. In the last 200 years we've already overshot three of those.

At the moment, however, ensuring a safe operating space for humanity just isn't top of minds as austerity tightens its grip on our planet and its seven billion people. As a result, financial and political crises have all but wiped out resources allocated to other types of risk — be it poverty, health, biodiversity loss or climate change.

But it doesn't have to be that way.

We all share the vision of a world where people are living well and also within the safe operating space of the planet. Therefore, the world needs a new development paradigm of growth within limits. To get there, there are certain must-haves.

First, we need to develop a planetary dashboard where safe boundaries are defined for critical environmental processes that directly affect human prosperity. Such a dashboard will allow us to see which areas are approaching unacceptable tipping points. Some of us are starting to call these Key Performance Indicators (KPIs) of the planet.

Second, our consumption and development need to fit into our planetary boundaries, and we need to recognize that some resources are, in fact, finite. To achieve this, we need to understand the true cost and true value of ecosystems services and make them visible in GDP accounts and companies' balance sheets. Smart public policy solutions can accelerate this.

Last but certainly not least, we must change our mindset. For many years, we have viewed nature either as something in need of protection or something that defies human control as in "a force of nature". In reality, maintaining a healthy natural environment can provide a cost-effective solution to boost social resilience; fight poverty and climate change, and propel greener and inclusive growth in order to safeguard human wellbeing on our planet for future generations.

A world transition to global sustainability is not a choice. It is a necessity. All evidence indicates that our current route of ever increasing environmental risks is too costly and dangerous. It is time to start investing in our natural capital now!

Courtesy of the World Business Council For Sustainable Development. Visit <http://www.wbcsd.org> for further details.

## Dung Beetles Do It By Starlight

A new study by South African researcher, Dr Marie Dacke, shows that dung beetles navigate via the Milky Way, the first known species to do so in the animal kingdom.



The insects can orient themselves to the bright stripe of light generated by our galaxy, and move in a line relative to it.

"This is a complicated navigational feat—it's quite impressive for an animal that size," said study co-author Eric Warrant, a biologist at the University of Lund in Sweden.

Moving in a straight line is crucial to dung beetles, which live in a rough-and-tumble world where competition for excrement is fierce.

Once the beetles sniff out a steaming pile, males painstakingly craft the dung into balls and roll them as far away from the chaotic mound as possible, often toting a female that they have also picked up. The pair buries the dung, which later becomes food for their babies.

But it's not always that easy. Lurking about the dung pile are lots of dung beetles just waiting to snatch a freshly made ball. That's why ball-bearing beetles have to make a fast beeline away from the pile.

"If they roll back into the dung pile, it's curtains," Warrant says. If thieves near the pile steal their ball, the beetle has to start all over again, which is a big investment of energy.

Scientists already knew that dung beetles can move in straight lines away from dung piles by detecting a symmetrical pattern of polarized light that appears around the sun. We can't see this pattern, but insects can thanks to special photoreceptors in their eyes. But less well-known was how beetles use visual cues at night, such as the moon and its much weaker polarized light pattern. It occurred to the scientists that maybe they were using the stars—and it turned out they were.