



DAMBARI WILDLIFE TRUST'S MATOPOS BIODIVERSITY MONITORING PROGRAMME NEWSLETTER

January 2013-May 2013



Dear Conservation Partner

We hope our third edition of Dambari's Matopos BDMP newsletter finds you well. The monitors have done a great job over the year, they collected vast amounts of invaluable data especially with the pitfall traps. We have recruited a new cohort (Form 3s) since our old members are now in Form 4 and are busy preparing for their ZIMSEC exams. Good luck monitors and do us proud! This edition reports on our findings from the programme and the impacts of the programme on childrens' attitude. It also features great poems and fantastic drawings from the monitors. The newsletter has a new layout which I hope will make the reading easier and more enjoyable. Check the spoiler section; a tease on what to expect in our next thrilling edition. Happy reading!

Faraimunshe Mawhiya

A Quick Recap of the Project

The Matopos biodiversity monitoring programme (BDMP) was launched in March 2012. The programme works with five schools within a ten kilometre radius of Matopos national park, which are Bazha Secondary, White Waters Secondary, Silozwe Secondary, Tohwe Secondary and Matopo Mission. The aim of the programme is to encourage long-term, community-driven biodiversity monitoring, by teaching secondary school pupils how to collect, summarise and report on biodiversity data in their communities. We train form 3 students since they have sufficient background scientific knowledge to allow uptake of monitoring methods, and do not sit major exams during the Form 3 year. The monitors carry data sheets and record species they see on an ad-hoc basis. The programme has had overwhelming support, with more than 200 members enrolling in the programme.

Programme results and activities

Collected data

The monitors record species of interest on an ad hoc basis on their data sheets, and a list of 60 organisms in nine classes was compiled across all schools. Encouragingly, they recorded both vertebrates and invertebrates, from the bee to the hippo.

In the third term they learned to set up pitfall traps and then recorded the invertebrates found in the traps. In excess of 2,120 specimens, representing five classes, 13 orders, 34 families and 107 species, were collected using pitfall traps between November 2012 and March 2013. Bazha Secondary School had the greatest richness, in terms of species (65), families (26) and orders (11), whilst Matopo Mission had a relatively depauperate fauna: 12 species and six families in four orders. In all cases, beetles dominated the specimens collected, with dung beetles (Scarabaeidae) forming a large proportion of the catch. Reasons for the variation in species richness and diversity have not yet been investigated, but we hypothesise that varying levels of human and livestock activity and proximity to naturally vegetated areas were contributing factors.

We are grateful to the entomologists at the Bulawayo Natural History Museum for assistance in identifying the insect specimens.

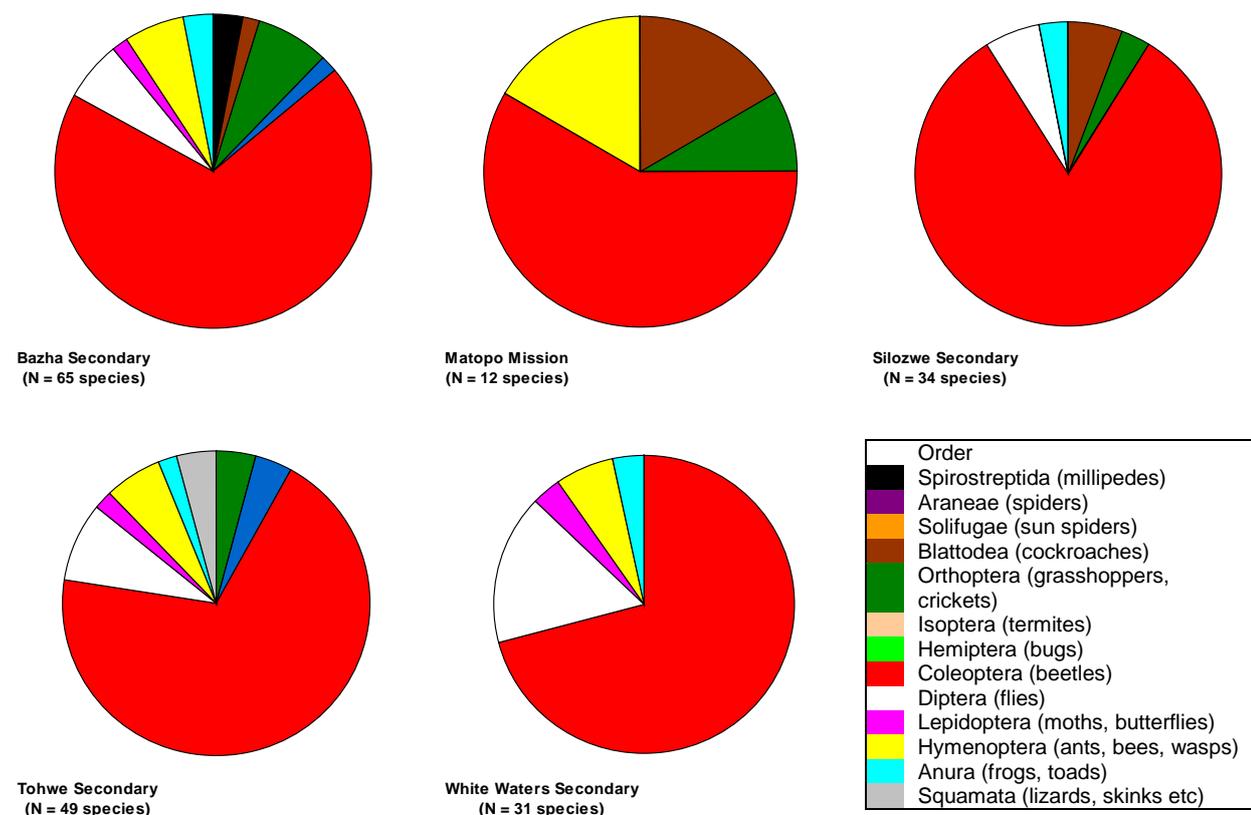


Figure 1: Number of identified species in each order from each school. Organisms that were not identified to species level were excluded, but all orders recorded are listed in the key.

Impacts of the programme on the monitors

The children's attitude to responsibility for natural resource conservation changed over time. Prior to the programme, a mean of 36% of children believed that natural resources were the responsibility of the local community. By March 2013, more than half of the children took this view (Fig. 2). In addition, there was an increase in the proportion of children who were concerned about biodiversity loss and extinction (Fig. 3). These changes were assessed using three sets of questionnaires that were administered to the monitors pre-, during- and post-training. 30 questionnaires per school were filled in by the monitors on each occasion. In addition a set of questionnaires was also administered to a control group of Form 4 pupils that had not participated in the programme, to measure the degree of knowledge uptake by trained pupils compared to their peers. With this kind of change in the attitudes and behaviours children will be more inclined to take action for the environment.

Who should be responsible for managing natural resources?

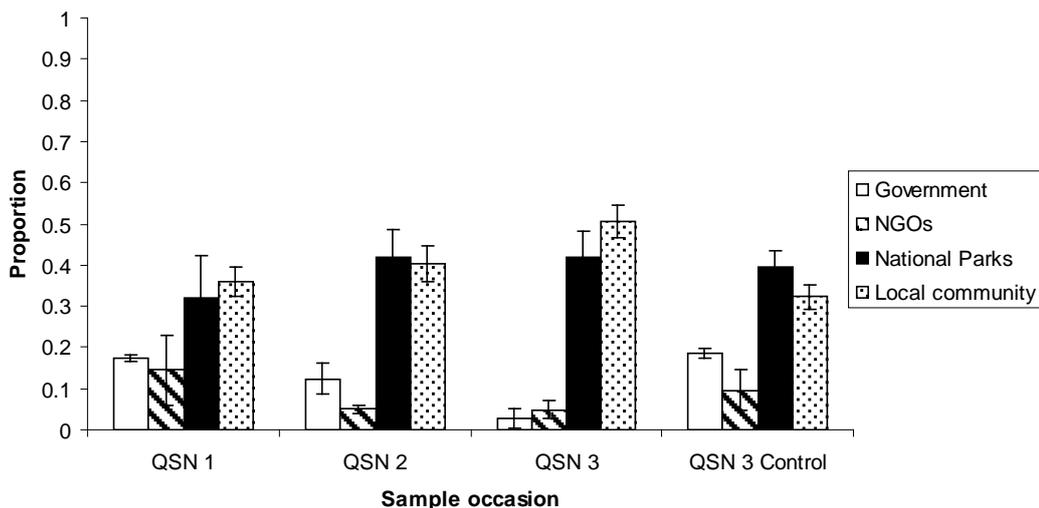


Figure 2: Children's perceptions (mean \pm SE across five schools) of who should be responsible for natural resource management, in March 2012 (QSN 1) October 2012 (QSN 2) and March 2013 (QSN 3). The control group (QSN 3 Control) of untrained Form 4s was sampled in March 2013.

How do you feel about species disappearing?

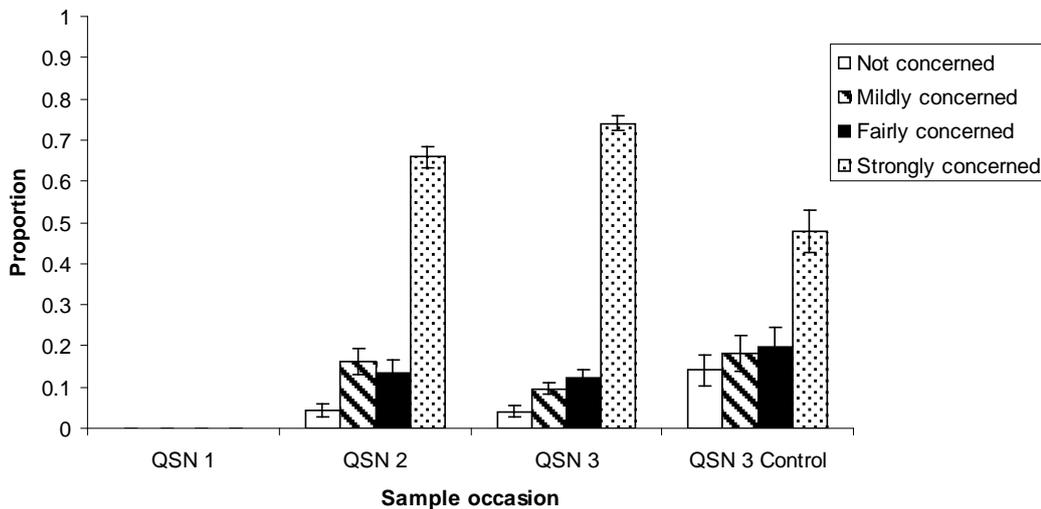
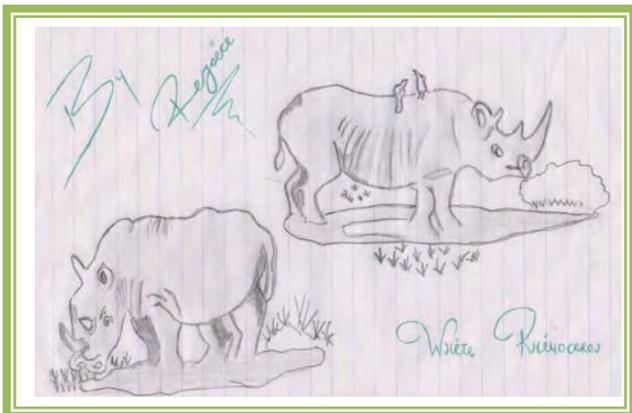
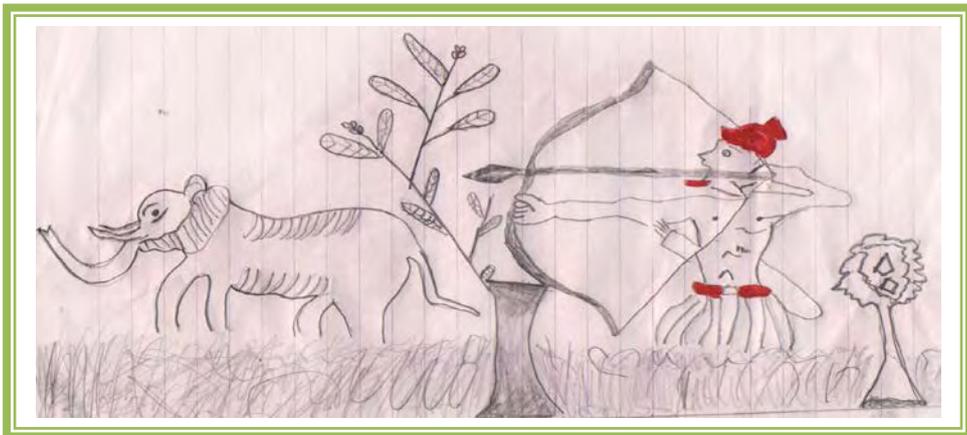
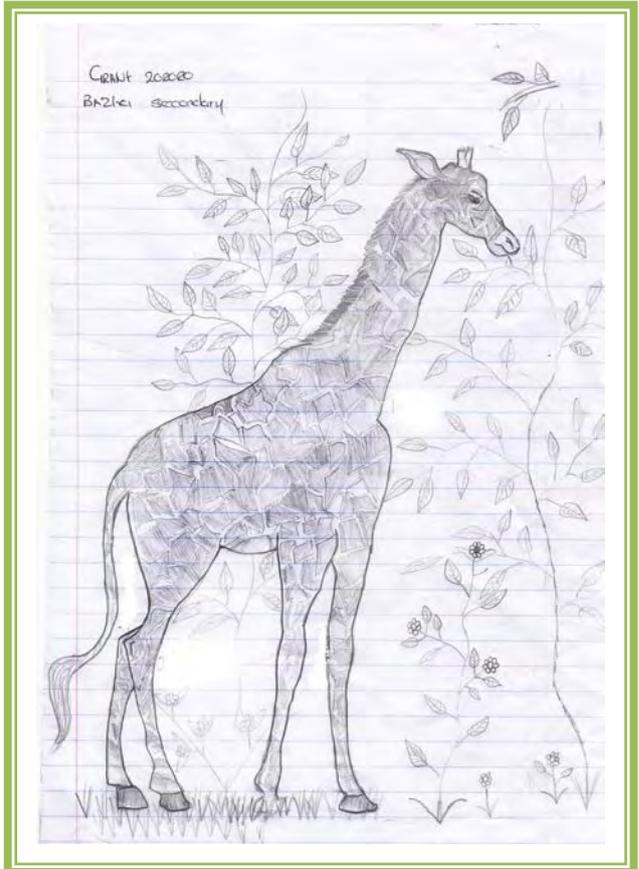


Figure 3: Children's attitudes (mean \pm SE across five schools) to loss of biodiversity or species extinction, in October 2012 (QSN 2) and March 2013 (QSN 3). The control group (QSN 3 Control) of untrained Form 4s was sampled in March 2013; the question was not posed in March 2012.

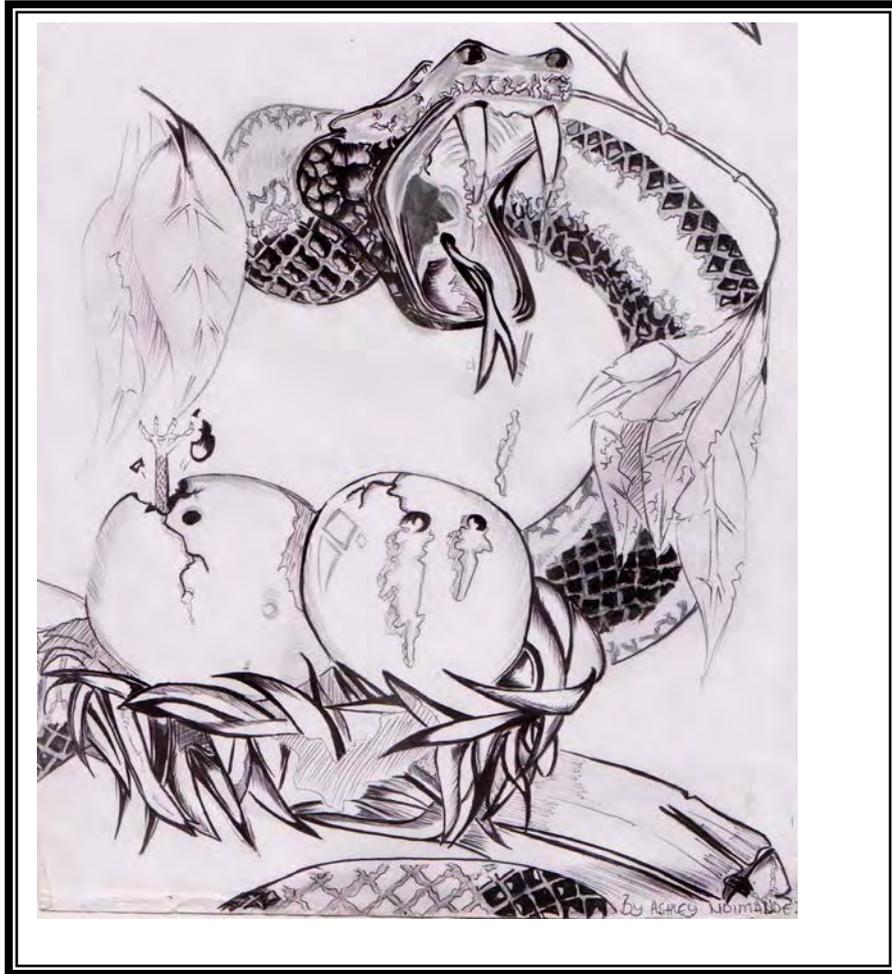
For more information on the results and findings please read our yearly report which is available on request. Those who have it already feel free to distribute it.

Art corner



Top left: Alvin Masiye- Matopo mission
Top right: Grant Zororo- Bazha secondary
Middle: Similo Ncube- Bazha secondary
Bottom left: Trish Tsikira and Rejoice Mpakame- Matopo mission
Bottom right: Solace Ndlovu-Tohwe secondary

Featured artist: Ashley tsepo Ndimande - Matopo Mission



Poetry, songs and scripts

Uyisicebi Hwange- a poem on the various things we get and learn from nature

Ngiphakhamise amehlo ami aqonda
Entshonalanga lawelizwe
Ngikhangwa zinyamazana zakhona
Lamahle amnyama tishu ehwange
Uyisicebi hwange

Inyamazana zemihlobohlolo zikuwe
Amabhalabhala, lempala, indlovu lenyati
Obhejan, amakhanka lezilwane
Zonke zibuthene lawawaicho amagusu

Amahle anambisa izitimela
Amalahle apheka amanzi kagetsi
Amalahle atshisa isimbi incibilike
Othokala kuwe hwange

Sifunda ukugana izinyamazana kuwe
Sifunda ukulondoza ezenjiweyo kuwe
Sifunde konge olakho hwange
Ngempela iqqakathekile indawo yeHwange

Sphiwe Masukuu :Bazha Secondary

A poor screaming World

Concrete rising up where
Yesterday there were parks
Where we used to hear the robin's song...

Where will this lead to?
And what is this good for?
Nothing but a poor world.....
A poor world indeed

Heavy tractors and machinery run
Polluting the clean and cool air
They make money destroying resources

Where will this lead to?
And what is this good for?
A poor world that's hurting bad
A poor world that's doomed to die.

We kill the world, They kill the world
Cause we don't know what we are doing
We kill the world

Don't kill the world, She's all we have
And surely is worth to save
Our only hope to survival.....
Don't kill the world
Its's Our world...
Let's protect it

Rejoice Mpakame : Matopo Mission

What I learnt

My name is Gracious Ndlovu. I am in from 4 west at Tohwe Matopo Secondary School. I am a member of the Dambari wildlife conservation club. I joined the club in 2012 when I was in form 3. I learnt many things, like to count the animals along transect lines, and set up pitfall traps. I learnt how to count small living organisms using quadrats and how to setup pitfall traps. When you want to count small slow moving animals like insects, millipedes we must count them using quadrats those quadrats are made by four joined planks. When setting up the traps you put the tin jar in the ground and poured water and alcohol inside the tin jar. That alcohol makes those animals do not be perishable.

We depend on it, so let's save it

Whether we realise it or not we are in danger. One may ask "why" but may fail to answer himself, It takes a student who has been studious, and who has decided to enlighten the world about what is happening and what will happen. I am that student and I have decided to take the step.

Where there is light? there is hope I say so, lets save the little we have instead of wasting and destroying, why be negative while we can be positive. It is getting more and scarier to watch the extinction of biodiversity as the pendulum swings due to our human activities.

The very co-producers of our food are in danger because of the shortage of water. Yes I may agree its nature that causes such thing but agree with me dear reader that we humans also greatly contribute to that. Trees are being cut every day, the rate of evapotranspiration is being reduced as a result less rainfall.

The shortage of water cause little plants such as grass to grow at a limited factor and the grasses are soon over grazed by animals. When the grass is overgrazed some animals die of hunger and a few are left. It is amazing to watch the grasslands turn into deserts over a short time.

The few animals that survive drought are even wasted by us humans for example the pangolins are getting scarcer by the minute. Rhinos and elephants are killed for ivory. What will the environment look like without nature like water, plants and animals we even need the plants and animals for food.

So people why destroy while we can build?

Providence proxy Moyo : Matopo Mission

What I learnt as a monitor

The time I have been a monitor I learnt different methods of collecting data, I learnt that a herbarium is a collection of dried pressed plants, I now know that biodiversity is the variety of all living species. Above all I learnt that we should conserve biodiversity because it can help support the local communities by providing us with wild fruit for consumption. Clean air, provide relish through sustainable fishing, and harvesting of mopane worms, these can also act as a source of income. I also learnt that we can enjoy our resources in a non-consumptive manner by attracting tourists.

Mercy Bhebhe : Silozwe High

Dambari in Matopo so far

I give a vote of thanks to the famous Dambari wildlife trust only as because as members of the club we have benefited a lot. We now know how to conserve our land for future uses and generations, how animals live and interact from season to season. Above all the activities we did were very fun including but not limited to: setting up pitfall traps, data collection, Point counts, and information on resources management. Watching video footages on how animals live and plants pollinate, and so many more including a trip that is yet to happen soonest.

They gave us a very caring team to support us through the training.

Ashley Tsepo Ndimande : Matopo Mission

Taking care of our environment

Humanity depends on the environment; we should take good care for our environment. If we don't take care of it you and I will be greatly affected. Let us not destroy it! Let's treat the environment with respect, it deserves better than this. I saying this, because if we don't improve we will be faced with imaginable suffering, increased floods, droughts..... We must conserve our environment. Let's not rob its sense of beauty and its sense of dignity, for long is our environment going to suffer? Let's conserve our environment/biodiversity!

Nation : you shall weep for the poor, cry for the destitute, wait for the sun to rise and cry never to see tomorrow if you destroy the environment. You will wonder when I will ask where. Our environment supports us let us knit economic plans and handle it with care.

Thank you for paying attention to my words.

Princess Mabhena: Silozwe high school

Spoilers

The Dambari Conservation Club's new cohort has started on a high note, in the first term they were concentrating on trees. Each monitor was required to collect and press five different tree species found around their homesteads. The main objective of this exercise is to come up with a species inventory of trees found around the Matopo National park- at village level. In the second term, the monitors will concentrate on birds. The birds they are monitoring were selected using two main categories: utilised (e.g. food, tourism) and / or indicator organisms and "problem" organisms (e.g. alien invasive, species in conflict with humans). Watch out for the next edition for more on the results and challenges faced. I will leave you pondering on the pictures below: pressed trees and grasses by monitors from White Waters secondary school.



Pressed and mounted trees and plants by monitors from White waters secondary.

Cover pictures by:

Grant Zororo:	Bazha secondary
Linda Siwela:	White Waters secondary
Wandile B.Ncube	
Primrose Gracious Ndlovu:	Tohwe secondary

The Biodiversity Monitoring Project is sponsored by:



Dambari Wildlife Trust's primary supporters are:



For more information about the Matopos Biodiversity Monitoring Programme or Dambari Wildlife Trust please visit our web site www.dambari.com or contact us: Dambari Wildlife Trust, P.O. Box 3863, Bulawayo, phone +263 (0)9 280029/30 or 280418 or 0712 366916, or email education@dambari.com