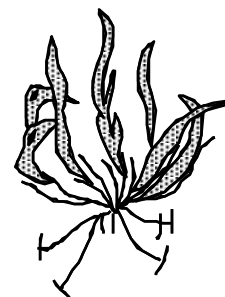


Geological Society of Zimbabwe



Newsletter

June 2012



Mother-and-Child and Mount Tikwiri to Sansaguru from Rusape Dam Wall – Pride of Makoni.
Lucy Broderick, January 2012

The Geological Society of Zimbabwe, P.O. Box CY 1719, Causeway, Harare

Contents

EDITORIAL	3
CHAIRMAN'S CHAT	4
ARTICLES AND REPORTS	
The growth of the Zimbabwe Craton during the late Archaean: an ion microprobe U-Pb zircon study	6
Laboratory analysis reveals direct evidence of pre-colonial gold recovery in the Archaeology of Zimbabwe's Eastern Districts	6
Comment on a trip to Sanyatwe and Nyanga by Anthony Harding	7
On naturally sculpted granites in Zimbabwe	8
NEWS	
Geology Department, University of Zimbabwe	10
Geological Survey Department	12
Mining Industry News	13
News about Zim Geoscientists	17
RESEARCH FUNDING OPPORTUNITIES	
GSZ Research and Development Fund	17
SEG Timothy Nutt Scholarship Memorial Fund	17
CONFERENCES	18
ADVERTORIAL 3D Earth Exploration (Pty) Limited	19
CONTACT DETAILS OF MEMBERS OF THE EXECUTIVE COMMITTEE	20
INSTITUTIONAL MEMBERS, 2012	20



The Committee, on behalf of the Geological Society of Zimbabwe, would like to offer a sincere vote of thanks to Marion de Beer of *Cadline* for preparing and printing our Phaup Award certificates for 2009 -- free of charge. This is, as previously, a wonderful gesture of Marion's time and skills and we can only encourage all you geologists and mining houses to steer your Autocad mapping work in her direction and to take advantage of at least 30 years of hard-won cartographic experience. *Cadline* also offers monochrome printing and scanning services in formats up to A0. Their telephone contact is 04-2917261/60 Tel/Fax is 04-301855 and the address is 94B Pendennis Road, Mount Pleasant in Harare. marion.debeer@cadline.co.zw

Editorial

Welcome to the first GSZ Newsletter under the Chairmanship of Bornwell Mupaya. I continue as editor, but with a great deal of assistance and liaison from Forbes Mugumbate, who is acknowledged for his work in providing news for the mining industry and for the Geological Survey as well as for co-ordinating other contributions. I have taken the liberty of summarizing Forbes AGM presentation on the “sculptured granites” of Zimbabwe, which as always was most entertaining.

Hugh Rollinson and Martin Whitehouse are congratulated as the A.E. Phaup Award-winners for 2011 through their paper “The growth of the Zimbabwe Craton during the late Archaean: an ion microprobe U–Pb zircon study”. We publish the abstract from *Journal of the Geological Society of London* for your interest.

Lawrence Poterai received the Mike Vinyu Award for being the best overall student in Geology at the Bulawayo School of Mines in 2011. His citation was read at the AGM by Mr Tusai from the School of Mines.

The Keith Viewing Award for the best presentation at the 2011 Summer Symposium was again won by Hillary Gumbo, this time in co-authorship with Peter Bourhill for their paper entitled “Integrated Exploration on a Coal Project in southern Zimbabwe”.

Ann Kritzinger has submitted the abstract of her paper on Nyanga archaeology, which she presented at the 9th International Mining History Congress, Johannesburg in April. Comments from Anthony Harding follow based on a post-Conference visit to Nyanga.

This year’s Chamber of Mines AGM, its 73rd, was held at Victoria Falls from 10th to 12th May with the theme “Powering the Mining Industry for Growth and Development”. The AGM saw the re-election of the presidium, which means the extension of the tenure of the present president, Mr Winston Chitando, his first vice-president, Mr Alex Mhembere, and the second vice-president, Mr Allan Mashingaidze. It is heartening to see that we as geologists are well represented.

Our proposed four-cornered symposium at Victoria Falls has been scheduled for November 2013 due to the international co-operation and co-ordination that will be required from geoscientists representing Botswana, Namibia, Zambia and Zimbabwe. Please note that our regular Summer Symposium will take place on 30th November. Please read the announcement and diarise the date. Andrew du Toit is looking for abstracts, so please put your mind to the challenge.

Andrew du Toit has also initiated a Geological Society of Zimbabwe group on Facebook to facilitate communication between Members. Already this group has a membership of over 250 friends. You are bound to find some of your lost colleagues there so please visit and join in with your news, or ask for details from Andrew on andrew.dutoit@zimplats.com

The views expressed in this newsletter are not necessarily those of the Hon. Editor or Members of the standing Committee.

Tim Broderick



Chairperson's Chat

Fadzanai Bornwell Mupaya

It is a great pleasure to be able to give you this chat as your new chairperson. I would like to start by thanking you all for trusting me with this position to steer activities of the Society during the 2012-2013 term.

The previous committee chaired by Dr Houda Bouammar is greatly thanked for successfully running the Society during a time when our country has been recuperating from devastating economic and political conditions. We, the new committee comprising myself Fadzanayi Bornwell Mupaya (Chairman), Hillary Gumbo (Vice Chairman), Collins Mwatahwa (Treasurer), Sofelani Mangezi (Honorary Secretary), Hillary Gumbo (Membership Secretary), Forbes Mugumbate (Newsletter co-ordinator), Daniel Chatora (Field Trips), Dr Isador Manuel (Talks), Andrew du Toit (Summer Symposium), Dr Houda Bouammar and Dr Ali Ait-Kaci, promise to continue with putting maximum efforts to ensure survival of our Society.

This year's AGM and dinner, when the above committee was inaugurated, was well attended. Please continue to support your Society's activities including participation on field trips and in attending talks. As has become the tradition, the AGM was used to celebrate achievements of winners of the Society's awards namely the A.E. Phaup Award given to the author(s) who made the most important contribution towards the Geology of Zimbabwe through publishing results of research in internationally acclaimed journals; and the Mike Vinyu Award given to the best student at the School of Mines. We congratulate the winners. There was no Geoffrey Bond Award given for the best BSc Honours project at the University of Zimbabwe, as the course was not run in 2011.

Forbes Mugumbate gave an interesting talk on granite topography at the AGM dinner. The talk, accompanied by excellent photographs, reminds us of the richness of granite in its variously weathered forms, of which Zimbabwe displays superb examples. Please continue to enjoy our God-given natural scenery.

Although Tim Broderick is no longer in the Committee, he has agreed to continue being Editor for the Newsletter. We take this opportunity to acknowledge the selfless work done by Tim to ensure that the Newsletter, which remains the most important medium for communicating Society issues and events, is produced. Please contribute bits and pieces of information to make the Newsletter more exciting.

The year 2012 started on a challenging tone, as no exploration licenses have been granted over many years. However, the Ministry of Mines and Mining Development has started a process to rectify the anomaly (See Industry News Section). The hiking of mining fees also promised to dampen the New Year. It is, however, noted that government has taken cognisance of the various interventions and advice given against this move, and is reviewing changes. We hope the government will in future engage stakeholders on such important issues to avoid unnecessary disagreement.

It is heartening to note that the government has decided to promote university education in the country through the initiative of the Deputy Prime Minister's, Professor Arthur Mutambara, "support the University of Zimbabwe Fund", which has resulted in many faculties being funded. The University of Zimbabwe funding exercise has seen some mining companies such as Mbada Diamonds pledging full support to the Metallurgical Engineering Department at UZ. We can only hope such endeavours will permeate to other departments and faculties.

I would like to conclude by stating our Committee's vision for this tenure. Field Trips and Talks are a must, and we are looking for any opportunity for these. We take this opportunity to invite members who may be in positions to accommodate these undertakings. We need to have a well-organized and respected Society for geoscientists. We are aware that our profession has, on a few occasions, been dragged into the mud by one or two individuals. We would therefore want every honest Zimbabwean geoscientist to be a member of our Society so that he or she is bound by our code of work ethics and conduct. In this regard, members are encouraged to maintain their paid-up annual membership. This Committee will also keep alive the quest to create conditions that will make it possible for interested geoscientists and technicians working in mining environments to get Certificates of Competence in the same manner that colleagues from sister professions in Surveying and Mining Engineering do.

Please check the dates for this year's Summer Symposium and diarise them. This has become the most important event on our calendar.

Articles and Reports

Abstract to the 2011 A.E. Phaup Award-winning paper

The growth of the Zimbabwe Craton during the late Archaean: an ion microprobe U–Pb zircon study

HUGH R. ROLLINSON¹* & MARTIN WHITEHOUSE²

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Abstract: U–Pb zircon ages obtained by ion microprobe are presented for late Archaean granitoids from the Zimbabwe Craton and the North Marginal Zone of the Limpopo Belt. Similar ages of crust formation in the felsic gneisses of the Zimbabwe Craton and the felsic granulites of the North Marginal Zone support the view, previously argued on geological grounds, that they represent the middle and lower crustal layers respectively of the Zimbabwe Craton. Zircons from the southern margin of the Zimbabwe Craton and the northern part of the North Marginal Zone contain old cores, confirming the presence of an old (c. 3.5 Ga) nucleus to the Zimbabwe Craton and indicating that the areal extent of this old nucleus is greater than has been hitherto supposed. Thus late Archaean crustal growth involved both the reworking of and the addition of new magmas to this old crustal nucleus. At 2.7 Ga crustal growth was contemporaneous with plume volcanism in the greenstone belts. In contrast, crustal growth at 2.74, 2.67, 2.64 and ?2.62 Ga was focused at the margins of the ‘old craton’ and may be related to Andean-style continental margin magmatism. Lower crustal melting at 2.61–2.59 Ga led to the emplacement of granitoids in the upper crust.

Supplementary material: A summary of previously published U–Pb zircon geochronology for the Zimbabwe Craton and the North Marginal Zone of the Limpopo Belt, field relationships and sample localities for the samples used in this study, and U–Th–Pb secondary ionization mass spectrometry data are available at www.geolsoc.org.uk/SUP18466.

Journal of the Geological Society, London, Vol. 168, 2011, pp. 941–952.

Laboratory Analysis Reveals Direct Evidence of Precolonial Gold Recovery in the Archaeology of Zimbabwe’s Eastern Highlands

Ann Kritzinger

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Abstract: The Nyanga districts of the Eastern Highlands of Zimbabwe between the Makaha and Penhalonga goldbelts are not known for the occurrence of gold. Paradoxically, and supported by recent discoveries of primary sources, today’s undercover gold panners are living testimony to the presence of gold in a landscape modified by hillslope terracing about which oral tradition is silent. The anomaly of much quartz rubble on the terraces and evidence of ore dressing as work in progress in and around hundreds of associated ‘pit structures’ is not considered in previous research. For nearly a century archaeologists have promoted the ‘pit structures’ as pens for a hypothesised breed of dwarf cattle, stallfed to provide manure to enrich the infertile hillslopes for terrace cultivation. In 2005, when Kritzinger was granted a Research Council of Zimbabwe permit to study the Nyanga archaeology from a mining perspective, this dominant theory was challenged by empirical

field observation and a self-funded pilot of geochemical sampling across a 65-km radius. The following results of 106 assays and conclusions made from structural data are summarised from the paper. Thirty-five samples taken from the tunnels and drains of 27 'pit structures' assaying 0.04-1.78 g/t Au provide direct evidence of gravity concentration. Results of samples from portable grindstones, rock-outcrop milling sites and heaps of sorted quartz ranging 0.04-2.04 g/t Au exhibit widespread liberation of gold from quartz gangue. Geological clues that Nyanga's massive land modifications – hillslope terracing and parallel linear banks – derive from surface sluicing and stream-working cast additional doubt on the intensive farming theory.

In: Proceedings of 9th International Mining History Congress, Johannesburg – 17-21 April, 2012. A copy of the full paper can be obtained from ackritzinger@gmail.com

Comment on a Trip to Sanyatwe and Nyanga by Anthony Harding

When Ann Kritzinger first asked me to comment on my two-day trip to Juliasdale, Nyanga and surrounds on 24th and 25th April 2012, my first reaction was that I had not seen enough of the structures for anything like a valid assessment. What I was looking for, in keeping with my former mind-set as an exploration geologist, were at least some signs of definite mineralization – gossans, discrete sulphides in weathered rocks, signs of mineralization in shear zones and other alteration effects. These signs were somewhat scanty. However, after reading Kritzinger's paper delivered at the International Mining History Congress, Johannesburg, I have been forced to change my mind.

I have to admit she has approached her research in an admirable manner by collecting ample evidence from diverse sources, both old and modern, which together with her own observations present a valid case. The general form of 'pit structures', or hydraulic tanks as named in the paper, especially when illustrated by means of the diagrammatic cross-section, have one word written all over them - mining! This interpretation makes more sense than their being posed as agricultural bins or cattle kraals. Furthermore, the samples taken from 26 such tanks and analysed for their gold content give values that certainly warrant further attention and follow-up work. I agree with some of the sources quoted, that these values are above what one would expect from a general background value in the areas tested.

In respect of the tanks, I would just like to make one comment. Apart from the puddling and/or jigging carried out on crushed mineralized rock, a layer of loosely packed gravel containing pebbles of different sizes placed on bedrock in the bottom of the tank would also have served as a means for trapping gold and other heavy minerals present in oxidized crushed ore washed into the tank with water over a period of time. The gravel could then have been removed and panned leaving the usual concentrate containing gold, which apparently is the most likely way by which the gold was finally extracted in ancient times.

I would also like to comment on the Nyadenji Hill deposit recently uncovered by the Gungutsva brothers. Unfortunately we were unable to examine this very interesting stockwork of narrow quartz veins. Gold values of 13 to 19 g/t are definitely anomalous and a surface deposit in a stockwork form assaying 3 to 7 g/t is a mine by today's standards, especially if sufficient tonnages can be proven.

This brings to point another question. How many other similarly mineralized targets remain to be discovered? In the light of this recent unexpected discovery, a mining company may be

interested and willing to undertake an exploration programme in the area when presented with the facts. This could eventually settle the argument once and for all whether the ruins were used for agriculture or mining by ascertaining what the background gold values are and defining the anomalous values and their relation to the tanks, terraces, gullies, etc. in the region. If this were to be carried out, at their cost a prior arrangement could be made with them to get the critical values essential for research only and not the essential grades that prove or disprove a minable deposit.

Thanks to Ann Kritzinger for the fascinating tour of the pits (tanks) and the panoramic vistas of the elliptical gullies and the other possibly man made excavations now turned into (gullies?) through active erosion.

Anthony Harding has had some 30 years' experience working as a field geologist and mine geologist for some major companies in the mining industry. Most of this time was spent with Rand Mines where he eventually reached the position of assistant consulting geologist responsible for Witwatersrand gold mining exploration at the Head Office of the company. He also spent 15 years working as a mineral economist with the Department of Mineral Resources in South Africa before retiring in 2007.

On naturally sculptured granites in Zimbabwe

Forbes Mugumbate
fmugumbate@gmail.com

A talk presented to the Geological Society AGM, February 2012.

Abstract: The greater part of the Zimbabwe Craton is underlain by granitic terrain of variable age, composition and tectonic history. The tectonic, weathering and erosive response to these discrete Archaean units provide a diversity in landscape forms, superb and unsurpassed, that gives Zimbabwe an unique impression that is often unappreciated. Through many of the districts, both north and south of the central watershed, and often at the interface between African and post-African erosive cycles, the granites are exhumed as massive bornhardts, castle koppies, balancing rocks and pavements or 'ruwaris'. Closer examination of these often 'artistic' expressions reveals a host of intriguing micro features relating to the active weathering and erosion processes. Bornhardts are the domed expression of more massive granites in areas with wide-spaced fracturing that occur commonly in Zimbabwe, and often in areas of batholithic proportion such as Chinamora north of Harare, Murehwa, Mutoko, Chivi, Ndanga, Nyanga and elsewhere. Exfoliation on the slopes plays a major role in the development of these monoliths. Castle koppies and balancing rocks by contrast reflect a subsurface where rectangular jointing and fracturing are close-spaced and facilitate more rapid denudation. Here the granite expression is blocky and spheroidal weathering processes play a greater role. Apart from the classic Epworth balancing rocks, for instance, these superlative landforms extend through many parts of Mabvuku, Chitungwiza and elsewhere close to Harare, and yet are unknown to the public at large (Figure 1). Although the Matopos granites are well known, those landscape expressions say across Gutu, Buhera and Makoni may not be (front cover).

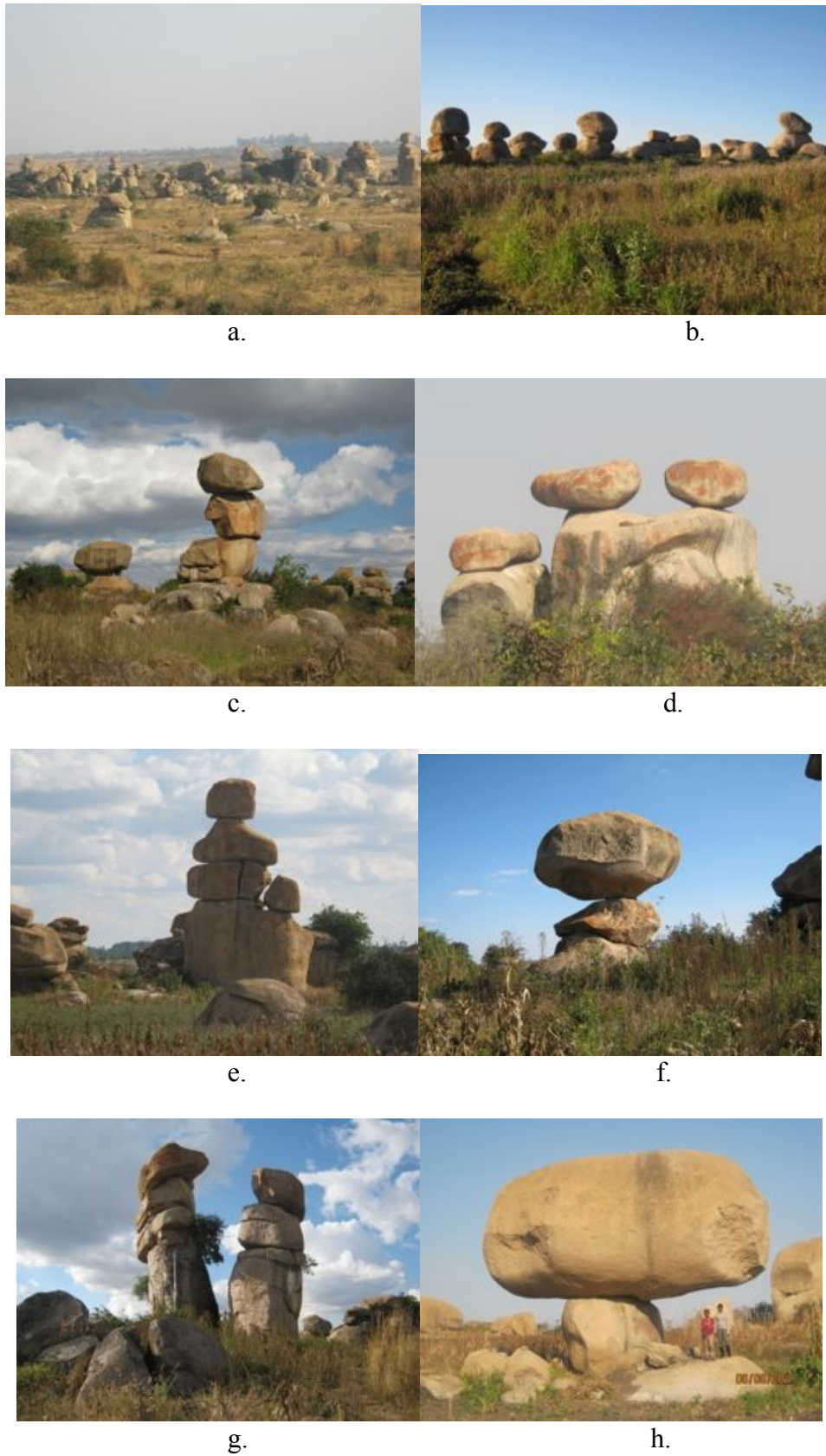


Figure 1: Examples of balancing rock topography associated with the Harare Granite; a. view of part of the Chitungwiza rocks; b. view of part of the Mabvuku rocks; c-g examples from Chitungwiza; h. a balancing rock from Mabvuku.

On a micro-scale are expressions such as polygonal cracking, tafoni, gnamma formation, drainage channelling, pseudo ripples and etch marking, all of which give insight into the evolution of granite landscape.

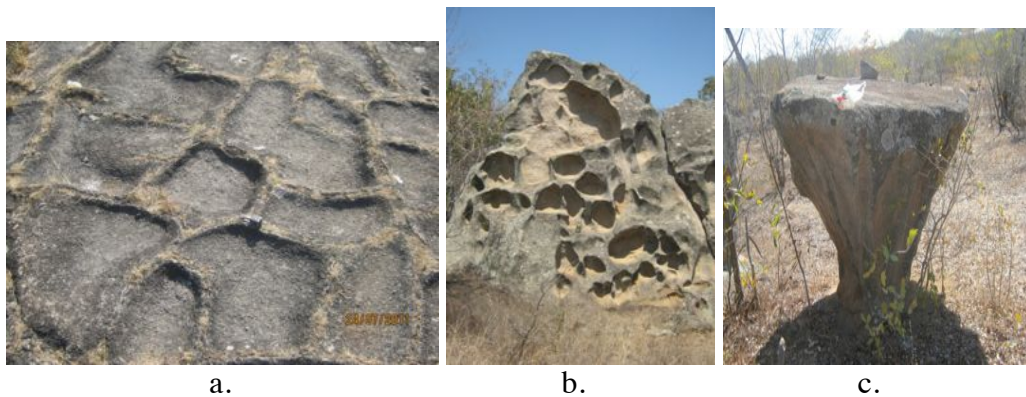


Figure 2: a. Polygonal cracks, Domboshawa. b, c. Tafoni, and an example of the process, Gutu.



Figure 3: Drainage channels on Domboshawa. a. channels breaking into several branches in a wide valley; b. deep channel with raised rock levees.

News



Geology Department, University of Zimbabwe

Maideyi Meck

The era of reporting that the Department of Geology is struggling seems to be coming to an end. The Department's situation and outlook has greatly improved. We now have 3 PhD holders, two with master's degrees and one with an honours degree among our teaching staff. This is a great improvement compared to previous years. The latest people to join the Department include Dr Njila, Ms Mudimbu and Marova.

We have applied to the University Academic Committee, along with other departments in the Faculty of Science, to run an Honours Degree course only. This has been approved and,

starting this year, students in the Department of Geology will be reading for a 4-year BSc Honours Degree in Geology.

With the slight improvement in teaching staff the Vice Chancellor has allowed us to take a stream of 20 students. Places will be offered on the basis of points obtained at A-level. Mathematic at A-level is a requirement.

The other piece of good news from the Department is that the mining industry has pledged to help us in several ways. Zimplats is to fund a professorial chair in mining, and the new incumbent is expected to help in the revival of Geology. The Chamber of Mines and the ZMDC have pledged to help in cash and kind. The University has established a PhD research vote for data collection.

The part-three field trip will take place from 2nd to 11th June in the Belingwe Greenstone Belt and a reconnaissance field trip to the area has already taken place (22-23 May). Assistance in form of supervision, transport, fuel or cash is being sought from well wishers to help in the logistics of this and future student field excursions, which are an essential part of their training.

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Note: DG – Department of Geology; MRC – Mineral Resources Centre; GSZ – Geological Society of Zimbabwe

Virtual Lecture Hall links UZ to the World

The Council for Assisting Refugee Academics (CARA) and Econet Wireless officially launched a new Virtual Lecture Hall (VLH) at the University of Zimbabwe (UZ) on Friday 30th June 2012. The VLH allows lectures, complete with slideshows and video conferencing, to be streamed into UZ from around the world with the use of a screen, speakers, and the internet. It is hoped that this project will not only enable members of Zimbabwe's academic diaspora to re-engage with UZ's future, but that it will improve standards of teaching and research, and facilitate increased networking and collaboration with universities outside Zimbabwe. *Cannot Geology take advantage of this initiative to ease its lecture deficit? Ed.*



ZIMBABWE

Geological Survey Department

Staffing

The professional staffing situation has not changed. The following members are in office.

Name	Post
Hawadi, Temba	Director
Mugumbate, Forbes	Deputy Director
Lunga, Sokesibone Mugandani, Ernest Mpindiwa, Sibongubuhle Muzanenhamo, Frank Kashiri, Tendai Maisera, MitsHELL	Geologist - Senior/Principal
Shawarira, Lloyd Ndro, Mathias	Geophysicist - Senior/Principal

Sibongubuhle Mpindiwa and Lloyd Shawarira attended a 3 month-long training course in mineral exploration and remote sensing in Japan, while Tendai Kashiri spent a month and a half in South Korea for a training course in remote sensing and GIS. Mathias Ndro is currently in South Korea for one and a half months' training in hydrogeology. Temba Hawadi was part of a delegation that accompanied the Minister of Mines and Mining Development to the Kimberley Process Certification Scheme intercessional meeting in Washington DC.

MitsHELL Maisera is back from maternity leave having been blessed with a baby girl. We take this opportunity to congratulate her.

Projects/activities

Given the staffing and financial constraints, the department's activities remain subdued.

We are happy to announce the reprinting of Bulletin 78 for Shamva and its accompanying 1:100 000-scale geological map. Also reprinted are the popular mineral resources series, No's 22 and 23, for Base Metal and Industrial Minerals, and for Gold Deposits respectively. Maps accompanying these are expected from *Printflow* at any time now. Out-of-print maps accompanying Bulletin 47 for the Great Dyke are being prepared for reprinting.

The department has been busy processing EPO resubmissions, following advertisements for all holders of EPO applications to resubmit their reaffirm their interest so that government can now start to issue the EPOs. There has, however, been a very low level of interest from companies. Out of 109 applications for EPOs, only 22 responded. This is not very surprising considering that some of the applications were submitted as long ago as 2004. For some reason government had decided to freeze the issuing of new EPOs. We hope that this time new EPOs will be issued soon to trigger a renewal in basic mineral exploration. The country has literally lost more than a decade of systematic exploration for new minable deposits.

Exploration work, however, continues in Special Grants for coal, and the department is involved in ensuring that those companies involved follow their exploration programmes. Encouraging results are being obtained in parts of the Lubimbi Basin.

Compilation of the 1:1 000 000-scale Geological Map of Zimbabwe remains a slow process due to the Survey's capacity constraints. The department has acquired GIS software, and technicians have been trained in its use, which should now see a speed-up in the process.

MINING INDUSTRY NEWS

Forbes Mugumbate

Mining fees

The issue of mining fees and other charges that were hiked by the Ministry of Mines remain contentious. The general feeling amongst both the large- and small-scale mining sectors is that the figures are too high and will impact on existing and future mining ventures. A parliamentary committee on mining has also raised concerns, and indicates that the new fee structures are illegal whilst pushing for the repeal of the Statutory Instrument.

Initially the Ministry argued that the increases were necessary to curb speculative behaviour by some claim owners. It also appears the Ministry wanted to raise money as suggested by the Minister's speech when he indicated that the Ministry had collected \$10 million since the fee increases came into effect.

However, recent developments show that the Ministry is succumbing to pressure, and has agreed to review the fees. The Minister has hinted that a two-tier system might be introduced where there will be separate fee structures for small-scale miners and for large-scale miners. This will require legal definition for the various scales of mining.

Concerns have also been raised regarding royalties. Zimbabwe now levies 7% royalties on gold, 10% on platinum and 15% on diamonds. Deloitte & Touche has warned that some mining houses operating in Zimbabwe might be forced to eventually leave the country if mining taxes and royalties remain higher than those levied by regional competitors. In Angola royalties on gold are pegged at 5%, while the figure in Tanzania is 3%. Namibia and Zambia levy royalties of 5% on gold, while Botswana levies 10% royalties on diamonds. Namibia and Angola levy a 5% royalty on diamonds.

Indigenisation and Economic Empowerment

Debate on indigenisation of the mining industry remains alive. A recent statement by the Minister of Youth Development, Indigenisation and Empowerment that all mining companies that had not complied with indigenisation requirements should note that 51% of their shareholding was now deemed to be owned by the state caused a lot of anxiety in mining circles. This follows an apparent impasse between the government and Implats on the modalities of indigenisation of Zimplats. This spat, however, appears to have been resolved after a team comprising Implats, the Ministry of Youth Development, Indigenisation and Empowerment, and the National Indigenisation Economic and Empowerment Board (NIEEB), was tasked with the job of coming up with details of the transfer of the 51% shareholding in Zimplats including the manner and timing of compensation.

It is interesting to note that there appears to be some disagreement in the Government of National Unity regarding the policy of indigenisation. The Prime Minister contradicted the Minister of Indigenisation when he stated in South Africa that the policy on indigenisation was unlawful. However, the drive to indigenise the mining industry continues, as the argument is that it is in accordance with the Indigenisation Act.

Diamonds

News on the mining industry in Zimbabwe cannot be complete these days without mentioning issues to do with diamonds. The following are snippets relating to diamonds in Zimbabwe.

Rio Tinto has launched a strategic review of its diamond business, which would potentially affect its Murowa asset in Zimbabwe. There are reports that RioZim Limited has already started negotiations with Rio Tinto in a bid to take full control of the Murowa diamond mine. Rio Tinto has a 78% stake in Murowa, while RioZim controls 22% of the mine. RioZim is a locally owned company created in 2004 when Rio Tinto largely left Zimbabwe while retaining its diamond interest.

Production at Anjin's mine has been intermittently affected by industrial action by workers who are demanding better working conditions. Anjin is a joint venture company between China's Anhui Foreign Economic Construction Company Limited and the Zimbabwe Mining

Development Corporation.

Meanwhile Mbada Diamonds reported to the Parliamentary Portfolio Committee on Mines and Energy that they had produced almost 12 million carats worth half a billion dollars over the past one-and-half years after injecting an investment of only \$185 million. Mbada Diamonds is a joint venture with Zimbabwe Mining Development Corporation's Grandwell Investments.

There are reports that DTZ-OZGEO (Private) Limited's diamond exploration on Charleswood, 10 km east of Chimanimani, is yielding positive results. The company has already produced over 7000 carats during trial mining. The company is using an x-ray based sorter developed by the Alrosa Group of Russia as an effective exploration tool.

The Minister of Mines and Mining Development led a delegation comprising government officials and stakeholders in the diamond industry to Washington DC for the Kimberley Process Certification Scheme (KPCS) meeting from 4th to 7th June 2012. Although this time Zimbabwe was not specifically on the agenda, issues discussed touched on the country's nerves. The USA and other Western countries are advocating for a re-definition of 'blood diamonds' to include issues relating to human rights and transparency. Zimbabwe is suspicious of the intentions, considering that there have been unsubstantiated reports of human rights violations by government security forces in the Marange area. The new impetus is suspected by government to be aimed at scuttling the country's smooth trading of Marange diamonds following the KPCS certification in November 2011. It is reported that over 90% of the participating countries rejected the idea.

Meanwhile the Ministry of Mines and Mining Development has reported that it has completed drafting a Diamond Policy that is preceding the amendment of the Precious Stones Trade Act. This is part of reforms to legislation regulating diamond exploration, mining, value addition and beneficiation, as well as the security aspects in the diamond mining industry.

A growing mining industry

In his address to the Chamber of Mines Annual General meeting held in Victoria Falls in May 2012, the Minister of Mines and Mining Development indicated that Zimbabwe's mining sector is expected to grow by 15.8% this year, anchoring the country's estimated economic growth rate of 9.4%. He further indicated that mineral exports grew by 138.1%, generating \$1.6-billion in 2010, while in 2011, mineral exports generated \$2.6-billion in a 38.7% growth. Exports are forecast to grow by 13.3% in 2012. Leading minerals on the growth trajectory have been platinum (41.1%), gold (38%), chrome (13.3%), coal (7.7%) and diamonds (3.3%).

Mining Industry Loan Fund

The Minister of Mines and Mining Development launched the mining equipment scheme for small-scale miners under the Mining Industry Loan Fund. Several miners will benefit through the acquisition of compressors, jack hammers and water pumps purchased from China by the Ministry. These will be distributed to deserving miners on a hire purchase scheme. Present at the launch were several local bank representatives who promised to assist with various schemes to ensure growth in small-scale mining. It is hoped that such schemes will help to revive the small-scale mining sector. The sector that was well organised and recognised world-wide had deteriorated into the chaotic 'makorokoza' in recent years.

Exclusive Prospecting Order (EPO) application resubmissions

Zimbabwe has lost a decade of systematic exploration through the EPO system. There are no current EPO's in place. The little exploration that is taking place is being conducted within mining claims. Having realized that both 'green' and 'brownfield' exploration campaigns are necessary for the discovery of new mineral deposits, the Ministry has resolved to expedite the granting of some of the more than 400 EPO applications that are pending. Advertisements were put in local newspapers inviting companies to resubmit their applications to show interest, and to revise work programmes and financial obligations were necessary. A grace period of 30 days was given for this exercise.

A need for the country to focus on exploration was highlighted by the past-president of the Chamber of Mines, Victor Gapare who, during a speech at the Chamber of Mines Annual General meeting held in May 2012 in Victoria Falls, regretted the lack of policies that promote mineral exploration. He indicated that mines were producing far less they are supposed to due to a lack of exploration caused by prohibitive costs and policy inconsistencies.

Trojan Nickel Mine revival bid

There are reports that a Chinese mining group will invest \$21.2 million to restart the Trojan nickel mine. Trojan operations were placed on care and maintenance in November 2008 following the collapse of nickel prices and the pervasive hyperinflation concerns in Zimbabwe at the time. Mwana Africa owns a 52.9% stake in Bindura Nickel Corporation, whose assets include the Trojan Mine.

Changes at Mwana Africa

Mwana Africa indicated that it was selling a 15% stake in its Freda Rebecca gold mine to a longstanding board member. Kenneth Musanhi, a Zimbabwean business person, would pay \$405 000 for the stake. The disposal is in fulfilment of an obligation made when Mwana Africa bought Freda Rebecca in 2005. The deal was conditional on receiving approval from the mine's principal debt provider, the Industrial Development Corporation of South Africa.

Mimosa Mine Accident

A fire underground at Mimosa Mine trapped 75 employees for several hours on 21st May 2012. The good news is that all the miners were rescued, and no injuries were reported. The teams involved in the rescue are commended for a job well done. We wish the miners a speedy recovery from their traumatic experience. The mining production loss during this period is estimated at 75 000 tonnes of ore. This was, however, covered by ore in surface stockpiles.

Changes at the Ministry of Mines

Garai Ndhlovu and Bernard Marungwara who were respectively the director and deputy director of the Mining Promotion Department in the Ministry of Mines and Mining Development, left following non-renewal of their contracts by the Public Service Commission. John Makandwa, who was a Chief Minerals Development Officer, was immediately promoted to the post of Deputy Director to fill the post left by Bernard. John is a geologist by training. In the meantime Charles Tawha, Chief Government Mining Engineer (CGME), is doubling up as CGME and Director of the Mining Promotion Department.

News about Zim Geoscientists

We hope your contributions may improve with the Facebook initiative. Talk to you on the Geological Society of Zimbabwe Group, an open link. Join us there for better communication.

Please provide us with news about yourself or other geologists. We need to keep in touch with all of you out there. E-mail fbmpaya@yahoo.co.uk or makari@zol.co.zw



GSZ Research and Development Fund

Enquiries relating to the distribution of funds through this facility should be made through the standing Chairperson.



SEG Timothy Nutt Scholarship Memorial Fund

This fund will be available to provide financial support for geology students and young economic geologists located in Zimbabwe or in Southern Africa with ties to Zimbabwe. The fund may be used to support SEG student chapter activities, travel to meetings, field trips, for research or study grants, technical lectures or any other activities approved by the SEG Regional Vice President for Africa.

Applicants must describe what the project is, why the research is important and how it is to be done.

An estimate of expenses for the project must be included with the application.

Grants are expected to be fully utilized by year-end.

Grant recipients are required to provide a year-end accounting of how the money was spent together with a suitable progress report or final abstract.

See the Society of Economic Geologists website for further details and the next call for applications.

Conferences

Craton Formation and Destruction with special emphasis on BRICS cratons, University of Johannesburg, South Africa. 21 – 22 July 2012, with post-Workshop Excursion to Barberton, the Witwatersrand, the Bushveld and Vredefort, 23 – 28 July 2012.

The two-day Workshop on Craton Formation and Destruction follows on from the International Conference on Craton Formation and Destruction held in Beijing in April 2011. The North China Craton has become the type locality for the study of processes related to craton destruction. The Kaapvaal Craton is renowned for its long term stability and rich record of diamondiferous kimberlites and associated xenoliths. With these two cratons as end members in the creation-destruction spectrum, comparative views of cratons will elucidate the roles of surface geology and deep mantle dynamics in craton formation and destruction. In light of their pivotal roles in Palaeoproterozoic plate reconstructions and craton assembly, additional views from the Brazilian, Russian and Indian cratons are especially encouraged. Contact: craton2012@uj.ac.za

Copper in Namibia, Copper Exploration, Mining & Processing, Ministry of Mines & Energy Auditorium, Windhoek, 13 – 14 September 2012. mail@geolsocnamibia.org

The 23rd International Geological Congress, Cape Town, South Africa – 2016.

Geological Society of Zimbabwe

Summer Symposium 2012

30th November 2012

Call for Papers

We are looking for 15-minute presentations on a broad range of subjects of interest to geologists. We are planning an interesting set of presentations on:-

- Advances in Mineral Exploration Techniques
- Database Management and Quality Control
- Skills Situation and Challenges
- Environmental Management
- Topics of general interest to Geologists

If you would like to present, please let us know (andrew.dutoit@zimplats.com)

Please put this date in you diary now!

3D EARTH EXPLORATION (Pty) LIMITED

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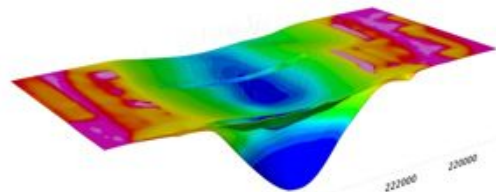
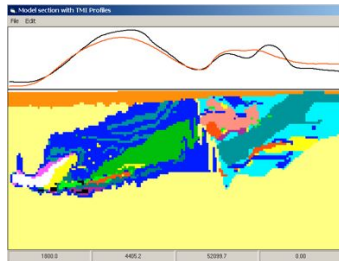
3D Earth Exploration is a Botswana-registered company operating in the Africa theatre and provides the following services:

- Ground geophysics surveys
- Physical rock properties measurements ...&... 3D Data processing and interpretation

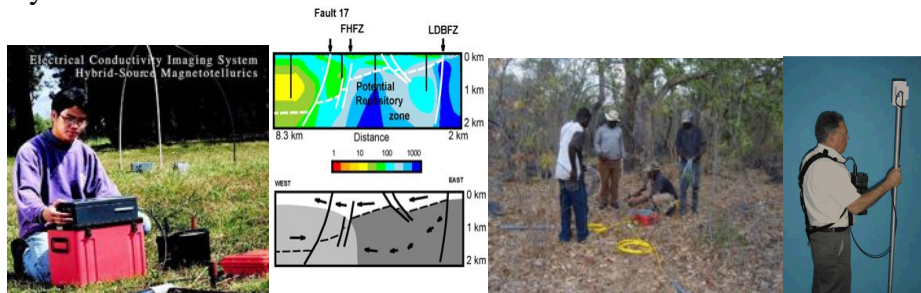


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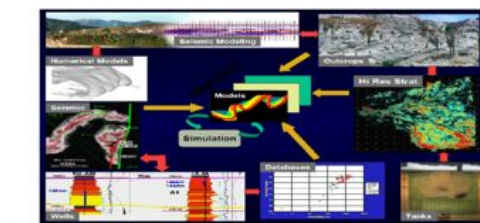
- 3D magnetic and gravity data modelling



- CSAMT, ground magnetic surveys, Induced Polarisation, gravity (CG3/5, La Coste), rock properties, EM, GPR, radiometrics and a wide range of other ground geophysics surveys.



- 3D Data integration and visualisation



CONTACT:

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