

MINUTES

EThekweni Biodiversity Forum
 27 August 2015
 9h00 – 12h00
 Paradise Valley Nature Reserve



IN ATTENDANCE

Aerisha Ramkalawan	AR	Jabulani Khoza	JK	Patty Mankowski	PM
Arnia van Vuuren	AvV	Jean Senogles	JS	Preshen Banwari	PB
Bart Forkens	BF	Jenny Loughlin	JL	Richard Lundie	RL
Bheka Nxele	BN	Justin Saunders	JS	Rob Jamieson	RJ
Bheki Mdletshe	BM	Kate Richardson	KR	Rodney Bartholomew	RBa
Billie Prinsloo	BP	Kerina Singh	KS	Roger Poole	RP
Brian Abrahams	BA	Kirstin Williams	KW	Samkelo Ntshangase	SN
Carla Petersen	CP	Lesley Frescura	LF	Shunnon Farnsworth	SF
Chantal Taylor	CT	Lee D'Eathe	LD	Survana Parbhoo	SP
Cherise Harris	CH	Maxime Manickum	MM	Thami Kunene	TK
Clive Walker	CW	Menzi Nxumalo	MN	Tony Wint	TW
Derek Airey	DA	Micke van Tienhoven	MvT	Warren Friedman	WF
Dina van Niekerk	DvN	Natasha Brijlal	NB	Zethu Gumede	ZG
Esmeralda Ramburran	ER	Natasha Govender	NG	Derrek Ruiters	DR
Geoff Pullan	GP	Nesisa Ngidi	NN2	Teddy Govender	TG
George Victor	GV	Nhlakanipho Mbanjwa	NM	Terry Stewart	TS
Gerald Clarke	GC	Nokuphila Buthelezi	NB	Barry Lang	BL
Gillian Noyce	GN	Nokuthula Dubazane	ND	Nick Liebenburg	NL
Hlengiwe Mtshali	HM	Nosipho Ndzimbomvu	NN	Marcus Govender	MG
Ingrid D'Eathe	ID	Ntombifuthi Ntshangase	NN1		

APOLOGIES

Jo Douwes, Richard Boon, Errol Douwes, Himansu Baijnath, Reshnee Lalla, Kenneth Mabila, Sean O'Donoghue and Kholosa Magudu

1	WELCOME & INTRODUCTION	ACTION
1.1	Natasha Govender (NG) welcomed all and facilitated introductions. Apologies were noted as above. A moment of silence was observed for the passing of Roddy Ward. NG stated that Roddy will be sadly missed both at the Biodiversity Forum meetings and by the broader ecological society for his immense contribution to botany, conservation and other branches of the natural sciences.	
2.	PRESENTATIONS	
2.1	Blue duiker population survey at Paradise Valley Nature Reserve and Marian Wood Nature Reserve: Zethu Gumede from Natural Resources Division of Parks and Recreation Department.	

<p>2.1.1</p>	<p>NG introduced Zethu Gumede (ZG) to present on the blue duiker population survey she undertook at the Paradise Valley Nature Reserve and Marian Wood Nature Reserve. ZG acknowledged Terry Stewart, the Paradise Valley Nature Reserve Manager for assisting during the study.</p> <p>ZG informed the meeting that the objectives of the study was to (i) provide an accurate estimate of the population of blue duiker within Paradise Valley Nature Reserve and Marian Wood Nature Reserve, (ii) to distinguish defined territories of blue duiker within the forest regions of the reserves and (iii) to obtain trends and distribution patterns which can assist with the management of the blue duiker population.</p> <p>ZG stated that blue duikers are the smallest antelope found in reserve areas and they prefer forests with dense undergrowth which are suitable for browsing and refuge. Due to forests becoming transformed and fragmented, blue duikers have been classified as a vulnerable species. They are especially vulnerable to becoming prey to dogs and eagles. As a result they have permanent territories which are marked with faecal pellets deposited in defined middens or by horn marks on tree stems.</p> <p>Methodology used</p> <ul style="list-style-type: none"> • Indirect methods using faecal pellets and other territorial markings. This method is considered to be more accurate for blue duiker population surveys and it also reduces the sampling effort compared to the conventional direct observation counting methods. Faecal pellets also provide more information on the distribution, size and diet of individual species within management area. • Preliminary patrols were conducted in order to gain be familiar with the study areas and the behavior of the blue duiker. • Faecal pellets were scrutinized and it was observed that newly excreted faecal pellets had a dark brown colour with a glossier, smooth texture whilst older more dull and less clumped together. • GIS software (gvSIG) was used to identify areas of potential forest habitat in the Paradise Valley Nature Reserve and Marian Wood Nature Reserve. Then potential areas were picked as areas all variations of terrain and suitable forest habitat. <p>Site selection and study areas</p> <ul style="list-style-type: none"> • At Paradise Valley Nature Reserve (PVNR) four block areas were selected and one area at Marian Wood Nature Reserve (MWNR) was selected. • At each area selected, systematic walks were conducted every morning to map faecal pellets using GPS device. The existing reserve trails were used to ground reference points. A small group of five people facing the same direction spaced more than 5m apart formed a line and walked in the same direction. • At each point where a group of faecal pellets were found, the GPS coordinates were recorded and the area was marked with barrier tape. Photographs were taken of the faecal pellets and of the surrounding habitat where they were found. 	
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	<p>Findings</p> <p>ZG presented a map showing the location of middens and blue duiker territories established using GPS coordinates. She explained the distribution patterns of blue duiker in both PVNR and MWNR.</p> <p>ZG informed the meeting that at PVNR Block 2, the average density is 0.93ha/midden which was marginally higher than the expected maximum stocking ratio for good habitat. In Block 3, the ratio is approximately 1.1ha/midden. Block 4 had 0.43ha/midden and Block 5 had a ratio of 0.27ha/midden which are both higher than expected.</p> <p>At MWNR, ZG reported that the stocking ratios of approximately 0.75ha/midden were recorded Block 2.</p> <p>Comments and discussions</p> <p>ZG informed the meeting that points plotted on the map were largely near the path area where there was less canopy cover. The accuracy of recording was dependent on a number of factors such as the geometry of satellites, multi paths, signal to noise ratio and interference due to buildings and vegetation.</p> <p>ZG also informed the meeting that she observed that at some instances the location of a midden at PVNR was approximately 350 m from the position generated from the map. She also observed that the location of middens when mapped tended to follow the route of reserve trails and not the actual midden sites.</p> <p>ZG stated that it can be assumed based on the use of middens, the estimated total number of blue duiker at PVNR is 90 individuals and it can be estimated that the total population for MWNR is 12 individuals. She further stated that the distribution throughout the available habitat was not uniform and this can be influenced by factors such as the age and the structure of the forest, availability of suitable undergrowth for refuge and availability of suitable browsing.</p> <p>She recommended that similar studies be conducted on the other areas of both reserves and comparisons be made.. She also advised that the actual distribution of duiker middens within the forest needs to be mapped accurately so that the correlation between habitat and population carrying capacity can be made.</p> <p>ZG thanked Terry Stewart for the assistance and guidance during the study.</p> <p>Contact details: Zethu Gumede at zethugumede@gmail.com</p>	
2.1.1.1	<p>KR queried whether ZG removed the markings at the middens after counting as this could have influences the results by altering the habitat of the research animal. ZG responded and stated that they did not remove them.</p>	
2.1.1.2	<p>JS queried the months that the study was conducted and whether MWNR is fenced. ZG responded and stated that the study was conducted between April and May 2015 and that MWNR is fenced but stray dogs still get access to the reserve which is a problem.</p>	
2.1.1.3	<p>It was queried whether poaching is a problem at MWNR. ZG responded and stated that she was not aware of poaching incidents.</p>	

2.1.1.4	TS added that the survey was useful but they were aware that it would be difficult to get accurate records of duiker populations within the reserves but it encourage that more studies be conducted.	
2.1.1.5	NG thanked ZG for sharing her study outcomes with the Forum and stated that this type of research assists policy makers and practitioners in making appropriate management decisions.	
2.2	<i>Environmental Impact Assessment Regulations 2014 Amendments - Natasha Brijlal from the KZN Department of Economic Development, Tourism and Environmental Affairs</i>	
2.2.1	<p>NG introduced Natasha Brijlal (NB) from the KZN Department of Economic Development, Tourism and Environmental Affairs (EDTEA).</p> <p>Natasha Brijlal (NB) thanked NG for the opportunity to come and present to the Biodiversity Forum. NB explained the purpose of the Environmental Impact Assessment (EIA) process. She explained that the EIA as a tool used in Integrated Environmental Management to identify, predict and evaluate environmental impacts of a developments.</p> <p>She informed the meeting that according to the South African Constitution: The Bill of Rights, everyone has a right to an environment that is not harmful to their health or wellbeing. The National Environmental Management Act 107 Section 24 gives effect to the Environmental Impact Assessment Regulations. The NEMA EIA Regulations were amended in December 2014 which resulted in the changes in the Listed Activities. NB explained the purpose of the amendments.</p> <p>NB outlined the requirements for the Basic Assessment, Scoping and the full EIA process. She also presented a flow chart of the various processes and the timeframes associated with same for applicants and the competent authorities. She informed the meeting that the EIA is no longer required for building within 32 m of the watercourse in urban areas.</p> <p>NB informed the meeting that the timeframes for the Public Participation Process exclude the period between 15th December and 5th January unless justified by exceptional circumstances. She added that the written consent is required if the applicant is not the landowner and outlined the requirements for the Public Participation Process and the procedure to be followed.</p> <p>She stated that as part of transitional provisions, pending applications in terms of Environmental Conservation Act, NEMA 2006, NEMA 2010 and Minerals and Petroleum Resources Development Act are finalised as if new regulations are not in effect.</p> <p>Contact details: Natasha Brijlal Email: BrijlalN@kznded.gov.za</p>	
2.2.2.1	KR raised concerns that the entire EIA process takes 300 days to complete from start to finish and stated that this was actually more detrimental than beneficial for the environment. She further added that the perception of the public is that government departments will deliberately use these lengthy timeframes as an excuse to not do their jobs.	
2.2.2.2	It was queried how does EDTEA defines urban and rural areas and why development within 32 m of a watercourse within urban areas are exempted from the EIA process. A concern	

	was raised that rivers within urban areas are the most stressed. NB responded and stated that the rationale in the legislation is unclear and that she is not in a position to answer this question. She also informed the meeting that the definition of urban and rural is not clear cut, but advised that EDTEA has developed guidelines to assess this.	
2.2.2.3	BF queried if there is any legislation that is applicable to artificial waterbodies. NB responded and stated that artificial waterbodies are covered under the Water Act which is the mandate of Department of Water Affairs	
2.2.2.4	NG thanked NB for presenting to the Forum and sharing this valuable information.	
2.3	<i>The makings of a KZN Sandstone Sourveld nature reserve: one step at a time: Natasha Govender: Environmental Planning and Climate Protection Department: eThekweni Municipality</i>	
2.3.1	<p>As an introduction to her presentation, NG gave a brief history of nature reserves in the world, in Africa and in South African and development of iconic nature reserves.</p> <p>NG stated that despite having the fastest rate of urbanisation, cities still harbour rich biodiversity and that Durban is located in one of the 32 Global Biodiversity Hotspots, the Maputaland-Pondoland Albany Biodiversity Hotspot.</p> <p>She further stated that Durban contains three of South Africa's eight terrestrial biomes and eight nationally recognised vegetation types. She added that Durban has over 2000 indigenous plant taxa, 18 river catchments, 16 estuaries, 98 kilometres of coastline and 4000 kilometres of rivers.</p> <p>NG informed the meeting that the Durban Metropolitan Open Space System (DMOSS) covers approximately 33% of Durban. She added that over half of the eThekweni Municipal Area (EMA) is classified as transformed. Transformation reduces the ability of ecosystems to deliver services.</p> <p>NG stated that the rate of urbanisation in Durban was calculated as 92.0% between 2013 and 2014 and the implications are that even the untransformed areas are at higher risk of becoming transformed in the next few years.</p> <p>She presented statistics and targets relating to the vegetation types of the EMA and highlighted the difficulty with meeting targets for KZN Sandstone Sourveld (KZNSS). NG informed the meeting that KZNSS is species rich grassland which is endemic to the KZN Province. It is listed as Endangered but more recent figures suggest that it should actually be classified as Critically Endangered. NG added that 90% of KZNSS in the province has been transformed and only 0.1% of the original extent of this vegetation type is statutory protected.</p> <p>NG informed the meeting that since 2002, the Environmental Planning and Climate Protection Department has been given a budget for the acquisition of environmentally sensitive land in the EMA. Properties to be acquired are selected systematically and the prioritization is based on a scientifically robust criteria.</p> <p>She informed the meeting about the journey that led to the acquisition of key KZNSS habitat in the Uitkomst & Doornrug area near Hammarsdale. She added that the properties in Uitkomst & Doornrug met all the criteria to be acquired i.e., the timing for acquisition</p>	

	<p>was right, the landowner was willing to sell, the properties contained a critically endangered vegetation type and endemic, rare and endangered species were littered the landscape. NG stated that since the decision was taken to acquire the properties in 2011, approximately 231.3 hectares have been acquired to date with a further 39.8 hectare in the imminent stages of acquisition.</p> <p>NG further presented properties that have been acquired since 2002 and informed the meeting that out of 594 ha of properties acquired; ~44 % contains KZN Sandstone Sourveld. She informed the meeting that the plan is to proclaim these properties in terms of the National Environmental Management Protected Areas Act to afford them with highest level of protection. This will also then allow Durban's grasslands to contribute to national conservation targets.</p> <p>Contact details: Natasha Govender: Natasha.Govender@durban.gov.za</p>	
2.3.2	RJ thanked NG for the talk and commended her for an excellent presentation.	
2.3.3	BF queried if eThekweni Municipality is negotiating with the Ingonyama Trust Board (ITB) and Amakhosi to acquire or protect any land of conservation value. NG responded and stated that EPCPD has a Biodiversity Stewardship Programme (BSP) that is currently negotiating with ITB and Amakhosi within eThekweni Municipal Area. LG added that the BSP is currently engaging with three Traditional Councils in KwaXimba, AbaThembu in Molweni and the Qadi in Inanda with the aim of introducing the biodiversity stewardship concept to these communities.	
2.3.4	It was queried if the areas that have been acquired are clearly demarcated with signage. NG responded and stated that most of them have no signage but LG has negotiated to have a budget to erect signage in all acquired sites. LG is also developing management plans for the acquired sites.	
2.3.5	GC added that these acquired sites go through the rezoning process (usually from a residential or agricultural zone to Environmental Conservation Reserve) and updated the meeting that ~230 ha have been rezoned in Uitkomst & Doornrug.	
2.3.6	JS added that Ezemvelo KZN Wildlife have a very successful volunteer programme using Honorary Officers and suggested that eThekweni Municipality consider using this approach to develop effective management of these areas. NG responded and stated that the KZN Conservancies Association have been meeting with the municipality with the aim of developing partnerships for conservation.	
3	Updates from various municipal departments	
3.1	Updates from the Durban Natural Science Museum (DNSM) – Kirstin Williams	
3.1.1	<p>Booking of the GO-WILD Mobile Museum: Kirstin Williams (KW) reported that she brought a publication that explains the new GO-WILD Museum booking procedures at the Durban Natural Science Museum. She explained that the contact details are on the publication.</p> <p>Thola Magazine: KW informed the meeting she brought boxes of the latest edition of the Thola Magazine and encouraged attendees to take copies and if they require more to</p>	

	<p>send her an email.</p> <p>Biodiversity Seminars: KW informed the meeting that she sent the invitation to Bheki Mdletshe to be circulated. She stated that the dates for the seminars as follows:</p> <ul style="list-style-type: none"> • On the 9th September 2015, Delina Ramnarain will be presenting on <i>“Promoting ecotourism as a tool for bio-diversity conservation”</i> • On the 4th November 2015, Shane McPherson will be presenting on <i>“Urban Ecology of the Crowned Eagle in KwaZulu Natal”</i> <p>For more information contact: Kirstin Williams at Kirstin.Williams@durban.gov.za</p>	
3.2	Updates from the Environmental Planning and Climate Protection Department (EPCPD)	
3.2.1	<p>Restoration Ecology Implementation Programmes: Bheka Nxele (BN) reported that all three implementation programmes (the Working for Ecosystems, Working on Fire and the Reforestation Programme) ended in June 2015.</p> <p>He informed the meeting that Working for Ecosystems appointment has been finalised and the team is currently engaging with ward councillors to begin implementation of the programme. He also reported that there are delays with finalising the appointment of Working on Fire programme service provider and this will result in scheduled areas missing the burning season this year.</p> <p>BN also reported that the tender for the Reforestation Programme has been re-advertised due to challenges in getting the appropriate service provider.</p> <p>For more information contact Bheka Nxele at Bheka.Nxele@durban.gov.za</p>	
3.2.2	<p>Durban Invasives Website update: Carla Petersen (CP) gave an update on the Durban Invasives Website (http://www.durbaninvasives.org.za) She mentioned that user logins and sighting reports have increased which indicates that new spotters are registering on the website and people are actively involved with the use of the website. The five most commonly reported species include: <i>Parthenium hysterophorus</i>, <i>Campuloclinium macrocephalum</i>, <i>Triplaris americana</i>, <i>Furcraea foetida</i> and <i>Lilium formosanum</i>. Lastly, the species Target List on the website has been amended.</p> <p>For information please contact Carla Petersen via email at Carla.Petersen@durban.gov.za</p>	
3.2.2.1	<p>LD queried what happens after an invasive plant has been spotted. CP responded and stated that the team is sent to verify and remove the plant and then monitor it where possible.</p>	
3.2.3	<p>EThekweni Municipality Reforestation Research Partnership Update: Nokuphila Buthelezi (NB) reported that 11 students enrolled in the research partnership; nine MSc and two PhD and there is one potential post-doctoral student.</p> <p>She further reported that on the 19th of June 2015 a Steering Committee meeting was held to discuss budgets, challenges and successes of the partnership. NB informed the meeting that a student progress meeting was held at UKZN Pietermaritzburg Campus and on the 31st of July 2015 and a workshop was held to develop a long term vision for the</p>	

	<p>partnership.</p> <p>For more information contact Nokuphila Buthelezi via email at Nokuphila.Buthelezi@durban.gov.za</p>	
3.3	Updates from the Natural Resources Division – Kenneth Mabila	
3.3.1	Forest of Remembrance Launch: Jabulani Khoza (JK) passed apologies for Kenneth Mabila who could not make it to the meeting. He informed the meeting that the Forest of Remembrance in Adams Mission will be launched by the MEC on the 4 th of September as part of Arbor Week. Over 100 indigenous trees have been planted.	
3.3.2	Arbor Week: JK informed the meeting that as part of Arbor Week, the Parks Department will be hosting an exhibition at the Durban Botanic Gardens starting on the 1 st September. JK also added that they are currently partnering with Springside Conservancy in planting trees in a school in the Outer West. They had identified that the school needed shade trees for learners.	
3.3.3	National Arbor City Awards: JK informed the meeting that Durban will be hosting the 2015 Arbor City Awards and added that Durban won the Best Arbor City Award in 2014.	
4.	General	
4.1	Proclamation of municipal nature reserves: Derrek Ruiters (DR) informed the meeting that the document for the Roosfontein Nature Reserve proclamation is currently with the MEC awaiting approval. He also reported that the proclamation of the other nature reserves is currently with Internal Committees of EKZNW for approval before the MEC.	
4.2	Fireworks: A concern was raised that fireworks affect urban wildlife and a query was raised on whether something can be done to minimise the impact that fireworks have on urban wildlife. TP stated that fireworks are classified as explosives and informed the meeting that because they are ignited at night, enforcement becomes difficult. It was suggested that awareness must be raised with children at schools to request their parents not to buy fireworks for them.	
4.3	Birdlife Calendar: LF informed the meeting that Birdlife Calendars are now available and funds will be used to support Birdlife projects. For more information, please contact Lesley Frescura on galefra@mweb.co.za	
4.4	Feral cats: A concern was raised about the problem of feral cats and that a presentation was made about feral cats in the urban context. NG suggested that someone with statistics and more information to come and give a talk to the Forum.	
5.	Close of meeting	
5.1	NG thanked all for attending and closed the meeting. The next Biodiversity Forum meeting will take place on 26th November 2015 at Paradise Valley Nature Reserve from 9 am to 12	

	pm.	
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