

# MINUTES

eThekwini Biodiversity Forum

25 August 2011

9h00 – 12h00

Paradise Valley Nature Reserve



## PRESENT

Adrian Armstrong	AA	Jean Tarrant	JT	Roger Uys	RU
Barry Lang	BL	Kirstin Williams	KW	Rosemary Harrison	RH
Billie Prinsloo	BP	Lesley Frescura	LF	Sabelo Nkosi	SN
Buh Nzimande	BN	Lilian Develing	LD	Sean o’ Donoghue	SoD
Crystal Naidoo	CN	Lunga Dlova	LN	Shoni Makhwedzha	SM
Derrek Ruiters	DR	Lungi Ndlovu	LN	Suvarna Parbhoo	SP
Errol Dowes	ED	Natasha Govender		Sindi Nzama	SN
Geoff Pullan	GP	Noloyiso Nkqeto	NN	Terry Stewart	TS
Gillian Noyce	GC	Rashieda Davids	RD	Trafford Petersen	TP
Jabu Sithole	JS	Reshnee Lalla	RL	Warren Botes	WB
Jean Lindsay	JL	Richard Boon	RB		
Jean Senogles	JS	Rob Jamieson	RJ		

## APOLOGIES

Bianca McKelvey, Jo Boulle, Rodney Bartholomew, Kerina Singh, Jessica Brislin, Snowy Baijnath, Kate Richardson, Graham Cairns and Heather Cairns.

<b>1.</b>	<b>WELCOME &amp; INTRODUCTION</b>	
1.1	NG welcomed all and facilitated introductions.	
<b>2</b>	<b>PRESENTATION – The KwaZulu-Natal Sardine Run, by Sean o’ Donoghue</b>	
2.1	<p>SoD presented details on the research he conducted as part of his Phd Thesis on the Sardine Run. SoD noted the following in this regard:</p> <ul style="list-style-type: none"> <li>• The Sardine Run takes place in the winter months.</li> <li>• Fish present are not only sardines, but many others, including shad, mackerel, pinky, sardine, round herrings and red eye. Bigger game fish feed on all the species present during the run.</li> <li>• Bird species present include the Cape Gannet (<i>Morus capensis</i>), which are endemic to SA.</li> <li>• Since 2002, Cape Gannet numbers have crashed on the west coast and are related to a crash in the numbers of sardines there. The fishing in this area was well managed so it is likely that environmental conditions were responsible for the crash. Sardine stock shifted to the South Coast up to East London, which is the only gannetry on east coast. Cape Gannets are the most abundant birds on a sardine run. Other species include the albatross, terns and Giant Petrel.</li> <li>• The most common predator is the Common Dolphin (identified by a figure 8 shape on its flank), with the biggest pod being identified via aerial photography to contain</li> </ul>	

	<p>approximately 4000 – 5000 dolphins. Dolphins are responsible for creating the bait balls.</p> <ul style="list-style-type: none"> <li>• The Bryde’s whales are biggest predators on Sardine Run. Their distribution is closely linked with sardines – moving eastward with the sardines during the sardine run.</li> <li>• Bottle nose dolphins are also present.</li> <li>• Humpback whales may also be spotted during a sardine run. During the summer months these whales migrate to the Antarctic.</li> <li>• Other predators of the sardine run include sharks.</li> </ul>	
2.2	<p>It was queried how these huge, very conspicuous whales catch sardines i.e., surely the sardines see these creatures moving toward them and disperse. SoD responded that they use their very large mouths to envelop and swallow large groups of sardines – filtering the sardines out of the water with their baleen.</p>	
2.3	<p>SoD mentioned that KwaZulu-Natal has a nutrient poor coastline, with far less fish than the west coast. The sardine run is therefore important for the fishing industry on the east coast. SoD added that Cape Gannets, Bryde’s Whales and Common Dolphins only occur along the Durban coastline during the sardine run. SoD further noted that licensed seine netters target sardine shoals near the backline. They encircle shoals from the beach with nets and haul the catch back to the beach. Both tourism and fishery sectors are major human interests in the sardine run.</p>	
2.4	<p>SOD mentioned that he is also involved in research into what drives the fish during the run, which includes extensive use of aerial survey work. He noted that a hydroacoustic survey was undertaken in 2005 to detect shoals. It was found that there is a close relationship between sea temperature and sardine movement. He added that the Durban eddy (a movement in a flowing stream of liquid in which the current doubles back to form a small whirl) forces sardines closer to shore to make fish available to seine netters.</p> <p>Common dolphins keep bait balls together. As soon as dolphins attack, birds dive into the water and begin their attack.</p> <p><b>For more information, visit the blogspot at <a href="http://sardinerun.wordpress.com">http://sardinerun.wordpress.com</a>.</b></p>	
2.5	<p>JS queried whether it would be possible to swim from the shore to do this research. SoD responded that the only place you can swim from shore is south of Waterfall Bluff. However, researchers always dive off a boat while conducting research and on recent surveys, to prevent excessive disturbance to the marine life, only a single diver entered the water to conduct surveys (recordings etc.)</p>	
2.6	<p>JS queried whether rising sea surface temperature would affect Brydes whales. SoD responded that these whales follow the sardines and are present where the sardines are. SoD added that he initially thought that warmer water would decrease sardine abundance and climate change could mean the end of the sardine run. However, even though sea surface temperatures were higher this year, one of the best sardine runs was experienced.</p>	
2.7	<p>AA queried why sardines move from the west and south coasts to the east coast. SoD responded that there are a few theories about the movement of fish, and often these theories may be contradictory. Research has shown that the sardine run most likely corresponds to a seasonal (winter) reproductive migration of a genetically distinct subpopulation of sardine. This migration is constrained close to the coast and facilitated by the presence of a band of cooler water and by the occurrence of Natal pulses and break-away eddies. Years when the sardine run is not detected could imply a real absence due to</p>	

	high sea temperatures on an eastward migration that is either further offshore or at greater depths.	
2.8	GP mentioned the recent increase in the number of shark attacks and queried if it was related to a reduction in availability of food for these sharks. SoD responded that Jeremy Cliff at the Sharks Board have found that bullsharks are using the uMzimvubu Estuary. This could be due to the mouth of the St. Lucia Estuary being closed for such a long time or a loss of habitat elsewhere. There is no shortage of food for sharks there so it might be a case of those attacked being unlucky. A probable reason for attacks could be that sharks are coming further south than usual because of a loss of habitat.	
2.9	<b>A special edition of the African Journal of Marine Science (Volume 32, 2010) contains a series of papers on the KZN Sardine Run. For more information, please contact Dr. Sean o' Donoghue (ODonoghueS@durban.gov.za).</b>	
<b>3</b>	<b>Updates from Natural Science Museum, Kirsten Williams</b>	
3.1	KW noted that the Natural Science Museum has revamped their 'Palmiet Post' publication, which also includes a name change to 'Thola'. She added that there have been many changes in the Department. The Thola magazine is to be published annually and not biennially. A series of climate change talks are being held at the Durban Natural Science Museum called "What's up with the weather?"  <b>A full listing of all the talks (dates, times and venues) can be found on the back inside cover of the Thola Magazine. For more information, please contact the Durban Natural Science Museum Research Centre on 031 – 311 2242.</b>	
<b>4</b>	<b>Updates from EPCPD</b>	
4.1	ED provided updates on Working for Ecosystems (WfE) Working on Fire (WoF) and Invasive Alien Plant (IAP) Training.	
4.2	ED reported the following with regard to WfE Statistics for 2010 – 2011: <ul style="list-style-type: none"> <li>• Total Area of IAP control: 218 Ha</li> <li>• Total Training Courses: 6</li> <li>• Total Training Person Days: 480</li> <li>• Total Jobs Created: 124</li> <li>• Total Person Days: 7068</li> <li>• 36% Youth, 67% Female</li> </ul> Successful launch at Roosfontein with ~100 ha of initial and follow-up IAP control completed in 2010/2011.  New programme in Mzinyati area with 12 new staff and 50 Ha to clear this financial year.	
4.3	ED reported the following with regard to WoF statistics for 2010 – 2011: <ul style="list-style-type: none"> <li>• IAP control - initial: 114 Ha</li> <li>• IAP control – follow-up: 564 Ha</li> <li>• Total Area of Burning: 38 Ha</li> <li>• Total Training Courses: 12</li> <li>• Total Training Person Days: 1254</li> <li>• Total Jobs Created: 52</li> </ul>	

	<ul style="list-style-type: none"> <li>• Total Person Days: 14042</li> <li>• 37% Female; 63% Male</li> </ul>	
4.4	ED reported that the Wof/ EM Herbicide assist programme assisted 13 conservancies on basic training and herbicide provision.	
4.5	ED further reported on the numbers of people that attended IAP Control Training courses: <ul style="list-style-type: none"> <li>• 110 Zibambele staff: Basic IAP control course</li> <li>• 100 Rural ABM staff: Basic IAP control course</li> <li>• 10 Zibambele staff: Intermediate IAP control course.</li> </ul>	
4.6	ED noted that emerging weed control was undertaken on the following species: <ul style="list-style-type: none"> <li>• <i>Diplocyclos palmatus</i> (Kloof scarp)</li> <li>• <i>Ailanthus altissima</i> (Hillcrest)</li> <li>• <i>Acacia saligna</i> (Roosefontein)</li> <li>• <i>Triplaris americana</i> (Cato Manor)</li> <li>• <i>Campuloclinium macrocephalum</i> (Roosefontein).</li> </ul>	
4.7	NN queried whether the jobs that were created are temporary or full time. She added that there is a subsidy available from the Department of Public Works for employment of more than 100 days. ED responded that jobs are temporary and are more or less than 100 days per year. ED is consulting with EPWP (Expanded Public Works Programme) and is receiving some funding in this regard.	
4.8	NN further queried how long the training course is and how many people attend. ED responded that there is a 3-day Basic course and 4-day Intermediate course.	
4.9	JS mentioned she is aware that Mzinyate have IAP clearing teams in Umgeni River and queried whether there was an overlap with the WoF teams. ED noted that he is aware of some teams working there and there is no overlap.	
4.10	It was queried whether the alien plants at Crawford school are new and if the war against IAP is being won. Further queried whether the WoF and WfE teams are targeting private or council owned land. ED responded that there could be some emerging species at the school, however, he is unsure. Primarily the teams work on council owned land but private properties are also assisted with permission.	
4.11	LD noted that <i>Triplaris americana</i> has been observed in Umlazi and Westville areas and queried what will be done about them. ED noted that SANBI is currently doing a survey on <i>Triplaris americana</i> and may be contacted to deal with it. ED requested that all localities where this species is identified be sent to Reshnee Lalla of SANBI's Early Detection and Rapid Response Unit.  RJ queried what the best way to deal with <i>Triplaris americana</i> is. ED noted that the seedlings respond well to foliar spray with Plenum. However, he was unsure of how to deal with adult trees.	
4.12	LD mentioned that only one woman and one man were doing IAP clearing on verges of Kassier and Inanda roads and added that such a small team could not really make progress. ED responded that he is aware of problems there and is looking at working with the Parks Department in this regard. ED added that the Parks Department have people out there who have been clearing. ED stated that IAP control needs to be tackled strategically and is trying to prioritise areas and ensure follow up. The teams are also supporting	

	conservancies through training and equipment.	
<b>5</b>	<b>Updates from Natural Resources Museum</b>	
5.1	No updates were available.	
<b>6</b>	<b>Chameleon Park, Adrian Armstrong</b>	
6.1	<p>AA noted that he is hoping to get people together to tackle the problems at Chameleon Park. In 2002, there was a development proposal which culminated in a Record of Decision where the land was set aside for specifically for the conservation of chameleons. The chameleon population is being monitored and was initially low and then declined even further. However, it gradually increased and the target population is 100 adults. In 2007, 38 adults were recorded, but the numbers have declined again since then and are currently very low. In 2007 no chameleons were recorded in the D'MOSS portion of the Chameleon Park, which is probably due to invasive alien plants being present and poor management activities.</p> <p>Financial support of the Chameleon Park was supposed to be provided through the Business Park as per the agreement that a levy would be charged to renters/owners for the management of the Chameleon Park. Would like to see this agreement revived.</p> <p>Queried what the zonation of Chameleon Park is and who is managing it. Wants to arrange a meeting to develop an Environmental Management Plan (EMP) for the park. This EMP should include alien plant control, mowing of vegetation, protecting and demarcating the park, management of the hedge and litter traps in storm water drains. Added that he wants to channel water to the wetland area and include a barrier to also prevent litter entering the park.</p>	
6.2	TS noted that the park was being managed by the Parks Department and that funding was previously made available. However, TS is not sure who the person currently responsible is.	
6.3	RB stated that in 2002 the Chameleon Park was managed by the Parks Department and the D'MOSS area was managed by Natural Areas Department. Nomafu Dlamini was the person responsible for the area. One of the tasks is to re-zone the land but it needs to be managed in the meantime.	
6.4	NG noted that John Forbes of EPCPD emailed her regarding a request made a few years ago to rezone the Chameleon Park from Public open Space to Environmental Conservation Reserve. A process is currently being undertaken where public open space that are important for conservation are being identified for rezoning.	
6.5	<p>AA stated that whoever is managing the land, currently scours the banks at the park and at one stage mowed a small amount. However, management is variable. Added that it would be great to get a plan to set the boundaries of mowing and IAP control that will stop scouring.</p> <p>JL responded that there are two possible solutions. The Business Park could become an Industrial Conservancy and then adopt the area. Alternatively, Howard College campus have strong conservancy and could be also adopt the park.</p> <p>AA responded that the businesses are supposed to be levied and requested that someone</p>	

	in the Municipality take the responsibility of ensuring that the fund is established.	
6.6	It was queried which district the Chameleon Park falls under. Noted that it is not included in District 8 and that there is a proposal by the Parks Department to reduce number of districts. Need to find out which Manager is responsible.	
6.7	AA noted that the extent of the park is 5 hectares, including the DMOSS area.	
6.8	RU noted that instead of an EMP, an Annual or Operational plan should be implemented. Added that an EMP is not useful for day to day interventions. What could work is if Ezemvelo KZN Wildlife sits down with Parks Department to identify key interventions and decide on how these will be implemented each year. Noted that an Annual Plan is being developed for the Stewardship Programme for Nature Reserves. Ezemvelo KZN Wildlife is creating a framework to use annual plans of operation and a draft is available that may be amended for Chameleon Park.	AA / RU
6.9	RB noted that he had heard that Bellair Road is proposed to be widened and will extinguish a large portion of Chameleon Park. This should be considered when planning for the park. Requested that AA send an email to the Head of Parks, Christo Swart and the Deputy Head of EPCPD, Debra Roberts, who would then direct the queries to the relevant people. Added that this route would ensure that the necessary meeting is arranged.	AA
6.10	AA queried when the rezoning of public open space to environmental conservation reserve would come into effect.  RB responded that environmental conservation reserve and conservation reserve have been incorporated into a number of Town Planning Schemes. There are 54 schemes in the city and the incorporation of DMOSS into all the schemes affected 1800 landowners. In the Outer West, portions of private properties are being rezoned. Added that RD AND John Forbes will start a process that will assess all properties to check which erven will need to be rezoned. Chameleon Park will be one of these areas. This must be done in conjunction with Parks and will potentially take place within a year.	
6.11	<b>General</b>	
7	LD noted that chameleons were found between the alien plants in the area cleared in Kassier Road. AA added that the chameleons are at risk of getting killed when crossing the road.	
7.1	JL raised three issues: <ul style="list-style-type: none"> <li>• Regretted that the Natural Resources Division was not present. Mentioned that the MOU that was supposed to be put in place in 2008 was still outstanding.</li> <li>• Noted that trees are being lost on verges despite the Tree Planting Policy.</li> <li>• Requested an update on the proclamation of reserves.</li> </ul>	
7.2	DR of Ezemvelo KZN Wildlife noted that he is working with Cameron McLean of the EPCPD on the proclamation processes of reserves. Roosefontein Nature Reserve is the first reserve in the process of being proclaimed and the other 10 will follow. Noted that for Roosefontein Nature Reserve, contracts and management plans have been developed. The next step is to get the survey from the deeds office, which they are currently waiting for. Mentioned that there is a bit of a time lag which is out of their control. With respect to the other 10 reserves, 3 don't require surveying, 3 are being surveyed and the others will still require survey work. The process of proclamation of the various reserves is being	

	implemented based on the speed at which they can go through the system. Cameron is setting up meetings with the managers of these reserves to get the input required for the management plans. Added that they are mastering the proclamation process through Roosefontein.	
7.3	JL invited everyone to the Indigenous Plant Fair (3 & 4 September 2011) and the Sustainable Lifestyle Exhibition on 2 - 4 September 2011.  Catalogues for plant fair available at R20 each and can be supplied.	
7.4	LF noted that the Bird monitoring and conservation group in New Germany Nature Reserve is concerned about the nesting materials there, which are falling apart and need some repair. Not sure where these issues can be raised. It was noted that Sbu Mkhwanazi of the Parks Department may be contacted in this regard. NG offered to forward contact details to LF.	
7.5	<b>CONCLUSION AND CLOSE OF MEETING</b>	NG
8	NG thanked all for attending and closed the meeting.  The next Biodiversity Forum is scheduled for 17 November 2011, at the Paradise Valley Nature Reserve from 9h00 to 12h00.	