Minutes of the 3<sup>rd</sup> Meeting of the

## Lead (Pb) Poisoning Working Group

Wednesday 16 November 2022 at 14h30 NCE Boardroom, 20 Nachtigal Street, Ausspannplatz area

## Participants

MEFT: Kenneth /Uiseb (K/U) Chairperson, Janine Sharpe (JS) Veterinarian UNAM Biological Sciences: Lorinda Hart (LH), Elizabeth Shilunga (ES) UNAM Veterinary School: Mark Jago (MJ), Liam Reid (LR) NCE: Chris Brown (CB)

## Apologies

Holger Kolberg (HK - MEFT), Ortwin Aschenborn (OA - Leibniz Institute for Zoo and Wildlife Research), Danene vd Westhuyzen (DvdW – NAPHA), Maria Thiessen (MT - NAPHA), John Yabe (JY - UNAM), Angus Middleton (AM - NNF)

Ag	enda item	Actions
1.	Welcome Kenneth welcomed everyone. A special word of welcome to Elizabeth and Liam,	
	students researching levels of lead in vultures and carnivores respectively.	
2.	Apologies	
	Noted.	
3.	Previous Minutes	
	- Correctness: accepted	
	- Matters arising: all matters are covered by Agenda	
4.	Incentivising the transition of hunting and wildlife sector to lead-free	
	ammunition	
	a. Information on the negative impacts of lead ammunition:	
	<ul> <li><u>Communication strategy</u>: The main use of lead ammunition is by</li> </ul>	CB & Gail
	farmers, wildlife ranchers, conservancies and hunting teams. A	Thomson
	communications strategy is needed to reach these groups. Gail	
	Thomson will be commissioned to prepare a concise strategy,	
	which should include the ideas below.	
	<u>Brochure</u> : a brochure should be developed on lead as a toxin and	
	issues around human and environmental health. A copy of the	
	brochure will be attached to each trophy and wildlife utilization	
	permit.	
	Meat Board bulletin: prepare information to be included in these	
	bulletins, which reaches every farmer.	
	<ul> <li><u>Radio broadcasts</u>: in local languages.</li> </ul>	

b.	Information on lead-free alternatives (including German calibre	
	firearms):	
	i. All imported ammunition brought in by hunters should be lead	
	free. To achieve this, work with Customs (NamRa) and NamPol,	NAPHA
	and with NAPHA.	
	ii. Prepare an information pack to go to Customs and NamPol at	
	key border posts, particularly Windhoek International Airport.	NCE
с.	Testing of lead-free ammunition:	
	• Currently awaiting import of ordered non-lead ammunition from	
	Badger.	NAPHA
	Data assessment form for recording effectiveness of non-lead	
	ammo by selected hunters was compiled by DvdW – attached as	All
	Annex 1 at end of Minutes – comments welcome.	,
d.	Presentation at NAPHA AGM (1 December 2021):	
	• Presentation given. Good response from members – support to	
	move ahead. Power point to be shared with Working Group.	СВ
e.	Engage with Environmental Investment Fund (EIF) on environmental	
	levy on lead ammunition:	
	• Need to compile a ToR for a concise focused social-economic and	
	ecological study on lead ammunition and implications of phasing	K/U & CB
	across to non-lead. Recent research findings will provide useful	,
	input.	
f.	Understand levels of lead in wildlife meat on markets:	
	• Veterinary School at UNAM to address this in 2023 as a student	MJ
	project.	
g.	MEFT to change to lead-free ammunition – lead by example:	
	• Presentation with most up-to-date info to be prepared for MEFT	K/U
	senior management early in 2023.	
	• MEFT to get supply of non-lead ammo for regional staff. List of	
	types of ammo needed and amount for a 1-year supply to be	JS & CB
	ascertained by JS. NCE to order. Data form (Annex 1) to be	
	completed by MEFT staff using unleaded ammo.	
h.	Other:	
	• Explore with NACSO and CANAM the idea of testing making non-	СВ
	lead ammo a condition in some hunting contracts – these	
	communal and freehold conservancies being recognised as the first	
	lead-free in Namibia – with certification and promotional publicity.	
	Get info from NACSO NR Working Gp on amount of game meat	
	harvested in conservancies, amount sold and amount distributed to	СВ
	conservancy members. Should try and sample this meat for lead.	

5.	Monito	pring / research	
	a.	Lead levels in vultures:	
	a.	<ul> <li>LH set the scene and Elizabeth gave a presentation on her findings of lead levels in adult and nestling White-backed and Lappet-faced Vultures from different localities across Namibia, using blood, feathers and bones (see pdf of power point accompanying these Minutes).</li> <li>Samples were analysed in Japan through a bilateral arrangement established through JY and under his guidance.</li> <li>The results are devastating – worst that we imagined and emphasise the critical importance of phasing out lead ammunition asap.</li> <li>Sample sizes will be increased with new samples collected by OA and others.</li> <li>ES will write up her work as a MSc, and then publish. NCE could assist to develop a Blog to spread the message more widely.</li> </ul>	LH & ES Gail Thomson
	b.	<ul> <li>Elizabeth was congratulated on her presentation and work.</li> <li>Lead levels in carnivore bones: <ul> <li>Liam gave a presentation on his findings of lead levels in long bones and skulls of Black-backed Jackal, Spotted Hyaena, Leopard and Cheetah (see pdf of power point accompanying these Minutes).</li> <li>Samples were analysed in Japan as above, under guidance of JY.</li> <li>All samples showed lead, some high. Some unexpected results were – high Pb levels in skulls, cheetah and leopard (that don't scavenge as much as jackal and hyaena) had highest lead levels. This is probably from animals in captivity being fed shot game meat contaminated by lead.</li> <li>This first study on carnivore lead levels indicates the need to expand the research to a full MSc in 2023. NCE could provide a bursary.</li> <li>LR to write up this work – could be a short paper in NJE, and NCE could assist to develop a Blog to share the results more widely.</li> </ul> </li> </ul>	UNAM – MJ & LH to discuss Gail Thomson
	C.	<ul> <li>Further research priorities:</li> <li>Monitor levels of lead in skinners, farm staff and farmers / hunters on a voluntary basis - engage with Ministry of Health / UNAM Medical School to design approach with appropriate ethical considerations.</li> <li>Expand the work on lead in carnivores through an MSc project</li> <li>Sample levels of lead in game meat sold to the public – game mince, boerewors, droewors, biltong, salami, etc. Also game meat distributed to conservancy members, and game meat sold at farm gates.</li> </ul>	Work with MHSS LH / MJ MJ

	<ul> <li>Conduct a survey of arms dealers to see what types and volumes of ammunition they currently sell to the public – but specifically farmers and hunters, including culling teams.</li> </ul>	NAPHA with NCE?
6.	Institutional arrangements	
	<ul> <li>a. It was agreed that a website would be useful to support the work of the Working Group. A draft will be prepared and circulated for review before it goes live.</li> </ul>	NCE & Alice Jarvis
	b. Mr Petrus Endjala, Head of Laboratory Services, Ministry of Health and Social Services should be invited to join the Working Group, with special focus on lead and human health.	
7.	Any other business	
	<ul> <li>a. Birdlife International lead (Pb) workshop for Southern Africa with focus on vulture conservation: Following names will be forwarded to receive invitation: Kenneth, Lorinda, John, Janine and Danene/Maria/NAPHA.</li> <li>b. Invite Dr John Yabe to give an overview of his work on lead in southern</li> </ul>	
	Africa at next meeting.	
8.	Close meeting	
	There being no further business, all participants were thanked for their attendance and active participation and the meeting was closed at 16h30.	

See Annex 1 on next page.

**ANNEX 1** 

## Lead Free Ammunition -



Ammunition tested on shooting range:

(please mark 'tick the box' on a scale of 1 – 10, 1 being excellent, 10 being worst)

Grouping:									
1	2	3	4	5	6	7	8	9	10
Fitting int	o chamber								
1	2	3	4	5	6	7	8	9	10
Recoil, co	mpared to	other Amm	unition:						
1	2	3	4	5	6	7	8	9	10
Accuracy:			a 4						9 15
1	2	3	4	5	6	7	8	9	10

Ammunition tested - Hunting:

Accuracy:

1	2	3	4	5	6	7	8	9	10

Anny Tracking done after shot, if so, which species and where was the shot placement:

Did you recover the animal, if so, how far did you track:

(please mark 'tick the box' on a scale of 1 – 10, 1 being excellent, 10 being worst)

Penetration:

1	2	3	(4)	5	6	7	8	9	10
Neight Re	tention:		6 - 6 5 - 63						2 0
1	2	3	4	5	6	7	8	9	10
Expansion	:					-			ĝ p
1	2	3	4	5	6	7	8	9	10