

STAKEHOLDER REVIEW					
CHAPTER 8		The role of meso-predators in ecosystems			
STAKEHOLDER NAME: Quinette Kruger					
Stakeholder	Page/s	Line/s	Table/Figure	Stakeholder Comment	Author Response
Quinette Kruger	5	146		bat-eared foxed should be bat-eared fox	Fixed
Quinette Kruger	16	539	Figure 8.2	Second bullet: Consumes should be Consume	Fixed
John Power	1	27		However, the majority..?	We have decided to keep what we have, thanks for the suggestion
John Power	1	33-35		Should mesopredators and apex predators not be defined early on?, with references etc - more detail than a glossary?	We have added further information on apex predators and a reference for meso-predators. Meso-predators are further explained at the start of the next section.
John Power	1	47		livestock	Fixed
John Power	3			from reality..	Not sure what this relates to?
John Power	3	70	Fig 8.1	Good, but maybe shorten wording in title - maybe lagomorphs etc = small mammals?, etc..	The figure legend needs to remain as is to fully explain the details in the figure. However, we have altered rodents and logomorphs to small mammals and included a short segment acknowledging that invertebrates are also consumed (just not shown).
John Power	5	133		structure ? Is this a sub-heading?	Yes, these are sub-headings. In the final formatting for the entire package these aspects will be standardised
John Power	5	153		Michigan's Isle Royale ? Suggesting	Included Michigan's as suggested
John Power	5	154		rephrase - brevity - , regulation by predation, moreover food in the moose population..	The re-phrased sentence does not sound right so we are leaving this as is.
John Power	6	177		Reference	Included the reference; NEWSOME T.M., RIPPLE W.J. 2015. A continental scale trophic cascade from wolves through coyotes to foxes. J. Anim. Ecol. 84:49-59
John Power	7	218		Of which the Karoo ecosystem comes to light as classic for this..?	We are not aware of a published article highlighting this fact in the Karoo. If there is one we will gladly refer to it.
John Power	7	229		Sub-heading? Not to be higher level?	All these sub-headings are part of the roles of mesopredators impacts on biodiversity and believe they should remain as is.
John Power	9	282		Interesting - also to look at Rutberg 1987 - adaptive hypth re hidrs vs followers.. ,any followers are seasonal, short-period breeders, with hidrs - wider period..may be interesting re impacts on high-value hider game, ie. sable, roan, and impresses on importance to protect these from jackals ! FYI.	This is a valid point but we are not aware of published literature on the role of jackals in regulating the populations of large ungulates (i.e. roan and sable). We have however elaborated on this in the final paragraph where we speculate on some possible impacts of these mesopredators. Included; "This targeted predation on neonates that hide could play an important role in population regulation of high value game species like roan Hippotragus equinus and sable Hippotragus niger antelope."
John Power	9	295		..precisely, why game farmers in NW like vulture restaurants and providing carrion to keep jackals from preying on ungulates, efficacy - unsure?	Although we are aware of the work by Yarnell et al. of the impact of vulture restaurants on jackal abundance, we are not aware of any published or reported work investigating the efficiency of vulture restaurants reducing the predation on valuable neonates or livestock. Thus this still remains an unproven mitigation technique.
John Power	10	311-312		or the contrary.. ?	Not sure how this would improve the text
John Power	10	315		..and catchability..	Included into line 314
John Power	10	331		Reference	This is a summary of what was introduced in the paragraph, thus this reference is included in the previous sentences.
John Power	10	337		scientific name of bat-eared - may have been used b4?	Thanks, removed from here
John Power	10	340		Similarly, ..as all this could also be mentioned in point above too..	We are leaving this as is because the previous sentence provides a contrasting view to this sentence, thus similarity is not likely to be the correct word.
John Power	11	349		References - Kamlers etc?	We have altered the text in the previous sentence and have included the recent paper; KAMLER J.F., ROSTRO-GARCÍA S., MACDONALD D.W. 2017. Seasonal changes in social behavior and movements of bat-eared foxes in South Africa: disease implications. J. Mammal. 98:1426-1433. The text now reads, "Along with direct mortality, black-backed jackals may influence bat-eared foxes in non-lethal ways, recent evidence suggests that bat-eared foxes living together with black-backed jackals are more wary in dark conditions, with potential foraging implications (Welch et al. 2017), and formed larger groups (Kamler et al. 2017)."
John Power	11	358		Other references - Yarnell - Vander Merwe - etc Van der Merwe, I, Craig J. Tambling, C.J., Thorn, M. & Dawn M. Scott, D.M., Yarnell, R.W & Green, M., Cameron, E.Z & Bateman, P.W. 2009. An assessment of diet overlap of two mesocarnivores in the North West Province, South Africa. Afr. Zool. 44(2): 288-291.	The reference provided is a review of three studies investigating brown hyaena and jackal diet overlap and this provides a summary of the findings from a few papers, including the one suggested.
John Power	11	364		ie. endangered African wild dogs Lycaon pictus	The example has been added in
John Power	11	368		outdated	Fixed
John Power	13	428		medium-sized	Fixed
John Power	13	442		through fear? Too wordy ecology of fear..	We have simplified this
John Power	13	449		Scandinavian rather? Readers will think wtf :)	The original article uses Fennoscandian and ultimately this does mean the exact same as Scandenavian, thus we are going to keep this is it is found in the original scientific paper.
John Power	15	504		Mellville reference here too I guess?	Included
John Power	15	510		not more studies - Mellville? Bracz..etc	Most of the studies just investigate the caracal diet. Very few studies actually investigate the prey species population level impacts that result from caracal predation.
John Power	15	516-517		Moon & blackman?? Wrong reference I think to use Moolman 86 rather?	Good catch, this reference has been removed.
John Power	16	528		following this, I would add something that this species has a major role to play in agro-ecosystems, where control of pest species can serve an Nb ecosystem role..	There is no published research showing this. We suspect this may be the case, but we have tried to reduce speculation and this just highlights the knowledge gaps that we are faced with.
John Power	16	531		..., which is where they come into conflict with the game	We have alluded to this in the next sentence
John Power	17	543		shorten title - more punchy..lessons from North America??	We have altered this to, "Lessons from felids from different systems". Likewise, we have altered the canid section heading to, "Lessons from canids in different systems".
John Power	18	611		expose	Fixed
John Power	19	641		scenario, biodiversity	Fixed
John Power	20	668		Vulpes chama - used earlier?	Yes we have, Latin name removed
John Power	25	802		Universiteit van Vrystaat?, institution needed	Institution added
John Power	26	879		stand to be corrected - Mamm. Biol. ?	Fixed
John Power	29	966		Universiteit van Pretoria, Pretoria.	Fixed
John Power	30	1029		stand to be corrected - Mamm. Biol. ?	Fixed
John Power	32	1070		stand to be corrected - Mamm. Res. ?	Fixed

Jacqui Codron	2	28 & 33		I think as part of the introduction to this chapter the authors should include examples of apex predators, as well as small- and medium-sized predators, to give readers a clear picture (not all readers will read all the chapters). Also because the latter group is said to be "...neither large nor charismatic and consequently have received relatively little research attention compared with the small group of apex predators...", implying that they are often "forgotten" or overlooked.	We have elaborated on the apex predators by including the text, "The majority of this understanding comes from a handful of studies on large charismatic predators (i.e. lions <i>Panthera leo</i> : referred to as apex predators when these large predators dominate the food chain)". Mesopredators are discussed throughout the chapter and we feel that it would make the introduction cumbersome if mesopredators are introduced in greater detail here and again later on when mesopredators are properly introduced. Furthermore, we will ensure that examples are included in the glossary.
Jacqui Codron	4	84		Instead of reading "mesopredator" here, I think this phrase should read "...role of <i>predators</i> in relation to their position in the food web (apex or	This has been changed
Jacqui Codron	4	86-87		Replace "play" with "have" in this line so that it reads "...impact that humans may <i>have</i> when filling the role of	Fixed
Jacqui Codron	General comment			Please make sure all the tab indentations at the start of new paragraphs are the same size (they seem to get larger after the heading "Role of mesopredators in	Fixed
Jacqui Codron	5	146		"bat-eared foxed" should read "bat-eared fox"	Fixed
Jacqui Codron	6	184		Did the authors mean "anthropogenic" as opposed to "anthropic"?	No, we mean anthropic - meaning: of or relating to human beings or the period of their existence on earth
Jacqui Codron	6	193		Feral cats as "top predators" can cause severe declines in prey populations of what species of animals? Any specific examples the authors can provide here?	The paper referenced includes 175 vertebrate species, including 14% of the global bird, mammal and reptile extinctions and they are a threat to 8% of all critically endangered birds, mammals and reptiles. Thus we do not think a single example will suffice and we have added the above details to the text.
Jacqui Codron	7	203		Replace "by humans" with "through humans"	The persecution that we are talking about is done by humans, we do not think through humans will be appropriate.
Jacqui Codron	9	295		Add a comma after the bracket (before the word	Fixed
Jacqui Codron	14	457		Please clarify - what are "seed predators"?	Animals that eat seeds, or predate on seeds, provided example of rodents.
Jacqui Codron	14	475		Could the authors include some examples here of "canids of conservation concern" (in addition to the red wolf example in the preceding sentence)?	Have included the example of grey wolf, which at the time of the publication that we have used were endangered and of conservation concern.
Jacqui Codron	15	499-508		The message that comes across here is that small mesocarnivores are impacted on by both caracal and black-backed jackal, albeit not in the same ways. It seems that jackal presence influences smaller carnivore numbers more directly, while caracal presence has direct and indirect influence on them?	Unfortunately this is not known. If you have published reports or papers on the relative impacts of these species beyond the information we have presented please let us know. We are starting to get a better understanding of the jackal impacts - as identified in the jackal section, but for caracal all that we know is that they consume these small predators. So although jackal may have both a direct and indirect effect, our current knowledge indicates that caracal could have a direct effect. This may be expanded to an indirect effect when this question is addressed in future research.
Jacqui Codron	15	515		Add the word "and" before "rodents"	Fixed
Jacqui Codron	16	534		Perhaps just remind the reader at this point what the "same population level responses, as observed in northern temperate regions" are.	We have included "i.e. reduced reproduction" to remind the readers - although they should probably go read the paper.
Jacqui Codron	16	537		Surely the role of caracal in removing waste from ecosystems is negligible, given that they rarely scavenge, and therefore we cannot really credit them with waste removal?	Is this a published fact, or your assumption? If they have been shown to play absolutely no ecological role in through their scavenging we will gladly alter this text to indicate this. We have changed the text to indicate a possible role. The new text now states, "they may be responsible"
Jacqui Codron	19	630		Rather rephrase "...ungulate populations remains uninvestigated" to "...ungulate populations has not been investigated" or "remains poorly investigated".	We have changed this to "remains poorly investigated"
Jacqui Codron	19	643		Include here the specific biomes in which mesopredators occur in the eastern regions of South Africa, to give the reader an idea of the kinds of environments being referred to when the authors say	We have now added in the biomes that are considered more productive based on the rainfall that they receive.
Jacqui Codron	19	646		Specify which ecosystems?	This is pretty much all of the ecosystems. There are no studies really investigating top down versus bottom up processes outside of protected areas.
Jacqui Codron	20	655-656		replace "through ecosystems" with "on ecosystems"	Fixed
Jacqui Codron	20	674		Rephrase "...is even less than for..." to something like "...is lacking even more than for..."	Fixed
Jacqui Codron	20	675		This phrase is unclear: "...resulting predator re-arrangement..." - Do you mean changes in the relative abundances of different predator species, or changes in	Both of these, so have included these in brackets