

Comments received during the external review of the Second Order Draft (SOD) chapters and for the First Order Draft Summary for Policy Makers (SPM) of the IPBES assessment of the sustainable use of wild species. The review period was from 15th April to 27th June 2021.								
Nb	Reviewer Name	Chapter (1-6)	From Page	From Line (s)	To Page (er)	To Line (end)	Comments / Feedback	Response
1	Burgess, Neil	5	0	0			The chapter might be slightly biased against the more animal rights end of sustainable use "scenario thinking".	Thank you for your comment. We have responded to specific comments on this topic in the report, which should help to ensure balance.
2	Burgess, Neil	5	0	0			From the literature review I wonder if the more general lessons looking at whether use is sustainable in current systems are fully captured. For example, its technically possible to have sustainable logging in tropical rainforests, but it very rarely (if ever) happens. There are forestry assessments of why this is the case and I am not sure these 100% come through in the text (although I was skimming it). I believe the same is also true of fisheries as well. Sustainability is possible, but almost never happens. So why is that and is this possible to build into scenario thinking? Many resources have the same challenges - charcoal in Africa, abalone in South Africa, Rhino horn etc. Are there some common themes that could be drawn out for futures thinking?	This is a correct observation; sustainable development is met with many obstacles that are often very difficult to overcome. Yet, the scenarios in this chapter focused on those papers that dealt with the sustainable use of wild species, thus excluding many plausible less sustainable futures. Yet, the archetypes that we developed and used were a combination of exploratory scenarios and pathways, thus also explicitly related to future developments that are not sustainable. We added a piece of text in section 5.2.1.3 to describe potential (archetypical) obstacles and later in the text to reflect on these in relation to main aspects of sustainable use.
3	Burgess, Neil	5	0	0			Is there anything of use in the scenario work around 'Bending the Curve' that can be useful for	Thank you for your comment. In the revision, entire section 5.2.2 was shortened and renamed. The work from the Global Scenario Group is referred to.
4	Burgess, Neil	5	0	0			Some synthetic graphics of what's been learned from the literature review would be great to see. Its a bit text heavy as a chapter	Thank you for your comment. We will evaluate the possibility of inserting your suggestion in the final draft.
5	Cheung, William	5	0	0	0	0	Giving specific focuses on scenarios of direct and indirect drivers by major use of wildlife system	We thank the reviewer for their comment and have made considerable changes in response to the second external review
6	Cheung, William	5	0	0	0	0	The chapter is more like an academic review on scenarios, instead of an assessment, and it may also risk tailoring for a narrower range of readers' interest than the chapter would intend to be.	We have improved the synthesis of the chapter, including developing summary sections that synthesize each practice, and adding additional text to strengthen the assessment components. Please also see our response to the comment below.
7	Cheung, William	5	0	0	0	0	Specifically, as noted in chapter 1 (line 457-462) of the report, the framing questions for chapter	Thank you for your comment. We will evaluate the possibility of inserting your suggestion in the final draft.
8	Elsey, Ruth	5	0	0	0	0	general comment - unsure how to monitor future scenarios - somewhat hypothetical, speculative, philosophical	While we are not entirely sure of the specific thrust of the reviewer's comment, we note that we do have considerable introductory text on scenario development, as well as refer the reader to the IPBES methodological assessment report on scenarios and models, both of which summarize the use of scenarios in practice as opposed to their hypothetical application.
9	Elsey, Ruth	5	0	0	0	0	general comment - must avoid "green-washing" wherein utilization programs claim to be ecologically sound	We agree, and note that our chapter is based on an assessment of the literature.
10	Elsey, Ruth	5	0	0	0	0	throughout the document there were references cited that were not listed in the references at the end	Thanks for this comment. The reference list is now updated in the new version of the text.
11	Germany	5	0	0	0	0	General comment: Overall, chapter 5 is very comprehensive and provides a sound analysis of	We thank the reviewer for their positive feedback and acknowledge their additional comments.
12	Germany	5	0	0	0	0	General comment: Chapter 5 applies the so called „nature futures framework“ in the context of sustainable use of wild species. According to ipbes/8/7 the current status of the framework is "work in progress". Given this, it is to be finalized following a consultation process in 2021 and only after which the plenary will receive it for consideration and approval at its 9th session, we encourage the authors to remove the nature future framework from the executive summary and we strongly suggest to outline the current status of the framework and the process it still has to undergo. Please check carefully ipbes/8/7 para 8.	Thank you for your comment. The text was revised and updated accordingly.
13	Germany	5	0	0	0	0	General comment: Please provide confidence levels to give an indication about the scientific evidence	Thank you for your comment. All the mentioned points were addressed in the final version of the chapter.
14	Germany	5	0	0	0	0	General comment: We realized that there are numerous editorial issues and we expect these to be addressed before the next version is available. We have highlighted some aspects below.	We thank the reviewer for their observations and have addressed editorial issues in the revised version.
15	Germany	5	0	0	0	0	Table of contents: "5.1.2 Framing within IPBES assessments and the sustainable use of wild species"	We have updated the table of contents and sub-heading to include this.
16	Germany	5	0	0	0	0	Table of contents: What is the difference between methodological considerations (5.2.2) and methodology (5.3). Please be coherent in wording and try to simplify the table of contents.	We have changed these subheadings and references in table of contents to "Methodological considerations for scenarios development" and "Assessment methods used in this chapter" respectively, as well as shortening section 5.2.2.
17	Germany	5	0	0	0	0	Table of contents: 5.4.2.2 Social what? Do you mean social aspects of social factors or social impacts?	Thank you for your comment. These categories are aligned with the chapter methodology.
18	Germany	5	0	0	0	0	Table of content: "5.5 Examples of indigenous people and local communities and indigenous knowledge in scenarios" Please consider re-wording. Do you mean the role of ILK in scenarios?	Thank you for your comment. The table of content and section header have now been changed to 'Examples of the involvement of Indigenous people and local communities and their knowledge in scenarios.'
19	Germany	5	0	0	0	0	Table of content: "5.9 A critical reflection on inequalities issues for the SU of wild-species". Please	This abbreviation has now been spelled out in the subheading and table of contents.

20	Kumagai, Joy	5	0	0	0	0	GENERAL. Please provide the license of the figure (should be CC-0 or CC-BY) and produce a data deposit package for each figure. This comment applies to all figures produced by authors of the assessment	Thank you for your comment. The license to all figures will be provided in the legend of the figures.
21	Wells, Geoff	5	0	0	0	0	I am not sure where this would fit in the report, but I note that there is no mention of 'bright spot'	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
22	Lavorel, Sandra	5	0	0			I congratulate the authors of Chapter 5 for the amazing work produced on future scenarios on the sustainable use of wild species. The chapter presents a very rich logically structure information base for identifying pathways towards sustainable use of wild species across a variety of potential global contexts. The downside of this richness is that this makes for a very complex chapter that is likely to be hard to follow for others than well versed specialists familiar with the multiple scenario approaches and frameworks. I count myself as one of these, and still found the current text complex to follow. Based on the raw material now available, the chapter needs to come to a final synthesis of potential pathways, in particular by identifying more clearly context-specific (i.e. scenario archetypes) vs. generic changes across the multiple dimensions explored (STEEP + C). Also the links from these results to Nature's futures scenarios and leverage points yet remain to be strengthened so as to reach policy relevant (if not immediately actionable) options.	Yes, you are completely right. This step was missing and has been added in an additional concluding and summarising section.
23	Lavorel, Sandra	5	0				One first thing that would really help guiding readers is a simple diagram summarising the architecture of the assessment report.	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
24	Acosta, Lilibeth	5	1	1	2	64	The executive summary needs to be further improved by (1) identifying issues/topics that authors would like to highlight from this chapter, and put those in bold letters; (2) for each highlighted issues/topics, elaboration with supporting information from the chapter and indicating section from which the information was taken in the chapter. This format was used in other chapters of the assessment report.	Thank you for your comment. All the mentioned points were addressed in the final version of the chapter.
25	Hashimoto, David	5	1	1	2	64	Need to indicate which part of the chapter each of these key messages are referring to by indicating the page number.	Thank you for your comment. All the mentioned points were addressed in the final version of the chapter.
26	Rosenberg, Andrew	5	1	1	2	64	this is an extremely important chapter but this summary doesn't give much in the way of conclusions. It reads more like an introduction rather than a summary of what you found.	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
27	Cheung, William	5	1	2	2	64	It needs a storyline and the above questions (chapter 1, line 457-462) could help guide that. But it is not clear what is the purpose of this chapter.	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
28	Germany	5	1	2	2	64	Executive summary: This executive summary is very important for readers and should allow capturing the main ideas behind this chapter: what is its purpose, how was it done and which are the main outcomes as well as knowledge gaps that remain. Unfortunately, we feel that this has not yet been fully achieved. This executive summary is way too broad- please be more specific on the topic of this chapter: Future scenarios of sustainable use of wild species, and try to structure the executive summary more stringently.	Thank you for your comment. The summary has been updated accordingly.
29	Stewart, David	5	1	9	1	10	Human population growth and changes in human population distribution, demographics and dis	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
30	Rosenberg, Andrew	5	1	22	1	23	this is not clear. Do you mean social and economic inequality? It is a sweeping and important statement but needs to be clarified. Perhaps you are referring to the distribution of policy impacts among communities, groups, sectors?	Thank you for your comment. All the mentioned points were addressed in the final version of the chapter.
31	Hashimoto, David	5	1	26	1	26	Better to use scenario analysis instead of scenario planning. Strictly speaking, scenario analysis	We agree that 'scenario analysis' and 'scenario planning' refer to different methods. However, the text in the Methodological Assessment refers to scenario analysis as "a framework" and scenario planning as "a tool". We used scenarios as a tool to explore pathways towards sustainable use, which is beyond a framework. Also, the text of the Methodological Assessment defines scenario analysis as "a tool for exploring possible, probable and/or preferable futures", which is what the chapter is doing. We will therefore maintain the use of the term 'scenario planning'. We have more directly referred to the text of the Methodological Assessment.
32	Rosenberg, Andrew	5	1	28	1	28	in this case also the potential response of human communities and their impacts	Agreed. The explaining text was changed to reflects this.
33	Lerambert, Anne	5	1	34	1	10	Human population growth and changes in human population distribution, demographics and dis	We agree that there is a large range of different factors that influence sustainability. We have expanded the main drivers that were listed, and included population growth.
34	Aebischer, Nicholas	5	2	35	2	35	"there were extend the set of existing IPBES archetypes scenarios" should be "the set of existing IPBES archetypes scenarios was extended"	We agree and this has been adjusted.
35	Elsey, Ruth	5	2	35	2	35	?grammar? "for this reason, there were extend the set of existing IPBES...." needs clarification	We agree and this has been adjusted.
36	Germany	5	2	35	2	37	Reformulate sentence: "For this reason, the set of existing IPBES archetype scenarios was expanded to specifically include..."	We have revised this sentence as per our response to the reviewer comment above.
37	Rosenberg, Andrew	5	2	35	2	42	no idea what this first sentence means. In the next paragraph, editing is needed to be much clearer	We have revised this sentence as per our response to the reviewer comment above. We have edited the rest of the paragraph to better explain the different number of sub-categories. Thanks for spotting this.
38	Weiskopf, Sarah	5	2	35	2	37	Problem with this sentence and meaning unclear. Does this mean authors extended to consider case studies as well? How can case studies be used in place of scenarios?	We agree and this has been adjusted.

39	Gallagher, L	5	2	38	5	42	Suggest adding source reference for the IPBES scenario archetypes and recalling who and how	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
40	Germany	5	2	38	2	41	The paragraph is not clear; it is not clear what the scenarios and sub-categories are and how many of them were considered. Please make sure this is understandable for all readers - including those not familiar with previous IPBES assessments.	Thank you for your comment. The paragraph has been updated accordingly.
41	Elsey, Ruth	5	2	56	2	59	would cite G. J. W. Webb (2020) "History of Crocodile Management in the Northern Territory of Australia".	Thank you for your comment. We cannot add additional text to the chapter due to word length restrictions. We feel our analytical approach is more informative than individual case studies, and we have already incorporated a few of these.
42	Lerambert, Adeline	5	2	60	2	64	The complex interrelationships between taxa also needs to be accounted for here. It seems this is focussing more on examining scenarios for individual taxa, which could fail to account for inter-taxa effects.	Thank you for your comment. We have included scenarios whether they cover single or individual taxa.
43	Stewart, Dav	5	2	60	2	64	The complex interrelationships between taxa also needs to be accounted for here. It seems this is focussing more on examining scenarios for individual taxa, which could fail to account for inter-taxa effects.	Thank you for your comment. We have included scenarios whether they cover single or individual taxa.
44	Weiskopf, Sarah	5	2	64	2	64	Executive summary highlighted what scenarios are and what gaps exist, but what are the key takeaways in terms of scenarios and practices that lead to more sustainable use?	Thank you for your comment. The summary has been updated accordingly.
45	Acosta, Lilibeth	5	3	65	3	95	Before presenting the structure of the chapter, it would be useful to include an introductory section.	Thank you for this suggestion. We agree and we have adapted the start of the chapter such that it first explains the logic of using scenario archetypes, also related to the sustainable use of wild species.
46	Yashphe, Shira	5	3	81	3	83	Throughout this chapter, it is stated that it will "recommend leverage points and positive actions" (after exploring the different scenarios) "to enhance the sustainable use of wild species". There should be a discussion on whether enhancing is the goal. This goes back to the question of how non-use practices (like those outlined in the Nature for Nature scenario) are treated. Is "leaving nature alone" a form of "sustainable use"? If it is, we feel it's fine to keep the word "enhance", if it is not (and our logic says it isn't as this is non-use), then the goal of leverage points and positive actions recommendations is not to enhance sustainable use but perhaps to manage it responsibly (which could include the option of deciding on a management option of non-use). We leave it to the authors to see if another wording could fit, but we believe that "enhance" is confusing for the reader and makes thinking on future possibilities of non-use harder. Another example for where "enhance" is used: Page 73, line 2178; and page 83, line 2367 (and in many other locations).	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
47	Acosta, Lilibeth	5	3	98	4	129	The section 5.1.2 on framing within IPBES assessments mentioned IPBES report on Global Assessment of the Status of Biodiversity and Ecosystem Services (2016)	Indeed good to mention suggested IPBES assessments; we do build on existing knowledge in IPBES. Yet, also good to explain that part of the approach was different because of the "sustainable use" focus. See also response to comment #45
48	Germany	5	3	98	4	105	Please include the ipbes Methodological Assessment Report on Scenarios and Models of Biodiversity and Ecosystem Services (2016)	We now include this assessment report in the list of underlying IPBES reports.
49	Germany	5	4	111	4	111	Please insert "of wild species" in the sentence as follows: "...underlying drivers of sustainable use of wild species."	This has now been adjusted.
50	Germany	5	4	119	4	119	Please specify: of wild species? or Sustainable use in general?	This has now been clarified.
51	Yashphe, Shira	5	4	124			Line should read: "Factors that affect extractive and non-extractive behaviors..."	This has now been adjusted.
52	Acosta, Lilibeth	5	4	130	9	299	The heading in section 5.2 "What is meant by scenarios" do not seem to represent the contents of the entire section. For example, meant or meaning deals only with definition and not types, which is discuss both in section 5.2. and subsection 5.2.1. Moreover, the subsection 5.2.2 deals with methodological considerations, which is beyond the topic of meaning and definition. The same are true for the two remaining subsections 5.2.3 and 5.2.4. I suggest to change the heading for section 5.2 so it can capture the different subsections.	Agreed. Although the entire 5.2 was shortened, the title still did not capture the content fully. The section was renamed to "Definitions, concepts and approaches". Text was restructured such that "what is meant by scenarios is the heading of section 5.2.1.
53	Cheung, William	5	4	131	16	504	I think section 5.2 can be substantially shortened, possible turn into a box. The authors can refer to the IPBES report on Global Assessment of the Status of Biodiversity and Ecosystem Services (2016)	See response to comment #54
54	Cheung, William	5	4	131	16	504	As a reader of this chapter, my interest would be to know what the scenarios tell us about the future of sustainable use of wild species.	This chapter is as much about scenarios as it is about the sustainable use of wild species. While the emphasis should and does lie with the topic (wild species), the method to assess (scenarios) does ask for a rather elaborate introduction, especially for those readers that are unfamiliar with scenarios and scenario planning. We slightly shortened the information provided, but we maintained the main flow of information.
55	Kumagai, J	5	5	150	5	151	Figure 5.1 Please gain approval to use.	Approval was gained.

56	Gallagher, Louise	5	5	152	5	158	Would recommend creating a new subheading here to ask 'why scenarios matter', and expand this paragraph to more fully elaborate why scenarios are a critically useful tool in deliberation and decision making under the deep uncertainty that characterises the choice and successful transition to pathways towards sustainable use of biodiversity. It seems useful to refer back to the diverse discussion in chapter 4 to illustrate how complex an endeavour it is to reach agreement on what are the problems and actually taking a new path. And then explain why good scenario analysis and planning can potentially play catalytic roles in evaluative processes for situations of uncertainties that can't be fully narrowed, contested values, etc. before going forward to talk about the specific scenarios being explored in the sustainable use assessment. This resource might have something useful in it on futures thinking, Decision Making Under Uncertainty and scenario development: https://www.frontiersin.org/articles/10.3389/fenvs.2019.00037/full . A pitch like this at the beginning will help to frame the following discussions.	As the entire section got shortened, not much room was available for adding text. Yet, we agree it is important to first explain why scenarios are needed. We added a few sentences in an additional opening paragraph that explains the logic of the chapter and also the logic of using scenarios.
57	Acosta, Lilib	5	6	159	6	159	Correct the first part of the sentence: "In this chapter, were used scenarios both to explore..."	Thanks for spotting the error. It was corrected
58	Germany	5	6	159	6	159	"In this chapter, we (not were) used scenarios..."	Thanks for spotting the error. It was corrected
59	Kenward, Rd	5		159		159	159 should "were" be "we"?	Thanks for spotting the error. It was corrected
60	Kenward, Robert	5		159		159	159 should "were" be "we"?	Thanks for spotting the error. It was corrected
61	Germany	5	6	161	6	161	Please specify: of wild species? or Sustainable use in general?	Thank for your comment. At this more general stage of the chapter, we refer to scenarios of sustainable use in general. Text was updated to reflect this: Original text: There were also analyses of the scenarios literature to evaluate what drives sustainable use based on the different projections and plurality of visions. Revised text: Analyses of the scenarios literature based on the different projections and plurality of visions were conducted to evaluate what drives sustainable use in general.
62	Germany	5	6	177	6	178	"an attempt was made.." this is very vague- what exactly is made here and how does this fit into the methodology presented later (5.3.1)?	Agreed. This sentence was modified. Section 5.3 explains what other search terms were included (e.g. pathway).
63	Germany	5	6	190	6	191	This chapter should tackle scenarios of sustainable use of wild species. Please be more specific	We agree to some extent. Parts of Section 2 were shortened, including this general overview of scenarios.
64	M, Crispin Swedi Bilombele	5	6	223	8	278	Figure/Table (Chapter 5. Incorporating multiple values of nature and nature's contributions to people for just and sustainable futures) Dear Madam or Sir, Greetings, Please, I thank you for your email on April 12nd 2021, regarding the Second Order Draft External Review Process, in which you have invited interested governments and qualified experts, including scientists, policy makers, practitioners and other knowledge holders, to sign up by providing feedback in a systematic way based on our own context and expertise and we thanked very much. As for the chapter see below an excerpt from comments on the sustainable use of the assessment of wild species: "The heavy reliance of indigenous people on wood for fuel and building materials has combined with population growth to contribute to the increased rate of destruction of forest species and woodlands. Biodiversity values of species use, is directly relevant to local residents, for whom biological resources often represent their primary source of livelihood, medicine, and spiritual values. Nation-states may also express values related to biological species resources, often in relation to economic benefits brought about through biological resource use-both consumptive , timber harvesting , hunting and no consumptive " tourism". " This situation is exacerbated by destructive commercial logging practices and inadequate forest management. The demographic explosion of local communities in protected areas is a source of human pressure on species in particular, strong demand for arable land, species through intense but commercial poaching, including the loss or disappearance of certain rare species and such as the Chimpanzee, the OKAPI, elephant, Mountain Gorilla, the subsequent demands for wood products, game, fish and arable land are constantly growing even within the protected areas. For a more sustainable use of species assessment, it would be desirable to strengthen / Measuring and monitoring sustainable use: - Strengthen the mechanisms of the existing convention, for the sustainable use of resources, in the countries of the member states.	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
65	Acosta, Lilib	5	7	227	10	336	This section will benefit from further literature review. Particularly the discussion of pathway archetypes.	In principle, we agree that the a full background would be needed in order to properly justify the choices made to construct the pathway and scenario archetypes. However, in view of other comments and also in view of the somewhat limited role of archetypes in the sectoral analyses, we decided not to provide more information. Rather, the entire Section 2 was shortened, where we did attempt to maintain most of the information related to pathway archetypes.

66	Hashimoto, Shizuka	5	7	227	8	270	Archetypes shown here are not the one presented in the IPBES Methodological Assessments of Scenarios and Models (see table 6.3, p.215) nor Global Assessment (Table 4.1.1, p. 22, Chp. 4). The archetypes used in the current draft not used across the regional assessment. The archetypes used in the current draft was proposed by Hunt et al. (2012) and used in the IPBES Asia-Pacific Regional Assessment but not by Global Assessment. I know this is too difficult at this stage but better to stick to IPBES archetypes proposed in Methodological Assessments of Scenarios and Models (see table 6.3, p.215) nor Global Assessment (Table 4.1.1, p. 22, Chp. 4). This also applies to archetypes proposed in pp 69-70 in the current draft. If there is no time to revise the archetypes used in this chapter, we need a good justification of why this assessment used the archetypes that are different from the Global Assessment.	We agree that there is not a complete 1 to 1 match with the scenario archetypes from the Global Assessment. However, differences are (very) small with mostly only a different grouping and different names. The only exception is the "Inequality" archetype that is gaining importance as it matches SSP4. As said, this addition was proposed in the Europe/CA regional assessment and is adopted here again. We have added some text to reflect and explain this choice.
67	Elsey, Ruth	5	7	228	7	228	disagree that international markets have a low degreee of regulation - IUCN and CITES are reg	Tahnk you for your comment. We are well aware that the assumptions made in the various archetypes can be debated and different opinions will exist. However, the general logic of using archetypes is to present a structured set of assumptions that can contextualise options for sustainable use. It is not easy to "disagree" or "agree" with the scenarios that we selected. On the other hand, the Business-As-Usual variant is a world in which markets will continue to be regulated. Text was altered to say "decreasing degree of regulation".
68	Yashphe, Shira	5	8	252	8	256	It is unclear where the approach considering wildlife's intrinsic value and the fact that wild animals are sentient beings fits in within the four main archetypes. Does it fall under the "New Sustainability Paradigm", perhaps under 2c where the "back to nature" attitude is described? If not, there should be another archetype it could fall under. In any case, this growing recognition of nature's intrinsic value and wild animals being sentient should, at least, be mentioned within one of these.	This is a good point, thanks for raising it. We agree that it would fit best under archetype 2c. Later in the chapter, you will see how 2c is linked to Nature for Culture. Some text has been added in Table 5.7, reflecting the "growing recognition of nature's intrinsic value, while wild animals are increasing regarded as sentient beings".
69	Elsey, Ruth	5	8	254	8	254	typo - open quotation mark in front of attitude should be a closed quotation mark after nature?	thanks for spotting this. The mistake was corrected.
70	Elsey, Ruth	5	8	269	8	269	intensifying agricultural production is not always negative - such as adding cover crops for soil retention to avoid erosion and loss of nutrients, etc.	This is correct. But in vein of Comment 68, in this archetype intensification is assumed to be largely negative in terms of environmental impact.
71	Woodward,	5	8	272	8	272	The use of the term, "elite" does not convey the true meaning of this statement. The term, "adv	We agree that the term can be debated, and that – in principle – using another word could be considered. Yet, the term originates from the narrative of the Shared Socioeconomic Pathways, SSP4, where it states: "Power becomes more concentrated in a relatively small political and business elite". The term "elite" was also used in the IPBES Europe/CA Regional Assessment, where this archetype was first described. Therefore, we chose to maintain the word here.
72	Elsey, Ruth	5	10	327	10	327	incomplete sentence "As can be seen in Table 5.1".	Thanks for spotting this error. There was a mistake in this sentence that was corrected.
73	Germany	5	10	327	10	327	at the end of the line: "There" should be "there".	Thanks for spotting this error. There was a mistake earlier in this sentence that was corrected.
74	Elsey, Ruth	5	10	329	10	329	needs an upper case "E" in Ectopian?	It was decided to refer to all archetypes without capitals. So the upper cases were replaced by lower cases, rather than the othe way around. Thanks for spotting the inconsistency.
75	Acosta, Lilib	5	10	333	10	334	Table 5.1 shows degree of matching. What are the basis/criteria/methods for coming up with th	These are all good points and good questions. Nevertheless, it is somewhat beyond the scope of this Section. More importantly, the case studies that would make this more concrete are given later in the chapter, with the classification of all papers in the database. Overall, we felt that an explanation of the logic of the entire chapter was missing. This was added, and includes some of your suggestions for more explanation.
76	Gallagher, Louise	5	11	346	11	360	The discussion in the stakeholder engagement and cocreation could be expanded a little here. Referring to the comment in the previous line, some reference to the value of participation in scenario analysis, planning when these methods are being deployed for political / policy, management and implementation decision making would round out the discussion here. I like the framework in fig 1 in this classic: https://www.sciencedirect.com/science/article/abs/pii/S1462901115000131 . TD scenario work is a challenge but we ususally do it because it yields results in facilitating futures thinking/robust DMUU, convergence in values in some cases, improvign enabling conditions for collective action, equity, completeness of an assessment etc https://agupubs.onlinelibrary.wiley.com/doi/full/10.1029/2019EF001311 . It's also worth acknowledging that participatory scenario development procedures also come with their fair share of challenges to ensure equity, fairness and inclusion of participants in meaningful ways. It does matter who is included and to what extent, and that deserves some mention. stakeholder assessment framework has just been published for situations of human-wildlife conflict and includes a case of scenario development and impact assessment: https://onbio.onlinelibrary.wiley.com/doi/full/10.1111/csp.2.399	These are all very relevant points as is the suggested literature. However, based on other reviewers' comments, we decided to shorten rather than expand the pieces of text that are less directly related to sustainable use of wild species, which includes this "methodological consideration". The chapter thus became less "scenario technical" and more "wild species applied assessment" which is what others were arguing for.

77	Trocchi, Val	5	11	347	11	349	It is important that stakeholders are involved in particular in the participatory processes of prot	This is a good point, but this suggestion does not fit in this particular part of the chapter. Here, we present the methodological angles, not the concrete examples of stakeholder participation. Some of your textual suggestions were added to the summarising table in Section 5.6.
78	Kumagai, Joy	5	15	467	15	468	Figure 5.3 Please gain approval to use.	Thank you for your comment. The license to all figures will be provided in the legend of the figures.
79	Elsey, Ruth	5	15	480	15	481	need to remove periods after those two bullet points to match style of others	Thanks for spotting this. The two full stops were removed.
80	Gallagher, Louise	5	16	489	16	490	Recommend amending the narrative in this section to "how scenarios HAVE BEEN used in decision making under uncertainty" and then illustrate using the cases.	We agree that this would be a better way of phrasing at this stage of the chapter. However, section two was revised and shortened, and this section was largely deleted. The text that was maintained, was moved to the start of the chapter to introduce and explain why scenarios are useful in general, making this text useful as it is.
81	Germany	5	16	502	16	503	Please consider rewording and please avoid policy-prescriptive language.	Thank you for your comment. The text was revised and updated accordingly.
82	Cheung, William	5	16	505	19	573	I think the whole section 5.3 can be moved to online supplementary materials. This is an assessment, not a scientific review, thus the valuable page space would better be spent on the results of the assessment instead of the methodology.	Thank you for your comment. The experts decided to leave this section on the text as it is since it makes easier for the reader to understand the steps taken by the authors to produce this chapter.
83	Kumagai, Jo	5	16	505	19	573	Thanks for adding the search terms, they're important to have for reproducibility and transparent	Thank you for your comment. The feedback is greatly appreciated by the chapter authors. A data management report will be created from the literature review.
84	Hoban, Sean	5	16	512	16		It is disappointing that the authors did not include "genetic" among the search terms even though "species" and "ecosystem" were included. Genetic diversity is the foundation of the three levels of biodiversity, supporting and complementing species and ecosystems. Unfortunately it is the most neglected of the levels of biodiversity even though it strongly supports ecosystem services and nature's contributions to people (Des Roches et al 2021, Stange et al 2020). It would be very unfortunate for IPBES to ignore genetic diversity. Hopefully IPBES can follow the lead of CBD and better incorporate genetic diversity. If the authors seek expertise on this level of biodiversity, the Coalition for Conservation Genetics (made up of working groups within IUCN, GEO BON, SCB and GBIKE) is willing and able.	Thank you for your comment. There are different sections related specific to genetics in other chapters (see chapter 3 and 4).
85	Woodward,	5	20	514	20	514	Suggest adding "hunting" and "harvest" to search terms to better identify terrestrial hunting refer	Thank you for your comment. We agree that adding specific search terms related to terrestrial animal harvesting might have yielded additional papers in this field. However, we have seen that it is not the general lack of literature on a certain topic, but the lack of the use of scenarios or other foresight methods and the lack of a specific focus on sustainable use. Although we assume that we included the most important literature, we acknowledge that we might have missed specific papers. We added a sentence to indicate this: "The dominance of forestry and fishery papers is clear, but might partly be attributable to the choice of search terms. Adding more practice-specific terms might have yielded additional papers."
86	Woodward, Allan	5	20	517	20	517	Suggest changing search terms from "wild species" to "wildlife" to expand the range of references.	Thank you for your comment. We agree that adding specific search terms related to terrestrial animal harvesting might have yielded additional papers in this field. However, we have seen that it is not the general lack of literature on a certain topic, but the lack of the use of scenarios or other foresight methods and the lack of a specific focus on sustainable use. Although we assume that we included the most important literature, we acknowledge that we might have missed specific papers. We added a sentence to indicate this: "The dominance of forestry and fishery papers is clear, but might partly be attributable to the choice of search terms. Adding more practice-specific terms might have yielded additional papers."
87	Elsey, Ruth	5	17	543	17	548	need to remove periods after these five bullet points to match style of others	This has now been adjusted.
88	Kumagai, Joy	5	18	556	29	559	Figure 5.4 Would it be possible to choose different color palettes for the different categories for different sub plots? For example fisheries, target seeking, and both have all the same color associated with them but are referring to very different subjects. Please also make sure to include this data in a data management report with a data deposit package that has these figures in an interoperable format (PNG, etc) and the code behind them.	Thank you for your comment. The updates suggested will be passed to the graphic designer to be updated in the last draft.
89	Gallagher, L	5	19	560	19	573	It doesn't seem correct that only 6 papers emerged from the search if it is both local communitie	Thank you for your comment. The focus of the assessment is on "sustainable use of wild species" and not on scenario modelling per se. Therefore, the search terms include "sustainable use of wild species" in addition to scenarios and models and capture papers that address both sustainable use of wild species and scenarios and models.
90	Woodward, Allan	5	21	562	21	563	Adding search terms, wildlife, hunting, and harvest, should improve the identification of pertinent literature associated with natural resource use by indigenous peoples.	Thank you for your comment. Our challenge with regard to finding literature on indigenous peoples is not natural resource use but on "scenarios," on which this chapter is focused.
91	Cheung, Wi	5	19	574	57	1927	I would expect that this section would present key projections of scenarios when available, and	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.

92	Lavorel, Sandra	5		574			Given the material available, this section presenting actions relating to different drivers for different practices combines information on current state and trends and results from actual scenario studies. First, it should appear more clearly that this is the case, and also which is which - rather than readers needing to work their way through text flow. Secondly, not having read the drivers chapter I don't know what is the level of overlap, but in principle strongly suspect explicitly links need to be made.	Thank you for your comment. All the mentioned points were addressed in the final version of the chapter.
93	Woodward,	5	24	586	30	844	Mention of freshwater fish use is lacking. Freshwater fisheries are being unsustainably harvested	Thank you for your comment. The subject of freshwater fish use has been updated in the last version of the chapter.
94	Hoban, Sean	5	20	595	20	603	In providing background related to fishing and biodiversity declines, it could be noted to include some element of genetic diversity, especially that harvested fish populations have been shown in a meta analysis of 140 species to have 12% lower genetic diversity than non harvested similar species https://onlinelibrary.wiley.com/doi/abs/10.1111/mec.12509	Thank you for your comment. We mentioned the decline of genetic diversity in the new version.
95	Halouani, Ghassen	5	20	598	20	603	I suggest to use the last version of FAO report (2020) throughout the document.FAO. 2020. The	Thanks for this suggested change. We have included it in the new version.
96	Elsey, Ruth	5	20	601	20	602	not sure how marine fish production can be stagnant for three decades (assume human population levels have risen, so should demand) while lines 588 - 589 state there is a need for production to increase by 30% to meet demand by 2050 - these seem contradictory	Thank you for your comment. We clarified the text according to the last version of FAO report (2020).
97	Germany	5	20	604	20	608	Where does this framework come from? Please cross-reference.	Thank you for your comment. We clarified the sentence. We used the word "perspective" instead of "framework" to avoid confusion.
98	Cheung, William	5	20	609	21	631	Chapter 4 of this report comprehensively assess the main direct and indirect drivers of sustainable use of wild life. It would be desirable to follow on Ch.4's results here in section 5.4.2.2 and assess the scenarios of those assessed drivers, instead of using a different framing.	Thank you for your comment. This is an important driver - but it's not a scenarios exploration and hence not included in this chapter.
99	Cheung, William	5	20	609	21	631	Substantial effort in this chapter is placed in identifying archetypes of scenarios. However, asse	We completely agree. This was missing from the analysis. We added a section in which this comparison is undertaken and an explanation in the beginning of the chapter that explains the conceptual considerations of this approach.
100	Halouani, Ghassen	5	20	610	20	611	It could be interesting to mention small scale fisheries in developed countries which may be further impacted by conflicts in sea use in the next years. For example, with the rapid development of Marine Renewable Energy (MRE) in coastal areas, spatial restrictions are likely to be implemented around installations for navigation safety which could reduce potential catches at local scale. Hammar, L., Perry, D., Gullström, M., 2015. Offshore Wind Power for Marine Conservation. Open Journal of Marine Science 6, 66–78. https://doi.org/10.4236/ojms.2016.61007 Yates, K.L., Bradshaw, C.J.A., 2018. Offshore Energy and Marine Spatial Planning. Routledge.	Thanks for this suggested change. We mentioned conflicts in sea use in the new version.
101	Halouani, Ghassen	5	20	614	20	615	In addition to the reduction of the catch potential, some small scale fisheries in developing coun	Thank you for your comment. We cannot add additional text to the chapter due to word length restrictions. We have already incorporated a few case studies.
102	Halouani, Ghassen	5	20	616	20	618	The reference is missing	Thank you for your comment. We added the missing reference in the new version.
103	Elsey, Ruth	5	21	621	20	621	not sure there are mass migrations to coastal areas - other sections discuss how climate change	Thank you for making this point. We removed the reference to "mass migrations to coastal areas" to avoid confusion.

104	Halouani, Ghassen	5	21	632	21	638	<p>There are also several technological advances to reduce bycatch by alerting non-target species (e.g sharks, marine turtles and small cetaceans) to the presence of fishing gears. These advances could be incorporated into scenarios related to the improvement of gear selectivity and conservation of endangered species.</p> <p>Hamilton, S., Baker, G.B., 2019. Technical mitigation to reduce marine mammal bycatch and entanglement in commercial fishing gear: lessons learnt and future directions. <i>Rev Fish Biol Fisheries</i> 29, 223–247. https://doi.org/10.1007/s11160-019-09550-6</p> <p>Molina, J.M., Cooke, S.J., 2012. Trends in shark bycatch research: current status and research needs. <i>Rev Fish Biol Fisheries</i> 22, 719–737. https://doi.org/10.1007/s11160-012-9269-3</p> <p>Bielli, A., Alfaro-Shigueto, J., Doherty, P.D., Godley, B.J., Ortiz, C., Pasara, A., Wang, J.H., Mangel, J.C., 2020. An illuminating idea to reduce bycatch in the Peruvian small-scale gillnet fishery. <i>Biological Conservation</i> 241, 108277. https://doi.org/10.1016/j.biocon.2019.108277</p>	Thanks for this suggested change. We have included it in the new version.
105	Germany	5	21	637	21	637	What does this growth rate of 2-4% imply vs. Declining fish stocks due to overfishing?	Thank you for this comment. According to Palomares & Pauly (2019) the "technological creep" have "a deeper societal aspect related to the rapid decline, in the Anthropocene, of global biodiversity (Butchart et al. 2010), particularly in the oceans (Worm et al. 2006)".
106	Elsey, Ruth	5	21	642	21	642	this says global fish production has risen 242% since 1976 which seems to contradict lines 601 - 602 for marine fish; how much has the human population (and thus demand for fish protein) changed in this time period?	Thank you for your comment. In fact, it is true that the annual marine fisheries production has been relatively stagnant over the past 3 decades. However, in this section we are addressing the question related to the increase of the trade of fish production in monetary terms. According to FAO (2020) About 38% of global fish production entered international trade in 2018 (an export value of US\$164 billion), at an annual growth rate of 8 percent in nominal terms (FAO, 2020). We updated the text in the new version.
107	Mahoney, S	5	21	651	21	654	While it may be covered elsewhere in this chapter, the perverse incentives associated with nati	Thank you for your comment. The perverse impact of subsidies was already covered in the "Political" section.
108	Germany	5	22	684	24	774	This section is on "environmental", but has a very strong focus on climate change. What about other environmentally relevant factors such as e.g. pollution, changes in coast lines, degradation etc?	Thank you for your comment. We will evaluate the possibility of inserting your suggestion in the final draft.
109	Halouani, G	5	22	690	22	691	In terms of fisheries management, the climate change might also affect the exploitation referen	Thanks for this suggested change. We have included it in the new version.
110	Hoban, Sean	5	22	691	22	691	The following is a good review of the impacts of climate change and global change on genetic diversity and adaptation/ evolution in species: https://onlinelibrary.wiley.com/doi/abs/10.1111/mec.12152 genetic diversity can also be used to study and understand the speed of species range expansions in the oceans and elsewhere https://www.nature.com/articles/s41598-018-27351-y?sf193177138=1	Thank you for this suggestion. We cannot add additional text to the chapter due to word length restrictions. (We already added a reference related to the impact of climate change on fisheries management)
111	Hoban, Sean	5	23	717	23	717	It might be noted somewhere around here that the response of species to warming may depend	Thank you for your comment. The positive feedback is greatly appreciated by the chapter authors.
112	Elsey, Ruth	5	23	718	23	718	the word "and" should not be in italics, but <i>Thunnus</i> should be in italics	Thanks for this suggested change. We have included it in the new version.
113	Kenward, Rd	5		718		718	718 italics off for "and", on for " <i>Thunnus</i> "	Thanks for this suggested change. We have included it in the new version.
114	Kenward, Robert	5		718		718	718 italics off for "and", on for " <i>Thunnus</i> "	Thanks for this suggested change. We have included it in the new version.
115	Halouani, G	5	23	719	23	721	I suggest to add the period or the year and the reference.	Thank you for this comment. We included the year and the reference in the new version.
116	Orenstein, Ronald	5	24	740	24	744	<p>The suggestion that climate change and natural fluctuation cycles alone are responsible for falls in fish stocks ignores the effect of poor management and overfishing. With respect to the Peruvian anchoveta fishery, the world's largest of its kind, please consult Carlson, A. K., Taylor, W. W., Liu, J., & Orlic, I. (2018). Peruvian anchoveta as a telecoupled fisheries system. <i>Ecology and Society</i>, 23(1), 35.</p> <p>Ferguson-Candler, G. (2018). Fisheries' collapse and the making of a global event, 1950s-1970s. <i>Journal of Global History</i>, 13(3), 399–424. https://doi.org/10.1017/S1740022818000219</p> <p>Hilborn, R., Amoroso, R. O., Anderson, C. M., Baum, J. K., Branch, T. A., Costello, C., De Moor, C. L., Faraj, A., Hively, D., Jensen, O. P., Kurota, H., Little, L. R., Mace, P., McClanahan, T., Melnychuk, M. C., Minto, C., Osio, G. C., Parma, A. M., Pons, M., ... Ye, Y. (2020). Effective fisheries management instrumental in improving fish stock status. <i>Proceedings of the National Academy of Sciences of the United States of America</i>, 117(4), 2218–2224. https://doi.org/10.1073/pnas.1909726116.</p>	Thank you for your comment. We clarified this point in the text. Prior to large scale exploitation, changes in small pelagic fish biomass are usually attributed to variations in oceanic climate rather than overexploitation.
117	Halouani, G	5	24	762	24	774	Several references are missing	Thank you for your comment. We included the reference in the new version.

118	White, Michael	5	24	762	24	774	falling pH will be an additional impact to coral reef habitat	Thank you for your comment. We cannot add additional text to the chapter due to word length restrictions. We already mentioned the sensitivity of coral reef fishes to increased CO ₂ levels.
119	Germany	5	25	786	25	786	Please specify: limit or reduce?	Thanks for this remark. We used the word "reduce" instead of "limit". We have included it in the new version.
120	Halouani, Ghassen	5	25	791	25	793	Geopolitical issues may arise from the redistribution of resources and/or the limitation of the access to these resources. (e.g the case of Brexit). (The transboundary management could also be impacted by the increase of regional conflicts)	Thank you for your comment. We cannot add additional text to the chapter due to word length restrictions. We feel our analytical approach is more informative than individual case studies.
121	White, Michael	5	25	796	25	797	I agree but unlikely to happen	Thank you for your comment. The positive feedback is greatly appreciated by the chapter authors.
122	Halouani, Ghassen	5	25	803	25	806	National subsidies could also lead to overcapacity and overfishing which negatively impact ocean health and reduce the chances of managing fisheries sustainability. Sumaila, U.R., Ebrahim, N., Schuhbauer, A., Skerritt, D., Li, Y., Kim, H.S., Mallory, T.G., Lam, V.W.L., Pauly, D., 2019. Updated estimates and analysis of global fisheries subsidies. <i>Marine Policy</i> 109, 103695. https://doi.org/10.1016/j.marpol.2019.103695	Thank you for your comment. The perverse impact of subsidies was already covered in the "Political" section.
123	White, Michael	5	25	806	25	812	likely mass human migration between countries too & resource wars	Thank you for your comment. We already mentioned that geopolitical issues may arise from the redistribution of resources.
124	Hoban, Sean	5	25	813	25	813	It could be noted here that marine protected areas can also be optimized to protect genetic or intra-specific diversity, including protecting the genetic diversity of multiple or even many species simultaneously https://www.sciencedirect.com/science/article/pii/S2351989415000785 and https://onlinelibrary.wiley.com/doi/full/10.1111/gcb.13634 and https://royalsocietypublishing.org/doi/pdf/10.1098/rspb.2017.2746	Thank you for your suggestion. We mentioned the role of MPA for protecting biodiversity.
125	Elsey, Ruth	5	25	814	25	815	not sure how expanding the protected areas by 5% will improve future catch by 20% (quotas? se	Thank you for your comment. According to Cabral et al. (2020), expanding existing global MPA network by just 5% can improve future global catch by at least 20%. We added the missing reference to the text.
126	Hoban, Sean	5	26	847	27	859	Harvesting can also impact genetic diversity https://link.springer.com/article/10.1007/s10531-004-7308-7 and https://bsapubs.onlinelibrary.wiley.com/doi/full/10.3732/ajb.91.4.540	Thank you for your comment. We included the impact of genetic diversity in the new version
127	Kenward, Robert	5		929		929	929. insert "but" after "yield"?	The suggested correction has been implemented. Thank you for the suggested edit.
128	Kenward, Robert	5		929		929	929. insert "but" after "yield"?	The suggested correction has been implemented. Thank you for the suggested edit.
129	Mahoney, S	5	30	1006	30	1007	Of course, such integrated forest management should also consider wildlife production and han	That is indeed true. The sentence has been revised to include wildlife production
130	Elsey, Ruth	5	31	1027	31	1027	Pinus brutia should be in italics	This suggested edit has been implemented.
131	Elsey, Ruth	5	31	1040	31	1044	seems a bit strong to speculate that noncompliance with CITES may be "more rampant" in cert	Agreed; this sentence has been revised to reflect that online trade provides a leeway for the sales of endangered species resulting in noncompliance with CITES rules. Hinsley et al. 2016 has been revised to Hinsley et al. 2017 which is the publication year.
132	Orenstein, Ronald	5	32	1067	32	1080	Discussion of trade in <i>Prunus africana</i> should take into account recent documents on the CITES website dealing with this species, which will be considerably more up-to-date than the academic literature. See https://cites.org/sites/default/files/eng/com/pc/25/Documents/E-PC25-27.pdf , which includes a report on a 2019 workshop on sustainable management of this species.	Thank you for this useful reference. Relevant material from this reference has been extracted and included in the section.
133	Cuadros-Ca	5	33	1109	33	1128	I am aware that the scenarios part is focused on a different kind of scenarios partly based on the	Done - with thanks. This paper was very useful, and we have included it, and have added to Zotero.
134	Woodward, Allan	5	37	1109	40	1412	Few references cited in the text can be found in the Literature Cited section.	We did doublecheck against Zotero, but will do so again. In progress.
135	Hoban, Sean	5	33	1110	33	1110	This section could note that hunting has a fairly well documented impact on heritable traits such	This is an important driver - but it's not a scenarios exploration and hence not included in this chapter.

136	Orenstein, Ronald	5	33	1117	33	1117	<p>I find it hard to believe that the authors found "very few" studies addressing hunting in the literature, and suggests that this says more about the search methodology than anything else. A Google Scholar search restricted to 2020-2021 alone on the word "hunting" found the following, among others: D'Cruze, N., Harrington, L. A., Assou, D., Ronfot, D., Macdonald, D. W., Segniagbeto, G. H., & Aulya, M. (2020). Searching for snakes: Ball python hunting in southern Togo, West Africa. <i>Nature Conservation</i>, 38, 13–36. https://doi.org/10.3897/NATURECONSERVATION.38.47864</p> <p>Gallego-Zamorano, J., Benítez-López, A., Santini, L., Hilbers, J. P., Huijbregts, M. A. J., & Schipper, A. M. (2020). Combined effects of land use and hunting on distributions of tropical mammals. <i>Conservation Biology</i>, 34(5), 1271–1280. https://doi.org/10.1111/cobi.13459</p> <p>Gallo-Cajiao, E., Morrison, T. H., Woodworth, B. K., Lees, A. C., Naves, L. C., Yong, D. L., Choi, C. Y., Mundkur, T., Bird, J., Jain, A., Klokov, K., Syroechkovskiy, E., Chowdhury, S. U., Fu, V. W. K., Watson, J. E. M., & Fuller, R. A. (2020). Extent and potential impact of hunting on migratory shorebirds in the Asia-Pacific. <i>Biological Conservation</i>, 246(June 2019). https://doi.org/10.1016/j.biocon.2020.108582</p> <p>Ghasemi, B. (2021). Trophy hunting and conservation: Do the major ethical theories converge in opposition to trophy hunting? <i>People and Nature</i>, 3(1), 77–87. https://doi.org/10.1002/pan3.10160</p> <p>Ibbett, H., Keane, A., Dobson, A. D. M., Travers, O. G. H., & Milner-Gulland, E. J. (2020). Estimating hunting prevalence and reliance on wild meat in Cambodia's Eastern Plains. <i>Oryx</i>, 1–11. https://doi.org/10.1017/S0030605319001455</p> <p>Romero-Muñoz, A., Benítez-López, A., Zurell, D., Baumann, M., Camino, M., Decarre, J., Castillo, H., Giordano, A. J., Gómez-Valencia, B., Levers, C., Noss, A. J., Quiroga, V., Thompson, J. J., Torres, R., Velilla, M., Weiler, A., & Kuemmerle, T. (2020). Increasing synergistic effects of habitat destruction and hunting on mammals over three decades in the Gran Chaco. <i>Ecography</i>, 43(7), 954–966. https://doi.org/10.1111/ecog.05053</p> <p>van Velden, J. L., Wilson, K., Lindsey, P. A., McCallum, H., Moyo, B. H. Z., & Biggs, D. (2020). Bushmeat hunting and consumption is a pervasive issue in African savannahs: insights from</p>	<p>Thank you for your comment. We agree that adding specific search terms related to terrestrial animal harvesting might have yielded additional papers in this field. However, we have seen that it is not the general lack of literature on a certain topic, but the lack of the use of scenarios or other foresight methods and the lack of a specific focus on sustainable use. Although we assume that we included the most important literature, we acknowledge that we might have missed specific papers. We added a sentence to indicate this: "The dominance of forestry and fishery papers is clear, but might partly be attributable to the choice of search terms. Adding more practice-specific terms might have yielded additional papers."</p>
137	Woodward, Allan	5	37	1117	37	1118	The search terms used were too broad and vague to provide an effective search of the literature	<p>Thank you for your comment. We agree that adding specific search terms related to terrestrial animal harvesting might have yielded additional papers in this field. However, we have seen that it is not the general lack of literature on a certain topic, but the lack of the use of scenarios or other foresight methods and the lack of a specific focus on sustainable use. Although we assume that we included the most important literature, we acknowledge that we might have missed specific papers. We added a sentence to indicate this: "The dominance of forestry and fishery papers is clear, but might partly be attributable to the choice of search terms. Adding more practice-specific terms might have yielded additional papers."</p>
138	Woodward, Allan	5	37	1118	37	1119	A wide range of hunting and animal harvest scenarios should be available if the search terms are expanded as suggested above. For example, American Alligator (Joanen et al. 1997, 2021), Tegu lizard (Mieres and Fitzgerald 2006), and Reticulated Python (Shine and Harlow 1999) harvests for skin markets, harvest of furbearers for fur markets (White et al 2015), harvest of ungulates and game birds for recreation (numerous in the literature), harvest of predators for human safety (Woodward et al. 2019), and harvest of wildlife for agricultural and domestic animal damage (Hynstrom, Timm, and Larson 1994). Also, a major source of harvest for crocodilians is eggs for captive rearing (termed, Ranching) (Larriera 2011, Joanen et al 1997).	<p>Thank you for your comment. We agree that adding specific search terms related to terrestrial animal harvesting might have yielded additional papers in this field. However, we have seen that it is not the general lack of literature on a certain topic, but the lack of the use of scenarios or other foresight methods and the lack of a specific focus on sustainable use. Although we assume that we included the most important literature, we acknowledge that we might have missed specific papers. We added a sentence to indicate this: "The dominance of forestry and fishery papers is clear, but might partly be attributable to the choice of search terms. Adding more practice-specific terms might have yielded additional papers."</p>
139	Hull, Amanda	5	33	1129	34	1129	This discussion seems biased toward the African circumstance and could benefit from a broader discussion.	<p>Thank you for your comment. All material discussed on the chapter is convenient from the literature review. Unfortunately not all examples of different regions could be add into the text.</p>
140	Woodward, Allan	5	37	1129	38	1155	An important and somewhat controversial driver of terrestrial animal harvesting is predator control for the safety of humans and their domestic animals. This is particularly relevant to crocodilian removal in many African countries, the U.S.A (Woodward et al. 2019), and Australia. Harvest to control big cats (lions, tigers, mountain lions, and leopards) as well as elephants occurs in their respective ranges. Woodward, A. R., E. H. Leone, H. J. Dutton, J. E. Waller, and L. Hord. 2019. Characteristics of American Alligator bites on people in Florida. <i>Journal of Wildlife Management</i> 83:1437-1453.	<p>Thank you for your comment. This is an important driver - but it's not a scenarios exploration and hence not included in this chapter.</p>
141	Lerambert, Adeline	5	33	1130	33	1130	'Illegal hunting' and 'poaching' are the same thing.	<p>Thank you for your comment. The feedback is greatly appreciated by the chapter authors.</p>
142	Stewart, Davyth	5	33	1130			Need to clearly define what (if any) is the difference between 'illegal hunting' and 'poaching' (as these terms are often used interchangeably in other contexts)	<p>Thank you for your comment. The feedback is greatly appreciated by the chapter authors.</p>
143	Lerambert, Adeline	5	33	1131	33	1131	'Illegal poaching'...by definition, all poaching is illegal.	<p>Thank you for your comment. The feedback is greatly appreciated by the chapter authors.</p>
144	Lerambert, Adeline	5	34	1135			The paper isn't referenced - could only find this one but it has nothing to do with hunting. https://onlinelibrary.wiley.com/doi/epdf/10.1002/ece3.5632	<p>Done, checked this - and added the correct paper, as well as adding it to Zotero (Carter et al 2019 - in Ecological Evolution</p>

145	Orenstein, P	5	34	1148	34	1148	Expanding wild species production "like livestock" is not necessarily good conservation, as it may increase hunting and trapping.	Read these papers, added this cautionary note, and cited the papers..
146	Woodward, Allan	5	38	1156	38	1156	Several technologies, in addition to those presented, have increased the effectiveness of hunting and trapping terrestrial animals. These include airboats, surface-drive boats, and expanded use of outboard motor boats to penetrate difficult to access habitats. Also, game cameras and unmanned aerial vehicles can increase the efficiency of detecting and harvesting animals, and which are rapidly becoming more effective and affordable.	This is quite correct; have added these notes to Section 5.4.4.3.
147	Germany	5	34	1158	34	1159	What does this imply - is it appropriate to cite this paper in this context? Please be coherent with the rest of the chapter.	Thank you for your comment. It will be updated.
148	Hull, Amanda	5	35	1174	35	1174	It would be good to include here some discussion of hunting technologies in more temperate regions where circumstances vary considerably.	Thank you for your comment. We have added a clarifying note to Section 5.4.4.3.
149	Aebischer,N	5	35	1179	35	1183	It is worth also mentioning the consequences of farming wild species in order to release them to the wild.	Thank you for your comment. This is an important driver - but it's not a scenarios exploration and hence not included in this chapter.
150	Elsey, Ruth	5	35	1179	35	1180	would cite Corey et al. 2017 in Fauna and Flora International "Commercial harvests of saltwater crocodile <i>Crocodylus porosus</i> eggs by Indigenous people in Northern Australia: lessons for long-term viability and management" and Austin and Corey 2012 in The Rangeland Journal 34:239 - 248 "Factors contributing to the longevity of the commercial use of crocodiles by Indigenous people in remote Northern Australia: a case study"	These are interesting paper, but not scenarios exploration and hence not included in this chapter.
151	Hull, Amanda	5	35	1179	35	1179	Any discussion of wild species farming should also include a reference to common criticisms found in academic literature.	We have added cautionary notes (and some references) on this issue already - see above.
152	Hull, Amanda	5	35	1179	35	1180	Does this section include the raising of wild species under captive circumstances for hunting activities, and where genetic manipulation of the animals is part of the process? Is this addressed elsewhere?	Thank you for your comment. This is not the focus of chapter 5. These points were discussed in chapter 3.
153	Lerambert, A	5	35	1179	35	1183	There is much concern surrounding farming of wildlife species already facing multiple threats in the wild such as Asiatic black bears, tigers and other taxa. The role of captive breeding facilities in illegal trade, demand stimulation and undermining field conservation efforts has been well demonstrated in peer reviewed literature, as has the inability of the farmed counterpart to ease pressure on wild populations, eg.	Thank you for your comment. The recommended references were read, and a cautionary note was added, with the Tensen ref.
154	Stewart, Davyth	5	35	1179	35	1183	https://www.sciencedirect.com/science/article/pii/S2351989420309318 and https://www.cambridge.org/core/journals/oryx/article/challenges-and-conservation-implications-of-bear-bile-farming-in-viet-nam/9BF020B8C6649C08083B284BBDE9335B It is therefore critical that the topic is treated with accuracy and appropriate caution, and that statements are non generic and qualified to ensure a sufficiently nuanced view is presented.	Thank you for your comment. The recommended references were read, and a cautionary note was added, with the Tensen ref.
155	Lerambert, A	5	35	1180	35	1183	Nogueira and Nogueira-Filho, 2011 is not referenced but it can be found here: http://nbcgib.uesc.br/nbcgib/2011/01/01/nogueira-nogueira-filho-2011.html	Thank you for your comment. Have added this reference, a cautionary note; The Tensen ref (added) is also relevant here.
156	Woodward, Allan	5	39	1191	39	1203	Harvest of reptiles (crocodilian [Thorbjarnarson 1999], lizard [Mieres and Fitzgerald 2006], and snake [Shine and Harlow 1999]) for skins for apparel and leather accessories is a major component of animal harvest worldwide. The driver is economic. Further, the harvest of furbearers for apparel is still significant in certain parts of the world (White et al. 2015). Thorbjarnarson, J. 1999. Crocodile tears and skins: international trade, economic constraints, and limits to the sustainable use of crocodilians. Conservation Biology 13:465-470. Mieres, M. M., and L. A. Fitzgerald. 2006. Monitoring and managing the harvest of Tegu Lizards, in Paraguay. Journal of Wildlife Management 70:1723-1734. Shine, R., and P. S. Harlow. 1999. Reticulated pythons in Sumatra: biology, harvesting and sustainability. Biological Conservation 87:349-357. White, H. B., T. Decker, M. J. O'Brien, J. F. Organ, and N. M. Roberts. 2015. Trapping and furbearer management in North America wildlife conservation. International Journal of Environmental Studies 72:756-769.	Thank you for your comment. These paper are about the current state and change, and not scenarios, and hence were not included in this chapter.
157	Woodward, A	5	39	1191	39	1203	The crocodilian leather industry is a major economic component of animal harvests. An inset, similar to Figure 1, could be included.	Thank you for your comment. Thank you for your comment. We will evaluate the possibility of inserting your suggestion in the final draft.
158	Lerambert, Adeline	5	35	1196			A key additional example is poor law enforcement effort.	Have added this.
159	Stewart, Davyth	5	35	1196			A key additional example is poor law enforcement effort.	Have added this.
160	Lerambert, Adeline	5	35	1197			"i.e., the opportunity cost of labor, are low as well..."unclear what is being stated.	This was an error, and is confusing - have deleted.
161	Lerambert, A	5	35	1197	85	1198	Not exactly, since many consumers were not pre-existing but came into income brackets which	Agree - have done so.

162	Stewart, Davyth	5	35	1197	35	1198	Suggest rewording: "Increased per capita incomes in East Asia is an important factor influencing consumer demand for wildlife parts and products." (This recognizes that many people became consumers only have entering income brackets which allowed such consumption).	Agree - have done so.
163	China	5	35	1199	35	1200	Delete this sentence. No reference to support this opinion. In fact, on the consumer side, China	Thank you for your comment. The text was revised and updated accordingly.
164	Lerambert, Adeline	5	35	1200			Amend for clarity, as interlinked: "...the demand for ivory, complimenting the domestic trade ban instituted in 2018 and associated law enforcement efforts."	Done
165	Acosta, Lilib	5	35	1204	36	1232	Box 5.2 is the first case study presented in section 5.2. It would be helpful to provide case study	Thank you for your comment. Thank you for your comment. We will evaluate the possibility of inserting your suggestion in the final draft.
166	Hull, Amanda	5	35	1206	35	1209	Sustainable hunting, as well as human livelihoods and community health, have also been impeded by a reduction in demand for some species, due to social and political drivers (trends), i.e. seal hunting in Canada.	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
167	Elsey, Ruth	5	36	1216	36	1219	would stress the positive potential for the locavore movement, with local acquisition of organic,	Thank you for your comment. This is an important driver - but it's not a scenarios exploration and hence not included in this chapter.
168	Orenstein, Ronald	5	36	1227	36	1229	The authors fail to point out that China, in addition to banning the consumption of wild meat, has undertaken mitigation programs to compensate traders for the loss of income.	Thank you for your comment. Please note that the domestic trade ban instituted in 2018 in China and associated law enforcement efforts are mentioned in the text. (section 5.4.4.4)
169	Woodward, J	5	40	1233	40	1233	Suggest adding some mention of the potential effects of climate change on nesting in vertebrates	Thank you for your comment. These papers are not about sustainable use and hence not included.
170	Aebischer, Nicholas	5	36	1234	36	1245	I suggest that the "clear gap" in studies looking at environmental factors as a driver of changes in hunting practice be at least partially filled in this section by including an overview of one of the best documented examples of this type: the case of the Grey Partridge in Europe over the last 100 years (described in Potts, G.R. (1986). The Partridge: Pesticides, Predation and Conservation. Collins, London; Aebischer, N.J. (1997). Gamebirds: management of the grey partridge in Britain. In Conservation and the Use of Wildlife Resources (ed. M. Bolton), pp. 131-151. Chapman & Hall, London; Potts, G.R. (2012). The Partridge: Countryside Barometer. Collins, London). In brief, 100 years ago the Grey Partridge was abundant and the most commonly shot small game species on European farmland; since then its numbers have declined by over 95%. Hunting has switched from harvesting wild Grey Partridges to harvesting artificially reared and released Pheasants and Red-legged Partridges. The change in hunting practice came about through environmental change in the form of habitat degradation and loss brought about by agricultural intensification. It began with the increased mechanisation of farming and the introduction of herbicides in the 1950s, which led to field enlargement, destruction of nesting habitat, disappearance of arable flora and its associated invertebrate community that was the basis of the Grey Partridge chicks' food chain. Chick survival dropped by half, the autumn abundance of Grey Partridges fell to levels below those at which hunting was economically viable, and the more easily farmed Pheasant and Red-legged Partridge were released to compensate. This "put and take" approach has proved so successful that the numbers of gamebirds released annually is now estimated at 57 million in UK, with bags close to 20 million (Aebischer, N.J. (2019). Fifty-year trends in UK hunting bags of birds and mammals, and calibrated estimation of national bag size, using GWCT's National Gamebag Census. European Journal of Wildlife Research 65 (64): 1-13). By contrast, Grey Partridge bag is only 30,000, and the UK population is so reduced in number that the species is locally extinct in many areas. Its remaining strongholds coincide with places where it is still prized as quarry, leading to sympathetic farmland management instead of a ruthless pursuit of profits (Aebischer, N.J. & Ewald, J.A. (2010). Grey Partridge <i>Perdix perdix</i> in the UK: recovery status, set-aside and shooting. <i>Ibis</i> 152: 530-542). The interaction between Grey Partridge, the	This material is very much about drivers. The one scenarios paper is not about sustainable use.
171	Woodward, J	5	40	1246	40	1246	This section needs to highlight the importance of CITES in affecting international trade in terrest	Thank you for your comment. We tried to all as much scenarios related to the sustainable use of wild species as possible.
172	Woodward, Allan	5	40	1246	40	1246	The crocodilian archetype for effectively reducing trade in threatened species and ensuring trade in more abundant species is sustainable needs to be presented, perhaps in a Box. The importance of controlling trade through a tagging system should be highlighted, as well as the strategy of diverting trade from threatened species to abundant species of crocodilians needs to be highlighted. Thorbjarnarson (1999) MacGregor (2002). Thorbjarnarson, J. 1999. Crocodile tears and skins: international trade, economic constraints, and limits to the sustainable use of crocodilians. <i>Conservation Biology</i> 13:465-470. MacGregor, M. 2002. International trade in crocodilian skins: review and analysis of the trade and industry dynamics for market-based conservation. Unpublished Report to the IUCN/SSC Crocodile Specialist Group. 64pp.	Length is a limitation here - we already probably have too many boxes.
173	Orenstein, R	5	37	1268	37	1269	I assume the paper by Travers et al (which is not listed in the reference list) is Travers, H et al.	Agreed - have amended this paragraph, and added to the text with references.

174	Elsey, Ruth	5	37	1278	37	1280	would cite Corey et al. 2017 in Fauna and Flora International "Commercial harvests of saltwater crocodile Crocodylus porosus eggs by Indigenous people in Northern Australia: lessons for long-term viability and management" and Austin and Corey 2012 in The Rangeland Journal 34:239 - 248 "Factors contributing to the longevity of the commercial use of crocodiles by Indigenous people in remote Northern Australia: a case study". There are dozens of citations available on the conservation benefits of commercial crocodilian egg ranching. Again, the studies cited in these lines are not in the references (Brown 2003, Mockrin et al 2005, and others page 37 (Akumsi 2003, Olsen et al. 2001, Dunn 1994) - none are in the references?)	Thank you for your comment. We cannot add additional text to the chapter due to word length restrictions. We have already incorporated a few case studies.
175	Orenstein, R	5	37	1278	37	1280	For more recent papers on wildlife farming in tropical countries, including two criticizing the farm	Thank you for your comment. These are not scenarios papers and hence were not included
176	Guillemain, Matthieu	5	38	1302	38	1317	This is again very much oriented toward subsistence hunting in e.g. Africa, but similar issues also exist in North America and Europe (wild boar or geese and agriculture, for instance)	Agreed, and have added to Box 5.3
177	Guillemain, M	5	38	1302	38	1317	This is again very much oriented toward subsistence hunting in e.g. Africa, but similar issues also exist in North America and Europe (wild boar or geese and agriculture, for instance)	Agreed, and have added to Box 5.3
178	Lerambert, Adeline	5	38	1310	38	1311	It's not clear what the 'benefits' to wild species are in this scenario. In many cases, attempts to integrate livestock and wildlife land uses, for example in southern Africa, may have benefitted those wild species that are considered to have economic value in terms of numbers, but may not have resulted in broader benefits for biodiversity and ecosystem services. The listing of a number of wild species within farmed species legislation in South Africa may serve as an example.	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
179	Stewart, David	5	38	1310	38	1311	Further information is needed to clarify the 'benefits' to wild species in this scenario. In many cases, attempts to integrate livestock and wildlife land uses, for example in southern Africa, may have benefitted those wild species that are considered to have economic value in terms of numbers, but may not have resulted in broader benefits for biodiversity and ecosystem services. The listing of a number of wild species within farmed species legislation in South Africa may serve as an example.	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
180	Lerambert, Adeline	5	38	1318	39	1353	See comments on Chapter 3. Note that the IUCN WCEL Ethics Working Group stated that Trophy hunting is not consistent with "sustainable use" https://www.iucn.org/news/world-commission-environmental-law/201909/compatibility-trophy-hunting-a-form-sustainable-use-iucns-objectives The sustainability of trophy hunting needs to be judged in the context of the overall threats to populations and species. There are many published field studies that have brought the conservation credentials of trophy hunting into question in relation to African lions and leopards in Tanzania, lions in Zimbabwe, leopards on South Africa, and elephants across parts of Southern Africa, among others. A report prepared for the International Union for the Conservation of Nature/France Partnership in 2018 noted that 40% of the big game hunting zones in Zambia, and 72% in Tanzania, are now classified as "depleted", because of overhunting and agricultural encroachment. https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0005941 https://lovewildafrica.com/wp-content/uploads/2015/10/Loveridge-et-al-2007-impact-of-trophy-hunting-on-lion-population-dynamics-in-Hwange.pdf https://africageographic.com/stories/leopard-hunting-quota-was-issued-despite-official-report-showing-significant-population-declines/ https://wildlife.onlinelibrary.wiley.com/doi/pdf/10.1002/jwmg.641 https://conservationaction.co.za/wp-content/uploads/2019/03/etudesAP_configAP_EN.pdf	Thank you for comment. This is a broader subject explained in chapter 3.
181	Stewart, David	5	38	1318	39	1353	Note that the IUCN WCEL Ethics Working Group stated that Trophy hunting is not consistent with "sustainable use" https://www.iucn.org/news/world-commission-environmental-law/201909/compatibility-trophy-hunting-a-form-sustainable-use-iucns-objectives	Thank you for comment. This is a broader subject explained in chapter 3.
182	Elsey, Ruth	5	38	1320	38	1321	would cite Joosten et al. 2021 Journal of Wildlife Management "Evaluation of Effects of Harvest on Alligator Populations in Louisiana". Although not specifically aimed at trophy hunting, a long term data set of 35 years of harvest on large adult sized alligators was found to be sustainable and good evidence of sustained use management	A very interesting paper, but a drivers paper and hence not included in this scenarios chapter.
183	Hull, Amanda	5	38	1320	38	1320	This should be qualified. Change to "Well-regulated trophy hunting" to ensure accuracy.	Have done so.
184	Mahoney, Shane	5	38	1327	38	1329	This statement ranges far ahead of the available evidence and should be modified. In most instances "trophy" hunting off-take is so small that phenotypic traits are not influenced and while the stress is level of the hunted individual might increase it is difficult to perceive how this pertains to the group, herd or population. Furthermore, if illegal harvesting is marginal and quantifiable, and depending on the productivity of the species in question, "trophy" hunting certainly can occur, where (some) illegal harvesting is also taking place. In addition, the presence of legal harvesters may help reduce illegal harvesting activities in some instances	Sentence has been simplified.
185	Yashphe, Shlomo	5	39	1333	35	1335	Please refer to the 2019 report on Protected Areas in Africa authored by Dr. Bertrand Chardonnet	Thank you for this suggestion. We have chosen not to include it in the assessment, as you have not provided any supporting evidence for this specific approach and it does seem to be suggested elsewhere.

186	Yashphe, Shira	5	39	1337	39	1339	Should add: and ethical considerations (- Batavia, Chelsea, Michael Paul Nelson, Chris T. Darimont, Paul C. Paquet, William J. Ripple, and Arian D. Wallach. "The elephant (head) in the room: A critical look at trophy hunting." <i>Conservation Letters</i> 12, no. 1 (2019): e12565 See other articles as well: Ghasemi, Benjamin. (2020). Trophy hunting and conservation: Do the major ethical theories converge in opposition to trophy hunting?. <i>People and Nature</i> . 10.1002/pan3.10160; Bashqawi, Nicholas. "Kill to Conserve: Ethical Implications of Trophy Hunting Conservation Measures." <i>ESSAI</i> 12, no. 1 (2014): 9;)	Thank for your comment. We believe that Box 5.4 is pretty balanced on trophy hunting already.
187	Yashphe, Shira	5	39	1340	39	1343	This sentence (the deleterious effects of a Trophy Hunting ban) is challenged by this article: Mw	Thank for your comment. We believe that Box 5.4 is pretty balanced on trophy hunting already, but your recommendation was integrated.
188	Hull, Amanda	5	39	1346	39	1347	New studies must also consider a broader geographic scope. Trophy hunting occurs not just in Africa, but worldwide, including in North America, though this is rarely acknowledged in international debates. Regional assessments are necessary to understand the sustainability and value of trophy hunting worldwide.	Thank you, we agree with your comment.
189	Orenstein, Ruth	5	38	1348	38	1353	I have cited numerous papers on this subject in my original comments. Please see comments 6	Have added a number of references as per these comments
190	Elsey, Ruth	5	39	1348	39	1353	would cite Joanen et al. 2021 Journal of Wildlife Management "Evaluation of Effects of Harvest on Alligator Populations in Louisiana". Although not specifically aimed at trophy hunting, a long term data set of 35 years of harvest on large adult sized alligators was found to be sustainable and good evidence of sustained use management	A very interesting paper, not about scenarios and hence not included in this scenarios chapter.
191	Germany	5	39	1348	39	1353	Is this indeed a knowledge gap in general or is it a knowledge gap in scenario studies?	Thank you for your comment. This is a knowledge gap in general.
192	Lerambert, Adeline	5	38	1362	38	1370	The emphasis should be on how to shift value orientations that help move us away from lethal interventions. For example, the promotion of the value of forest elephants in terms of their carbon sequestration activities, as promoted by IMF https://www.imf.org/external/pubs/ft/fandd/2020/09/how-african-elephants-fight-climate-change-ralph-chami.htm , and the intrinsic value of wildlife and its value to non-consumptive tourism https://www.sciencedirect.com/science/article/abs/pii/S0921800900001981 https://focusingonwildlife.com/news/elephants-worth-much-much-more-alive-than-dead-says-new-report/	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
193	Stewart, Davyth	5	38	1362	38	1370	There should be greater emphasis on how to shift measurements of value away from exploitation	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
194	Guillemain, Matthieu	5	39	1365	39	1370	Opposite comment to the ones I made before: this probably holds for leisure hunting in western countries (the situation is certainly the same in Europe), but probably does not hold for subsistence hunting in other parts of the world	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
195	Guillemain, Matthieu	5	40	1377	40	1382	Note that beyond the fierce discussions about leisure hunting on ethical grounds, there is also a	Done and reference added.
196	Guillemain, Matthieu	5	40	1377	40	1382	Note that beyond the fierce discussions about leisure hunting on ethical grounds, there is also a move in Europe and north America towards game meat becoming fashionable owing to low fat contents and being "pure organic"	Repeat of comment above
197	Woodward, Ruth	5	44	1377	44	1380	The sentence alluding to animal rights initiatives needs to have a reference.	Have broadened the sentence and added a reference
198	Hull, Amanda	5	40	1378	40	1378	Animal rights philosophy is not constrained to Europe but is well established in North America also. Furthermore, the rise of animal empathy needs to be considered here, as this is distinct from animal rights and may be more of a global phenomenon.	agreed - see response to previous comment
199	Elsey, Ruth	5	40	1386	40	1386	no year for the Lopes et al. citation	Thank you - have corrected
200	Lavorel, Sandra	5		1391			Please link Box 5.5 to the biodiversity and pandemics report	Thank you for your comment. The report mentioned is now cited.
201	Elsey, Ruth	5	40	1397	40	1397	omit the second "in" (in which these animals are kept IN)	Done
202	Germany	5	40	1400	40	1400	The term 'wet market' must be used carefully: not all wet markets include live animals.	Noted - have amended the text
203	Lerambert, Adeline	5	40	1400	40	1406	Of note is the interim guidance from WHO/OIE/UNEP on reducing public health risks associated	Thank you for your comment. Added a note regarding the pandemics treaty
204	Stewart, Davyth	5	40	1400	40	1406	Of note is the interim guidance from WHO/OIE/UNEP on reducing public health risks associated with the sale of live wild animals of mammalian species in traditional food markets, published in April 2021. https://cdn.who.int/media/docs/default-source/food-safety/ig-121-1-food-safety-and-covid-19-guidance-for-traditional-food-markets-2021-04-12-en.pdf?sfvrsn=921ec66d_1&download=true .	In its associated public release of the document, the WHO also recognised that although this document focuses on the risk of disease emergence in traditional food markets where live animals are sold for food, it is also relevant for other utilizations of wild animals. All these uses of wild animals require an approach that is characterized by conservation of biodiversity, animal welfare and national and international regulations regarding threatened and endangered species. https://www.who.int/publications/item/WHO-2019-nCoV-Food-safety-traditional-markets-2021.1 . The proposed Pandemics Treaty, the establishment of which is to be considered by a Task Force established at the May 2021 World Health Assembly, provides an opportunity to expand the scope of the interim guidance and implement it into a legally binding treaty.

205	Hoban, Sean	5	41	1415	42	1472	Either here in the Introduction or below under Environmental it should be noted that the impact	We have included text referring to the impacts of logging on forest genetic diversity, and reference a global review by Ratnam et al., 2014.
206	Elsey, Ruth	5	42	1460	42	1460	need a space between by and 50%	This suggested edit has been implemented
207	Elsey, Ruth	5	43	1498	43	1498	omit comma after behavior	This suggested edit has been implemented
208	Elsey, Ruth	5	45	1584	45	1584	need genus and species for the trees? Need upper case "S" in Silver birch?	Agreed; the English names have been replaced with scientific names
209	Elsey, Ruth	5	45	1593	45	1593	need "forest sites" or something after Finnish and before reinforces? A word or words missing?	Thank you. This phrase was rewritten
210	Elsey, Ruth	5	46	1617	46	1617	CO2 should be subscript for the "2" (now reads CO2)	Thank you. The 2 has been formatted as subscript
211	Elsey, Ruth	5	46	1622	46	1624	should be lower case "d" in dollars?	Thank you. In the text and other similar sentences, the relevant phrases have been replaced with U.S. \$
212	Elsey, Ruth	5	47	1664	47	1664	replace "in" with "by"?	This suggested edit has been implemented
213	Elsey, Ruth	5	48	1696	48	1696	need a space after the hyphen and before based?	This suggested edit has been implemented
214	Elsey, Ruth	5	50	1806	50	1806	should read bioenergy. Rodriguez-Loinaz et al. (2013) challenged...	The affected sentences have been revised
215	Yashphe, Shlomo	5	51	1826	51	1829	Within the definition of non-extractive use (and this comment from chapter 1 too as this line refers)	Thank you for your comment. We have expanded this section to include mention of non-tourism non-extractive practices, such as cultural and ceremonial use, restorative and health uses, as well as novel financial instruments.
216	Lerambert, Adeline	5	51	1829	51	1829	Note that catch and release fishing does involve the removal (if on a temporary basis) of wild animals from their natural habitats, which can be damaging and disruptive and can limit their ability to reintegrate successfully into their ecological niche following release	Thank you for your comment. As per Chapter 1, we define non-extractive practices as "the observation of wild species in a way that does not involve the harvest or removal of any part of the organism (Table 1.1). The observation can imply some interaction with the wild species, such as the activities of wildlife tourism and whale watching or no interaction with the wild species, such as remote photography." This definition excludes catch-and-release fishing and we have removed mention of this from this section.
217	Stewart, David	5	51	1829	51	1829	Note that catch and release fishing does involve the removal (if on a temporary basis) of wild animals from their natural habitats, which can be damaging and disruptive and can limit their ability to reintegrate successfully into their ecological niche following release	Thank you for your comment. As per Chapter 1, we define non-extractive practices as "the observation of wild species in a way that does not involve the harvest or removal of any part of the organism (Table 1.1). The observation can imply some interaction with the wild species, such as the activities of wildlife tourism and whale watching or no interaction with the wild species, such as remote photography." This definition excludes catch-and-release fishing and we have removed mention of this from this section.
218	Lerambert, Adeline	5	51	1837	51	1837	Note that, in zoos, animals have already been removed from their natural habitats (or bred in captivity), and their contribution to nature education and in situ conservation is highly questionable. Therefore visits to zoos should not be considered a part of non extractive nature-based tourism	Thank you for your comment. We define wild species as any species populations that exist within their natural distribution range, that have not been domesticated through multigenerational selection for particular traits, and which can survive without human intervention. This does not, however, imply a complete absence of human management. It does exclude feral and introduced populations although these may be included in some aspects of the assessment (see Chapter 1, the definition is further explored in section 1.3.1.) Thus, captive animals in zoos are outside of the scope of this assessment and mention of zoos has been removed from this section.
219	Stewart, David	5	51	1837	51	1837	Note that, in zoos, animals have already been removed from their natural habitats (or bred in captivity), and their contribution to nature education and in situ conservation is highly questionable. Therefore visits to zoos should not be considered a part of non extractive nature-based tourism	Thank you for your comment. We define wild species as any species populations that exist within their natural distribution range, that have not been domesticated through multigenerational selection for particular traits, and which can survive without human intervention. This does not, however, imply a complete absence of human management. It does exclude feral and introduced populations although these may be included in some aspects of the assessment (see Chapter 1, the definition is further explored in section 1.3.1.) Thus, captive animals in zoos are outside of the scope of this assessment and mention of zoos has been removed from this section.
220	China	5	52	1864	52	1864	Change "Taiwan" to "Taiwan, Province of China"	Thank you for your comment. This phrase is referencing the study of Lin, Y. H., & Lee, T. H. (2020), which refers to only as Taiwan. (Lin, Y. H., & Lee, T. H. (2020). How do recreation experiences affect visitors' environmentally responsible behavior? Evidence from recreationists visiting ancient trails in Taiwan. <i>Journal of Sustainable Tourism</i> , 28(5), 705–726. https://doi.org/10.1080/09669582.2019.1701679)
221	Guillemain, Isabelle	5	52	1869	52	1881	I don't fully agree with this section: how can this be in line with what you (rightly) describe as incl...	Thank you for your comment. We have revised this text for balance.
222	Germany	5	52	1871	52	1871	At the beginning of the sentence please use a capital letter: "Information and..."	Thank you. We have made the suggested change.
223	Guillemain, Isabelle	5	53	1907	53	1908	There is a great emphasis on whale watching in this document as soon as it comes to non-extract...	Thank you for this comment. We have expanded the scope of this section to include non-tourism uses of wild species, as well as tourism examples beyond whale watching.

224	Lerambert, Adeline	5	53	1914	53	1917	Note also the CMS Species-specific Guidelines for Boat-based Wildlife Watching https://www.cms.int/en/document/species-specific-guidelines-boat-based-wildlife-watching and the CMS Sustainable Boat-based Marine Wildlife Watching documentation https://www.cms.int/en/document/sustainable-boat-based-marine-wildlife-watching-2	Thank you for your comment. This whole section has been considerably restructured and whale watching governance is no longer a central component.
225	Stewart, Dav	5	53	1914	53	1917	Note also the CMS Species-specific Guidelines for Boat-based Wildlife Watching https://www.cms.int/en/document/species-specific-guidelines-boat-based-wildlife-watching	Thank you for your comment. This whole section has been considerably restructured and whale watching governance is no longer a central component.
226	Germany	5	54	1926	54	1926	Please insert "of wild species" in the sentence as follows: "Examples of factors that will impact scenarios of sustainable use of wild species by the sociological, technological, economical, environmental..."	Thank you, this was added
227	Woodward, J	5	58	1926	61	1927	Table 5.3 needs to be modified to include changes and enhancements made to Terrestrial Animal Harvesting	Thank you, this was added
228	Lavorel, Sandra	5		1926			Table 5.3 is a very useful synthesis. Would it be possible to bring some 'texture' to the table by representing (e.g. through colouring) the supporting information (state / trends / scenarios) and the level of confidence for each cell? Besides I would suggest putting it at the front of section 3, to then be supported by all the detailed text information.	Thank you for your comment. We will evaluate the possibility of inserting your suggestion in the final draft.
229	Hull, Amanda	5	54	1927	54	1928	Consider including social trends influencing food consumption patterns, i.e. the locavore movement	Done - added
230	Hull, Amanda	5	54	1927	54	1928	Increased social pressures, often delivered via social media, not to participate in lethal extractive activities. (Table 5.3, Social: Terrestrial animal harvesting).	Done - added
231	Hull, Amanda	5	54	1927	54	1928	Conversion of land from wild habitat to agriculture or other use. (Table 5.3, Social: Terrestrial animal harvesting).	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
232	Hull, Amanda	5	54	1927	54	1928	More urbanites create urban green spaces to enable gathering closer to home. Urban planners begin to incorporate larger communal green spaces within communities. (Table 5.3, Social: Gathering).	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
233	Hull, Amanda	5	54	1927	54	1928	Youth become better educated about nature and the benefits of sustainable wild harvests and	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
234	Hull, Amanda	5	54	1927	54	1928	Technological developments in modes of transportation have increased many hunters' ability to travel farther from their homes, more quickly and more cheaply, thereby increasing the geographic scope of their (recreational) hunting opportunities. (Table 5.3, Technological: Terrestrial animal harvesting).	Implicit in first bullet - but have expanded
235	Mahoney, S	5	54	1927	57	1928	Table 5.3 is extremely useful, very informative and can be improved further. various specific co	Thank you for your positive feedback.
236	Hull, Amanda	5	55	1927	55	1928	Invasive species impact freshwater ecosystems and reduce, displace, or destroy native species populations. (Table 5.3, Environmental: Terrestrial animal harvesting).	Not clear on the link
237	Hull, Amanda	5	55	1927	55	1928	Climate change is altering landscapes, influencing and changing species' ranges and migration	Thank you for this suggestion. We included the impact of climate on marine ecosystem dynamics to be more holistic.
238	Hull, Amanda	5	56	1927	56	1928	The opposite is also true: "increased demand for wild species products" (Table 5.3, Economic: Terrestrial animal harvesting).	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
239	Hull, Amanda	5	56	1927	56	1928	Increased cooperation between countries and regions to detect and reduce illegal wildlife trafficking	Done - added
240	Hull, Amanda	5	56	1927	56	1928	Increased governance/controls for invasive species. (Table 5.3, Political: Terrestrial animal harvesting).	Done - added
241	Hull, Amanda	5	56	1927	56	1928	Increased penalties for poaching and illegal wildlife trafficking.	Done - added
242	Hull, Amanda	5	56	1927	56	1928	Increased engagement of IPLCs in wildlife management and wildlife law enforcement. (Table 5.3, Economic: Terrestrial animal harvesting)	Done- added
243	Hull, Amanda	5	56	1927	56	1928	Increased emphasis on identification and prosecution of criminal organizations responsible for	Done - added
244	Hull, Amanda	5	57	1927	57	1928	Changes in social acceptability of the practice, as has occurred with hunting in many regions. (Table 5.3, Cultural: Fishing).	Thank you for this suggestion. We have included it in the new version.
245	Biondo, Mon	5	58	1935	58	1935	Before the management of marine ornamental fishes can be put in place, there needs to be a d	Thank you for this comment. As this suggested literature is not highly relevant to the scenarios focus of the chapter, we have not included it in the final draft.
246	Marcoux, Marianne	5	59	1964	59	1964	This is a very neat figure! It would help to provide a bit more description in the caption or in the main text. It is not clear what the four scenarios of the future represent.	Thank you for this suggestion. We have added more descriptions of the four scenarios in the caption.
247	Woodward, J	5	64	2015	64	2016	A good example of indigenous peoples would be harvesting of salmon, whales, seals, and ung	Thank you for this comment. However, it is unclear to us what this comment would like to contribute in the scope of the chapter on scenarios and, therefore, has not been added.
248	White, Michael	5	61	2035	61	2039	This is already happening in central Oceania	Thank you for your comment. As there is no reference, we cannot add the comment as it is.
249	Hoban, Sean	5	61	2045	63	2047	In this table, here is an example of indigenous knowledge and ecosystem management of gene	Thank you for the suggestion. We have added this to the table.
250	Acosta, Lilibeth	5	63	2056	63	2058	"We 2056 refrained from using more formalized methods to decide on the combinations that would 2057 maximize diversity (e.g., morphological analysis or cost-benefit analysis)". The authors should explain why this decision has been made, e.g. Lack of data, lack of appropriate method, etc.	Thank you. We agree that this important step needs to be explained, and we added some clarifying text: "We refrained from using more formalized methods to decide on the combinations that would maximize diversity (e.g., morphological analysis or cross-impact balances). This was decided because existing methods would have needed to be adapted and tested, as they are not developed to combine archetypical information. Future endeavors might explore this possibility."

251	Acosta, Lilibeth	5	63	2060	63	2061	The table for combined archetypes are presented in several ways in the chapter, but all in very	thank you. We agree that there is an aspect missing from the analysis. We have added a section that brings together the generic statements related to the archetypes and the concrete detail of the individual practices. We also added an explanation in the beginning of the chapter that explains the conceptual considerations of this approach.
252	Hoban, Sean	5	65	2083	68	2086	In this table and throughout the report I was surprised there was not much mention of biotechnology especially CRISPR and other tools as both a threat and an opportunity. This is one of the most up and coming technology tools to change and conserve ecosystems, and really should be considered! https://onbio.onlinelibrary.wiley.com/doi/abs/10.1111/cobi.13292 This also of course has a large social/ ethical/ political element https://onbio.onlinelibrary.wiley.com/doi/full/10.1111/cobi.13310?casa_token=YDx96Fx9eUOA AAAA%3A5BtdC2GaGfQVH0vsI9fhGHXXptomyilLFGRv1EEkMRHlyqHx4swwUa37VSRIHvEmlgK121ssLNdoNU	Thank you for your comment. We are not aware of any scenario analyses that explore CRISPR impacts on the sustainable use of wild species; note also that this table presents general archetypes and not specific instances.
253	Lavorel, Sandra	5		2083	2085		These two tables are core information for the pathway development. Yet the format as two separate tables would be very large and, like you say, it would make "vertical comparison" more difficult. We therefore decided to maintain the current division in two separate tables.	We agree that this would be an option. The drawback is that the resulting table would be very large and, like you say, it would make "vertical comparison" more difficult. We therefore decided to maintain the current division in two separate tables.
254	Acosta, Lilibeth	5	69	2087	70	2122	It would be useful to provide case studies for the scenario archetypes presented on these pages. The description will also need elaboration, citing literature for evidence or explanation.	Thank you. We agree that there is an aspect missing from the analysis. We have added a section that brings together the generic statements related to the archetypes and the concrete detail of the individual practices. We also added an explanation in the beginning of the chapter that explains the conceptual considerations of this approach.
255	Elsey, Ruth	5	69	2099	69	2099	upper case "G" needed in Green	Thank you for spotting this mistake. It was corrected.
256	Lavorel, Sandra	5		2130	2158		I imagine the text presenting supporting evidence will be further developed with a somewhat more in depth analysis - including for supporting the synthesis presented in 2152-2157. A point of particular interest will be which solutions defined by actions, interventions and issues are shared or similar across archetypes vs. highly specific. This is particularly important when thinking in terms of pathways and adaptive trajectories.	You are completely right in assuming that a more in-depth analysis is needed. We have added a section that brings together the generic statements related to the archetypes and the concrete detail of the individual practices. We also added an explanation in the beginning of the chapter that explains the conceptual considerations of this approach.
257	Kumagai, Jo	5	70	2131	72	2158	Please create a data deposit package and data management report for this literature analysis	Thank you for your comment. The feedback is greatly appreciated by the chapter authors. We will see the possibility to create a data management report.
258	Woodward, Allan	5	75	2139	75	2145	The lack of representative papers on terrestrial animal harvesting was the result of inadequate search terms, not a lack of these papers in the literature. Suggest using "wildlife", "hunting", and "harvest" as search terms.	Thank you for your comment. We agree that adding specific search terms related to terrestrial animal harvesting might have yielded additional papers in this field. However, we have seen that it is not the general lack of literature on a certain topic, but the lack of the use of scenarios or other foresight methods and the lack of a specific focus on sustainable use. Although we assume that we included the most important literature, we acknowledge that we might have missed specific papers. We added a sentence to indicate this: "The dominance of forestry and fishery papers is clear, but might partly be attributable to the choice of search terms. Adding more practice-specific terms might have yielded additional papers."
259	Elsey, Ruth	5	71	2149	71	2149	lower case "i" in Inequality needed?	Thanks for spotting this. There were several instances, where capital letters were used for names of archetypes. This was corrected.
260	Acosta, Lilibeth	5	72	2159	76	2246	How does the case studies on nature future framework support/link to the assessment of scenario archetype?	Thank you for your feedback. The case studies on Nature Future Framework could support the assessment of scenarios archetypes by illustrating an application of NFF which highlight the importance to consider different perspectives (nature for nature, nature for people, nature as culture) to develop a desirable future scenario. The plural perspectives of human–nature relationships is not explicitly considered in the construction of scenarios archetype.
261	Germany	5	72	2159	72	2159	The nature futures framework: Here, the so called „nature futures framework“ in the context of scenario archetypes?	Thank you for your comment. The text was revised and updated accordingly.
262	Elsey, Ruth	5	73	2186	73	2186	upper case "N" needed in Nature for society?	Thank you; corrected
263	Lavorel, Sandra	5		2190	2246		What do we learn from these text boxes? They are very nice exemplars, but how they mobilise	Thank you for your positive feedback. These boxes illustrate an application of the Nature Future Framework related to the management of marine species under different perspectives. We used these examples to present an alternative method to develop desirable scenarios. In these boxes, we tried to present different positive future for management of wild species. The application of these scenarios depends on the available models and the needs of stakeholders. Since we have length restrictions we cannot add additional text to the boxes.
264	Elsey, Ruth	5	74	2206	74	2206	some words are upper case (Nature, Culture) while society is lower case	Thank you for pointing this out. We have corrected the typo in the new version of the figure.

265	Hashimoto, S	5	74	2206	74	2206	Triangle figures used in this Box 5.7. need to be harmonized with the one in figure 5.6 on p.72	Thank you for your comment. According to the TSU of IPBES task force on scenarios and models there are no recent versions of those figures in more recent publications. But since the 'new' NFF triangle hasn't been published this version of NFF is fine.
266	Kumagai, Joy	5	74	2207	74	2208	Figure 5.7 - Please gain approval to use..	Thank you for pointing this out. We added the reference of figure 5.7.
267	Elsey, Ruth	5	74	2226	74	2226	change & to "and"? (food and feed)	Changed
268	Orenstein, Ronald	5	75	2232	75	2234	The present administration in Brazil has a very different policy towards deforestation to that operating in 2004, and this section should be updated to reflect this.	Thank you for your comment. This box was based on the work of Siqueira-Gay et al. 2020.
269	Kumagai, Jo	5	76	2244	76	2246	Figure 5.8 - Please gain approval to use..	Thank you, the license was updated.
270	Lavorel, Sandra	5		2247			So far the material of the transformation section is a bit 'raw' and needs further digestion to be better tailored to the specifics of the sustainable use of wild species question. The list of points made and proposed leverage points and approaches remain quite high-level and generic.	We have edited the section to make it flow better and to make it more concrete.
271	Woodward, S	5	80	2254	80	2254	An example of "vicious" to "virtuous" cycles in crocodilian management has been the change fr	Thank you for this suggestion. However, we have read the reference provided, and it is not clear if this management change has lead to positive outcomes for sustainable use; therefore, we retain the text as it.
272	Germany	5	77	2268	77	2268	Please delete "al., 2018)" or include full reference. Furthermore, this example should be explained more in depth: why were these five building blocks chosen? And, in the specific example, how were they filled?	Thank you for your comment. The full reference was added.
273	Kumagai, Jo	5	77	2270	77	2271	Figure 5.9 - Please gain approval to use..	Thank you, the license was updated.
274	Orenstein, Ronald	5	77	2275	77	2282	This paragraph represents a one-sided and overoptimistic view of the ability of sustainable use programs to conserve wildlife without a parallel program of regulation and oversight. As noted in comments to my original submission, without proper governance and limitation of corruption even well-conceived conservation programs can be coopted by criminal elements. A recent report, for example (Bargent, James (2021). Peru's Turtle Traffickers Operate Under Veneer of Legality. https://insightcrime.org/investigations/peru-tortoise-traffickers-operate-under-veneer-of-legality/), alleges that a much-praised hatchery release program for Amazonian river turtles in Peru has become a source of wildlife crime, with the "released" hatchlings being almost immediately recaptured for illegal sale into the pet trade. The idea that sustainable use programs, if sufficiently "virtuous", can self-regulate ignores the scope and pervasiveness of wildlife crime and the inability of local communities to resist effectively on their own, particularly for species traded internationally at high prices.	Thank you for this comment. We agree that rules/regulations - combined with appropriate compliance management - are an important component of any wildlife management intervention (even those which promote consumptive use). We did not intend to propose sustainable consumptive use programs are appropriate for all wildlife and contexts, nor that they can all self-govern. Rather, we intend to emphasize that regulation should be just one piece of an intervention mix. We have now re-worded this section for clarity.
275	Yashphe, Sh	5	77	2279	77	2282	This section represents a contradiction with this chapter's intended goal. This chapter presents	Thank you for pointing this out. We have removed this wording, and replaced it with 'sustainable use', where we have noted that 'use' may be consumptive or non-consumptive, as per the NFF.
276	Yashphe, Shira	5	77	2283			When trade-offs are discussed, there is room to discuss also ethical trade-offs. What does it mean for human beings to engage in sustainable use practices such as trophy hunting, etc.? There are two types of ethical breaches here: to our ethical commitment to fellow human beings, namely local communities living alongside wildlife; and to our ethical commitment to wild animals, which are sentient. The first ethical trade-off results from indigenous communities' views on trophy hunting and other sustainable use practices. A 2019 study looking into Facebook pages of three major social media players with a predominantly African followership, namely, BBC News Africa, News24.com, and NewsDay-Zimbabwe, revealed a dominant pattern of resentment towards what was viewed as the neo-colonial character of trophy hunting, in the way it privileges Western elites in accessing Africa's wildlife resources. In addition, criticism was directed at African politicians who were perceived as allowing wildlife exploitation to satisfy their own greed. In the words of the article's author, Mucha Mkonzo: "In this instance, far from [trophy] tourism being a facilitator of intercultural understanding and peace, it appears to reproduce images and wounds of a colonial past." Communities themselves feel they are being robbed of their natural heritage and resources when greed and profit maximization are at play. There is room to consider what is the trade off if using such sustainable use practices when it comes to our ethical commitment to our fellow humans beings, living alongside wildlife. The second ethical trade off arises from the need to consider welfare of sentient beings. There is a body of research conducted in philosophy on this specific sustainable use practice of trophy hunting showing that it offers ethical difficulties. This means that if practices a trade-off is made: human beings ethical standing for the sake of other considerations. In some papers, the practice of trophy hunting situate the practice "in a Western cultural narrative of chauvinism, colonialism, and anthropocentrism, we argue trophy hunting is morally inappropriate" - Batavia, Chelsea, Michael Paul Nelson, Chris T. Darimont, Paul C. Paquet, William J. Ripple, and Arian D. Wallach. "The elephant (head) in the room: A critical look at trophy hunting." Conservation Letters 12, no. 1 (2019): e12565	Thank you. We agree that ethical considerations are also important when considering costs and benefits. We have added an extra sentence to emphasize the importance of multiple values, including ethical ones: "A plurality of values should be considered when understanding these costs and benefits (e.g. economic, social, ethical), as per the Nature Future's Framework. In particular the value systems of people who will be most affected by interventions need to be foremost in the design of these interventions."
277	Kumagai, Jo	5	78	2290	79	2295	Figure 5.10 - Please gain approval to use.	Done

278	Germany	5	79	2294	79	2294	What is the function of figure 5.10? Please add an in-depth explanation of the figures a) and b) in the text; if not possible, please delete figure.	The function of Figure 5.10 is to illustrate the transition from vicious to virtuous cycles, which is discussed throughout the chapter, as well as the need for an intervention mix which combines structural and behavioural interventions to achieve this. Both of these points are discussed in the chapter.
279	Elsey, Ruth	5	80	2307	80	2307	could not read any of the text in the 17 boxes of each of the four charts - font is too small	This can be addressed in the final formatting by enlarging the figures concerned
280	Kumagai, Joy	5	80	2307	80	2312	Figure 5.11 - Please gain approval to use.	Done
281	Kumagai, Jo	5	81	2322	82	2351	Please explicitly state the license associated with these figures. IPBES figures are either CC-BY	Done
282	White, Michael	5	83	2361	83	2380	I like this. Much better than missing every target (like Aichi) & it tracks how much further we have to go, so we can speed up actions too	Thank you for your positive feedback
283	Yashphe, Sh	5	83	2366	83	2368	There is room to mention that "create a better and more sustainable future for all" includes the	Thank you for raising this point. We have added an extra sentence at the end of the paragraph noting that the outcome goals can "consider the multi-dimensional well-being of all living things, both humans and non-human"
284	White, Michael	5	83	2384	83	2385	This doesn't happen even though they talk about it a lot	Thank you for your comment; however, no changes are suggested.
285	White, Mich	5	83	2392	83	2393	e.g. moving from fuel duty economics to polluter pays principle	We agree this is an analogous situation
286	Lerambert, Adeline	5	84	2411	84	2412	Standards and quotas are fraught with problems which undermine their effectiveness and credibility, so suggest adding a sentence at the end: "In order for such regulations to be effective and act as safeguards for sustainability, they should be closely associated with robust monitoring mechanisms and efficient adaptive management, and insulated from political interference and poor governance". Note that the 'nature for society' approach in Box 5.9 is as least as susceptible to illegality as the 'nature for nature' approach but omits this cost in the diagram.	Yes, thank you for this suggestion. We have added this suggested sentence.
287	Stewart, Dav	5	84	2411	84	2412	Standards and quotas are fraught with problems which undermine their effectiveness and credit	Seems to be a duplication. See above.
288	Woodward, Allan	5	88	2415	88	2421	A little more detail is needed about the relationship between indigenous peoples and commercial hunting of Bighorn Sheep in Mexico and Saltwater Crocodiles in Australia. The way this passage reads, leaves the reader with the impression that harvesting is done completely by the indigenous people. Indigenous people in the Mexican Bighorn case provide access and guiding services to outsiders to harvest these animals. They rarely perform the harvest itself. In the Northern Territory of Australia indigenous people either collect eggs themselves or allow outsiders to harvest the eggs for access fees. More detail and references are needed in this section.	Thank you for pointing out that this was misleading. We have edited to provide more detail.
289	Elsey, Ruth	5	84	2425	84	2428	perhaps cite examples to protect habitat as well as species, such as the USDA's Conservation	Thank you for your suggestion; we believe that 'and/or their habitats' covers this.
290	Mahoney, Shane	5	85	2441	85	2443	While discouraging unsustainable wild meat consumption can direct a positive social norm, encouraging sustainable wild meat consumption can also accomplish this by incentivizing protection of wildlife productive public and private lands, incentivizing conservation of food provisioning species of wildlife and reducing demand for intensive and environmentally damaging domestic animal production.	Thank you for this suggestion. We agree that both discouraging unsustainable use and encouraging sustainable use are needed, and that in some cases sustainable use of wildlife can be better for nature than animal agriculture. We have edited this paragraph to broaden out our definitions of illegal and unsustainable use vs environmentally-friendly diets.
291	Lerambert, A	5	85	2453	85	2457	Suggest deletion, as this is purely marketing material and without some form of critical treatment	Deleted
292	Stewart, Davyth	5	85	2453	85	2457	Suggest deletion, as this is purely marketing material and without some form of critical treatment has no place in a report based on science, ie. without evidence there is no sound basis to the claim and should not be a foregone conclusion by IPBES.	Seems to be a duplication. See above.
							Note that the luxury wildlife product industry, including brands in the Kering Group, is subject to a very significant level of criticism for the opacity and link to illegality of many of its supply chains. See for example https://www.nationalgeographic.com/animals/article/luxury-fashion-wildlife-imports-seized	
293	Woodward, 5	89	2453	89	2457	The reference to the Kering Group (2020) is not in the Literature Cited	We have now deleted this paragraph	
294	Lerambert, Adeline	5	85	2465	85	2473	This statement needs careful reconsideration - suggest deletion given its extreme nature and given previous statements by IPBES on wild species exploitation.	Deleted
295	Orenstein, R	5	85	2465	85	2469	This statement amounts to an unsupported ad hominem attack on conservationists with whom	Deleted
296	Stewart, Davyth	5	85	2465	85	2473	This statement needs careful reconsideration - suggest deletion given its extreme nature and given previous statements by IPBES on wild species exploitation.	Deleted
297	Guillemain, M	5	85	2474	85	2480	It would be good to explain that adaptive management is not only a flexible or trial-error system	This is a very good point, we have edited the sentence to emphasise the on-going process of research & dialogue
298	Guillemain, Matthieu	5	85	2474	85	2480	It would be good to explain that adaptive management is not only a flexible or trial-error system, but is rooted in the parallel progress of science and dialogue among stakeholders (e.g. https://pubs.er.usgs.gov/publication/5224840 ; https://pubs.er.usgs.gov/publication/70169309)	Seems to be a duplication. See above.

299	Lavorel, Sarah	5		2481			The inclusion of the horizon scan for illegal wildlife species trade is really useful. Could similar approach be used for other issues/sectors?	Yes, we agree that horizon scanning can be used to inform other issues/sectors and thus help with prioritisation. The sentence now reads "Horizon scanning may also be a useful component of an adaptive approach to transformative change in dynamic systems, which can be used to inform scenario-building and policy formulation", which we think is sufficiently general to address this comment.
300	Germany	5	86	2489	86	2489	Please improve figure 5.14; hardly readable.	Thank you. The figure was updated.
301	China	5	86	2496	87	2500	The expression is biased and lacks support of scientific research and scientific evidence, which	We think these comments might refer to this phrase: "... for example the fallout of the COVID-related Chinese ban on consumption of much wild species for food (Koh, Li, & Lee, 2021)." We have therefore deleted this phrase.
302	Lerambert, Adeline	5	87	2505	87	2510	As per above comment, this statement requires careful reconsideration - suggest deletion as lacking independence and is inappropriate language for a scientific report.	We think these comments might refer to this phrase: "... for example the fallout of the COVID-related Chinese ban on consumption of much wild species for food (Koh, Li, & Lee, 2021)." We have therefore deleted this phrase.
303	Stewart, David	5	87	2505	87	2510	Suggest deletion as lacking independence and is inappropriate language for a scientific report.	We think these comments might refer to this phrase: "... for example the fallout of the COVID-related Chinese ban on consumption of much wild species for food (Koh, Li, & Lee, 2021)." We have therefore deleted this phrase.
304	China	5	87	2511	87	2514	No evidence to show the ban on wild meat consumption in China will be lifted, on the contrary, the ban will be integrated into the updated Wild Animal Protection Law as a permanent regulation. Delete the sentence.	We think these comments might refer to this phrase: "... for example the fallout of the COVID-related Chinese ban on consumption of much wild species for food (Koh, Li, & Lee, 2021)." We have therefore deleted this phrase.
305	Lerambert, Adeline	5	87	2513	87	2514	Suggest deletion since it represents an inaccurate representation of the paper, which presents	We think these comments might refer to this phrase: "... for example the fallout of the COVID-related Chinese ban on consumption of much wild species for food (Koh, Li, & Lee, 2021)." We have therefore deleted this phrase.
306	Stewart, Davyth	5	87	2513	87	2514	Suggest deletion since it represents an inaccurate representation of the paper, which presents a holistic examination by objectively referencing criticisms of the ban (in a short paragraph towards the end of the paper). With respect to those criticisms it then recommends: "Policymakers need to be aware of the adverse impacts of this ban on marginalized groups, and provide sufficient support to them. These groups should include, but not be limited to, segments of society that are still dependent on wildlife for essential protein, and wildlife farmers who are suffering economic hardships". At no point do the authors state or imply a conclusion or view of any fallout from the ban.	We think these comments might refer to this phrase: "... for example the fallout of the COVID-related Chinese ban on consumption of much wild species for food (Koh, Li, & Lee, 2021)." We have therefore deleted this phrase.
307	White, Michael	5	89	2581	89	2585	now playing out in many countries	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
308	Elsey, Ruth	5	89	2592	89	2592	per cent should perhaps be percent	Ok, updated.
309	Elsey, Ruth	5	90	2608	90	2608	not sure Figure 5.16 is needed - could just have a sentence that there are interactions between	Thank you for your comment. The figure was removed.
310	Kumagai, Joy	5	90	2608	90	2610	Figure 5.16 - Please gain approval to use.	Thank you for your comment. The figure was removed.
311	Gallagher, Linda	5	90	2612	90	2622	There is scope for including more detailed recommendations for future approaches and methods	Thank you for your comment. We have tried to make this section as brief as possible due to word count limitations of the chapter.
312	Germany	5	90	2612	91	2658	We welcome very much this explicit section on the identified knowledge gaps in scenario studies of the sustainable use of wild species.	Thank you for your comment
313	Woodward, Sue	5	94	2612	95	2658	Knowledge gaps will ultimately narrow with the expansion of the search terms and the addition of	Thank you for your comment. We agree that adding specific search terms related to terrestrial animal harvesting might have yielded additional papers in this field. However, we have seen that it is not the general lack of literature on a certain topic, but the lack of the use of scenarios or other foresight methods and the lack of a specific focus on sustainable use. Although we assume that we included the most important literature, we acknowledge that we might have missed specific papers. We added a sentence to indicate this: "The dominance of forestry and fishery papers is clear, but might partly be attributable to the choice of search terms. Adding more practice-specific terms might have yielded additional papers."

314	Kenward, Robert	5		2635		2635	In Chapter 5, at line 2635, in order to recognise at least the large quantity of predictive modelling associated with terrestrial animal extraction, may continue the sentence: "(e.g., Dobson et al., 2019), as there has been appreciable modelling done for predicting habitat requirements and yields of populations of game and other species relevant to hunting (Arraut et al. 2021, Kenward et al. 2007, Potts 2012, Topping et al. 2010)." Arraut, E.M., Walls, S.W., Macdonald D.W. & Kenward R.E. 2021 Anticipation of common buzzard population patterns in the changing UK landscape. Proc. R. Soc. B 288: 20210993. https://doi.org/10.1098/rspb.2021.0993 Kenward, R., Katzner, T., Wink, M., Marcström, V., Walls, S., Karlborn, M., Pfeffer, R., Bragin, E., Hodder, K., & Levin, A. 2007. Rapid sustainability modelling for raptors with radio-tags and DNA-fingerprints. Journal of Wildlife Management 71:238-245. Potts, G.R. (2012). Partridges. Countryside Barometer. New Naturalist Library Book 121. Collins, London. Topping, C.J., Høye, T.T., Odderskaer, P. & Aebischer, N.J. (2010). A pattern-oriented modelling approach to simulating populations of grey partridge. Ecological Modelling 221: 729-737.	Thank you for your comment. As this is another example to support a point already made, and not crucial to our critical evaluation, we have chosen not to include it.
315	Kenward, Rd	5		2635		2635	In Chapter 5, at line 2635, in order to recognise at least the large quantity of predictive modelling associated with terrestrial animal extraction, may continue the sentence: "(e.g., Dobson et al., 2019), as there has been appreciable modelling done for predicting habitat requirements and yields of populations of game and other species relevant to hunting (Arraut et al. 2021, Kenward et al. 2007, Potts 2012, Topping et al. 2010)." Arraut, E.M., Walls, S.W., Macdonald D.W. & Kenward R.E. 2021 Anticipation of common buzzard population patterns in the changing UK landscape. Proc. R. Soc. B 288: 20210993. https://doi.org/10.1098/rspb.2021.0993 Kenward, R., Katzner, T., Wink, M., Marcström, V., Walls, S., Karlborn, M., Pfeffer, R., Bragin, E., Hodder, K., & Levin, A. 2007. Rapid sustainability modelling for raptors with radio-tags and DNA-fingerprints. Journal of Wildlife Management 71:238-245. Potts, G.R. (2012). Partridges. Countryside Barometer. New Naturalist Library Book 121. Collins, London. Topping, C.J., Høye, T.T., Odderskaer, P. & Aebischer, N.J. (2010). A pattern-oriented modelling approach to simulating populations of grey partridge. Ecological Modelling 221: 729-737.	Thank you for your comment. As this is another example to support a point already made, and not crucial to our critical evaluation, we have chosen not to include it.
316	Elsey, Ruth	5	91	2656	91	2656	"represent" should be "represented"?	Corrected.
317	Kumagai, Jd	5	97	2831	97	2843	For all IPBES references for assessments or summary for policy makers, please add the assoc	Thank you for the comment. DOI will be added in all the IPBES references.
318	Kenward, Robert	5		1168		1168	1168. spelling "sleighs" – are these better known as "snowmobiles"?	Corrected.
319	Kenward, Rd	5		1168		1168	1168. spelling "sleighs" – are these better known as "snowmobiles"?	Repeat
320	Kenward, Robert	5		1234		1234	In this section (or perhaps elsewhere and even as a Box) it would be appropriate to recognise dramatic progress for reversing environmental deterioration through sustainable use: "Rapidly changing agricultural environments have also had dramatic impacts. In the UK, the Grey Partridge (<i>Perdix perdix</i>) has become a flagship following intensification of agricultural land that caused 90% population declines. Fifty years of research, motivated by hunting, has identified habitat restoration measures that allow small reductions in income from crop yield to be offset by financial and aesthetic benefits from sustainable use (Potts 2012). Experimental land management has been applied to restore plant, invertebrate and vertebrate biodiversity in ways that are sustainable socio-economically, with socio-cultural innovation allowing roll-out and intended upscaling across Europe and beyond (Ewald et al. 2010, 2020, Brewin et al. 2020). Brewin, J., Bunger, F.D. & Ewald, J.A. 2020. Farming with nature - promoting biodiversity across Europe through partridge conservation. In Gottschalk, E., Bos, J., van Alebeek, F., Scheepers, T., Vanhyse, K., Parish, D.M.B. & Aebischer, N.J. (eds). The Game & Wildlife Conservation Trust, Fordingbridge, UK. 104pp. ISBN number: 978-1-901369-38-0. Ewald, J.A., Aebischer, N.J., Richardson, S.M., Grice, P.V. & Cooke, A.I. 2010. The effect of agri-environment schemes on grey partridges at the farm level in England. Agriculture, Ecosystems and Environment 138: 55-63. Ewald, J.A., Soerton, N.W. & Aebischer, N.J. 2020. Research Into Practice: Gray Partridge (<i>Perdix perdix</i>) Restoration in Southern England. Frontiers in Ecology and Evolution 8:517500. doi: 10.3389/fevo.2020.517500 Potts, G.R. (2012). Partridges. Countryside Barometer. New Naturalist Library Book 121. Collins, London.	Thank you for your comment. As this is another example to support a point already made, and not crucial to our critical evaluation, we have chosen not to include it.
321	Kenward, Rd	5		1253		1253	1253. "Namibia" = "Kenya"?	Thank you for your comment. The phrase was updated.
322	Kenward, Robert	5		1318		1318	1318. For consistency with usage in Chapters 2, which recognises in the definition section that tourism can include travel for recreational fishing, hunting and for gathered foods, all of which have particular governance requirements as recognised in the European Charters from Bern Convention, replace "ecotourism" here by "wildlife watching".	Thank you for your comment. We have changed all mention of "nature-based tourism" to wildlife / wild species watching tourism, as per the assessment's glossary (see "Wild species watching (or wildlife watching)")
323	Kenward, Rd	5		1386		1386	1386. "Lopes et al." needs date.	Done
324	Kenward, Robert	5		1409		1409	1409. <i>Cordyceps sinensis</i> is a fungal parasite of lepidoptera, not a plant.	Note - we deleted this section .
325	Kenward, Rd	5		1413		1413	1413. A major knowledge gap that this chapter should identify is understanding of climate chang	Thank you for this suggestion. We have chosen not to include it in the assessment, as you have not provided any supporting evidence for this specific approach and it does seem to be suggested elsewhere.
326	Kenward, Robert	5		1593		1593	1593. Two Finnish forests?	Thank you. The phrase was rewritten

327	Kenward, Rd	5		1806	1806	1806. "They challenged this"?	Thank you. The phrase was rewritten
328	Kenward, Robert	5		1828	1828	1828. For consistency with usage in Chapters 2, which recognises in the definition section that tourism can include travel for recreational fishing, hunting and for gathered foods (all of which have particular governance requirements as recognised in the European Charters from Bern Convention), replace "wild species tourism" by "observational tourism" here.	Thank you for your comment. We have changed all mention of "nature-based tourism" to wildlife / wild species watching tourism, as per the assessment's glossary (see "Wild species watching (or wildlife watching)")
329	Kenward, Rd	5		1836	1836	1836. Replace "nature-based tourism" by "observational tourism" or "wildlife watching". Fortunately, the term "wild species tourism" is not mentioned in the text.	Thank you for your comment. We have changed all mention of "nature-based tourism" to wildlife / wild species watching tourism, as per the assessment's glossary (see "Wild species watching (or wildlife watching)")
330	Kenward, Robert	5		1840	1840	Replace "nature-based tourism" by "observational tourism" or "wildlife watching"	Thank you for your comment. We have changed all mention of "nature-based tourism" to wildlife / wild species watching tourism, as per the assessment's glossary (see "Wild species watching (or wildlife watching)")
331	Kenward, Rd	5		1906	1906	1906. Most previous uses of nature-based tourism could be extractive or observational; however, the term "wild species tourism" is not mentioned in the text.	Thank you for your comment. This sentence has been removed and the content restructured.
332	Kenward, Robert	5		1913	1913	1913. "wild species tourism" = "observational tourism"	Thank you for your comment. We have changed all mention of "nature-based tourism" to wildlife / wild species watching tourism, as per the assessment's glossary (see "Wild species watching (or wildlife watching)")
333	Kenward, Rd	5		1926	1926	1926. The absence of consideration of impact on terrestrial animal extraction of environment changes is noted.	As with some other points, this is an excellent point, but this didn't come up in the methodology we used.
334	Kenward, Robert	5		1965	1965	1965. Scenarios in Figure 5.5. require more explanation.	Thank you for your comment, which has also been brought up by another reviewer. Additional explanation has been provided to Figure 5.5.
335	Kenward, Rd	5		2085	2085	2085. Table 5.7 is an interesting indication of the huge complexity of the possible scenarios created by the different combinations of factors.	We agree that the complexity of scenarios is huge and this information by definition somewhat subjective. In the latest version, we have added a Table that uses concrete examples of solutions from the various practices, based on literature. This step link archetypal possible options to concrete implementable solutions
336	Kenward, Robert	5		2167	2167	2167. It needs to be clarified whether Nature as Culture includes some extractive use (viz 2411), otherwise the impression is of 2 lovely non-consumptive scenarios vs 1 nasty crocodile!	Thank you for your comment. The Nature as Culture scenario includes some extractive use of wild species. The food production is based on the cropping and harvesting of a wide diversity of edible species. Small-scale and community-based management predominates in fishing.
337	Kenward, Rd	5		2188	2188	2188. Insert "the" before "Amazon".	Added
338	Kenward, Robert	5		2490	2490	2490. Should this be the "top 20" or the "top emerging IWT issues in 2020"?	Corrected.
339	Kenward, Rd	5		2633	2633	2633. Recognition of modelling to improve agriculture for game species is essential.	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
340	Kenward, Robert	5		2633	2633	In Chapter 5, at line 2635, in order to recognise at least the large quantity of predictive modelling associated with terrestrial animal extraction, may continue the sentence: " (e.g., Dobson et al., 2019), as there has been appreciable modelling done for predicting habitat requirements and yields of populations of game and other species relevant to hunting (Arraut et al. 2021, Kenward et al. 2007, Potts 2012, Topping et al. 2010)." Arraut, E.M., Walls, S.W., Macdonald D.W. & Kenward R.E. 2021 Anticipation of common buzzard population patterns in the changing UK landscape. Proc. R. Soc. B 288: 20210993. https://doi.org/10.1098/rspb.2021.0993 Kenward, R., Katzner, T., Wink, M., Marcström, V., Walls, S., Karlbom, M., Pfeffer, R., Bragin, E., Hodder, K., & Levin, A. 2007. Rapid sustainability modelling for raptors with radio-tags and DNA-fingerprints. Journal of Wildlife Management 71:238-245. Potts, G.R. (2012). Partridges. Countryside Barometer. New Naturalist Library Book 121. Collins, London. Topping, C.J., Høye, T.T., Odderskaer, P. & Aebscher, N.J. (2010). A pattern-oriented modelling approach to simulating populations of grey partridge. Ecological Modelling 221: 729-737.	Thank you for your comment. As this is another example to support a point already made, and not crucial to our critical evaluation, we have chosen not to include it.
341	Yashphe, Shira	5	72	Figure 5.6: Nature for Nature graphic		The Nature for Nature approach includes the consideration of wild animals' and nature's intrinsic values.	Thank you for your comment. It will be updated.
342	Yashphe, Shira	5	74	Figure 5.7 "shared elements" section		Note: the realities of sustainable use as it is practiced currently is that when it follows the "Nature for Society" approach, the Precautionary Principle is not always included. There is room to consider if this is truly a shared element. We see current practices of "nature for society" aligning more closely with the "Market Force" scenario and the precautionary principle is not a major consideration in this scenario.	Thank you for your comment. We agree that the precautionary approach is not always included in the current management plans. That's why in the example of the Nature Future Framework in fisheries management, we considered the precautionary approach as a common feature for all visions to achieve any of the desirable future scenarios.
343	Germany	5	61	table	62	table	Table 5.4: Delete unnecessary empty paras in table, please see especially row "Technological". Deleted

344	Germany	5	65	table	68	table	Tables 5.6/5.7: repeat title row after each page break.	Thanks for this suggested change. We have included it in the new version.
345	Germany	5	70	table	71	table	Table 5.8: repeat title row after page break.	Thanks for this suggested change. We have included it in the new version.
346	Yashphe, Shira	5	65	table 5.6	66	table 5.6	This table could benefit from an additional column (or additions to Column 7, "environmental") spelling out the implications on wildlife for the reader. The aim of this report, after all, is to aid policy makers and conservationists in their understanding of sustainable use (it's definitions, the different approaches, and eventually different future scenarios). Therefore, it is important for readers to get clarity, for instance, on what "not a main focus" means for the Market Forest scenario, in row 1, column 7. For this scenario, an explanation is offered in page 8, lines 237-239, where the meaning of such a scenario could be either devastating (environmental destruction, extinctions), or positive (economically-viable nature-based solutions). Though, if it is stated that it's "not a main focus", I would suspect that the table here refers to the first case where the consequences are devastating. In summary, we believe it is important to add an explanation for readers within this overview/analysis table to facilitate understanding.	Thank you for this suggestion. We agree that table 5.6 can be more explicit on the implications for wild species. Instead of adding a column, we provided this information in the last column with the "overall challenge" indication.
347	Yashphe, Shira	5	67	table 5.7	68	table 5.7	The same comment as above (for table 5.6) - we recommend adding a column spelling out what	main (types of) solutions and pathways towards sustainable use. The last column summarises this by means of "key direction". We feel that this sufficiently relates the text to wild species. Note that we have added a table that provides concrete examples, further strengthening the link.
348	Elsey, Ruth	5	0	0	0		note references listed are available from me at relsey@wif.la.gov	Thank you.
349	Ebora, Juan	5	1		95		Well-presented	Thank you for your comment
350	Mkono, Mucha	5	1		105		In relevant scenarios, consider reflecting on the following matters: (I)Growing Gen Z activism (e.g. Greta Thunberg) and its implications for sustainable wildlife use in future (II)Possible alternatives to trophy hunting that could be more acceptable to younger generations (III) The recent ban on captive lion farming in South Africa	Thanks you for these concrete suggestions. We agree that these are all relevant possible solutions. However, we did not find any evidence in the literature database, and we therefore cannot add them to possible solutions.
351	Louette, Michel	5	26		39		Domestication: The conservation of all forms of biodiversity (all species) is also useful to discover	Thanks for pointing this out. Domestication has been explicitly added to the scenario archetypes as a possible solution.
352	Guillemain, Matthieu	5	54				Table 5.3. Cell "Social"/"Terrestrial animal harvesting" add "- Demand for game meat". Cell "Technological"/"Terrestrial animal harvesting": availability of LED lights is probably anecdotal	I agree with the one point, and have added, but not with the observation re LED lights
353	Elsey, Ruth	5	55		55		lower case "h" in Higher temperatures in Environmental cell?	Text now changed
354	Guillemain, Matthieu	5	55				Table 5.4. "Reduced market demand for wild species products" is probably true for fur, maybe not for meat	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
355	Guillemain, Matthieu	5	80				Figure 5.11: impossible to read text	Figure updated;
356	Yashphe, Shira	5	83				When discussing "green recovery" post-COVID 19, it's important to also note the need to prevent future pandemics. Welfare of and trade in live animals is a major contributing factor to this. Poor welfare leads to stress which leads to susceptibility for disease. See: https://www.nature.com/articles/s41586-020-2169-0_reference.pdf https://www.theparliamentmagazine.eu/news/article/coronavirus-world-must-change-its-relationship-with-animals-says-leading-animal-welfare-group	Thank you for your comment. However, prevention of future pandemics is beyond the scope of this section, which is on green recovery rather than pandemic prevention.
357	Gallagher, Linda	5	General				General comments - nicely written, relatively easy to read. I tend to think of good scenarios worse than bad ones.	Thank you for your comment. The feedback is greatly appreciated by the chapter authors.
358	Hoban, Sean	5	General				Relating to above comment, I observe that there are only two instances of "genetic" in the entire document and both refer to biotechnology/ genetic modification. There is one instance of "intra-specific diversity" e.g. genetic diversity on line 925. It is good that this one example is included but it's really problematic that an entire realm of biodiversity is almost entirely ignored in this chapter in spite of many examples (see below comments). By comparison there are hundreds of instances of the word "species"	Please see responses to other comments on genetic diversity.
359	Yashphe, Shira	5	General				General comment: As recognized by chapter authors (page 2, line 56-59), there are numerous	Thank you for your comment. While animal welfare concerns all animal species, it has been of special concern for domesticated ones, which are clearly out of the scope of this assessment. Animal welfare is increasingly being incorporated into concepts of sustainable use of wild species but it was not identified in the scoping report for the sustainable use assessment and is not dealt with in any detail in this assessment. Nevertheless, this issue would deserve a dedicated assessment.
360	Hull, Amanda	5	Table 5.3				Increased emphasis on identification and prosecution of criminal organizations responsible for large-scale poaching efforts. Table 5.3, Economic: Terrestrial animal harvesting).	Thank you for your comment. This point was added into the table.