If it would be useful to the authors for IUCN to disaggregate further the Red List data summarised for the ECA region and its component subregions by Brooks et al. (2016), please feel free to contact me accordingly.

**Examples**

### General

**Comment**

**General**

From Page 31-579

Regional Assessment Report on Biodiversity and Ecosystem Services for Europe and Central Asia

**Zsolt Molnar**

Germany

Thomas Brooks

Thomas Brooks

Frank Wugt Larsen

(EEA input)

**General**

**General**

**General**

**General**

**General**

**General**

The entire report should be homogenously arranged, logically build and fully integrated with no inconsistency, disharmony or overlapping within its chapters and sections. The titles of chapters and sections are generally too much look forward to the second order draft of this important assessment.

many-many important publications on ILK are not at all used and cited in the assessment (see the literature lists provided by the ILK Task Force, and the Proceedings volume of the ILK Dialogue workshop) concerned (see definitions in Table 1.2, p. 19).

Published scientific literature represents a source of access to ILK. In this review, examples will be given of studies where ILK related to biodiversity and environmental change has been recorded. It can be factual qualitative arguments are overall strengthened. We also strongly encourage the development of an appendix that lists all the acronyms and key terms (including their definitions) used in the ECA assessment and communicate these lists relevant to the ECA region so that useful options for actions can be derived for the potential user groups. Please also ensure that in the further development of this assessment key messages with their level of of relevance to Europe and Central Asia. As we are dealing with a regional assessment for Europe and Central Asia (ECA) we strongly encourage the authors of this assessment to assess regional organizations and treaties related to the ECA region so as to find useful options for actions that can be derived from the literature (see definitions in Table 1.2, p. 19).

The ECA authors have been encouraged to use EEA reports as a resource, and we would like to thank the reviewer for providing the web-links for these.

The ECA authors have been encouraged to use EEA reports as a resource, and we would like to thank the reviewer for providing the web-links for these.

The ECA authors have been encouraged to use EEA reports as a resource, and we would like to thank the reviewer for providing the web-links for these.
we have aimed for this approach for SOD, a synthetic analysis with some specific examples for each group.

Chapter 3

1

help the reader to find key information—provide a table to recap on the information for each group or each sub-system.

We have fundamentally revised the whole chapter which is not much more concise and streamlined.

possible additional reference: Mapping and Assessment of Ecosystems and their Services - Urban ecosystems 4th Report: calculates the biological—physical—neural—chemical and the pedological (long-term). Land degradation opportunities, planning, assessment, implementation constraints, and limits should be addressed. Land degradation and ecosystem services should be assessed in the context of the complete

how is the assessment of this chapter related to and distinguished from others like Chapter 2 which also tries to analyse the different ecosystem services provided by biodiversity? Nevertheless, this chapter serves to much

This chapter could benefit from full use of many recent EEA publications, incl. the references listed under the 1st comment. Eg. this include EEA, 2015 European environment — state and outlook 2015 (SOER 2015), in particular, thematic reports and the 2014 report (2015 SOER); 2016. European forest ecosystems – state and trends (including up-to-date information). We cross-referenced the section with chapter 2 and we state clearly that this section serves to show the

The reference to “biodiversity hotspot” is based upon the term introduced by Conservation

3

We have a specific section on biodiversity gaps, and specifically acknowledged the lack of quantitative or even qualitative trends when appropriate.

there are several references to biodiversity hotspots (even “real biodiversity hotspots”) in the Chapter. No doubt these occur in other regional assessments. These tend to be subjective, and therefore not helpful, terms.

The reference to “biodiversity hotspot” is based upon the term introduced by Conservation.

the review of the sampling and the ecosystem services and ecosystem services has been integrated to the more ECA specific and to focus on ecosystem services rather than ecosystem functioning. In this context there are examples for recent ecosystem types (tundra or arctic) noting how a loss of diversity affects ecosystem services in these regions.

We have a specific section on biodiversity gaps, and specifically acknowledged the lack of quantitative or even qualitative trends when appropriate.

there are several references to biodiversity hotspots (even “real biodiversity hotspots”) in the Chapter. No doubt these occur in other regional assessments. These tend to be subjective, and therefore not helpful, terms.

the review of the sampling and the ecosystem services and ecosystem services has been integrated to the more ECA specific and to focus on ecosystem services rather than ecosystem functioning. In this context there are examples for recent ecosystem types (tundra or arctic) noting how a loss of diversity affects ecosystem services in these regions.

the reference to “biodiversity hotspot” is based upon the term introduced by Conservation.

we have a specific section on biodiversity gaps, and specifically acknowledged the lack of quantitative or even qualitative trends when appropriate.

there are several references to biodiversity hotspots (even “real biodiversity hotspots”) in the Chapter. No doubt these occur in other regional assessments. These tend to be subjective, and therefore not helpful, terms.

the review of the sampling and the ecosystem services and ecosystem services has been integrated to the more ECA specific and to focus on ecosystem services rather than ecosystem functioning. In this context there are examples for recent ecosystem types (tundra or arctic) noting how a loss of diversity affects ecosystem services in these regions.

the reference to “biodiversity hotspot” is based upon the term introduced by Conservation.

there are several references to biodiversity hotspots (even “real biodiversity hotspots”) in the Chapter. No doubt these occur in other regional assessments. These tend to be subjective, and therefore not helpful, terms.

their review of the sampling and the ecosystem services and ecosystem services has been integrated to the more ECA specific and to focus on ecosystem services rather than ecosystem functioning. In this context there are examples for recent ecosystem types (tundra or arctic) noting how a loss of diversity affects ecosystem services in these regions.

the reference to “biodiversity hotspot” is based upon the term introduced by Conservation.

the review of the sampling and the ecosystem services and ecosystem services has been integrated to the more ECA specific and to focus on ecosystem services rather than ecosystem functioning. In this context there are examples for recent ecosystem types (tundra or arctic) noting how a loss of diversity affects ecosystem services in these regions.
Throughout the assessment there is little differentiation in "forest"—and this includes evergreen vs. deciduous broadleaved forests, mixed forest and coniferous forests. While there is a trend for more natural forest, most statements are not associated with quantitative likelihood statements nor qualitative confidence levels as outlined in Chapter 1, section 1.6.1. A coherent and adequate treatment of uncertainty is essential for the credibility and trustworthiness of the report.

The chapter needs more structure and a clear target, which should be formulated upfront. As it stands now, lots of valuable information is compiled, but it is very difficult to get the main messages and linkages out of it. Please ensure that all information is presented in a well-structured and comprehensible manner. (If data exist, please specify a time scale and geographical approach to chapter 1, i.e., also partly presented, Please improve on this.)


The following paper seems of relevance: Bond et al. (2015). Ancient grassland at risk. Science 351, 120-122. Note taken, plantations are also addressed in the cultivated lands, while the forest sections specially under 'moreover' but at the first point, as this is their particular sensitivity which led to the disappearance of many species in urban areas and at sensitive species even in contaminated forest areas. Of course, the bulk of both, birds and invertebrates, they harbour some extremely sensitive and rare species, but that does not correspond to high BD! Throughout the assessment there are no consistent terminologies and the theoretical framework is weak or absent. Overall—despite reassuring—there may be the most species poor habitat in WE.

The abbreviation "ECA" should be used only when necessary. It should be clear that this regional assessment summarizes the available information for the ECA-region point taken.

As indicated in "A note to reviewer", "subsections require reduction". To avoid the work load for future reviews (i.e. second order draft), reduction before review would be appreciated.

The executive summary, sorry for mentioning this, does not really convince me that something serious enough happens to the terrestrial biota, which would need urgent action. One major point is that statements are often not conclusive and more an enumeration of threats. For cryptogamic species bryophytes and lichens, I'm not sure if it really meets the point the most severe threats occur. E.g. at lichens, I would mention an air pollution classification, more than just mentioning that FSC and GOTS are bad and need to be avoided. In both birds and invertebrates they harbour some extremely sensitive and rare species, but that does not correspond to a high BD! Throughout the assessment there are no consistent terminologies and the theoretical framework is weak or absent. Overall—despite reassuring—there may be the most species poor habitat in WE.

The impact of research or conservation projects is not within the scope of this chapter.

The report will be published guidance on the for the first draft. As indicated in "A note to reviewer", "subsections require reduction". To avoid the work load for future reviews (i.e. second order draft), reduction before review would be appreciated.

As indicated in "A note to reviewer", "subsections require reduction". To avoid the work load for future reviews (i.e. second order draft), reduction before review would be appreciated.

As indicated in "A note to reviewer", "subsections require reduction". To avoid the work load for future reviews (i.e. second order draft), reduction before review would be appreciated.

As indicated in "A note to reviewer", "subsections require reduction". To avoid the work load for future reviews (i.e. second order draft), reduction before review would be appreciated.

As indicated in "A note to reviewer", "subsections require reduction". To avoid the work load for future reviews (i.e. second order draft), reduction before review would be appreciated.
Please mention that these data come from the Red List. We are not sure that it is needed as it an Executive summary.

The crucial question is whether or not these protected areas can maintain biodiversity for the future.

We have considered listing the results by IUCN category but given that the IUCN target to not differentiate that are declined in 50 years but has been declining by 2021, this statement is too strong. As other threats might be better mitigated by PA with different management practices but to illustrate that there is limited evidence that IUCN categories are more effective in general. There is some evidence that different PA categories do not deliver different impacts in terms of avoided deforestation (see Joppa and Pfaff 2011, Proc Roy Soc B). This is not to dismiss this aspect, as other threats might be better mitigated by PA with different management practices but to illustrate that there is limited evidence that IUCN categories are more effective in general.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

Please make sure to treat natural and man-made grasslands differentially, identifying common and divergent patterns.

We are not sure that it is needed as it an Executive summary.

The structure of the Summary was not quite clear to me, because you start the treatment of species directly under the ecosystems (and I first thought why marine fishes are discussed in the freshwater section). This is specific in the first draft to EU28, but in how far does this here correspond to ECA? Done.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

The structure of the Summary was not quite clear to me, because you start the treatment of species directly under the ecosystems (and I first thought why marine fishes are discussed in the freshwater section). This is specific in the first draft to EU28, but in how far does this here correspond to ECA? Done.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.

Please mention that these data come from the Red List. We do not agree with this statement. We based our assessment on a thorough literature review and conservation section in Ch 6 (L1571-1573) has not yet been drafted, and so this question is hard to resolve at present. In any case, it is important that this text appear somewhere. We also that this paragraph relates to freshwater and marine protected areas and biodiversity areas, as well as terrestrial areas. (IUCN 2020). We agreed that we should try to make these points clear in this chapter.
Although true that there is debate over what exactly has intrinsic value, it is widely accepted that it is not only humans that have intrinsic value (see comment to Ch3 line 4404).

This either very deep or very trivial and should probably reworded. We explain this in more detail based on a recent article.

Evidence here is not unequivocal - please provide a more differentiated perspective.

I find this statement incomprehensible and dubious. Knowing European tree-diversity and what mainly influences it, I wonder whether it is a sensible statement. Are we possibly just talking about the effects of topography and structure?

This has been entirely reworded. Possibly true, but very complicated wording. The text has been simplified and clarified concerning this issue.

We now refer to biodiversity change in such cases.

"Intrinsic" and "inherent" value are not the same thing (see Bowman, Davies and Redgwell, Lyster's International Wildlife Law (Cambridge University Press 2010) pp62ff for an explanation). It is worthwhile keeping the two terms clear.

This paragraph overlaps with the previous one and requires a complete re-write in conjunction with it. Or they could be deleted as suggested above: it's not clear why these examples are chosen here. The text in SOD is shortened.

"locus of valuational activity" - B Morito, 'Intrinsic Value: A Modern Albatross for the Ecological Approach' (2003) 12 Environmental Values 317; but an individual panda or potentially even a whole ecosystem does.

"Basic" and "mismatch"? Why "increase" (is there already a mismatch)? The point could be made much more clearly e.g. Environmental change may mean that organisms are no longer adapted to the ecosystems, but also drivers of change.

We agree. However, the part on intrinsic value was cut from chapter 3, in response to several reviewer comments. Intrinsic value is explained in the final version of chapter 1.

Please check this statement. There is more than topography and structure which influence tree diversity. Intrinsic value is not non-empirical. It is a value that humans assign something simple because of its existence (e.g. the Morea Line and the species Alpine meadows) may both have inherent value.

This is what the assessment should do, not what it does. note taken, the text for SOD is being edited.

Valuable comment on indigenous and local knowledge. All useful references will be reviewed and much changed the language (as it is also used by quoted authors).

We agree. However, the part on intrinsic value was cut from chapter 3, in response to several reviewer comments. Intrinsic value is explained in the final version of chapter 1. The part on intrinsic value was cut from chapter 3, in response to several reviewer comments. Value is mentioned and intrinsic value is explained in the final version of chapter 1.

Intrinsic value is the basis of conservation (since the Mills - Novak Act) and mentioned in many conservation legislations (e.g. the preamble of the Habitats Directive). We would add the responsibility of future humans.

We agree. However, the part on intrinsic value was cut from chapter 3, in response to several reviewer comments. Intrinsic value is explained in the final version of chapter 1.

This is how certain conservation practices are justified. The text has been simplified and clarified concerning this issue.

We explain these issues in more detail based on recent articles and point up that these are indeed important biological and ecological processes that give rise to life and intrinsic value in the chapter rather than as a compilation of datasets on species in ECA, hence a fuller discussion of intrinsic value could make more sense here.

This is how certain conservation practices are justified. The text has been simplified and clarified concerning this issue.
3.3. Past and current trends of biodiversity and ecosystems

There is a list of habitats in previous chapters. If I had to have one single table for the entire ECA assessment, there is no methodology given at all for taxa and species diversity (BD in the strict sense). Unfortunately this is then reflected in the assessment.

- Please ensure consistency with chapter 4 when discussing and presenting those drivers. Please also consider whether this information might be better placed in chapter 4.

- The approach to habitat classification is changed to the agreed and approved by the MNP and PPRS, hence table of Analysis. They are now described in Ch.3 of the SOD. The approach to biodiversity assessment has further improved in the Ch.4 while describing these.

- The consideration of urban habitats seems interesting in view of global urbanisation.

- Definitions of terms are needed e.g. structural and functional ecosystem diversity, not necessarily here but probably where first mentioned in a given Chapter.

- Change "Endangered Species" to "Extinction Risk" in Table 3.3. Also L1089 (Table 3.10), L1137 (Table 3.11), L1324 (Table 3.12), L1480 (Table 3.14), L1536 (Table 3.15), L1595 (Table 3.16), L1633 (Table 3.17), L1714 (Table 3.18)

- Table now reads Conservation Status

- Comment considered. The overall approach to indicators is adjusted to the universal one throughout the assessment.

- Comment taken. Recommended sources of information are included into the Assessment

- In the tables now read "Conservation Status"

- The overall approach to indicators is adjusted to the universal one throughout the assessment.

- The authors refer to LTER as source for biodiversity data. They could also refer to EVS (European Vegetation Survey) and GEO-BON / EU-BON especially the EuMon portal http://eumon.ckff.si/index1.php of EU-BON

- Adaptive capacity of species could be added as an indicator

- The authors refer to LTER as source for biodiversity data. They could also refer to EVS (European Vegetation Survey) and GEO-BON / EU-BON especially the EuMon portal http://eumon.ckff.si/index1.php of EU-BON

- The authors refer to LTER as source for biodiversity data. They could also refer to EVS (European Vegetation Survey) and GEO-BON / EU-BON especially the EuMon portal http://eumon.ckff.si/index1.php of EU-BON

- The approach to habitat classification is changed to the agreed and approved by the MNP and PPRS, hence table of Analysis. They are now described in Ch.3 of the SOD. The approach to biodiversity assessment has further improved in the Ch.4 while describing these.

- Definitions of terms are needed e.g. structural and functional ecosystem diversity, not necessarily here but probably where first mentioned in a given Chapter.

- Change "Endangered Species" to "Extinction Risk" in Table 3.3. Also L1089 (Table 3.10), L1137 (Table 3.11), L1324 (Table 3.12), L1480 (Table 3.14), L1536 (Table 3.15), L1595 (Table 3.16), L1633 (Table 3.17), L1714 (Table 3.18)

- Table now reads Conservation Status

- Comment considered. The overall approach to indicators is adjusted to the universal one throughout the assessment.

- Comment taken. Recommended sources of information are included into the Assessment

- In the tables now read "Conservation Status"
Chapter 3

Section 3.1: Habitat Alterations

Are some sub-regions understood better than others?

Retain but make the figure clearer.

This section is completely revised in the SOD but this comment was taken in consideration.
We contacted interviews of representatives of 564 confined
fishers in Italy, Spain and Greece, asking specific questions about trends they perceived in dolphins and sharks abundance between 1960 and 1990 (in three 20 year periods) compared to the present abundance. The large
major grouping of fishers were not interviewed in the commercial fishing fleet segment interviewed (Trawl fishery). The
fishers were asked to rank the perceived trends in dolphin abundance on a 0-10 scale (0 being no change and 10 a very
high absolute increase). The results showed that both incidental catches and the sighting frequency of dolphins have
declined significantly over the 60 years of the study period except for dolphins due to the recent population
increase. This shows that fishers’ perceptions are in agreement with the declining population trends detected by
scientists. Shark catches were also perceived to have diminished since the early 1960s for all species. Other long lived Mediterranean marine fauna (turtles, seals, whales) were very few in numbers in the second half
of the 20th century and no quantitative data could be obtained. Our study supports the results obtained in the Mediterranean and other areas that show the rapid disappearance of marine mammals. We believe
that appropriately designed questionnaires help provide a picture of animal abundance in the past through the valuable perceptions of fishers. This information can be used to complement scientific sources or in some
cases be taken as the only information source for establishing population trends in the absence of sensitive

Maynou et al., 2011. Estimating trends of population decline in long-lived marine species in the Mediterranean Sea based on fishers’ perceptions. [Abstract]: “We conducted interviews of a representative sample of 564 confined fishers in Italy, Spain and Greece, asking specific questions about trends they perceived in dolphin and sharks abundance between 1960 and 1990 (in three 20 year periods) compared to the present abundance. The large majority of fishers were not interviewed in the commercial fishing fleet segment interviewed (Trawl fishery). The fishers were asked to rank the perceived trends in dolphin abundance on a 0-10 scale (0 being no change and 10 a very high absolute increase). The results showed that both incidental catches and the sighting frequency of dolphins have declined significantly over the 60 years of the study period except for dolphins due to the recent population increase. This shows that fishers’ perceptions are in agreement with the declining population trends detected by scientists. Shark catches were also perceived to have diminished since the early 1960s for all species. Other long lived Mediterranean marine fauna (turtles, seals, whales) were very few in numbers in the second half of the 20th century and no quantitative data could be obtained. Our study supports the results obtained in the Mediterranean and other areas that show the rapid disappearance of marine mammals. We believe that appropriately designed questionnaires help provide a picture of animal abundance in the past through the valuable perceptions of fishers. This information can be used to complement scientific sources or in some cases be taken as the only information source for establishing population trends in the absence of sensitive species.”

**Rough draft**

Thank you, this will be taken into consideration in the final version of this document
Inland surface waters

The Aral Sea fishery potential has been lost because of desiccation and salinization. In 1960, the water volume reached 1064 km3, but after that it was stopped. And it is obvious that when you fish that way, the net moves along the bottom (but since the net fishing stopped), the plants had a chance to grow back" (Rune Stokke, Udtja sameby chairman).

Regional Assessment Report on Biodiversity and Ecosystem Services for Europe and Central Asia

This is interesting to know. Unfortunately we do not have enough space for including such information in the EEA reports. We will refer to the references provided by the authors for more details.

“the water volume reached 1064 km3” -> “the water volume reached 1064 m3”, i.e. km3, not m3

3.3.2.2.1. Inland surface waters

The references will be used. It takes time to read the papers before.

The methodology will be described in the separate part.

Allan Watt

Peatlands section has been re-written for the SOD.

A description of the method used should be included. The methodology will be described at the separate part.

Almost all of the freshwater biodiversity in the ECA region is at risk. Most of the sections describe biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

The references will be used. It takes time to read the papers before.

A very superficial treatment of trends in freshwater biodiversity. Most of the section describes biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

This is obviously still under construction, but neither of the alternatives is good. Peatlands would be the most comprehensive as it includes all the other options (mires, bogs, fens).

The references will be used. It takes time to read the papers before.

The Aral Sea fishery potential has been lost because of desiccation and salinization. In 1960, the water volume reached 1064 km3, but after that it was stopped. And it is obvious that when you fish that way, the net moves along the bottom (but since the net fishing stopped), the plants had a chance to grow back" (Rune Stokke, Udtja sameby chairman).

This is interesting to know. Unfortunately we do not have enough space for including such information in the EEA reports. We will refer to the references provided by the authors for more details.

“the water volume reached 1064 km3” -> “the water volume reached 1064 m3”, i.e. km3, not m3

The references will be used. It takes time to read the papers before.

A very superficial treatment of trends in freshwater biodiversity. Most of the section describes biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

This is obviously still under construction, but neither of the alternatives is good. Peatlands would be the most comprehensive as it includes all the other options (mires, bogs, fens).

The references will be used. It takes time to read the papers before.

The Aral Sea fishery potential has been lost because of desiccation and salinization. In 1960, the water volume reached 1064 km3, but after that it was stopped. And it is obvious that when you fish that way, the net moves along the bottom (but since the net fishing stopped), the plants had a chance to grow back" (Rune Stokke, Udtja sameby chairman).

This is interesting to know. Unfortunately we do not have enough space for including such information in the EEA reports. We will refer to the references provided by the authors for more details.

“The water volume reached 1064 km3” -> “the water volume reached 1064 m3”, i.e. km3, not m3

3.3.2.2.1. Inland surface waters

The references will be used. It takes time to read the papers before.

A very superficial treatment of trends in freshwater biodiversity. Most of the section describes biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

This is obviously still under construction, but neither of the alternatives is good. Peatlands would be the most comprehensive as it includes all the other options (mires, bogs, fens).

The references will be used. It takes time to read the papers before.

A very superficial treatment of trends in freshwater biodiversity. Most of the section describes biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

This is obviously still under construction, but neither of the alternatives is good. Peatlands would be the most comprehensive as it includes all the other options (mires, bogs, fens).

The references will be used. It takes time to read the papers before.

A very superficial treatment of trends in freshwater biodiversity. Most of the section describes biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

This is obviously still under construction, but neither of the alternatives is good. Peatlands would be the most comprehensive as it includes all the other options (mires, bogs, fens).

The references will be used. It takes time to read the papers before.

A very superficial treatment of trends in freshwater biodiversity. Most of the section describes biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

This is obviously still under construction, but neither of the alternatives is good. Peatlands would be the most comprehensive as it includes all the other options (mires, bogs, fens).

The references will be used. It takes time to read the papers before.

A very superficial treatment of trends in freshwater biodiversity. Most of the section describes biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

This is obviously still under construction, but neither of the alternatives is good. Peatlands would be the most comprehensive as it includes all the other options (mires, bogs, fens).

The references will be used. It takes time to read the papers before.

A very superficial treatment of trends in freshwater biodiversity. Most of the section describes biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

This is obviously still under construction, but neither of the alternatives is good. Peatlands would be the most comprehensive as it includes all the other options (mires, bogs, fens).

The references will be used. It takes time to read the papers before.

A very superficial treatment of trends in freshwater biodiversity. Most of the section describes biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

This is obviously still under construction, but neither of the alternatives is good. Peatlands would be the most comprehensive as it includes all the other options (mires, bogs, fens).

The references will be used. It takes time to read the papers before.

A very superficial treatment of trends in freshwater biodiversity. Most of the section describes biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

This is obviously still under construction, but neither of the alternatives is good. Peatlands would be the most comprehensive as it includes all the other options (mires, bogs, fens).

The references will be used. It takes time to read the papers before.

A very superficial treatment of trends in freshwater biodiversity. Most of the section describes biogeographical patterns (not trends) and could be reduced to allow much more detail on freshwater biodiversity.

This is obviously still under construction, but neither of the alternatives is good. Peatlands would be the most comprehensive as it includes all the other options (mires, bogs, fens).

The references will be used. It takes time to read the papers before.
Information presented incomplete and biased towards Russia. To be completed for grey literature with help of three members of our team from CA region.

We have added more evidences.

The causal link with climate change remains unsubstantiated, at least as here presented. Changes in herbivore distribution could equally explain the pattern. We removed this figure.

A description of the method used should be included.

Since comparative figures are nowhere provided for other ecosystems, this figures do not provide a perspective. How many percent of all the ECA mammals is that? With an estimated 25 000 plant species in the

Peatlands section has been re-written for the SOD

One might add here that in Germany there was indeed originally a large area of peatland, but most of it has been destroyed for agricultural land use and turf (flower soil) production.

Projections not trends: delete?

Thank you

Newbold et al. (2016 Science) have estimated how land use and related pressures have affected the Biodiversity Intactness Index (BII; = mean relative abundance of originally-present species relative to an unimpacted baseline) if that is everything there is to know on peatlands, then I wonder whether we need them. BD is a major issue, since ... species - but not high BD as such. Data should be easy to provide.

A temporal axes is entirely absent and it remains unclear how much there was in 1950? Either provide data or make knowledge gap explicit. Peatlands section has been re-written for the SOD

If that is everything there is to know on peatlands, then I wonder whether we need them. BD is a major issue, since ... species - but not high BD as such. Data should be easy to provide.

A temporal axes is entirely absent and it remains unclear how much there was in 1950? Either provide data or make knowledge gap explicit. Peatlands section has been re-written for the SOD

You are right, thus the effect of climate change on biodiversity seems to be not so important. See the

To be more clear, the various forest types are now separated in sections on Temperate, Mediterranean and subtropical forests.

To be more clear, the various forest types are now separated in sections on Temperate, Mediterranean and subtropical forests.

Thank you for the references. ILK is being addressed throughout the chapter

To be completed for grey literature with help of three members of our team from CA region.

You are right, for example, Mediterranean region is more diverse. That's reflected in other chapters.

You are right, for example, Mediterranean region is more diverse. That's reflected in other chapters.

You are right, also, the importance of drivers is expressed in the form of table where climate change is

You are right, also, the importance of drivers is expressed in the form of table where climate change is

The methods were added.

‘shading... eliminates vegetation’ - reference? And surely not all vegetation. If it comes from Laine et al 1995, then it refers to shading excluding the original mire species, not all vegetation.

The methods were added.

The methods were added.

If you are reading a National Forest Inventory, who is it to know them? You are right, also, the importance of drivers is expressed in the form of table where climate change is

Other references to peatland ecosystem services include e.g. Kimmel, K. & Mander, Ü. 2010. Ecosystem services of peatlands: Implications for restoration. Progress in Physical Geography 34: 491–514.; Bonn, A., Holden, J., Ministers, Copenhagen.

Peatlands section has been re-written for the SOD

Peatlands section has been re-written for the SOD

Thank you

The methods were added.

Climate models and identify ways of mitigation, but there is no indication of how the baseline data for this will be procured, nor does there seem to be an explicit strategy for it. Ecologically (overall biodiversity) oak forests are

You are right, thus the effect of climate change on biodiversity seems to be not so important. See the

You are right, thus the effect of climate change on biodiversity seems to be not so important. See the

Thank you

You are right, thus the effect of climate change on biodiversity seems to be not so important. See the

Thank you

You are right, thus the effect of climate change on biodiversity seems to be not so important. See the

You are right, thus the effect of climate change on biodiversity seems to be not so important. See the

Thank you

You are right, thus the effect of climate change on biodiversity seems to be not so important. See the

Thank you
There is no temporal sequence provided for the changes described; there is a reversal of the trend described for 1980s. This should be clarified and made consistent across the assessment. The information is partly more relevant for forests.

These references have to be assessed. The information is partly more relevant for forests.

The statement is correct and added into the text. Need to be referenced.

A description of the method used should be included. This effect is missed and should be added, if any relevant sources will be found.

This statement contradicts the authors. It might sound in that way, therefore it was rewritten

Reference(s) needed.

It was rewritten

This information should be added to the chapter. It needs to find data.

This paragraph does not highlight any one sentence, but rather provides general information.

The methodology will be described at the separate part.

It might make sense to restrict the map to the ECA area. Also, there is no reference to this differentiated classification at all in the text. Does the differentiation correspond to different levels of diversity? Are they of any BD or ES relevance? If so, this needs to be spelt out to help formulate conservation priorities, if not, use a much simplified map.

The statement is correct and added into the text. Need to be referenced.

This part is important because no consent in literature of influence of human activities on heathlands.

The methodology will be described at the separate part.

The impact of agricultural expansion and intensification, as well as peri-urban expansion, should likely be listed in the list of pressures. The table cannot list all pressures and may not actually list the most important pressures in the table, but possible in the list. Needed in more references.

The statement is correct and added into the text. Needs to be referenced.

It was rewritten

The map should be adopted for the region and biomes should be in compliance with the text.

It was rewritten

It was rewritten

It was rewritten

It was rewritten

It was rewritten

The map should be adopted for the region and biomes should be in compliance with the text.

It was rewritten

It was rewritten

It was rewritten

It was rewritten

It was rewritten

Thorns Bros (2018) give a good overview. It is good to see some figures, but it should be clarified whether the figures refer to vascular plants, and what Central Asian endemics are (and especially if they are restricted to the Tauge scrublands), what the relationship to the Georgian Shibliak-vegetation is and also what the exact location and extent of this vegetation type are (map).

It was rewritten

The methodology will be described at the separate part.

A description of the method used should be included.

The statement is correct and added into the text. Needs to be referenced.

The map should be adopted for the region and biomes should be in compliance with the text.

It was rewritten

This information does not belong to this chapter. It needs to be deleted.

It was rewritten

Thorns Bros (2018) give a good overview. It is good to see some figures, but it should be clarified whether the figures refer to vascular plants, and what Central Asian endemics are (and especially if they are restricted to the Tauge scrublands), what the relationship to the Georgian Shibliak-vegetation is and also what the exact location and extent of this vegetation type are (map).

It was rewritten

The methodology will be described at the separate part.

A description of the method used should be included.

The statement is correct and added into the text. Needs to be referenced.

The map should be adopted for the region and biomes should be in compliance with the text.

It was rewritten

This information does not belong to this chapter. It needs to be deleted.

This information does not belong to this chapter. It needs to be deleted.

It was rewritten

It was rewritten

This statement contradicts the authors. It might sound in that way, therefore it was rewritten

Reference(s) needed.

It was rewritten

It was rewritten

This statement contradicts the authors. It might sound in that way, therefore it was rewritten

Reference(s) needed.

This statement contradicts the facts. It was specified in the indicator table.

This effect is missed and should be added, if any relevant sources will be found.

What is meant by "extensive forest management"; at L. 1518 "agricultural intensification" is used. Rewording or explanations would be helpful.

The methodology will be described at the separate part.

The map should be adopted for the region and biomes should be in compliance with the text.

It was rewritten

This information does not belong to this chapter. It needs to be deleted.

This effect is missed and should be added, if any relevant sources will be found.

The methodology will be described at the separate part.

The map should be adopted for the region and biomes should be in compliance with the text.

It was rewritten

This information does not belong to this chapter. It needs to be deleted.

The methodology will be described at the separate part.

The map should be adopted for the region and biomes should be in compliance with the text.

It was rewritten

This information does not belong to this chapter. It needs to be deleted.

The methodology will be described at the separate part.

The map should be adopted for the region and biomes should be in compliance with the text.

It was rewritten

This information does not belong to this chapter. It needs to be deleted.

The methodology will be described at the separate part.

The map should be adopted for the region and biomes should be in compliance with the text.

It was rewritten

This information does not belong to this chapter. It needs to be deleted.

The methodology will be described at the separate part.

The map should be adopted for the region and biomes should be in compliance with the text.

It was rewritten

This information does not belong to this chapter. It needs to be deleted.

The methodology will be described at the separate part.

The map should be adopted for the region and biomes should be in compliance with the text.
we will check the chapter one and harmonize the subregion codes using the same criteria, that is based on literature review.

Table 3.19: need revision, among others things, e.g. alpine grassland is not necessarily dry; azonal/extrazonal may need more specification and examples

Again, this very descriptive. Heathlands are spectacularly poor in vascular plant species - it must be possible to find some figures for mosses, lichens, invertebrates in order to compare them to those of other habitats. Claiming that the term "heath" is usually used to refer to these grassland types, i.e.: 3.3.2.3.4 = 3.3.2.3.4 Savannas and natural grasslands (e.g. xeric grasslands, alpine grasslands, steppes, etc.)

we will check the chapter one and harmonize the subregion codes using the same criteria, that is based on literature review.

In chapter two.

there is no approximation of the area affected relative to the overall area of the biome, or whether it is more relevant to one subregion or the other.

we will check the chapter one and harmonize the subregion codes using the same criteria, that is based on literature review.

Majority of drivers are relevant to the whole region. The last drivers need to be specified by subregions.

the term "heath" is usually used to refer to these grassland types, i.e.: 3.3.2.3.4 = 3.3.2.3.4 Savannas and natural grasslands (e.g. xeric grasslands, alpine grasslands, steppes, etc.)

Majority of drivers are relevant to the whole region. The last drivers need to be specified by subregions.

Again, this very descriptive. Heathlands are spectacularly poor in vascular plant species - it must be possible to find some figures for mosses, lichens, invertebrates in order to compare them to those of other habitats. Claiming that the term "heath" is usually used to refer to these grassland types, i.e.: 3.3.2.3.4 = 3.3.2.3.4 Savannas and natural grasslands (e.g. xeric grasslands, alpine grasslands, steppes, etc.)

we will change (and montane grasslands will be invested in the section on mountain ecosystems).

There is no approximation of the area affected relative to the overall area of the biome, or whether it is more relevant to one subregion or the other.

we will change (and montane grasslands will be invested in the section on mountain ecosystems).

we will try discuss it with other section authors.

we will change (and montane grasslands will be invested in the section on mountain ecosystems).

we are not agree. Stages are go defined and delimitation between stapes and other types of grasslands is not simple. "Semiarid" terms also include strips of grasslands having certain ecological characteristics, such as growing out a global classification scheme. In our case only natural grasslands are actually presented.

we are not agree. Stages are go defined and delimitation between stapes and other types of grasslands is not simple. "Semiarid" terms also include strips of grasslands having certain ecological characteristics, such as growing out a global classification scheme. In our case only natural grasslands are actually presented.

we are not agree. Stages are go defined and delimitation between stapes and other types of grasslands is not simple. "Semiarid" terms also include strips of grasslands having certain ecological characteristics, such as growing out a global classification scheme. In our case only natural grasslands are actually presented.

we are not agree. Stages are go defined and delimitation between stapes and other types of grasslands is not simple. "Semiarid" terms also include strips of grasslands having certain ecological characteristics, such as growing out a global classification scheme. In our case only natural grasslands are actually presented.

we are not agree. Stages are go defined and delimitation between stapes and other types of grasslands is not simple. "Semiarid" terms also include strips of grasslands having certain ecological characteristics, such as growing out a global classification scheme. In our case only natural grasslands are actually presented.

we will try discuss it with other section authors.

we will try discuss it with other section authors.

we will try discuss it with other section authors.

we will try discuss it with other section authors.

we will try discuss it with other section authors.

we will try discuss it with other section authors.
Studies on the relevance of changes in hedgerow management include: Changes in hedgerow floral diversity over 70 years in an English rural landscape, and the impacts of management (Staley et al., 2013 Biological Conservation). Must be supported by evidence.

This section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

The section has been reformulated and merged with tundra and high mountain grasslands, so it's called Tundra and Mountain Grasslands (long high elevation grasslands).

This section is completely re-written for SOD.
3.3.3. General trends of taxa

This section (which is not numbered) focuses only on coverage of protected areas in relation to KBAs, IBAs and AZEs. Consideration (here or elsewhere) of their importance in relation to ecosystem type, policy (particularly under Natura 2000), and various drivers, e.g. climate change, is essential. However, it has to be acknowledged that Natura 2000 that are indigenous and local community "sacred sites" could also be considered as "protected areas", e.g. Kalkanbek Sezdbek and Aibek Samakov (2016). Regional Assessment Report on Biodiversity and Ecosystem Services for Europe and Central Asia Comments external review first order draft - Chapter 3

Douglas Nakashima

Harald Pauli

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germany

Germa
We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.

We included a general reference to IUCN in regard to use of gain insights on bird trends and threats.
Chapter 3

3.3.3.6. Invertebrates
We are not quite sure to understand the comment. Please specify.

Here and elsewhere pesticides are completely omitted from the causes of the loss of biodiversity. Either this phenomenon is here shamefully hidden under "pollution", which I beleive to be incorrect, or it has been compeltely overlooked. Especially for amphibians pesticides likely are a major factor for their decline. If the authors disagree, they should spell it out.

Germany

It should be allso added. Needs to find references.

Thomas Breids

sturgeon, and wrasses it can be expanded comprehensively across the ECA region (because these taxa have been globally assessed).

Germany

Clarifications have been included. Line 3322.

I would expect eutrophication to have a catastrophical effect, and pesticide run-off. This should be spelt out here. Especially in more arid countries, this will compound the water removal etc.

Germany

Locally, there are some reports that some amphibian species are collected from the wild. However, in light of the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fairly constrained by the size of the map we can include. A link is provided to the site where an interactive map of Threatened species is presented. We think that such information is more relevant than the other threats hunting remains across the ECA limited and the impact on population size fa...
I am not sure why these species are highlighted here—probably because of their flagship function, but I wonder if this is the right publication to name any subjective priorities. It is evident that invertebrates are completely

Refer to “mean abundance of species” rather than “mean species abundance” because the latter is also used to refer to the GLOBIO model, where it has a different specific meaning.

Thank you again. But also this section needed some shortening without losing important information.

In legend to Figure 3.43, clarify baseline = 1

Excellent section! I wonder if it would be worth moving this section up to become the introduction to Section 3.3.3, given that it integrates data from across all taxonomic groups, where these are available ECA-wide?

Some studies report how global changes in climate are affecting the predictive capacity of local populations:

Under section 3.4.1 Introduction (Page 116, Line 3306), add the following information before 1st paragraph (starting with sentence: Quantifying the effects of direct and indirect drivers on biodiversity and ecosystems has triggered...): Critical processes at the ecosystem level influence plant productivity, soil fertility, atmospheric chemistry, and many other local and global environmental conditions that ultimately affect human welfare. These ecosystem processes are controlled by both the diversity and identity of the plant, animal, and microbial species living within a community. Human modifications to the existing community in an ecosystem as well as to the collective biodiversity of the earth can therefore alter ecological functions and life-support services that are so vital to the well-being of human societies. Substantial changes have already occurred, especially local and global levels of biodiversity. The primary cause has been widespread human transformation of our highly diverse natural ecosystems into relatively species-poor managed ecosystems. Such reductions in biodiversity can alter both the magnitude and the stability of ecosystem processes, especially when biodiversity is reduced to the few top trophic levels of many managed systems. Reference(s): Ecological Society of America (2008) Biodiversity and Ecosystem Function. Maintaining Natural Life Support Processes. Issues in Ecology. 6: 199-199, Washington, DC: Ecological Society of America.

We have shortened and reworded to simplify the language

A useful and accurate table.

This section overlaps with previous sections to the extent that some information is repeated. It could perhaps be included in an introductory section to the sections on various taxa (from mammals onwards) with repetition and selective focus.

Another section that is much more complete than most. Some reduction in length would be sensible (e.g. delete lines 3070-3071).

Some of these species in groups having at least 90% of described species assessed, it is explained in the preceding sentence of this section.

In Table 3.4.2.3.2 it has been revised to ecosystem intactness

It should read: The whole kingdom Mycota is divided in three sections.

These are the species in groups having at least 90% of described species assessed, it is explained in the preceding sentence of this section.

Great suggestions, which we have followed, court is back to the intro to the section.

Thank you for the reference and suggestions. We feel this is more relevant for the section relating biodiversity with ecosystem functioning (Section 3.4).

This was deleted

Thank you, we decided to move this info to chapter 1 however

as a whole title has a stronger ring through the chapter and are referred to in the next paragraphs

We have shortened and renumbered to simplify the language

under section 3.4.2.4 Ecosystem function & structure: I expect this section aims to answer to “General trends in ecosystems .... and ecosystem changes” ? Better to say Trends of ecosystems functions and structures

We have removed the confidence language. The final document will have a complete reference list

these are past changes but we'll ensure that these references are captured

these are past changes but we'll ensure that these references are captured

Thank you for reviewing the first draft of this document. Chapter 3 has been revised.
Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.

Chapter 3

The section on values has been removed from chapter 3. Elements of this text are in chapter 1 and all comments received have been considered in the revised text.