Identifying sites that contribute significantly to the global persistence of biodiversity (Key Biodiversity Areas):
Criteria and Delineation Workshop report

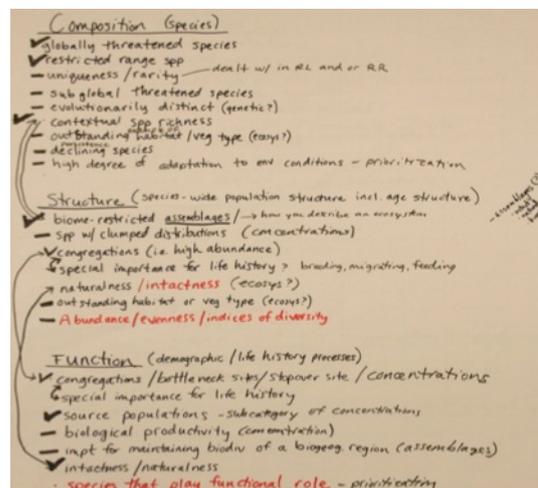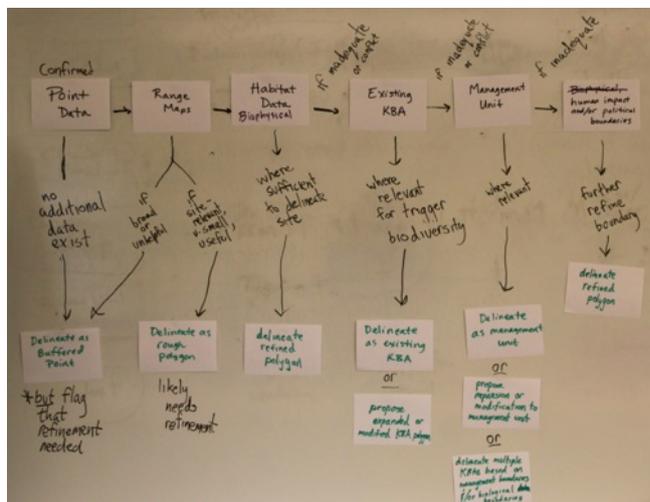**Front Royal, Virginia, USA   11 – 14 March 2013**

Identifying sites that contribute significantly to the global persistence of biodiversity (Key Biodiversity Areas): Criteria and Delineation Workshop report

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IUCN World Commission on Protected Areas and Species Survival Commission Joint Task Force on Biodiversity and Protected Areas

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EXECUTIVE SUMMARY

In 2009 the IUCN World Commission on Protected Areas and IUCN Species Survival Commission established a joint taskforce on Biodiversity and Protected Areas. One of the two objectives of this taskforce is to convene a consultation process to consolidate scientific criteria and methodology to identify sites of global significance for biodiversity (a.k.a. Key Biodiversity Areas). These criteria will support national and regional processes in identifying important sites within their jurisdiction and will help national government agencies, decision makers, resource managers, local communities, the private sector, donor agencies, and others to target the implementation of site conservation safeguards. They will also contribute to the fulfilment of Target 11 of the new CBD Strategic Plan, which requires the identification of "areas of particular importance for biodiversity."

Following the recommendations of a framing workshop held in June 2012 in Cambridge, several workshops addressing various technical themes took place in 2013. This report covers the "Criteria and Delineation" technical workshop held 11-14 March 2013 in Front Royal, Virginia, USA.

This workshop had two main objectives. The first was to develop draft criteria for Key Biodiversity Areas (KBAs) that span the genetic, species and ecosystem levels of biodiversity and can be applied for all regions, biomes and taxa and that build on existing criteria in pragmatic ways. The second was to provide guidance on the delineation of KBAs to increase the consistency and repeatability of the delineation process.

Criteria

The workshop proposed four criteria for the identification of KBAs. To qualify as KBA a site must contribute significantly to the global persistence of one of the following:
   A. Threatened biodiversity
   B. Geographically restricted biodiversity
   C. Biodiversity through outstanding ecological integrity
   D. Outstanding biological processes

The **threatened biodiversity** criterion (A) identifies sites contributing significantly to the persistence of:
   1) Taxa that are formally assessed as globally threatened or expected to be classified as globally threatened once their risk of extinction is formally assessed; or nationally/regionally endemic taxa that have not been formally globally assessed but have been nationally/regionally assessed as threatened; OR,
   2) Ecosystems that are formally assessed as globally threatened or expected to be classified as globally threatened once their risk of collapse is formally assessed.

The **geographically restricted biodiversity** criterion (B) identifies sites contributing significantly to the persistence of:
   1) Species with ranges that are permanently or periodically geographically restricted, or highly clumped populations, or which occur at few sites; OR,
   2) Assemblages of species with geographically restricted ranges in centers of endemism or genetic distinctness; OR,
   3) Ecosystems with geographically restricted distributions or which occur at few sites.

The **ecological integrity** criterion (C) identifies sites contributing significantly to the global persistence of biodiversity because they are exceptional examples of ecological integrity and naturalness, as represented by:

1) Intact species assemblages, comprising the composition and abundance of native species and their interactions, within the bounds of natural ranges of variation; OR,
2) The most outstanding places, within biogeographic regions, of relatively intact:
    a) regionally distinct species assemblages with high contextual species richness; OR,
    b) regionally distinct, contiguous areas of ecosystem and habitat diversity.

The **outstanding biological process** criterion (D) identifies sites contributing significantly to the persistence of:
1) Evolutionary processes of exceptional importance in maintaining biodiversity or driving rapid diversification; OR
2) Species at key stages in their life-cycles, such as those which are migratory or congregatory, as indicated by high relative abundance; OR,
3) Ecological processes of exceptional importance in maintaining biodiversity.

All sites should be assessed against all the criteria, but meeting any one of the criteria is enough to qualify a site as a KBA. The specific thresholds that quantify globally "significant" for each of these criteria will be discussed at the thresholds technical workshop in Dec 2013 to be hosted by Sapienza University of Rome.

Delineation
The working group on delineation developed a list of key data layers that can aid in the delineation process. The group used 3 hypothetical case studies representing diverse decision contexts to help clarify the steps required in KBA delineation, and in particular, to clarify situations in which it may be useful to incorporate non-biological data in the delineation process to obtain sites that are "potentially manageable". After much vigorous discussion, the group reached the following points of agreement:

1) Delineation is a process that requires guidance, rather than rigid prescription. There is not one model.
2) There is considerable experience and documentation to build on for global guidance (e.g. IBA, EBSA).
3) Delineation should occur in collaboration with all relevant stakeholders. Stakeholder selection is contextual to scale and region. Where site delineation overlaps with areas owned, occupied, managed or claimed by indigenous peoples, the principle of free prior and informed consent (FPIC) should be observed when implying or recommending that those sites be managed for biodiversity. (Stakeholders definition will be included in a glossary under development).
4) Biodiversity that is triggered by the criteria should be mapped using the best available information, including traditional knowledge. Step 1 is always biological mapping. This mapping should be retained for reference. Step 2 will work toward developing boundaries that best increases the likelihood of persistence of biodiversity for which the site is important. In Step 2, the biological map will always be considered as an option for the KBA boundary.
5) Biological/Ecological information is necessary, but not always sufficient, to map useful KBA boundaries. We need to recognize both biological and management complexity in defining useful, practical boundaries for KBAs. For example, areas of high biodiversity with multiple overlapping species polygons, species with large home ranges, and areas of continuous habitat, are not easily mapped biologically and need practical solutions.
6) Boundaries should be informed by management considerations, land tenure and customary rights where demanded by site-based realities and practicalities (e.g., political boundaries, linguistic boundaries, other land uses.). The reason for this is that the aim for KBA delineation is beyond "mere" identification. It aims to delineate areas that have the best chance to increase the likelihood of persistence of biodiversity for which the site is important.

7) KBA boundaries should aim to minimize the amount of additional land added that is not relevant to the persistence of biodiversity features. KBA delineation should aim to identify sites that have the potential to be effectively managed. Where data deficiency precludes the identification of biological units, then the precautionary principle should be applied to ensure sufficient area is considered.

8) The KBA delineation Guidance document will include illustrative case studies for each criterion.

9) Each KBA should contain a regional context statement, e.g. whole area is high conservation value or only the riparian forest strips within the area are of importance for the species.

10) Delineation of KBAs should always be considered as iterative and there is a requirement for adaptive learning. Delineation may change over time for the same feature (due to climate change impacts, improved data, changes in species status, etc.). The cartography and documentation around delineation decisions should highlight the level of confidence around KBA boundaries.

Ad hoc working groups

Several *ad hoc* working groups addressed specific questions and issues that arose during the workshop. These included how and whether to incorporate viability into the criteria and delineation of KBAs and what should be the minimum data standards for KBAs. The *ad hoc* working group on viability recommended that (1) viability inform the identification of KBAs and should guide prioritization, (2) the relative viability of biodiversity feature(s) for which the site was identified should be documented, and (3) relative viability should inform the definition of thresholds. The *ad hoc* working group on KBA documentation developed a recommended list of required and optional data fields that should be recorded for each KBA in the identification process. This working group also brainstormed communication tools and needs around the KBA identification process, both for groups doing the assessment and those that may use the data (i.e., end users).

Next steps

Several topics were raised during the week that will be treated through different processes. These include thresholds of significance, further consultation with experts on genetic biodiversity, detailed guidelines for delineation, and end use applications of KBA data. The workshop participants expressed a need to reconcile existing site identification systems with the new standard, develop a nomenclature that works well in the three IUCN languages, keep the criteria and delineation simple and pragmatic, and develop a glossary/language for the layperson.

The results of this workshop will inform the remaining technical meetings and working groups (on thresholds, governance, end use applications, and marine) and will be incorporated into the methodology for the new KBA standard in 2014.

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1. INTRODUCTION

From 11th to 15th of March 2013, a Technical Workshop on Criteria and Delineation for Key Biodiversity Areas (KBA) was held at the Smithsonian-Mason School of in Front Royal (USA). This is the first of several technical workshops that took place in 2013, following the recommendations of the KBA Framing workshop held in June 2012 in Cambridge (workshop report available at https://cmsdata.iucn.org/downloads/framing_workshop_report_2012.pdf).

Experts on plants, fungi, vertebrates and invertebrates, as well as on terrestrial, marine, and freshwater ecosystems, were invited to this workshop. These included individuals from several IUCN Members and Commissions as well as IUCN Secretariat. In total 40 participants from 31 different organizations and 16 countries came together for four days to discuss and agree on two key issues:

1. Develop new KBA criteria that span the genetic, species and ecosystem levels of biodiversity and can be applied for all regions, biomes and taxa, building on existing criteria in pragmatic ways;
2. Provide guidance on the delineation of KBAs to increase the consistency and repeatability of the delineation process.

The workshop comprised a number of combined plenary and break-out sessions designed to address these key questions and additional issues that emerged during the workshop and needed further clarification or recommendations. These included topics such as minimum standard documentation for sites and viability as a consideration in KBA identification and delineation.

The first evening of the workshop (Monday 11 March) was dedicated to the welcoming and introduction of the participants, presentation of the KBA consultation process, and clarification of expectations for the KBA consultation process in general and for the criteria and delineation workshop in particular.

On the second day (Tuesday 12 March), the participants split into three working groups focused on criteria. Each working group discussed in detail one level of biodiversity—genetic, species or ecosystem—and evaluated existing criteria with respect to composition, structure, and function for that given level of biodiversity. They identified gaps and suggested changes to existing criteria or potential additional criteria. At the end of the day, each working group reported back in plenary.

On the third day (Wednesday 13 March), after a summary of the previous day, the participants split into two main working groups: one dedicated to KBA criteria and one on delineation. Several ad-hoc sub-groups addressed emerging issues as they appeared during the discussions, such as viability and minimum standard documentation for KBAs.

On the last day (Thursday 14 March) of the workshop**,** the two working groups on criteria and delineation finalized their recommendations and reported back in plenary, and the next steps were agreed.

On Friday 15 March, the participants took an optional guided tour around the Smithsonian-Mason School of Conservation's property, where they had the opportunity to see several endangered species housed at the facility, such as maned wolf, cheetah, cranes, Przewalski's horse and more, while learning about research being conducted at the Smithsonian Conservation Biology Institute.

2. WORKING GROUP ON GENETIC LEVEL CRITERIA

On the first full day of the workshop, participants divided into 3 working groups to discuss issues of KBA criteria. All three working groups were asked to consider elements of composition, structure and function when discussing development of KBA criteria for the genetic, species, and ecosystem levels of biodiversity. The genetic working group discussed how the existing KBA criteria should be modified to better address the genetic level of biodiversity.

2.1 Main points of discussion

Genetics is relevant at several levels of organisation:
- Ecosystem level: Meta genomics (genetic material recovered from environmental samples)
- Species level: Inter-species/Phylogenetic genetic diversity
- Population genetic diversity: Infra-species genetic diversity
  Adaptive genetic diversity
  Evolutionary Significant Unit (ESU)

The genetic unit is the "Evolutionary Significant Unit – ESU".

It is important to maintain the capacity of adaptation to future change.

Sub-populations can be defined through differences in morphology, behaviour, culture, genetics, geography, and ecology.

Genetic can be either a biodiversity feature in itself (for example in the case of Crop Wild Relatives) or a tool for considering additional data on species and ecosystems. Some clear guidelines might be needed regarding when to use the genetic level to identify KBAs.

Approaches below the species level might be a way to address taxonomy uncertainty (cryptic species or regions of the world where taxonomy has not been revised).

KBA criteria can include both direct genetic measurement and proxy or rules of thumb, such as areas that have been isolated for a long time.

Potential genetic input into the draft criteria:
A. **Threatened infra-specific diversity:** Most infra-specific information is not backed up by genetics now, but that might change in the near future.
B. **Geographic restricted infra-specific diversity:** historical refugia (with a high likelihood of high genetic diversity) might be a good surrogate. Current refugia would be picked up by geographically restricted or threatened criteria.
C. **Ecological integrity:** Two genetic considerations here:
   a. Ecological function of infra-specific units, such as the examples of the army ants or of a pine tree sub-species, which is the dominant tree of its ecosystem and is vulnerable to a scale insect. If this sub-species disappears, the whole ecosystem collapses.
   b. Adaptive potential or adaptive genetic diversity, where some sub-populations have a set of genetic material highly adapted to specific conditions
D. **Biological processes:** metagenomics is an interesting tool to measure contextual diversity

Case study: Army ant – 300 species are related to one sub-species, so if this sub-species goes, then this might have a cascade impact.

2.2 Decisions taken

Wording and definitions:
- The wording "genetic biodiversity" should be used instead of "genes".
- Users should not be required to look to another place to search for the definition of criteria's words (such as Endemic Bird Areas)
- Definition of global persistence of biodiversity (including both preventing loss, e.g. species extinction and reversing decline, e.g. population or habitat) is required.
- Consistent definitions are needed between the different IUCN knowledge products, therefore the definition of the Red List of Threatened Species of population and sub-populations should be used (Population (*sensu* IUCN) is the whole species and sub-populations (*sensu IUCN*) are geographically and otherwise distinct groups).

Considerations for the KBA User Guidelines document:
- **Only biodiversity needing site conservation** – the guidance document should ensure that sites are identified only for biodiversity features that DO require site conservation.
- **Selecting sites across the range/extent** - A network of sites should be chosen to protect adequately the relevant biodiversity features (See IBA guidelines for reference). This is a good way of accounting, in an indirect way, for the genetic diversity of the biodiversity feature of concern and captures to some extent population viability. Furthermore, with the genetic tools, it is possible to identify the sites that are the most different from each other and select them.

Features considered:
- **Evolutionary history or phylogenetic** (such as EDGE species) are considered through the interspecies genetic level. If they are threatened, they will be considered under Criteria A, otherwise, there is no specific need to include them.
- **Phylogenetic diversity**: if the population of a unique clade is rare, it is captured under the geographically restricted criteria, if it is widespread, then it doesn't need to be protected by a KBA. However, such considerations might be included in the prioritization process.
- **Rare species** - If a rare species is widely distributed, then KBAs are probably not the best way to address their conservation, so rarity should not be included in the criteria.

Other considerations:
- A **climate change case study** should be developed by the application working group in collaboration with the IUCN Climate Change Specialist Group.

2.3 Additional issues to be further discussed

- Ecological function
- Population genetic diversity – Crop-Wild Relatives/domestic/harvested species
- Adaptive genetic diversity – ESU
  - Importance relative to Climate Change (need a discussion with the IUCN Climate Change Specialist Group)
  - Crop-Wild Relatives
- Follow-up with the ConGRESS meeting

3. WORKING GROUP ON SPECIES LEVEL CRITERIA

This working group discussed application of the KBA criteria to the species level of biodiversity. Since most of the existing criteria focus at the species level, this working group discussed in detail whether elements of composition, structure, and function were sufficiently reflected in the criteria.

3.1 Main points of discussion

KBA criteria need to be quantifiable or subjected to thresholds of significance. Based on the review of existing criteria, three main concepts arise:

Criterion A. Threatened species

As not all species have been assessed in the global Red List of Threatened Species, we need to be able to deal with those that haven't been assessed. There are a number of species threatened at a sub-global level that might trigger global KBAs (e.g. threatened endemics), or maybe "candidate KBAs".

This criterion might not cover all species, but maybe other criteria will do.

The definition of KBAs includes the <u>persistence</u> of global biodiversity, so we need to highlight sites that are important for persistence and not only identify sites that represent threatened biodiversity.

Criterion B. Restricted-range species

Thresholds for restricted range are difficult to set and might be different for various taxonomic groups, but these will be defined by the Threshold Workshop.

Criterion C. Ecological intactness

Intactness/naturalness: The addition of this criterion reflects that the standard will not focus exclusively on sites that are already imperilled, and instead have a proactive dimension by identifying the best examples of functional ecological areas on earth, regardless of their diversity or threatened status.

Contextual species richness: should be differentiated from absolute species richness, as the former does contribute to the global persistence of biodiversity, but not the latter. Furthermore, contextual species richness addresses the issue of data poor regions.

Criterion D. Biological processes

Congregations: can be permanent or temporary.

Source populations: contribute to the global persistence of biodiversity, but requires a lot of information on the species. It sometimes can be considered under congregations, but not always. It might be included in a criterion E (quantitative analysis), if this criterion is developed.

There is also a need to capture centres of origin for species, even if they are not rare or unique, due to their incredible value for agrodiversity and for the persistence of biodiversity.

3.2 Decisions taken

- Intactness (ecological integrity) will be included in the new KBA standard criteria, to allow the KBA methodology to be pro-active in conserving biodiversity.
- Requirements for persistence must be documented and must be taken into account.
- Composition list should be used to choose among sites, but not included in the criteria.
- Source population: should inform the selection of sites, but not be included in the criteria.
- Biological diversity: should inform the selection of sites, but is not included in the criteria.
- Likelihood of success is an issue for prioritization; it should be documented for each site but it is not part of the criteria. Prioritization is a further step.

Additional issues to be further discussed
- Unique phylogenetic diversity.
- What happens to a KBA when the trigger species disappear?
- Maybe there is a need to have a category similar to "Near Threatened - NT", for sites with declining species. This should be addressed by the Thresholds Workshop.

4. WORKING GROUP ON ECOSYSTEM LEVEL CRITERIA

This working group addressed application of the KBA criteria to the ecosystem level of biodiversity.

4.1 Main points of discussion

What are ecosystems?
A few examples of definitions included:
- A) Spatial unit of assessment that can be characterised by the
  - i. Characteristic assemblages of biota;
  - ii. Associated physical environment;
  - iii. Processes and interactions between components (among biota and between biota and environment;
  - iv. Spatial extent.
- B) Any group of co-occurring, interacting species.
- C) Data deficient/hypothetical (abiotic features mapping, such as geology, drainage, slope).

It was recognized that there are enough data and tools to conduct ecosystem level assessments and that looking at ecosystems brings a different or new perspective compared to the genetic or species level, especially in areas where no information is available on species but that are still known to be valuable for biodiversity. It also outlines areas that are important for a variety of assemblages of species (rather than one species alone) and there are management implications that arise from looking at the ecosystem level..

Abiotic components need to be explicitly taken into consideration. It is therefore suggested that abiotic element are classified first, based on uniqueness and irreplaceability. Survey information can be so poor, that there is a great responsibility to capture more of this typology than is typically recognised.

Splitting the landscape into habitat mosaics and unique ecosystems is a good way to conserve the silent genetic diversity that lives across the biogeographic region.

Tools: remote sensing can be used.

An important issue is the scale and clear guidance should be provided on where to draw the line. Another issue to consider is the timescale and how to ensure the global persistence of intact areas over time.

KBAs should draw upon the Red List of Threatened Species and the developing Red List of Ecosystems.

The EBSA (Ecologically and Biologically Significant Areas in the marine realm) process can provide good inputs in developing the methodology, and the criteria and synergies between the EBSA and the KBA processes should be strengthened. In particular, the development of the new KBA standard should not weaken the EBSA process or confuse decision makers. However, some EBSA criteria, such as sites including high biodiversity, might not be relevant for KBAs.

KBAs should be underpinned by the best science at ecosystem/species level.

Ecosystems are good surrogates in situations where species are Data Deficient.

4.2 Decisions taken

- It is important to have definitions that read well across the different languages and that are in line with other IUCN Knowledge Products, such as the Red List of Ecosystems.
- A flexible operational definition of ecosystems is needed.
- A discrete, explicit classification that can be applied at the global level is needed.
- KBAs should include data deficient unique areas that "probably" or "likely" contain key biodiversity components.
- The selection of KBAs for ecosystems should be based on irreplaceability (with the vulnerability of the ecosystem folded into irreplaceability as discussed and agreed during the framing workshop), not on representation.
- The new KBA standard should encompass all realms in their totality and not have different criteria for different biomes.
- The criteria developed are independent from the available information.
- This new standard is not a prioritisation tool
- Size of the area: no minimum size, maximum size is defined by manageability.

Additional topics that require more follow-up:
- Categories of KBAs, including Data Deficient areas

5. PLENARY DISCUSSION ON CRITERIA

The three working groups (genetic, species, ecosystem levels) reported back to plenary on their deliberations. The different aspects of biodiversity (composition, structure and function), suggested by the Framing workshop, were discussed by all working groups, but the decision was taken to omit them in the development of the criteria, since all working groups found these aspects to be confusing.

Issues arising in plenary:
- Need a definition of KBAs that is easily understandable but scientifically defensible.
- How to deal with viability?
- Should we classify data deficient areas as threatened or endangered?
- Different criteria for different realms?
- All criteria applied at once or only one criterion is enough?
- Overlap with other group (viability, assemblages, etc.).
- Would these criteria work for all ecosystems?
- Does a site become a KBA if it meets a criterion for genetic OR species OR ecosystem?
- Should degraded or heavily modified sites that still support significant biodiversity features still be considered KBAs?

Decisions on KBA Category:
- For sites not meeting the thresholds, instead of calling them "non-KBA", a more adequate wording needs to be developed, for example along the line of the Red List categories (i.e. "Low contribution").
- For sites that probably meet the thresholds, but don't have enough information to confirm it (for example, a species that is probably threatened at the global level, but has not yet been assessed in the IUCN Red List), the suggestion is to call them "Candidate KBAs", as Conservation International did.

6. INTEGRATED WORKING GROUP ON CRITERIA

Following the plenary discussion, 5 main criteria are suggested and agreed. Sub-criteria will help qualify the level of details required. Thresholds will also provide much of the further detail required, but are not addressed during this workshop.

In order to strike a balance between identifying the whole planet as a KBA and losing the last remaining species, the definition of the KBA as contributing to the "global persistence of biodiversity" should be kept in mind.

Four criteria are proposed to identify sites contributing significantly to the global persistence of biodiversity. A fifth criterion based on quantitative analysis (like in the IUCN Red List of Threatened Species) has been suggested for further consideration.

6. 1 Proposed criteria

All sites should be assessed against all the criteria, but meeting any one of the criteria is enough to qualify a site as a Key Biodiversity Area.

The criteria suggested are:
- A. Sites contributing significantly to the global persistence of threatened biodiversity
- B. Sites contributing significantly to the global persistence of geographically restricted biodiversity
- C. Sites contributing significantly to the global persistence of biodiversity through their outstanding ecological integrity
- D. Sites contributing significantly to the global persistence of outstanding biological processes

6.2 Criterion A. Threatened biodiversity

Sites contributing significantly to the global persistence of:
1) Taxa that are formally assessed as globally threatened[1] or expected to be classified as globally threatened once their risk of extinction is formally assessed[2]; or nationally/regionally endemic taxa that have not been formally globally assessed but have been nationally/regionally assessed as threatened[3]; OR,
2) Ecosystems that are formally assessed as globally threatened[4] or expected to be classified as globally threatened once their risk of collapse is formally assessed.

Discussions regarding Criterion A
- Taxonomy is a threshold issue. This perhaps does not need to be addressed at the criteria level.
- Taxa: The wording "taxa" is used, rather than "species" to ensure that when relevant, units below the species level are considered (such as sub-species *sensu* IUCN Red List of Threatened Species). However, this will require good instructions in the guidelines on the methods required to justify this choice to avoid misinterpretation and abuse of this criterion. It should be clear that not all infraspecific taxa should trigger sites always. It is recommended that a footnote explaining this is included (why taxa and taxa *sensu* IUCN)
- Candidate sites: one possible category of KBAs, which will be addressed by the threshold workshop. This category is likely to be very important, especially for species that have not yet been assessed globally. The meaning of "candidate" sites might differ between KBAs and EBSAs.
- Non-endemic threatened species, assessed at the regional/national level can be used to trigger national/regional KBAs, but not global ones.
- This workshop recognized that less than 5% of the described species are currently assessed on the IUCN Red List. Therefore national/regional data is also considered, but to ensure the scientific rigor, alternative sources of data must be evidence based methods.
- Noted that there is a lack of clarity concerning ecosystem definitions between countries. Include further details in the KBA User guidelines.
- "Risk of collapse" is understood as per the Red List of Ecosystems definition.
- Ecosystems can provide an important way to identify threatened species that we will never assess.

A2. Plausible threat aligns to EBSA vulnerability, fragility, slow-recovery, sensitivity – potential impact.

6.3 Criterion B. Geographically restricted biodiversity

Sites contributing significantly to the global persistence of:
1) Species with ranges that are permanently or periodically[5] geographically restricted, or highly clumped populations, or which occur at few sites; OR,

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[1] "globally threatened": According to assessments using The IUCN Red List of Threatened Species Categories and Criteria or other equivalent evidence-based process

[2] "taxa anticipated to be threatened once their extinction risk is formally assessed": e.g., single site endemics; taxa likely to be globally threatened but not yet assessed in all of their range

[3] "nationally/regionally assessed as threatened": According to IUCN RL regional guidelines or equivalent evidence-based processes

[4] "globally threatened": According to assessments using The IUCN Red List of Ecosystems Categories and Criteria or other equivalent evidence-based process

2) Assemblages of species with geographically restricted ranges in centers of endemism or genetic distinctness[6]; OR,
3) Ecosystems[7] with geographically restricted distributions or which occur at few sites[8].

Discussions regarding Criterion B

B1:
- Congregation is temporary, whereas concentrations is more permanent
- "which occur at few sites": threshold sizes could be similar to AOO or EOO or number of locations; also e.g., TDWG geographic coding as guidance

B2:
- A threshold of species is required for the assemblages of species
- Difference between criteria B2 and D: B2 criterion captures the processes. Bottle-necks are considered under the criteria D Outstanding phenomena. Outstanding phenomena might be a much higher bar to reach. And B would be range-related regardless of abundance.
- Marine: This links to EBSAs uniqueness or rarity criteria. Areas that contain a large proportion of sensitive habitats, vulnerable, fragile, slow recovery. It is about a potential impact.
- Ecosystems vs. habitats should be addressed in guidelines.
- Requires a way in which a threshold for range size is included to flag narrow distributions.
- Guidelines need to explicit what is meant by range" or "distribution", extent of occurrence, area of occurrence, localities, etc.
- Thresholds should be set relatively high, to focus on features that are truly unique.
- Richness and uniqueness – species complements within centers of endemism, national endemics, contextual species richness.
- Particularly important for data poor taxa – for plants – (TDWG) geopolitical system higher than site level, not national level. It will be important to have people who are familiar with this helping to set the thresholds.
- If a species at any point is geographically restricted at a certain threshold then it should be important. These thresholds are different. Different percentages in different circumstances.

6.2 Criterion C. Outstanding ecological integrity

Sites contributing significantly to the global persistence of biodiversity because they are exceptional examples of ecological integrity and naturalness, as represented by:
1) Intact species assemblages, comprising the composition and abundance of native species and their interactions[9], within the bounds of natural ranges of variation; OR,
2) The most outstanding places, within biogeographic regions, of relatively intact:
   a. regionally distinct species assemblages with high contextual species richness; OR,
   b. regionally distinct, contiguous areas of ecosystem and habitat diversity.

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[5] Seasonal or aseasonal fluctuations, e.g., monarchs, bat hibernacula
[6] This wording need further work, maybe through the ConGRESS meeting in Cardiff in April
[7] "Ecosystems": Ecosystems meaning ecosystems, habitats, etc.
[8] "less than a threshold number of sites": With this threshold being >XXX in (ii) above
[9] Interactions include biotic and abiotic

Discussion Concerning Criterion C

- Definition of ecological integrity. Parks Canada – "characteristic of its natural region and likely to persist, including abiotic components and the composition and abundance of native species and biological communities, rates of change and supporting processes", so intactness protects the community composition, physical structure and supporting ecological processes (e.g. fire regimes).
- Note that pristine does not mean it is not threatened, but that the components within are complete in terms of composition and natural abundance, or as close as you can be to that.
- C1 is about "absolute" intactness (or a naturalness concept), while C2 is about "relative intactness" within a piece of geography. C2 may not be exceptionally intact but are still worthwhile to protect because of their uniqueness or representative function across regions. Both fit under ecological integrity (umbrella concept covering several thing).
- Relative intactness is also relative to what is known and what is available: ideally the most complete assemblage at present But if you have little data, you would use the area large enough to ensure viability of the species assemblage over the long term.
- Top predators as indicators of intactness – relative intactness.
- There are surrogates, species complements, try to select sites that capture as many as possible.
- There is a value here to the species assemblage that distinguishes an ecosystem that has many species but they are all going extinct.
- Once again, the thresholds need to be set relatively high.
- Infraspecific diversity should be recognised or captured in this criteria.
- Current or potential relative ecological integrity. Could capture the potential to be restored.
- C1 might trigger huge areas and need some strict guidelines on how to identify and delineate these KBAs.
- **Difference between contextual species richness and biome restricted assemblages:** contextual species richness is more about a limited number of indicators of an area, not necessarily tied to a country, whereas biome restricted assemblages is more linked to an ecosystem, but they might end up being the same.
- Example: IBA – biome was a way to confine to a certain area. Pragmatic, wanted a network of sites, across ranges, not putting all eggs in one national basket. Justification was that this was the only area in which these species occur, let's do this in a systematic way, when this biome occurs, lets capture as many species as we can within the biome. The feeling was, if you were using these as indicators for the wider fauna in the area, they would all also be captured at the same time. Using a set of species to capture the rest.
- Example: freshwater equivalent is freshwater ecoregions. Well defined, distinct, something special and discrete. For any basin that has at least 25% that are only found in that ecoregion would be selected as a KBA.
- Marine: EBSA point of view. There are many areas that are not impacted by man now. However, we need to identify important sites now to prevent them being trashed. Complex, pristine environments. This relates to the EBSA criteria on Naturalness.
- In the case of large intact areas, such as the Amazon Basin, there still are unique assemblages and mixes of ecosystems. Then this is part of the delineation challenge and we should ensure long-term viability.
- This criterion is about being pro-active in the site selection.
- Discussion about the potential that we were trying to include representativeness in this criteria. This is the only time we do this, but we need to be careful about the bounds of the exercise. Not that all biodiversity is represented.
- How will we control for the "best" example? KBAs could sneak in without reassessing other sites. First out of the gate issue? This would be the same for threatened species being

reassessed and not being threatened any more. Not a static system. Needs to be a mechanism to remove KBA status.

- KBA identification over time. There has to be flexibility and iteration, however, not to unstable to inform political processes.
- In the KBA process, it is not clear who is going to be playing this umpire role to ensure that not just any site is identified. This needs to be clarified in the governance workshop.
- Summary of this process: absolute/relative intactness, representativeness / replication, integrity used as a mechanism of getting to intactness and representativeness. Realised that there were pristine areas that need to be KBAs, they are perfectly intact. So we are identifying them not within an ecological region, just wherever they are. Then we have other regions that are not pristine, but are critically representative of ecological regions. How do we identify which ones of those do we pick to represent the best ecological characteristics of a region:
  a) Proxies for ecological regions. Best possible sites that are left based on species richness and assemblages. Has to represent sub-specific variation, to capture where there are distinct populations.
  b) At a larger scale, beyond an ecological region, how do you tie up landscapes in this, across a landscape. Contiguous areas. Representing the whole extent of a system that might not be caught by a).
- Look at dealing with this in absolute terms and relative terms (pick out the best relative examples that are going to represent at regional or larger landscape.

6.4 Criterion D. Outstanding biological processes

Sites contributing significantly to the persistence of:
1) Evolutionary processes of exceptional importance in maintaining biodiversity or driving rapid diversification[10]; OR,
2) Species at key stages in their life-cycles, such as those which are migratory or congregatory, as indicated by high relative abundance; OR,
3) Ecological processes of exceptional importance in maintaining biodiversity[11].

Discussion regarding Criterion D:
- This criterion is not related to size or abundance, but to critical processes – flow, passage, etc. It looks at phenomenon such as bottleneck/pinch point/funnel/particular areas of which there are few other examples that serve this functional need and identifies focal points that are irreplaceable.
- Marine: high relative abundance is related to productivity, migration, breeding and feeding
- Here again, the thresholds should be high to link these processes to the survival of the species.
- It is adapted from Ramsar Criterion 1 (obj 1.2) To give priority in determining suitable sites that play a substantial ecological role in the natural functioning of ecosystems. Provide …high ecological role in the natural functioning of an ecosystem.
- It recognizes interconnectedness
- Outstanding vs. essential. Sites necessary for maintaining a species.

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[10] E.g., Pleistocene refugia and centers of radiation

[11] E.g., primary production, upwelling, habitat provision, hydrological stratification, river delta sedimentation, propagule dispersal, nutrient cycling, nursery functions, pollination, predation, hydrological regulation by *Sphagnum*, etc, for example, in driving high abundance of individuals such as flamingos

6.5 Criterion E. Quantitative analysis

A fifth potential criterion was proposed drawing from the criteria E of the Red List of Threatened Species and of the Red List of Ecosystems. However, contrary to these two Red Lists, KBAs are not about risk, but about other variables. This criterion was not further discussed, or agreed during this workshop. It might be further developed later based on the results of the discussions of the Thresholds Working Group.

6.6 Overarching Issues

Existing criteria schemes:
KBA criteria were developed thinking about other existing criteria scheme and should be mapped to other criteria schemes, ideally with similar wording. They could provide a list of potential sites for international conventions, such as Ramsar, CBD's EBSAs, etc…

KBA User Guidelines document:
It is important to ensure consistency with the wording and definition of the other knowledge products (for example, species, taxa, population, sub-population in the Red List of Threatened Species, risk of collapse in the Red List of Ecosystems, etc.)

Data-Deficient sites:
When new species are found, but their range/threatened status is not yet known (which is a very common occurrence, for example in deep sea research), then the site would not qualify as a KBA, but as Data Deficient. This should be highlighted in the guidelines document.

Candidate KBAs:
This is a category of KBAs, when the existing information suggest that the site might trigger the threshold, but the data is not yet available (for example a species has not yet been assess by the IUCN Red List, but is most likely to be threatened once it is). KBAs category will be addressed by the thresholds workshop.

Other questions:
- What to do with unassessed sites?
- Does a site need to meet just one criterion or more than one (Genes, Species, and Ecosystems): are all criteria primary? Do we have Genes KBAs, Species KBAs, etc. -
- Crop Wild Relatives + Crops + domesticated biodiversity/ freshwater + marine equivalents If just a threat do it through red listing process for important domesticated species also.

7. DELINEATION WORKING GROUP

This working group was tasked with making progress towards increasing consistency and repeatability in the delineation of KBAs and generating guidelines that provide best practices for delineation under a range of conditions.

7.1 Main points of discussion

Delineation - drawing lines on a map – is essential, but is not a linear process; it has many entry points and considerations depending of the context, and on the people drawing these lines.

One group of participants felt that KBAs should be delineated purely based on biological data, without considering data that informs manageability. The boundaries of the site should not be open

to "political" negotiations which could imperil or disadvantage the biodiversity for which the sites are identified. The group felt that manageability should be considered after KBAs have been delineated, perhaps as part of implementing conservation activities, or as part of other conservation planning processes.

A second group of participants felt that delineation should, as a first step, take into consideration the biodiversity/ecological features; a second step would involve looking at other relevant data layers to refine site boundaries, such as land-use, existing protected areas, linguistic boundaries, and local political boundaries. However, the inclusion of socio-economic variables into the delineation should not be used to undermine the delineation of the KBA, or be part of negotiations with stakeholders. The aim is to maximize the likelihood implementation of conservation or management actions by having boundaries that are recognisable or meaningful on the ground. In other cases, incorporating data on manageability allows for delineation to occur in cases where biological or ecological data do not suggest boundaries due to the generation of multiple overlapping polygons extending over a vast region, to data deficiency, or to continuous and undifferentiated habitat. The maps or data layers based on biological features should be maintained for future reference.

Some of the disagreement may have resulted from different understandings of the word 'manageability' and whether manageability implies a need for management. Using the words 'sensible' and 'practical' to guide delineation may be less confusing.

Depending on the geographical scale at which delineation is undertaken (i.e., at the regional, national or local level), the degree of precision and the data available will be different and will influence the delineation process. The relevance of management data will also vary based on scale and context.

7.2 Case studies

The working group facilitator (Stephen Woodley) suggested hypothetical case studies from three different regions to help make the delineation discussion less abstract. Each region had a data poor and a data rich situation, and the three different regions represent a gradient of landscape fragmentation:

	High Human/ High Fragmentation	Medium Human/ Medium Fragmentation	Low Human/ Low Fragmentation
Specific trigger – data poor	Range restricted Lichen found on old growth oak in Virginia	Amphibian found in the canopy of *Adansonia* in Madagascar	Tree Kangaroo found in West Papua in continuous forest. 29 records.
Specific Trigger – data rich	Fresh water mussel found 2 reaches (1km) of a 30 km river. Obligate to river red horse.	Golden-brown mouse lemur in Madagascar. Known home range, food habits, partial distribution data	Multiple red-listed species found on PNG in border areas of 4 linguistic groups and 100 tribes

In smaller groups, participants worked through the case studies and developed a recommended delineation approach. In doing so, the sub-groups were to identify the main delineation considerations and challenges for that particular case study. The objective for the three groups was to clarify how to approach delineation in different situations. The notes from two of these case studies are presented below to represent some of the challenges faced in delineating KBAs.

Lichen case study: A poorly known, range-restricted oak lichen found in Virginia. It has records at only 50 locations, all on private land; however, lichen experts say that if more surveys were done, we might find more locations. The oaks are harvested by farmers. There is one national park. Land-use and vegetation maps are available. In this circumstance, one might delineate sites:

- Based on the management units: overlaying the locations with land-use maps and identify as many KBAs as there are management authorities, say 25 KBAs.
- Based on the biological features: ignoring the land-use and using the biological boundaries to identify a single KBA, including all 50 records. Alternatively, if there is a clear fragmentation of oak woods on the vegetation map, then use this information to identify KBAs in each fragment of the oak woods (yielding perhaps 2 or 3 KBAs).
- Based on modelling: as the records are not very comprehensive, by limiting ourselves to the known records, we might be missing important lichen areas.)

Tree Kangaroo case study: A species of globally threatened tree kangaroo found in continuous forest in the Papua Province of Indonesia, with a range and records extending into Papua New Guinea. There are 29 records. Participants to the sub-working group added additional context, identifying the relevant data available and then discussing possibilities for delineation.

List of considerations:
1. Socioeconomic data: human dependency / resources use (tree kangaroo is eaten) – for rural population in Papua; 70% of population directly on the forest)
2. Political data: Indonesia has a decentralised government; the governor of Papua has a lot of authority; potential tension between national/provincial level, and the community/provincial level. Governance in Papua New Guinea is more centralized at the national level; transboundary cooperation for conservation might be difficult.
3. Local management small tribal groups, with hundreds of languages. (Decided on 500 communities, 200 languages, 30 language groups, and mapped these very roughly)
4. Only 29 locality points for the species, so look traditional knowledge to increase the knowledge of AOO, etc. (10 of the 29 records are very old data – from surveys in the 1880s),
5. Biophysical and ecological data: species lives in upland forest, not in the lowland areas. We don't know if there are barriers to dispersal, but habitat is generally contiguous from mountain top to valleys. The scale is large: 400km east to west.
6. Existing conservation efforts: Two protected areas in this area, but no effective management. Conservation actions are at the community level.

Delineation options:
1. One option is a single, huge, transboundary KBA encompassing the entire known range of the species. This was rejected as being impractical.
2. Restrict the polygons based on the biological data: habitat cover and species requirement such as altitudinal range. For instance, the group selected habitat above 300m.
3. Check which of the sites meet the thresholds.
4. At this point, we would have to decide whether to incorporate data that might support site manageability, such as national and provincial boundaries, language groups, logging concessions, and so on. There was discussion about the level at which delineation was undertaken, and about the groups leading delineation.
5. There was discussion on whether to lump or split sites. For instance, whether to use entire protected area boundaries even where the species is restricted to a small portion of the protected area. Participants supported a precautionary approach, with consideration of the biodiversity features, connectivity, and the local context.

No definite decisions were taken by the group regarding delineation in this case, but various options were weighed carefully.

Lessons Learned from the Case Studies

The case studies served as the basis for a lot of fruitful discussion, and allowed participants to move towards some points of agreement. They also served to illustrate that KBA delineation is not based exclusively or primarily on models; they are based on confirmed presence of biodiversity features.

As decided in the Framing Workshop, KBAs are sites that can be potentially managed to ensure the persistence of the biodiversity feature for which they are identified. This is not to say that the process of KBA delineation prescribes a particular form of management for each site. The aim of this methodology is to be pragmatic and practical. As such, taking into account the sites' "potential manageability" in delineation will support potential safeguard measures to be implemented, with more specific boundaries and actions determined by stakeholders in a subsequent planning stage.

The guidance on the delineation should allow different assessors to generate similar sites and similar boundaries based on given contextual considerations.

7.3. Suggested delineation steps and useful data layers

There are several steps to take when starting a delineation exercise:
1. Identify biodiversity features that meet criteria
2. Define species habitat requirement
3. Identify other existing previously identified sites of significance
4. Identify existing protected areas

The working group brainstormed a list of data/attributes that should be considered in delineation:
locality data*
habitat extent*
existing KBAs
species area requirements*
administrative boundaries
catchments/biophysical data*
range maps*
protected areas
tracking data*
land tenure

* data that can inform the initial biological delineation of sites.

A hypothetical decision tree was presented to the group for consideration:
Point data
Range maps
Existing KBAs? If no, look to
Habitat data
May stop here if sufficient to delineate site
If inadequate or non-existent to define a site, move to:
Management unit (community-based conservation areas, plantations, PAs, etc)
This may be stopping point, if not
Biophysical/political boundaries and measures of human impact in that area
Example: altitudinal data

In some cases, we may end up with a buffered point, though the goal is a delineated polygon

Also, participants suggested that assessors need information on refining biological boundaries to include management. Guidelines should show through case studies and list what types of management units make sense to include for delineation.

Such an approach is more difficult to apply to widespread species, but it is useful to keep in mind that the approach is only meant to be applied for biodiversity features that benefit from site conservation.

Depending on the gradient of fragmented vs. intact (wilderness) areas, the delineation approach needs to be different.

Depending of the context, whether to delineate a single or multiple KBAs in an area of importance could be a question of tactics, but in any case, any KBA will need to trigger the criteria.

A lot of discussion went into defining "manageability" and no satisfactory definition or consensus could be reached. However, a few points have been mentioned:
- Manageability is not constrained to one management regime, there are many different options.
- Several sites with different management requirements might be manageable as a single unit because they all depend of the same management authority (e.g. in a protected area).
- Ongoing need to reconcile terrestrial/marine and freshwater delineation approaches. Current unit for freshwater KBA delineation is sub-catchment.
- Using the words 'sensible' and 'practical' instead of 'manageable' may help resolve confusion.

7.4 Points of agreement

The following points of agreement were reached during the workshop, even though their wording requires further refinement:

1. Delineation is a process that requires guidance, rather than rigid prescription. There is not one model.
2. There is considerable experience and documentation to build on for global guidance (e.g. IBA, EBSA).
3. Delineation should occur in collaboration with all relevant stakeholders. Stakeholder selection is contextual to scale and region. Where site delineation overlaps with areas owned, occupied, managed or claimed by indigenous peoples, the principle of free prior and informed consent (FPIC) should be observed when implying or recommending that those sites be managed for biodiversity. (Stakeholders definition will be included in a glossary under development).
4. Biodiversity that is triggered by the criteria should be mapped using the best available information, including traditional knowledge. Step 1 is always biological mapping. This mapping should be retained for reference. Step 2 will work toward developing boundaries that best increases the likelihood of persistence of biodiversity for which the site is important. In Step 2, the biological map will always be considered as an option for the KBA boundary.
5. Biological/Ecological information is necessary, but not always sufficient, to map useful KBA boundaries. We need to recognize both biological and management complexity in defining

useful, practical boundaries for KBAs. For example, areas of high biodiversity with multiple overlapping species polygons, species with large home ranges, and areas of continuous habitat, are not easily mapped biologically and need _practical_ solutions.

6. Boundaries should be informed by management considerations, land tenure and customary rights where demanded by site-based realities and practicalities (e.g., political boundaries, linguistic boundaries, other land uses.). The reason for this is that the aim for KBA delineation is beyond "mere" identification. It aims to delineate areas that have the best chance to increase the likelihood of persistence of biodiversity for which the site is important.

7. KBA boundaries should aim to minimize the amount of additional land added that is not relevant to the persistence of biodiversity features. KBA delineation should aim to identify sites that have the potential to be effectively managed. Where data deficiency precludes the identification of biological units, then the precautionary principle should be applied to ensure sufficient area is considered.

8. The KBA delineation Guidance document will include illustrative case studies for each criterion.

9. Each KBA should contain a regional context statement, e.g. whole area is high conservation value or only the riparian forest strips within the area are of importance for the species.

10. Delineation of KBAs should always be considered as iterative and there is a requirement for adaptive learning. Delineation may change over time for the same feature (due to climate change impacts, improved data, changes in species status, etc.). The cartography and documentation around delineation decisions should highlight the level of confidence around KBA boundaries.

A process to take these points of agreement and develop practical delineation guidelines, to be reviewed by workshop participants and other interested stakeholders, is underway.

8. AD HOC WORKING GROUP ON VIABILITY

An ad hoc working group looked at viability issues through the 4 criteria and provided guidance on how to deal with viability in the new methodology.

8.1 Main points of discussion

As the definition of KBA agreed upon at the Framing workshop includes "global persistence", rather than "existence", viability needs to be taken into consideration. However, due to some specific situations, where a site with a non-viable population is everything that is left of a species, and should therefore still be identified as a KBA, the concept of "relative viability" should be used. This could also help choosing between potential sites. Conversely a site should not be selected only because it is viable!

There are two options discussed:
1- Relative viability as guidelines
2- Relative viability as a sub-criteria

"Relative" is relative to the site where the feature occurs, it has to be applied at the level of the feature not of the site. It is fine in the guidelines as long as it is applied at the level of the feature. If the feature is only found in one site, then the relative viability is different than if it's in 10 sites. Perhaps have a different threshold depending of the number on sites where the biodiversity feature is found.

Relative viability could be used to limit the number of KBAs or maybe in a second process of prioritization.

The identification of KBA should not consider the prospect of success, some KBAs will be in better condition than others, but if the triggering feature is there, then the site should be considered as KBAs.

8.2 Decisions taken

Relative viability consideration should not prevent identification of sites that can be restored, as restoration is important. This should be explicit in the guidelines. Explicit documentation about the site viability should be requested.

Relative viability will help to prioritise, maybe you can see it that way. You might identify sites that are degraded and you choose the good ones

Viability should be considered at three different levels:
1) **General guidance --** "Relative viability" can inform the identification of KBAs and should guide prioritization. A site has greater potential to contribute "significantly to the global persistence of biodiversity" if its contribution is expected to be higher with respect to other sites where the feature occurs.
2) **Documentation --** The rationale for the selection of a KBA should include information on the relative viability of the biodiversity feature/s for which the site was identified, with respect to other sites. The evaluation of relative viability should be based on the best available knowledge, and could take the form of narrative and/or quantitative analysis[12].
3) **Thresholds setting --** Relative viability should inform the definition of thresholds.

Some methods touch on viability (e.g. Important Plant Areas) through 5 best sites, so probably viability is included in there.

Follow-up at the threshold workshop:
- relative viability should be discussed at the threshold workshop
- replication was discussed (e.g. identifying 2 sites, so that if one get lost, there is at least another one), but the group proposed that replication is more appropriately part of prioritization among KBAs once identified

9. AD HOC WORKING GROUP ON KBA DOCUMENTATION

An ad hoc working group looked at the minimum standard documentation required for each KBA. Sites that have been assessed, but do not trigger the KBA criteria should also be documented, including the biodiversity features that were assessed.

9.1 General Considerations

- The information and documentation required for KBAs should consider information already gathered for sites (e.g, IBAs, EBSA, IPAs, Ramsar)
- The number of proposed KBAs will depend on the thresholds and this will have an implication for data handling

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[12] Subject to projected viability, based on current situation as well as potential impact of future threats and/or management actions**.**

- The more mandatory fields the more expensive and time consuming the process (IUCN Red List and WCPA experience). It might be worthy to look at the minimum documentation standard of existing schemes (such as IBAs, IPAs, AZEs) to see how much effort it requires from assessors.
- Drop-down lists or automatic selection might improve the online submission of KBAs
- Some sites (for example sacred sites) might need confidentiality, and the handling of their data needs further discussion (in the governance working group).
- In the documentation, important to have as many persistence attribute as possible. Which is the particular contribution of the site to global biodiversity, for example

9.2 Recommended KBA Documentation

(* = optional)
- KBA Name
- WDPA site ID code (if the site is a protected area)
- Geographic Locality Information (e.g., country, coordinates)
- KBA category
- Biogeographical realm*?
- Site type/s (e.g., terrestrial, marine, freshwater, subterranean)*?
- Concise Site Summary Description (stand-alone, for general audience, with word limit)
- "Trigger" biodiversity features
- KBA criteria that are met (all relevant criteria)
    - Justification on how criteria are met (based on available data)
- KBA criteria not met*?
    - Brief explanation on why criteria are not met/relevant*?
    Rationale: End user needs information on the criteria that are met and not met
- Administrative jurisdiction
- Customary jurisdiction
- Land tenure and use regimes
- Relevant stakeholders (decision makers, conservation agencies, land owners, local people)
- Spatial data layers
    - elevation/bathymetry
    - habitat
    - "trigger" biodiversity features, i.e. initial biological feature map
    - other biodiversity features (optional)
    - land/sea cover or use over time (when known)
    - administrative and land tenure
    - proposed delineation of KBA boundaries
- Explanation of delineation of proposed KBA boundaries
- Photographs and Videos (with captions) of KBA and its features (guidelines to be given)
- Site status and designation history (e.g., protected area status)
- Ecosystem services*
- Socio-economic values (e.g., including degree of dependence of local communities for livelihood)*?
- Cultural values (where applicable and known)*
- Major site-related threats and pressures
- Conservation actions in-place (including impact where known)*?
- Recommended conservation actions at the site*?
- Important information gaps*
- Relative viability
- Assessors, Contributors, Evaluators (following IUCN terminology)
- Data Sources
- Engagement of stakeholders in KBA assessment

Submissions should be accepted in any IUCN language (English, French, Spanish)

9.3 Communication to Groups doing KBA Assessment

Target Groups
- General conservation community - e.g., NGOs
- Scientific community
- Academic institutions (in KBA country, outside KBA country)
- Governments
- Local communities near potential KBAs

Communication Packages
- Manual/s
- Guidelines (e.g., little red booklet)
- Training package/s (e.g., online, workshops)
- Case studies ("perfect" assessment)

Target Groups for Information in KBA Documentation (=end-users)
- General conservation community - e.g., NGOs
- Scientific community
- Academic institutions (in KBA country, outside KBA country)
- Educational Sector
- Governments
- EU
- Multilateral environmental agreements (CBD, CMS)
- Private sector - banking, extractive industries
- Press and Media
- Local communities
- Local government
- Indigenous communities
- Development agencies (international, national)
- Health sectors
- UN organizations (UN, FAO, UNDP)
- Agricultural sector
- Fisheries
- Forestry
- General public
- Other

Communication Packages
- Website/s
- Data entry tools
- Scientific publications
- Audio-visual presentations for general public
- Presentations at key meetings (e.g., COPs)
- Fact sheets for key target groups
- Workshops with end users

These communication packages need to relate to the perspective and use the "language" of each audience

10. NEXT STEPS

The workshop ended with a discussion of next steps and the process from this point forward.

10.1 Criteria and delineation workshop report

A short report highlighting the decisions taken during this workshop will be circulated to the participants as soon as possible. A more detailed report will be circulated subsequently. The decisions taken during this workshop will inform the forthcoming technical working groups:
- Threshold (workshop - Dec 2013)
- End-users and Applications (case study and interviews – themes needed)
- Marine (coordination between processes, opportunity to discuss at IMPAC 3 in Oct 2013)
- Governance (workshop - Nov 2013)

10.2 Considerations for other technical working groups

A number of issues were raised during the week that will be handled by the other technical working groups:

Threshold workshop:
- Discuss Non-KBA and category names
- Consider the Data Deficiency option
- Consider options of having different criteria sets for different taxonomic groups
- Learn from different non-charismatic taxa case studies

End-users/Application working group
- Clear outcomes useful to end-users.
- When we define our criteria, are we thinking about this just from a scientific perspective, or do we need to think about it in terms of broader end-users who must take ownership of KBAs?
- Mechanisms for the process that would help avoid KBA-people conflicts.
- Discussion on the desired uses of the new KBAs (or whatever they shall be termed) as this will help us devise criteria and delineation process.
- Simply to find a way to reduce human pressure on all ecosystems and species.
- Discussion concerning the final aim: how can governments be influenced to use the KBA approach for conservation measures; Legal implementation with IPBES; "Ranking" between existing systems.
- Final product is applicable by policy makers.
- Application of KBAs to broader issues (e.g. CC) and engagement with end users.

Governance working group
- Name: Consideration of the name of the areas? There has been a consultation on this last year, strong push to retain KBAs for now. The question will need to be raised with the governance group for branding and other implications.
- How do we integrate the many different types of local/regional issues with a global standard?

10.3 Other consultations

In addition to the technical working groups, further consultations are needed:

Consultation with the genetic community:
- As there is more emphasis on genetic and ecosystem biodiversity in the new KBA criteria, IUCN Secretariat needs to engage more specifically with the conservation genetic community.

Additional work needed on delineation:
- Can the freshwater approach, which needs to work at the scale of catchments, be easily integrated with terrestrial and marine approaches
- A delineation framework/best practice/guidelines/decision tree for all biomes.
- Agreement/guidance on what "manageable" means.
- Repeatability

10.4 Suggestions for the development of other products

a) **Communication**
- **Work flow:** Provide a one page work flow towards 2014 launch. This will make it easier to brief other end users.
- **Strategy post-launch:** A way to promote the idea/approach post launch/2014.
- KBA Factsheet: Develop a one pager describing KBAs to share with stakeholders/end-users - DONE.
- Website update, need a volunteer to help with communications. DONE
- Scientific paper: Editorial in Conservation Letters (Andrew Knight).

b) **Clarification of relationship with other schemes:**
- Relationship between KBA and Protected Areas: Describe the non-PA KBA situations in more detail. This would have informed a lot of the discussions in a meaningful way and would support communicating the concept of KBAs to end-users. Perhaps the delineation group could inform and pass on to end-user group. Help with the "sell".
- Relationship between KBA and HCV: HCV network stakeholders can be pulled into this framework well via Mark. End-user document on HCV (DONE) and this will be a part of the governance group discussion. There needs to be a two-way flow of information between the processes.

APPENDIX 1 – Meeting agenda

Monday, 11 March	
16.00	Opening, welcome (plenary)
16.10	Introduction (plenary)
16.40	Participants presentation (plenary)
17.00	Session on participants expectations for the workshop (plenary)
18.00	*End of the day*

Tuesday, 12 March			
9.00 9.15 9.45 10.15	Welcome by the workshop chairs (plenary) – expectations, structure and the objectives of the workshop Detailed presentation of criteria background paper (plenary) Detailed presentation of delineation background paper (plenary) Presentation of the criteria matrix (plenary)		
10.30	*Coffee break*		
11.00	**CRITERIA BREAK-OUT SESSION** Fill the matrix with the existing criteria (Part 1)	**CRITERIA BREAK-OUT SESSION** Fill the matrix with the existing criteria (Part 2)	**CRITERIA BREAK-OUT SESSION** Fill the matrix with the existing criteria (Part 3)
12.00	*Lunch*		
13.00	**CRITERIA BREAK-OUT SESSION** Species criteria. incl. - restricted-range definition - taxa not assessed in the Red List - taxonomic standard	**CRITERIA BREAK-OUT SESSION** Ecosystem criteria, incl. - units for criteria application (ecosystems, communities, assemblages, etc..) - assessment of vulnerability	**CRITERIA BREAK-OUT SESSION** Genes criteria, incl. - Phylogenetic diversity - infraspecific taxa - viability(?)
15.30	*Coffee break*		
16.00	Report back from break-out sessions		
17.00	Discussion and suggestions for the next day		
18.00	*End of the day*		

Wednesday, 13 March		
9.00	Summary of the previous day (plenary)	
9.30	**CRITERIA BREAK-OUT SESSION** Species criteria (con't)	**DELINEATION BREAK-OUT SESSION** Agreement on general principles (existing principles, existing features, definition of "management unit", how to reflect uncertainties, etc…)
10.30	*Coffee break*	
11.00	**CRITERIA BREAK-OUT SESSION** Ecosystem criteria (con't)	**DELINEATION BREAK-OUT SESSION** Agreement on general principles (con't)
12.00	*Lunch*	
13.00	**CRITERIA BREAK-OUT SESSION**	**DELINEATION BREAK-OUT SESSION**

	Genes criteria (con't)	Define what are the various environmental and social conditions in which delineation happen (fine grain vs coarse grain land-tenure, marine vs fw vs terrestrial, mountain vs plains, habitat fragmentation vs wilderness, etc…)
15.30	*Coffee break*	
16.00	**CRITERIA BREAK-OUT SESSION** Should we have an equivalent to the Red List of Threatened Species Criteria E? Number of criteria required for a site to be identify as of global significance?	**DELINEATION BREAK-OUT SESSION** Biome specific working groups
18.00	*End of the day*	
Thursday, 14 March		
9.00	Report back from the break-out sessions (plenary)	
9.30	**CRITERIA BREAK-OUT SESSION** Issues raised during the previous days	**DELINEATION BREAK-OUT SESSION** Define a hierarchy of the questions to be asked by the decision tree first
10.30	*Coffee break*	
11.00	**CRITERIA BREAK-OUT SESSION** Issues raised during the previous days (con't)	**DELINEATION BREAK-OUT SESSION** Issues raised during the previous days
12.00	*Lunch*	
13.00	Report back from the break-out sessions (plenary)	
14.00	Products from the workshop	
15.30	*Coffee break*	
16.00	Next steps: • What are the next steps • setting a roadmap	
18.00	*End of the day*	
Friday, 15 March		
Morning	Optional field trip	

APPENDIX 2 – List of participants

First Name	Last Name	Organisation	Country
Steven	Bachman	Royal Botanic Gardens, Kew	UK
Jessica	Boucher	University Of Edinburgh And Independent Consultant	Scotland
Thomas	Brooks	IUCN	Switzerland
Sudipta	Chatterjee	Integrated Development Division, Louis and Berger Inc	India
Viola	Clausnitzer	Senckenberg	Germany
Annabelle	Cuttelod	IUCN	UK
Naamal	De Silva	George Washington University	USA
Moreno	Di Marco	Sapienza Università di Roma	Italy
Graham John	Edgar	University of Tasmania	Australia
Lincoln	Fishpool	BirdLife International	UK
Matthew	Foster	National Fish and Wildlife Foundation	USA
Ian	Harrison	Conservation International/IUCN; and representing Ramsar Convention STRP	USA
Frank	Hawkins	IUCN Washington office	USA
Borja	Heredia	UNEP/CMS	Germany
Angela Nina Ann	Ingle	Wildlife Conservation Society of the Philippines	Philippines
Diego	Juffe-Bignoli	IUCN	UK
Andrew	Knight	Imperial College London	UK
Odé Marie Louise	Kouamé		USA
Penny	Langhammer	Arizona State University	USA
Mark	Leighton	Harvard University	USA
Yolanda	Leon	Grupo Jaragua	Dominican Republic
Barney	Long	World Wildlife Fund	USA
Stewart	Maginnis	IUCN	Switzerland
Ian	May	BirdLife International	UK
Gregory	Mueller	Chicago Botanic Garden	USA
Sílvia	Pérez-Espona	ConGRESS consortium	UK
John	Pilgrim	The Biodiversity Consultancy	UK
Pichirikkat Rajeev	Raghavan	Conservation Research Group (Crg), St. Albert's College	India
Justina	Ray	Wildlife Conservation Society	Canada

First Name	Last Name	Organisation	Country
Jon Paul	Rodríguez	Instituto Venezolano de Investigaciones Científicas	Venezuela
Jane	Smart	IUCN	Switzerland
Martin	Sneary	IUCN	USA
Isabel	Sousa Pinto	University of Porto	Portugal
Christopher	Tracey	Pennsylvania Natural Heritage Program	USA
Kathy	Traylor Holzer	IUCN/SSC Conservation Breeding Specialist Group	USA
Amy	Upgren	Independent Consultant	USA
Hao	Wang	Peking University	China
Philip	Weaver	Seascape Consultants Ltd	UK
Stephen	Woodley	Parks Canada / IUCN	Canada
Frank	Wugt Larsen	European Environment Agency	Denmark
Nassima	Yahi-Guenafdi	University of Sciences and Technology	Algeria

APPENDIX 3 – 10 reasons why we should conserve biodiversity

On the request of IUCN Protected Area Communication team, Stephen Woodley asked participants to list the main reasons why it is important to conserve biodiversity. The results are indicated below:

1. It inspires people
2. Biodiversity keeps us alive
3. To make sure our children enjoy seeing wildlife instead of losing this opportunity
4. To reduce the risks of economic lose from bad ecosystems
5. Because a bio-divers world is a much more interesting place to live
6. As far as we know it is the only one in the universe
7. The most precious an unique heritage of a country, more than flag
8. Provides food, drugs and medicine
9. Without it, we are threatening our own existence
10. Species other than *Homo sapiens* have the right to live too. It is their planet as well.

APPENDIX 4 – Terms to add to the Glossary

Relative viability
Stakeholder
Management unit
Manageability
Local
Species, taxa, population, sub-population in the Red List of Threatened Species
Risk of collapse in the Red List of Ecosystems
Global persistence
Sites vs areas
Significantly
Threatened biodiversity
Geographically restricted
Ecological integrity
Intact species assemblages
Biogeographic regions
High contextual species richness

Many of these terms will be defined during the upcoming Thresholds technical workshop in Rome in Dec 2013

APPENDIX 5 – Participant Expectations

Participants were asked to give their expectations for the workshop on the first day. Some of these were identified as relevant for the delineation component o this workshop (yellow). Others were issues that will be dealt with in the thresholds workshop in Dec 2013 (green) and in the applications/end-user interviews (blue) occurring throughout 2013.

Yellow – delineation working group
Green – thresholds working group
Blue – applications/end-users working group

Theme		Expectation
Criteria	High Level	- Better understand how understudied groups and areas can be integrated into KBAs. - At the end of the workshop, the criteria must be simplified and defined to precision. - When do we think about how we create networks of KBAs? Do we need to think about that early on, or later? - Identification of "key" core criteria for identifying areas of high biodiversity. - An inclusive set of criteria that are easy to apply and fill existing gaps validating existing criteria. - Reconciling and embracing: biodiversity rich, threatened biodiversity, intact biodiversity - Connectivity is taken into account. - Criteria should be easy; KBAs should be "rather" stable, otherwise no one will take them serious - To design a robust assemblages criteria or drop it if we can't. - Explicitly including "persistence" in the categorization of KBAs to make sure we are not just dealing with representation - Clarity on how the criteria and KBA data will work in data deficient situations.
	Taxonomic Issues	- Hope to agree on surrogate measures for vulnerability when Red List status is not known. - Hope agreed criteria will be applicable to plants/fungi and other mega-diverse groups. - Keen to explore options of having different criteria sets for different taxonomic groups. (GREEN TO THRESHOLDS GROUP)
	Genes and Ecosystems	- Consider introducing, in a pragmatic way, the use of genetics to identify key biodiversity areas. - More emphasis on genetic and ecosystem biodiversity in KBA criteria. - I hope we can still consider ecological services and cultural values or criteria even if just a window for fleshing out later. These are often very important to local communities.
	Biome Issues	- To find a way to include the high seas under the KBA umbrella that is acceptable to the high seas community.

		- Criteria for data deficient species, groups, marine areas.
		- Harmonized criteria that will take in to consideration the different specification of the marine ecosystems.
		- Can the freshwater approach, which needs to work at the scale of catchments, be easily integrated with terrestrial approaches
		- Inclusive of all biomes, including marine.
Delineation		- Clear distinction between scientific criteria vs. management potential.
		- A delineation framework/best practice/guidelines/decision tree for all biomes.
		- Try to have consensus about the better size for the site in order to be manageable easily not too big – not too small.
		- With respect to delineation of KBAs; help separate socio-political from ecological standards.
		- Discuss and agree on the appropriate scale for a KBA across biomes (note in bracket not legible).
		- To align freshwater and terrestrial delineation practices.
		- Agreement/guidance on what "manageable" means.
		- IUCN standard for KBA delineation which strike a balance between: transparency, repeatability, and application in the real world.
		- Decision tree for delineation under different scenarios.
Thresholds		- How do we refine the large number of KBAs that will certainly be identified on the basis of biodiversity, with the need to be practical in terms of landscape management and resources?
		- Understanding the trade off between established KBAs and new KBAs, considering that "not too many" sites are to be identified.
Consensus/Agreement		- Agreement.
		- Reach agreement on the criteria and delineation principles.
		- Full consensus on outcomes.
		- Consensus, making the best use of participants experiences and expertise to align best practice.
		- Consensus on key questions/issues related to criteria.
		- Constructive compromise among existing site-based approaches to synchronise criteria.
		- Hopes/fears of being able to reconcile existing systems with new "ideal".
End-users		- Clear outcomes useful to end-users.
		- When we define our criteria, are we thinking about this just from a scientific perspective, or do we need to think about it in terms of broader end-users who must take ownership of KBAs?
		- Mechanisms for the process that would help avoid KBA-people conflicts.
		- I would like some discussion on the desired uses of the new KBAs (or whatever they shall be termed) as this will help us devise criteria and delineation process.

	- Simply to find a way to reduce human pressure on all ecosystems and species. - Discussion concerning the final aim: how can governments be influenced to use the KBA approach for conservation measures; Legal implementation with IPBES; "Ranking" between existing systems. - Final product is applicable by policy makers.
Workshop Process	- Tackle difficult or unclear points and define the reasoning and decision. - Clarity as to the type of list we are expecting. - Learn from different non-charismatic taxa case studies. - To learn about the issues surrounding creation of KBAs. - Learn from the vast expertise of the participants and enjoy the different points of view from all of them. - Better understanding of how I an my organization can contribute to this process. - Productive discussions and team work to accomplish the objectives of this workshop. - Good environment with a lot of discussions and mutual learning and some consensus. - Observe collaboration, innovation, knowledge sharing and capacity building towards an aligned, robust, comprehensive standard for the identification of Key Biodiversity Areas. - I expect to learn a lot from all the participants especially given their varied and diverse taxonomic, geographical and work backgrounds.
Nature of Results (clear, concise, practical, timely)	- Respect the existing criteria (and embrace them too). - Develop a nomenclature that works well in the three IUCN languages (at least!). - How do we integrate the many different types of local/regional issues with a global standard? - Keep it very simple and pragmatic (criteria + delineation). - Simple results. - See results even if they are not agreed by most participants. - Agreement on solid, yet pragmatic, criteria that will enable broad buy-in to KBA concept. - IUCN standards for Key Biodiversity Area criteria which strike a balance between: building from existing processes and adding value; scientific rigor and consistency; simplicity and applicability. - Outcomes that are practical rather than perfect. - Outcomes that build upon work to date. - On track for 2014 World Parks Congress. - A standard that is transferrable to national/sub-national work. - Criteria that can be easily summarized on one page. - Clear, concise set of criteria.

APPENDIX 6 – Workshop Evaluations

After the workshop participants were asked to answer 10 questions in a Survey Monkey. Eighteen out of 40 participants answered this survey. The results are shown below:

1. Please indicate your region(s) of expertise:
SE Asia
Marine
tropical forests, trees, mammals
Global
Global
South Asia
Species conservation, terrestrial, global
IBAs
SSC, fungi
International / Northern Canada / South East
Asia
None, really.
KBA delineation
Freshwater biodiversity conservation
Global
global scale
Mediterranean
Plants, GIS, Species Conservation

2. To what extent were the objectives of the workshop achieved?

	Not Achieved	Partly Achieved	Mostly Achieved	Completely Achieved	Total number of answer
Overall workshop	0.0% (0)	16.7% (3)	72.2% (13)	11.1% (2)	18
Criteria working group	0.0% (0)	11.1% (2)	66.7% (12)	22.2% (4)	18
Delineation working group	13.3% (2)	33.3% (5)	40.0% (6)	13.3% (2)	15

Comments
- Given expectations and agenda!
- We need to have a discussion on delineation decision when different types of taxa and biomes that trigger KBAs overlap spatially.
- I had to leave before Delineation working groups were completed
- Given the complexity of subject material, and the fact that many of the people from the previous workshop were not able to attend, I think the results were very good.
- Added value from extra working groups on viability and on documentation. Explanations for "mostly achieved": Criteria: all but the cross-walking with existing schemes Delineation: all but the decision tree or equivalent guidance Viability: good overall agreement, detail passes to the thresholds WG Documentation: good start, detail passes to the governance WG

3. Workshop organisation (please rate 1 (Poor) to 5 (Excellent))

	1	2	3	4	5	Total number of answer
Meeting arrangements (travel, visas etc.)	0.0% (0)	0.0% (0)	0.0% (0)	22.2% (4)	77.8% (14)	18
Quality of the meals and accommodation	0.0% (0)	0.0% (0)	0.0% (0)	33.3% (6)	66.7% (12)	18
Workshop background material	0.0% (0)	0.0% (0)	11.1% (2)	33.3% (6)	55.6% (10)	18
Workshop venue, inc. meeting rooms	0.0% (0)	0.0% (0)	5.6% (1)	5.6% (1)	88.9% (16)	18
Field trip	0.0% (0)	0.0% (0)	46.2% (6)	38.5% (5)	15.4% (2)	13

Comments
- The workshop background material was helpful but circulated relatively late. I would have welcomed it being sent our earlier as I would have had the chance to give the content more thought as well as to ask others for their perspectives.
- paperless commitment is counterproductive when important draft documents are to be reviewed
- The meeting was well planned, well implemented, and the venue was excellent - especially once I had got used to eating a huge amount of food at 6.30 pm so I would not be hungry at midnight. I would definitely return to the venue for other workshops and especially KBA workshops!
- On the fieldtrip, shame we didn't have the opportunity to go into Shenendoah NP, right next to Front Royal and a major iconic NP...
- No need for cars on the field trip, but volunteer guides were great :)

4. Did the sessions comprise the right amount of time and content?

	Not Enough	Just Right	Too Much	Total number of answer
Presentations	16.7% (3)	**83.3% (15)**	0.0% (0)	18
Expectations session	5.6% (1)	**88.9% (16)**	5.6% (1)	18
Plenary discussions	11.1% (2)	**88.9% (16)**	0.0% (0)	18
Break-out groups	11.8% (2)	**82.4% (14)**	5.9% (1)	17

Comments
- more background needed on earlier workshop and future use of initiative

5. Which session/elements of the workshop did you find most useful? Why?
- I liked the break out groups - discussion of ideas seemed more efficient with fewer people. I wonder if in future there could be more smaller group discussions.

- Break out groups because of the detailed discussions
- plenaries, break outs, informal discussions
- All sessions were useful
- The balance between groups sessions and plenary session was good and just the right amount
- Breakout groups on delineation, because it helped focus participants on real-world delineation situations and challenges.
- The documentation of the KBA as it gave a clear picture of what information KBA site would contain, what added values the KBAs would provide. Discussions on stakeholders engagement.
- Breakout sessions and plenary discussions
- Criteria working group - better understanding of how ecosystems might be incorporated; integration of existing systems with this
- small breakout sessions, fostered good discussion
- Plenary sessions. Good discussions and contributions from all participants worked well.
- Smaller working sessions.
- KBA delineation, because this session bring people to conservation ground.
- break out groups; evening opportunities for follow-up group meetings
- All!
- small break-outs on specific issues + plenary; easier agreement + better chance to present a clear outcome to the plenary
- Break-out groups for all the exchange
- Criteria discussions

6. Which session/elements of the workshop did you find less useful? Why
- Initial evening intro because I was tired
- None
- Maybe a bit more time for the group sessions?
- Conforming the criteria discussion to the composition/structure/function framework was challenging and frustrating at times.
- there was no session that came out clearly with the overall KBA process against a timeline, milestones and success indicators.
- Expectations discussion - but still useful
- Expectations session - never convinced, generically, these are particularly useful
- Although a good starting point, the matrix session seemed to not be as useful as intended as it did not always fit the purpose of the session.
- None in particular.
- None!
- 1st day morning species wg; unclear scope, it was just about repeating (once again) existing KBA approaches
- Delineation - should have spent at least some time in this group

7. Are there any sectors/institutions/people who should have been present at the workshop but weren't, and so who are priorities to involve in subsequent stages of the process (if the answer is yes please explain who)?

	Response Percent	Response Count
Yes	66.70%	12
No	11.10%	2
Possibly	22.20%	4

Please explain who are priorities to involve in subsequent stages of the process

- (1) Community and ecosystem ecologists including foresters, vegetation ecologists, and coastal and marine ecologists. Their expertise was not well represented at the workshop. (2) Those who are familiar with large areas of natural habitat in different parts of the globe (these people are often involved in land use and mapping activities but familiarity with the landscape is crucial). Their expertise could help in identifying criteria on the scale of landscapes.
- more general biodiversity conservation planners, community ecologists w/conservation interests
- I believe it would be useful to involve IUCN Law Center in this process since they are working on legal aspects of connectivity
- Private and Financial sector would have been specially useful for the delineation group.
- Donors (e.g. CEPF), freshwater experts
- no representation from the end user and the donors who supporting the KBA delineation.
- More diverse geographic representation
- Plantlife - for obvious reasons
- large federal landowners
- Perhaps not as important at this stage, however, private sector end-user buy in will be important at subsequent stages.
- I think that the organizers had all the relevant people on the list of invitees; but some of them simply could not get time to attend
- a) Climate change & biodiversity specialists... address through an "applications" cast study? b) Plantlife International...
- end users + conservation planners
- some authorities
- More scientists with ecological background could have given support to ecosystem function discussions.

8. Are you looking forward to be involved in the subsequent stages of the consultation process (yes/no/don't know)?

	Response Percent	Response Count
Yes	88.90%	16
No (please explain why below)	0.00%	0
Possibly	11.10%	2

Please explain why you are not willing to keep involved:
- Contingent on availability
- Having done two workshops already it may be difficult to justify my involvement in further meetings.

9. Would you consider using the standard – or the products of its application – in your organisation when it is finished? How?

	Response Percent	Response Count
Yes	88.90%	16
No (please explain why below)	0.00%	0
Possibly	11.10%	2

Please explain: how would/could you use this standard OR Why you would not consider using it

- A lot will depend on the final standard and the process and products. As they say, the devil is in the details - these will determine in large part how useful KBAs are and it is good that many are being consulted for their input.
- Potentially great application to HCV assessment findings and protocols; conserve representative biodiversity
- The standard will be applicable to identify important sites for migratory species and will be useful for CMS and its associated instruments
- Using the criteria to identify KBAS, using KBAs datasets for analysis
- To guide conservation action and research priorities
- use the outputs in rationalization of some of the existing protected areas.
- To guide stakeholders through identification of key sites for conservation activities and support
- To inform extractive sector project development and impact mitigation design.
- Applying to specific countries and regions.
- The results could guide conservation acts for general conservationists, beyond big institutions.
- Definitely - this is why we are doing all of this work!
- a) Inform conservation plans, b) Inform site safeguard from multilateral institutions and the private sector
- To continue the process of identifying KBAs in my region.

10. Please feel free to add any additional comments, suggestions or remarks.
- Wonderful workshop-- great leaders, logistics, venue and collegial, expert participants--thanks!
- The workshop was very successful and well organized. Many thanks for providing the opportunity to participate.
- Overall, an excellent workshop. Facilitation could have been stronger.
- A regular update on the progress made will be helpful
- Well organized and facilitated
- It is a great workshop and excellent organized, looking forward to be involved in following workshops.
- Excellent workshop, in my opinion.
- Brilliantly chaired by Jon Paul and Naamal, with excellent support from Annabelle and Diego - well done!
- Excellent workshop, well organised. Participants very enthusiastic. Rich and fulfilled experience. Thank you for this opportunity. Congratulations to the organizers.
- Good luck!