

Making non-detriment findings

Ensuring sustainable utilization of
species in international trade

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Presentation objectives

- What is a non-detriment finding?
- Who is required to make non-detriment findings?
- Why is a non-detriment finding required?
- How is a non-detriment finding undertaken?
- What data are required to make non-detriment findings?

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CITES

- ❑ Convention on International Trade in Endangered Species of Wild Fauna and Flora
- ❑ Appendix I – species threatened with extinction which are or may be affected by trade
 - Commercial trade in wild specimens prohibited
 - Captive bred / artificially propagated specimens = Appendix II species
- ❑ Appendix II – species that may become threatened with extinction unless trade is subject to strict regulation
 - May be traded internationally on presentation of an export permit
 - Export permit shall only be granted when a Scientific Authority of the State of export indicates that export **will not be detrimental to the survival of that species** (Article IV)

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Scientific Authority

- ❑ Established in November 2008 by the Minister of DEA in terms of Section 60 of the National Environmental Management: Biodiversity Act
- ❑ Committee of experts with one member from:
 - Each of the provincial conservation authorities
 - DEA
 - SANBI
 - SANParks
 - National Zoological Gardens
 - South African Museums
- ❑ Chaired by Prof John Donaldson (SANBI)
- ❑ Scientific Co-ordinator: Michèle Pfab (SANBI)
- ❑ Meet ± twice yearly

Section 61 of NEMBA

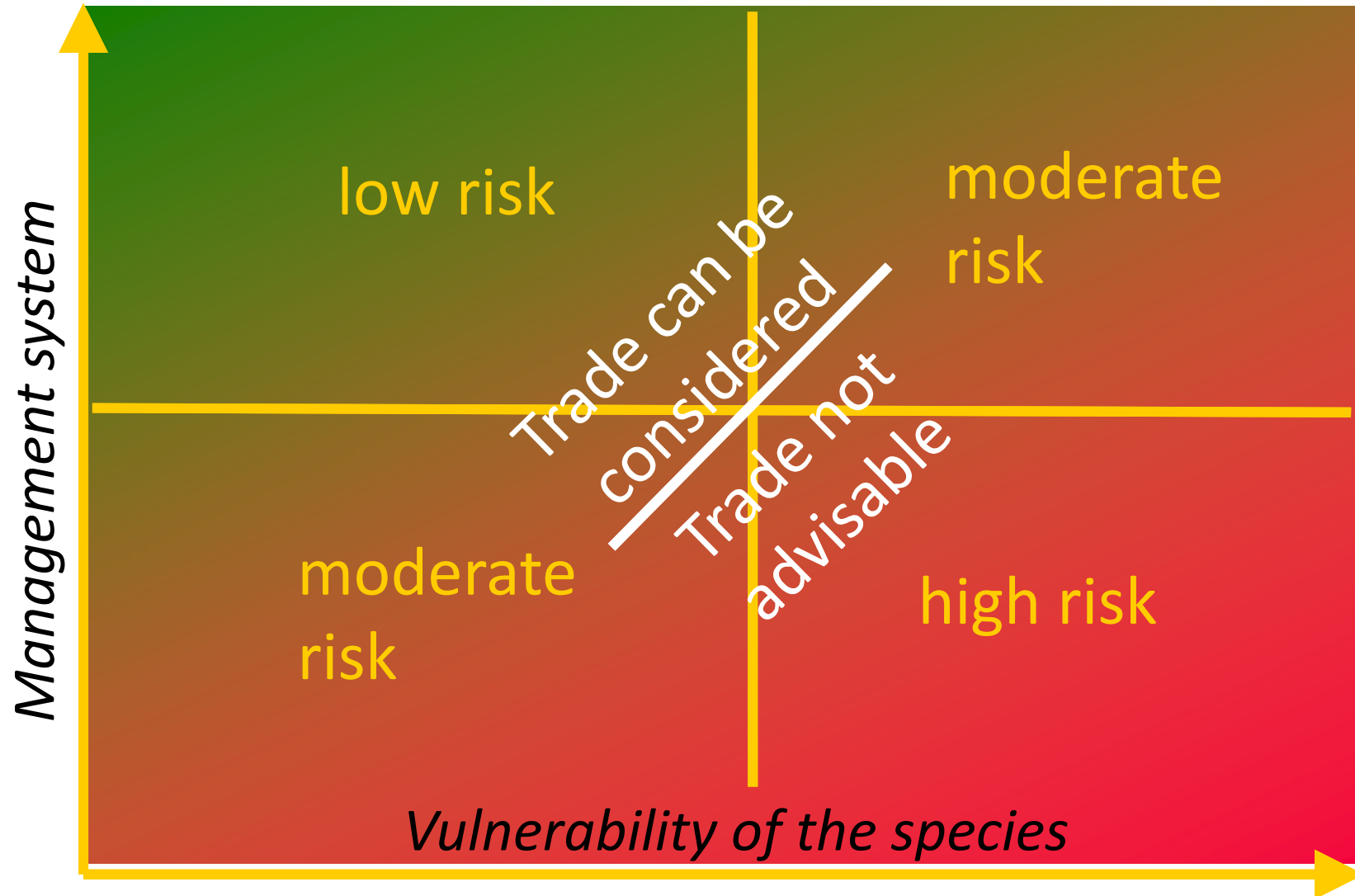
Assist with regulating and restricting the trade in specimens of listed threatened or protected species (ToPS)

- Monitor illegal/legal trade and advise Minister/other organs of state on these matters
- Make recommendations on permit applications in relation to undertaking restricted activities with ToPS species or prohibiting such activities
- Make non-detriment findings on impacts of international trade on ToPS species and publish annual non-detriment findings**
- Advise on registration and requirements of facilities for captive breeding / artificial propagation
- Advise on amendments to ToPS listings and prohibition of restricted activities
- Advise on nomenclature of species
- Assist Minister / EMIs in identifying specimens of ToPS species
- Issue certificates verifying identification of specimens
- Any other prescribed or delegated function

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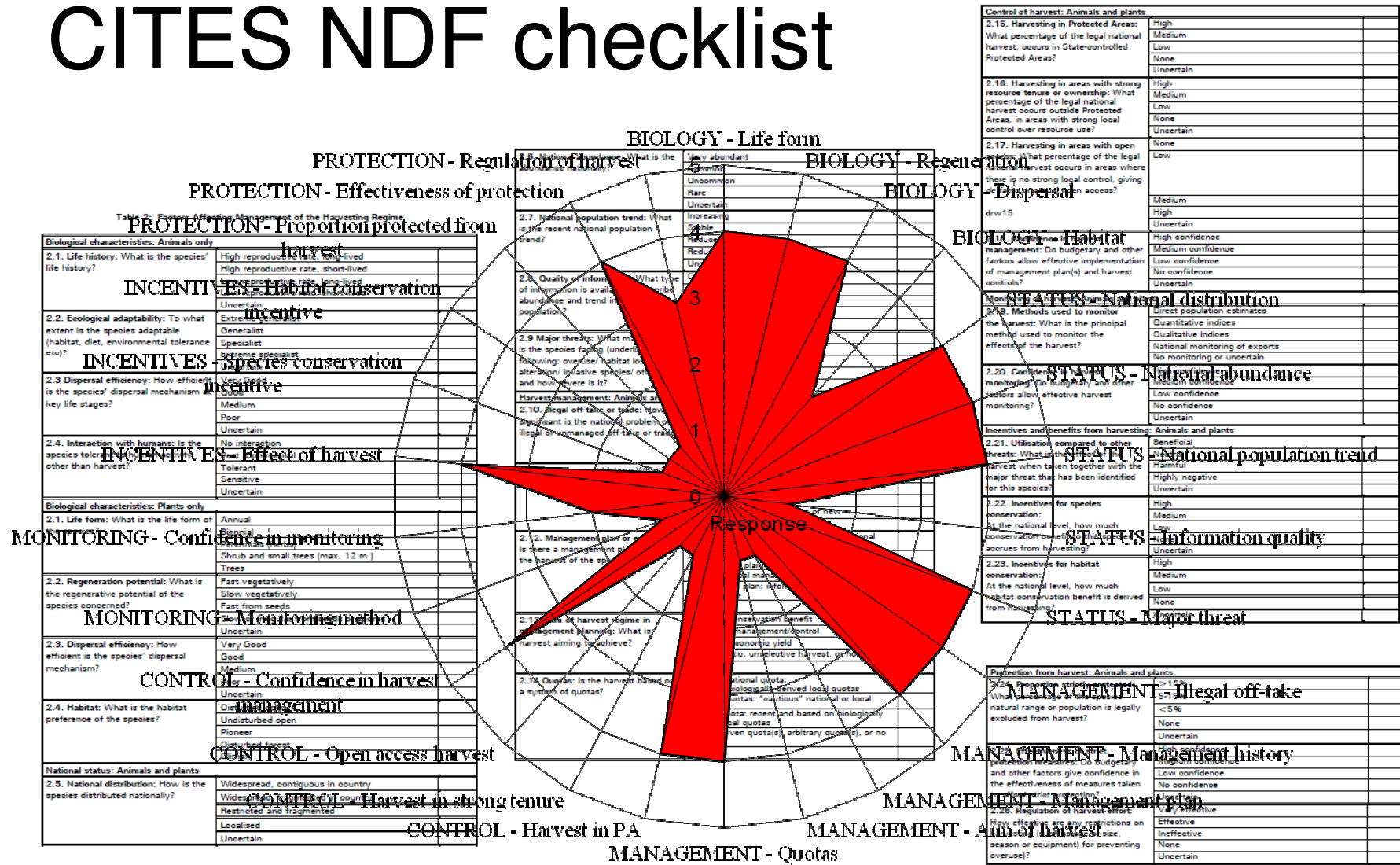
NDF = science-based risk assessment



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CITES NDF checklist

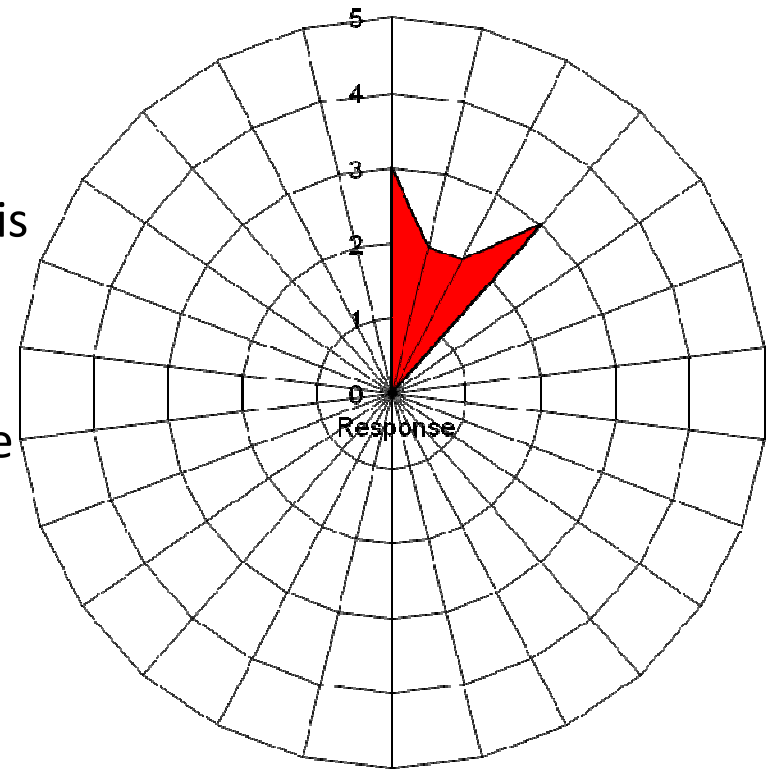


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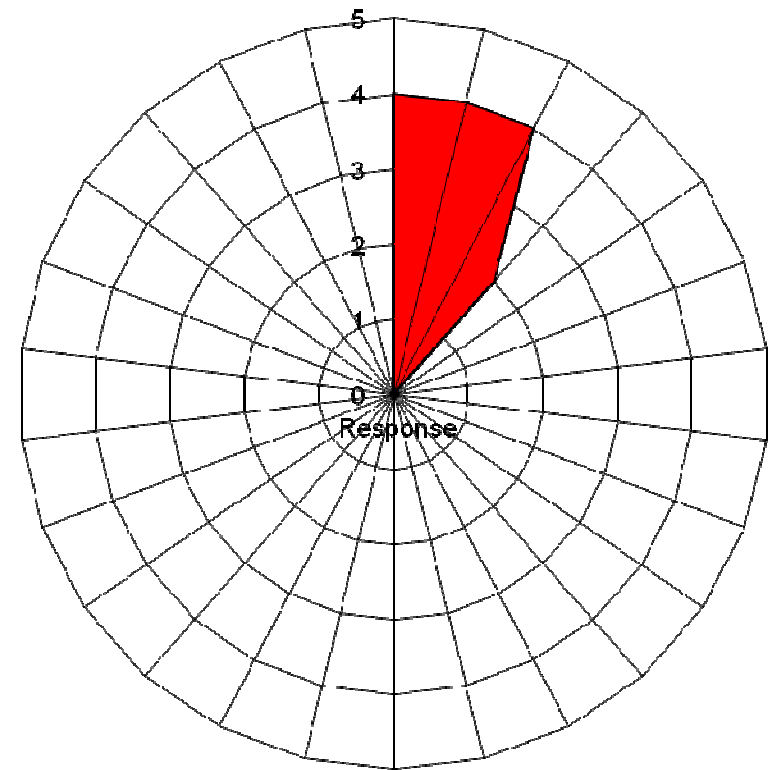
NDF for *Hippopotamus amphibius* – Biological characteristics

- 1. Life history:** What is the species' life history?
 - ✓ Low reproductive rate, long-lived (3)
- 2. Ecological adaptability:** To what extent is the species adaptable (habitat, diet, environmental tolerance etc.)?
 - ✓ Generalist (2)
- 3. Dispersal efficiency:** How efficient is the species' dispersal mechanism at key life stages?
 - ✓ Good (2)
- 4. Interaction with humans:** Is the species tolerant to human activity other than harvest?
 - ✓ Tolerant (3)



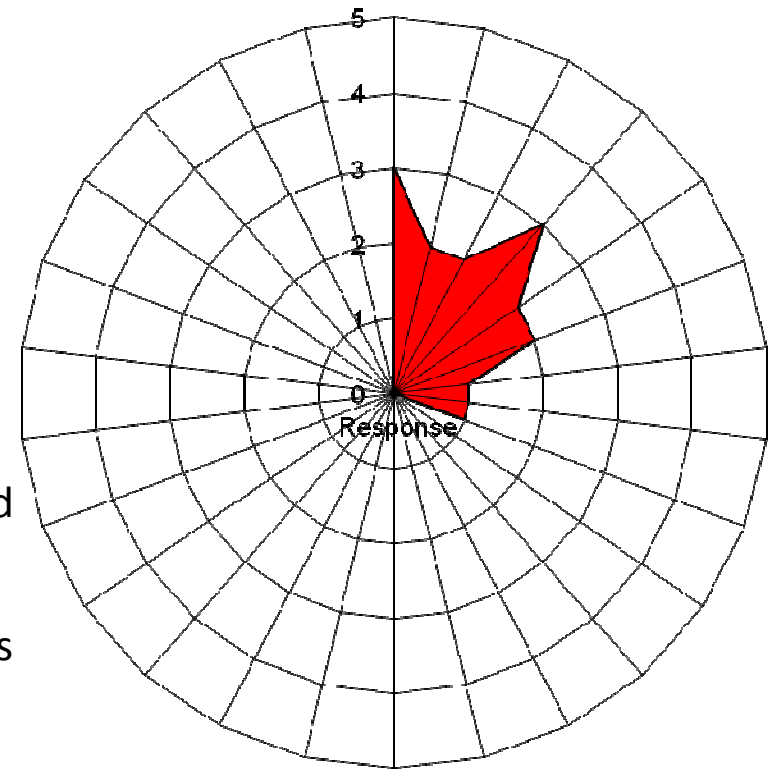
NDF for *Encephalartos heenanii* – Biological characteristics

- 1. Life form:** What is the life form of the species?
 - ✓ Shrub and small trees (max. 12m.) (4)
- 2. Regeneration potential:** What is the regenerative potential of the species concerned?
 - ✓ Slow or irregular from seeds or spores (4)
- 3. Dispersal efficiency:** How efficient is the species' dispersal mechanism?
 - ✓ Poor (4)
- 4. Habitat:** What is the habitat preference of the species?
 - ✓ Undisturbed open (2)



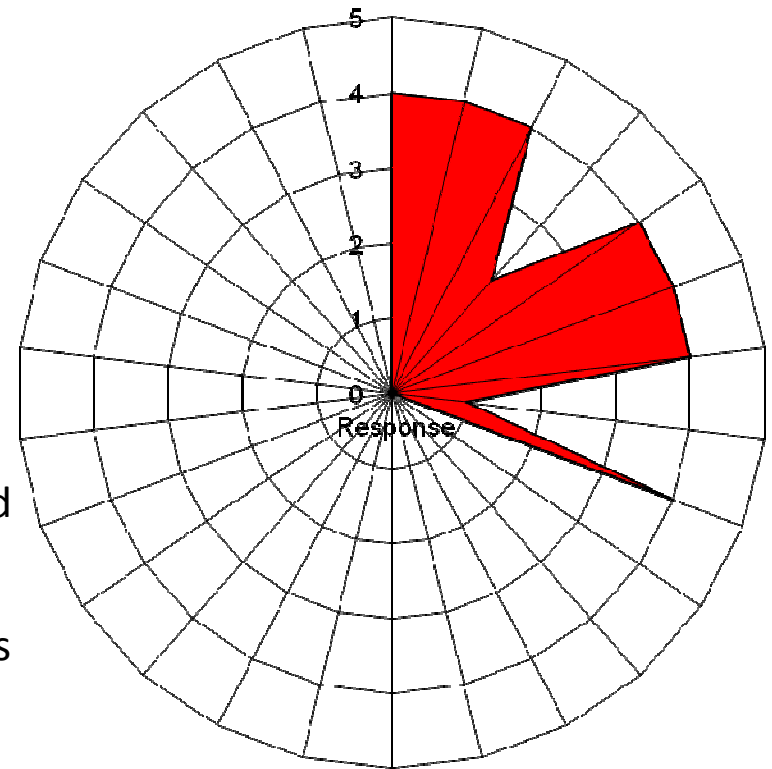
NDF for *Hippopotamus amphibius* – National status

- ❑ **5. National distribution:** How is the species distributed nationally?
 - ✓ Widespread, fragmented in country (2)
- ❑ **6. National abundance:** What is the abundance nationally?
 - ✓ Common (2)
- ❑ **7. National population trend:** What is the recent national population trend?
 - ✓ Increasing (1)
- ❑ **8. Quality of information:** What type of information is available to describe abundance and trend in the national population?
 - ✓ Quantitative data, recent (1)
- ❑ **9. Major threats:** What major threat is the species facing (underline following: overuse/ habitat loss and alteration/ invasive species/ other:) and how severe is it?
 - ✓ None (1)



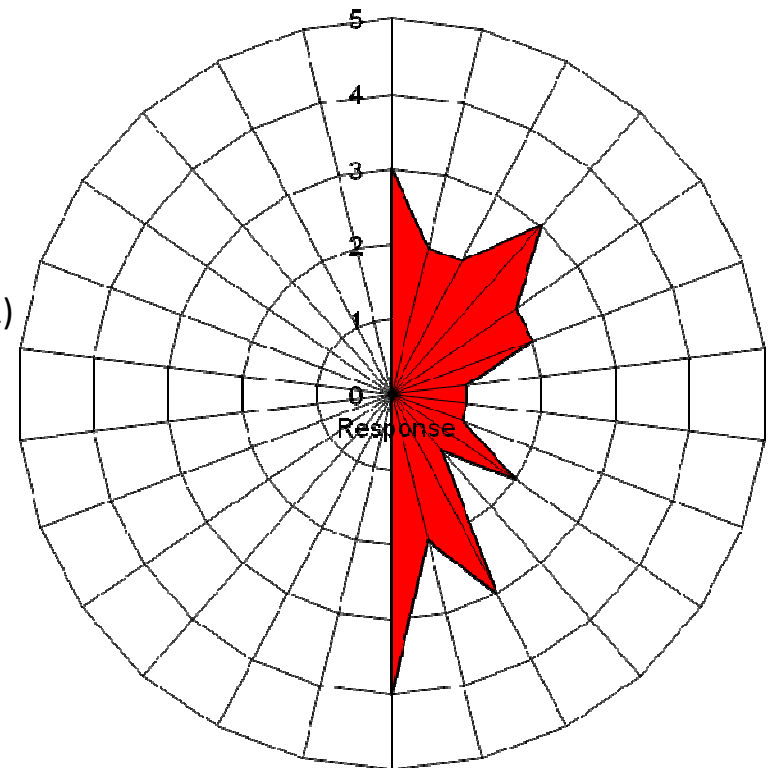
NDF for *Encephalartos heenanii* – National status

- ❑ **5. National distribution:** How is the species distributed nationally?
 - ✓ Localized (4)
- ❑ **6. National abundance:** What is the abundance nationally?
 - ✓ Rare (4)
- ❑ **7. National population trend:** What is the recent national population trend?
 - ✓ Reduced and still decreasing (4)
- ❑ **8. Quality of information:** What type of information is available to describe abundance and trend in the national population?
 - ✓ Quantitative data, recent (1)
- ❑ **9. Major threats:** What major threat is the species facing (underline following: overuse/ habitat loss and alteration/ invasive species/ other:) and how severe is it?
 - ✓ Severe/Irreversible (4)



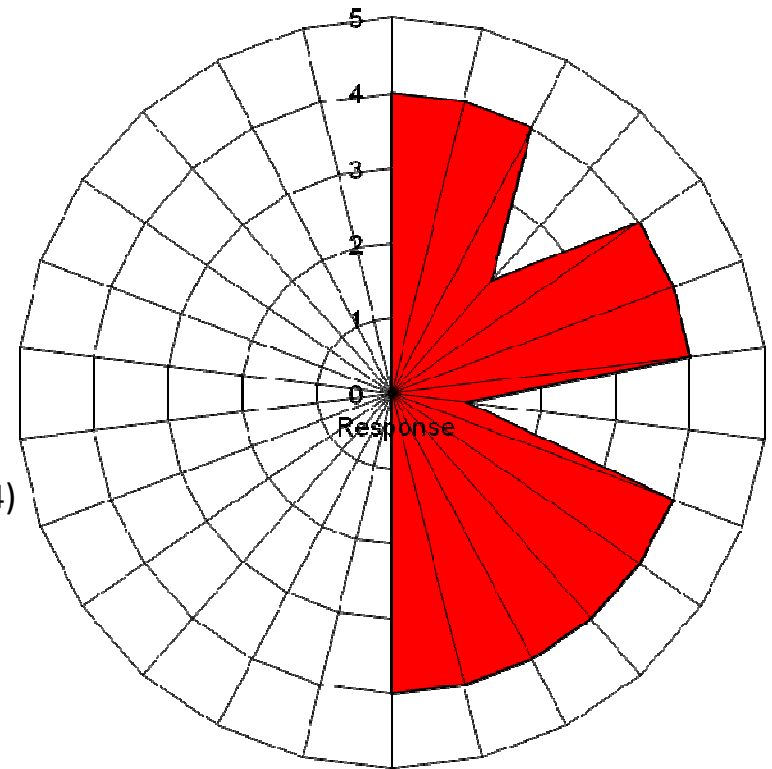
NDF for *Hippopotamus amphibius* – Harvest management

- 10. Illegal off-take or trade:** How significant is the national problem of illegal or unmanaged off-take or trade?
 - ✓ Small (2)
- 11. Management history:** What is the history of harvest?
 - ✓ Managed harvest: ongoing with adaptive framework (1)
- 12. Management plan or equivalent:** Is there a management plan related to the harvest of the species?
 - ✓ Approved local management plan (3)
- 13. Aim of harvest regime in management planning:** What is harvest aiming to achieve?
 - ✓ Population management/control (2)
- 14. Quotas:** Is the harvest based on a system of quotas?
 - ✓ Market-driven quota(s), arbitrary quota(s), or no quotas (4)



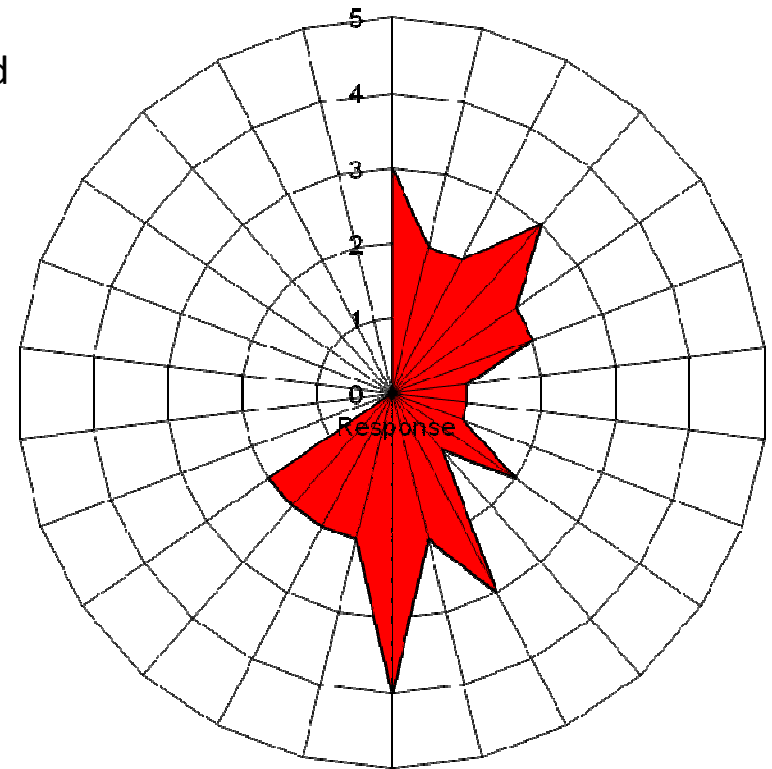
NDF for *Encephalartos heenanii* – Harvest management

- ❑ **10. Illegal off-take or trade:** How significant is the national problem of illegal or unmanaged off-take or trade?
 - ✓ Large (4)
- ❑ **11. Management history:** What is the history of harvest?
 - ✓ Unmanaged harvest: ongoing or new (4)
- ❑ **12. Management plan or equivalent:** Is there a management plan related to the harvest of the species?
 - ✓ No approved plan: informal unplanned management (4)
- ❑ **13. Aim of harvest regime in management planning:** What is harvest aiming to achieve?
 - ✓ Opportunistic, unselective harvest, or none (4)
- ❑ **14. Quotas:** Is the harvest based on a system of quotas?
 - ✓ Market-driven quota(s), arbitrary quota(s), or no quotas (4)



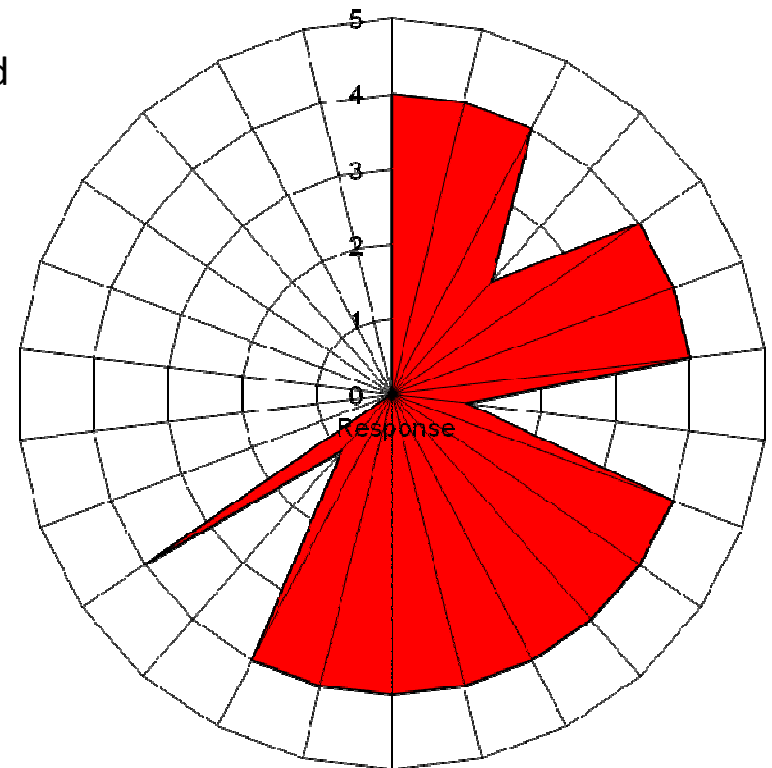
NDF for *Hippopotamus amphibius* – Control of harvest

- 15. Harvesting in Protected Areas:** What percentage of the legal national harvest occurs in State-controlled Protected Areas?
 ✓ Medium (2)
- 16. Harvesting in areas with strong resource tenure or ownership:** What percentage of the legal national harvest occurs outside Protected Areas, in areas with strong local control over resource use?
 ✓ Medium (2)
- 17. Harvesting in areas with open access:** What percentage of the legal national harvest occurs in areas where there is no strong local control, giving de facto or actual open access?
 ✓ Low (2)
- 18. Confidence in harvest management:** Do budgetary and other factors allow effective implementation of management plan(s) and harvest controls?
 ✓ Medium confidence (2)



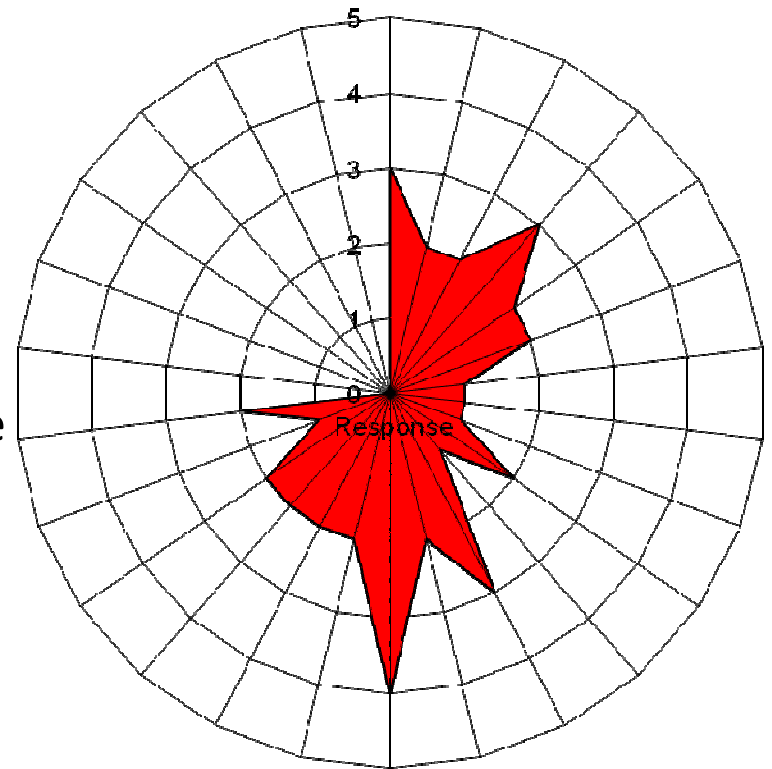
NDF for *Encephalartos heenanii* – Control of harvest

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 ✓ None (4)
- 17. Harvesting in areas with open access:** What percentage of the legal national harvest occurs in areas where there is no strong local control, giving de facto or actual open access?
 ✓ None (1)
- 18. Confidence in harvest management:** Do budgetary and other factors allow effective implementation of management plan(s) and harvest controls?
 ✓ No confidence (4)



NDF for *Hippopotamus amphibius* – Monitoring of harvest

- 19. Methods used to monitor the harvest:**
What is the principal method used to monitor the effects of the harvest?
 - ✓ Direct population estimates (1)
- 20. Confidence in harvest monitoring:** Do budgetary and other factors allow effective harvest monitoring?
 - ✓ Medium confidence (2)



NDF for *Encephalartos heenanii* – Monitoring of harvest

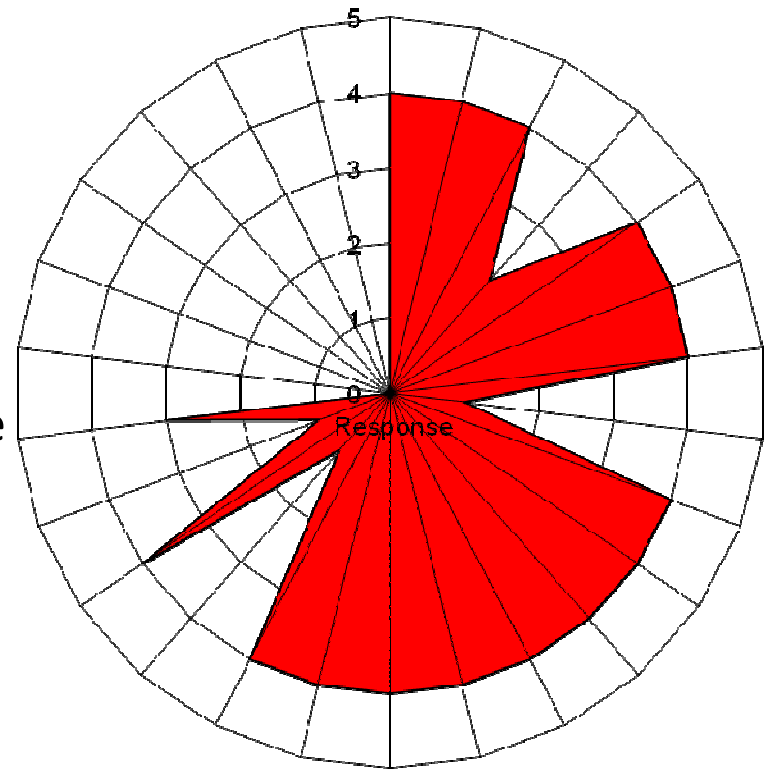
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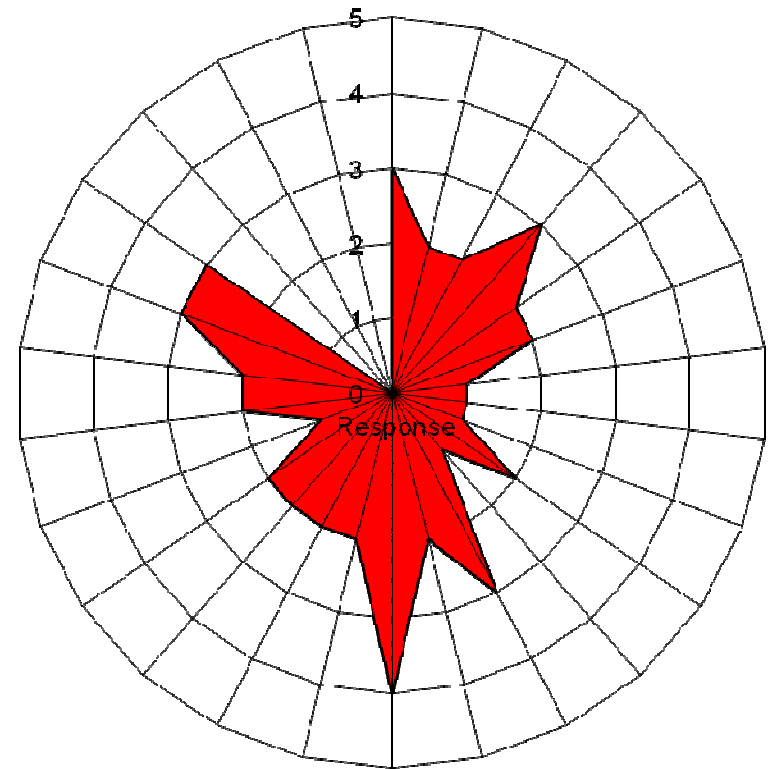
20. Confidence in harvest monitoring: Do budgetary and other factors allow effective harvest monitoring?

- ✓ Low confidence (3)



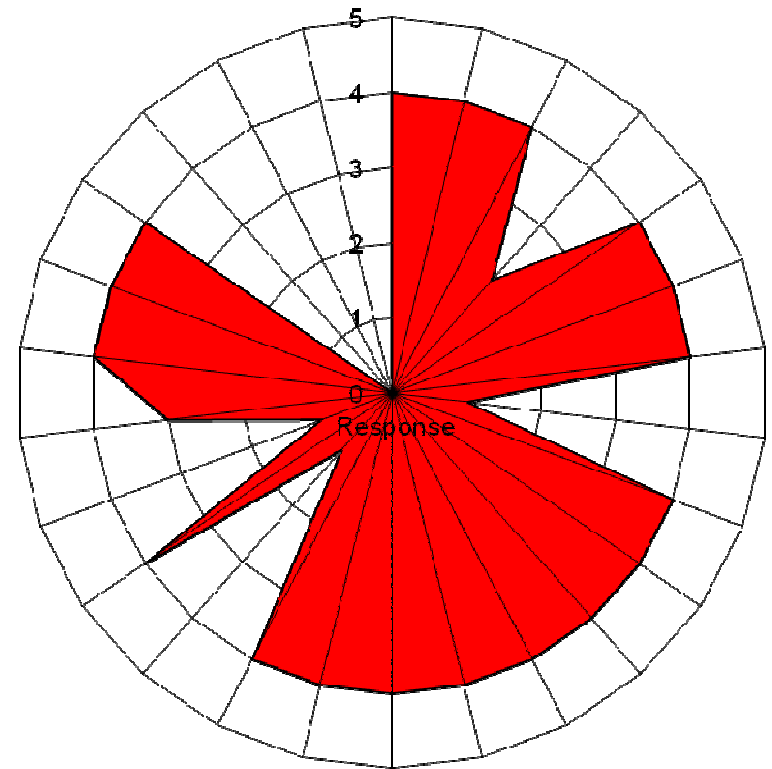
NDF for *Hippopotamus amphibius* – Incentives and benefits from harvesting

- 21. Utilization compared to other threats:** What is the effect of the harvest when taken together with the major threat that has been identified for this species?
 - ✓ Neutral (2)
- 22. Incentives for species conservation:** At the national level, how much conservation benefit to this species accrues from harvesting?
 - ✓ Low (3)
- 23. Incentives for habitat conservation:** At the national level, how much habitat conservation benefit is derived from harvesting?
 - ✓ Low (3)



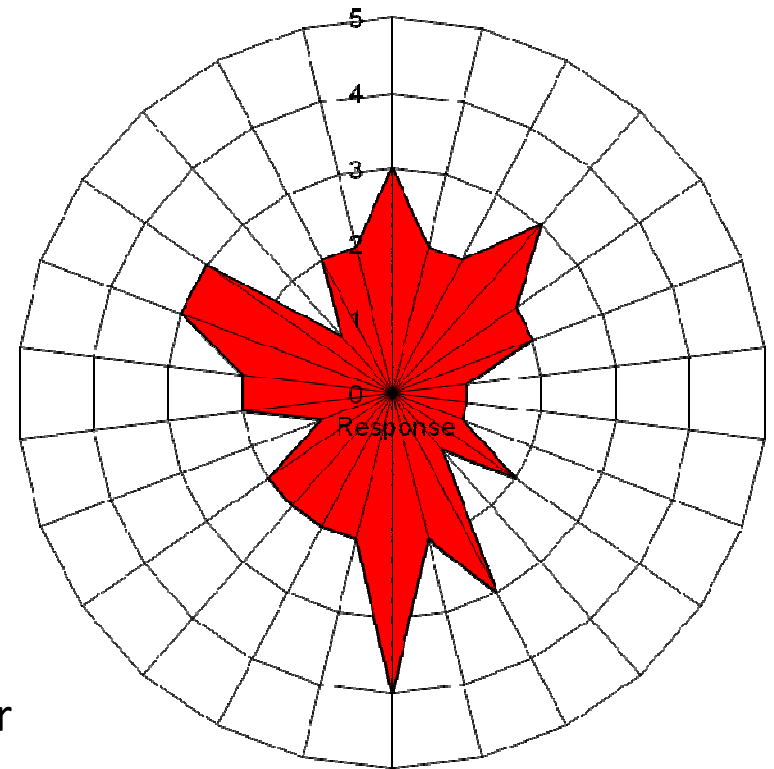
NDF for *Encephalartos heenanii* – Incentives and benefits from harvesting

- 21. Utilization compared to other threats:** What is the effect of the harvest when taken together with the major threat that has been identified for this species?
 - ✓ Highly negative (4)
- 22. Incentives for species conservation:** At the national level, how much conservation benefit to this species accrues from harvesting?
 - ✓ None (4)
- 23. Incentives for habitat conservation:** At the national level, how much habitat conservation benefit is derived from harvesting?
 - ✓ None (4)



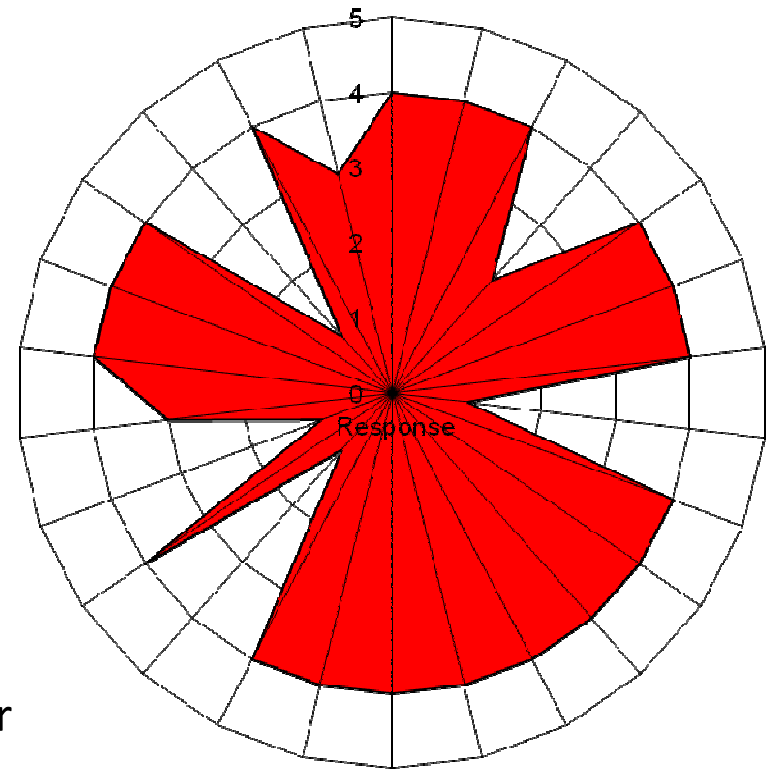
NDF for *Hippopotamus amphibius* – Protection from harvest

- 24. Proportion strictly protected:** What percentage of the species' natural range or population is legally excluded from harvest?
 - ✓ > 15% (1)
- 25. Effectiveness of strict protection measures:** Do budgetary and other factors give confidence in the effectiveness of measures taken to afford strict protection?
 - ✓ Medium confidence (2)
- 26. Regulation of harvest effort:** How effective are any restrictions on harvesting (such as age or size, season or equipment) for preventing overuse?
 - ✓ Effective (2)



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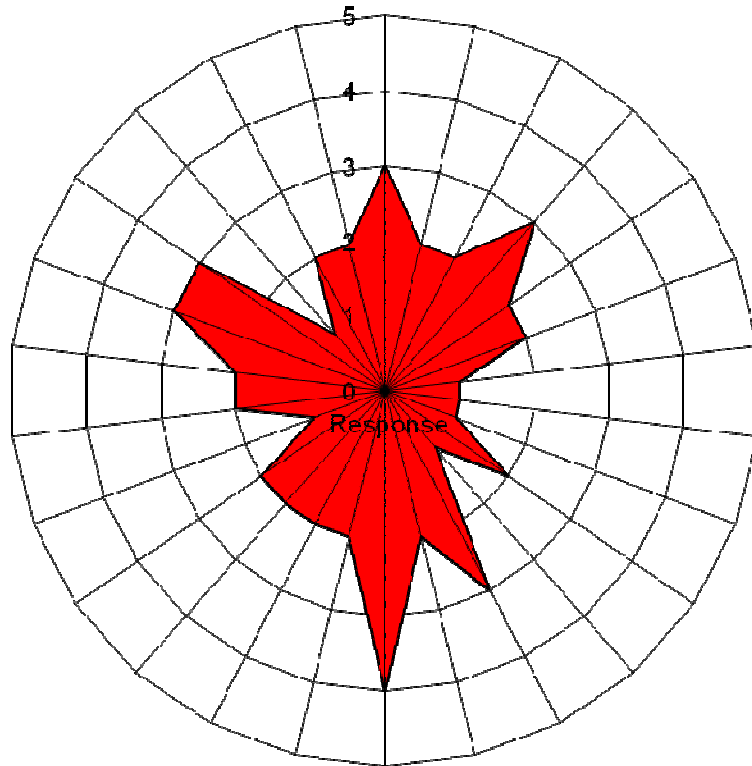
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 - ✓ > 15% (1)
- 25. Effectiveness of strict protection measures:** Do budgetary and other factors give confidence in the effectiveness of measures taken to afford strict protection?
 - ✓ No confidence (4)
- 26. Regulation of harvest effort:** How effective are any restrictions on harvesting (such as age or size, season or equipment) for preventing overuse?
 - ✓ Ineffective (3)





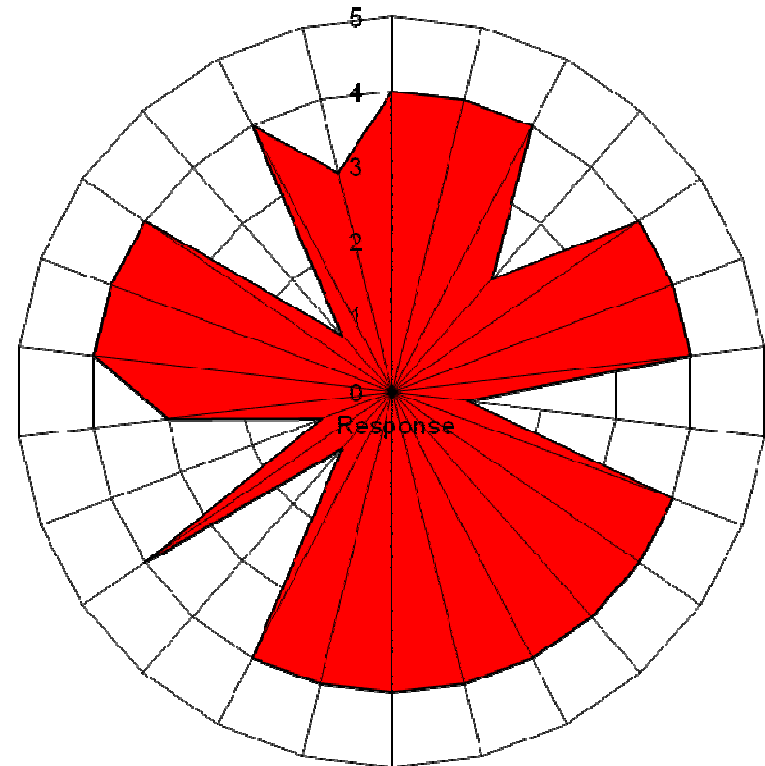
Final radar charts - comparison

Hippopotamus amphibius



LOW RISK

Encephalartos heenanii



HIGH RISK



Thank you
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