

Conservation Implications of Animal Culture and Social Complexity



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United Nations
Environment Programme

Convention on the Conservation of Migratory Species of Wild Animals



3rd Meeting of the Sessional Committee of the CMS Scientific Council (ScC-SC3)

Bonn, Germany, 29 May – 1 June 2018

UNEP/CMS/ScC-SC3/Inf.8

REPORT OF THE CMS WORKSHOP ON CONSERVATION IMPLICATIONS OF ANIMAL CULTURE AND SOCIAL COMPLEXITY

(Submitted by the Secretariat)

Aspects of human culture are well known



What is culture?

Expanding Culture to Animals

- **Group-typical behavioral patterns shared by community members that rely on socially learned and transmitted information.**

(Laland & Janik, 2006)

- **Need to eliminate possibility that behavior is due to individual learning, genetic variability or environmental influences.**

Examples of Culture in Animals



Tool Use



Singing



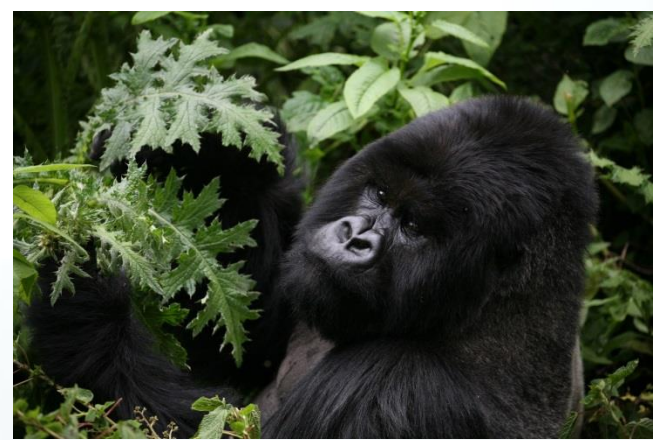
Migration Routes



Knowledge of Habitat

Do gorillas have culture?

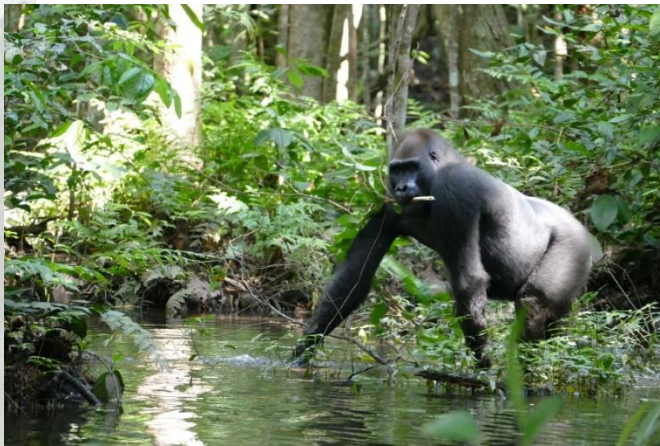




RESEARCH ARTICLE

Behavioral Variation in Gorillas: Evidence of Potential Cultural Traits

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Western Gorillas:

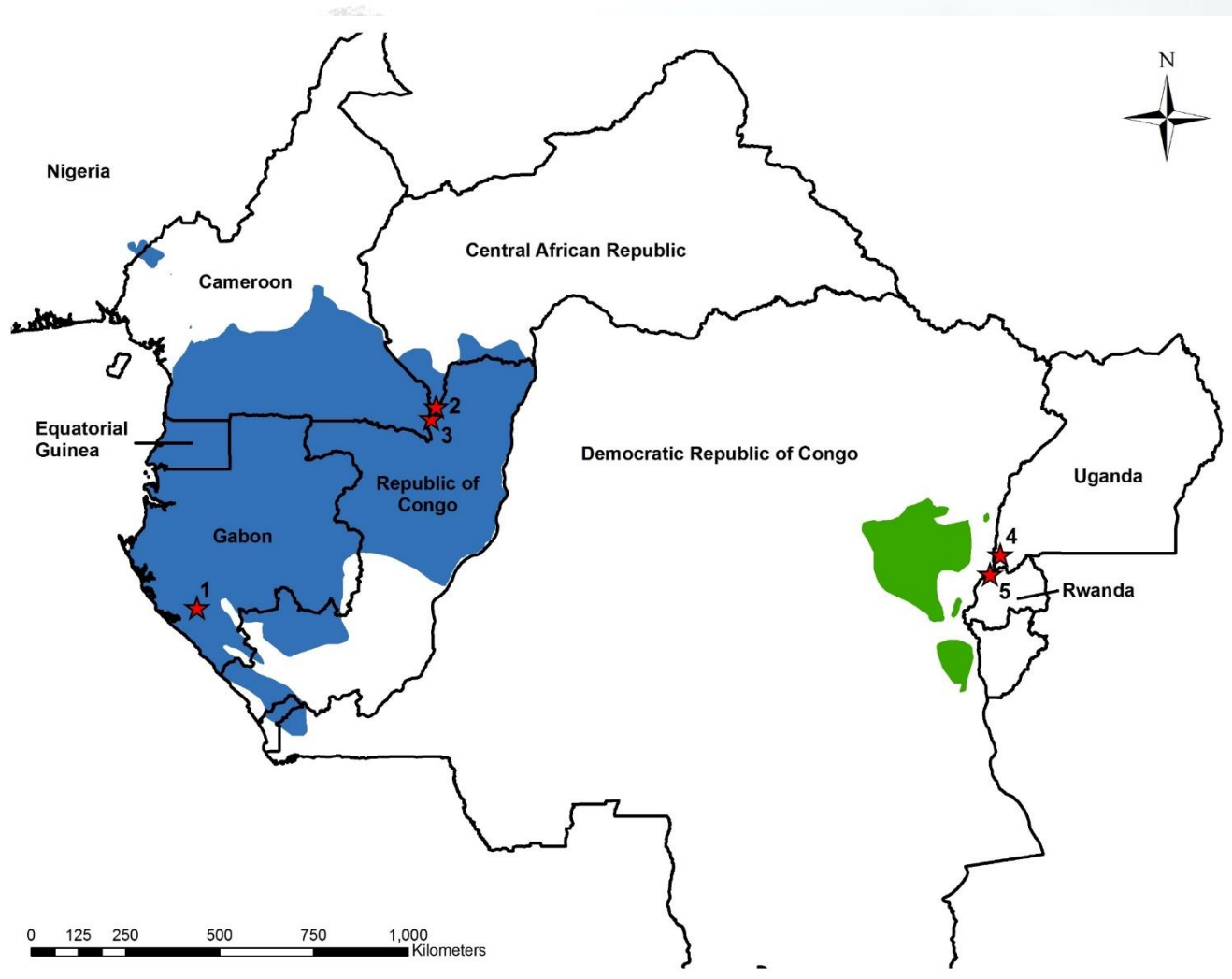
Gorilla gorilla gorilla

3 sites

Mountain Gorillas:

Gorilla beringei beringei

2 sites



Goal:

Seek evidence of culture in gorillas by applying the 'method of exclusion' to particular behaviors in five populations of gorillas.

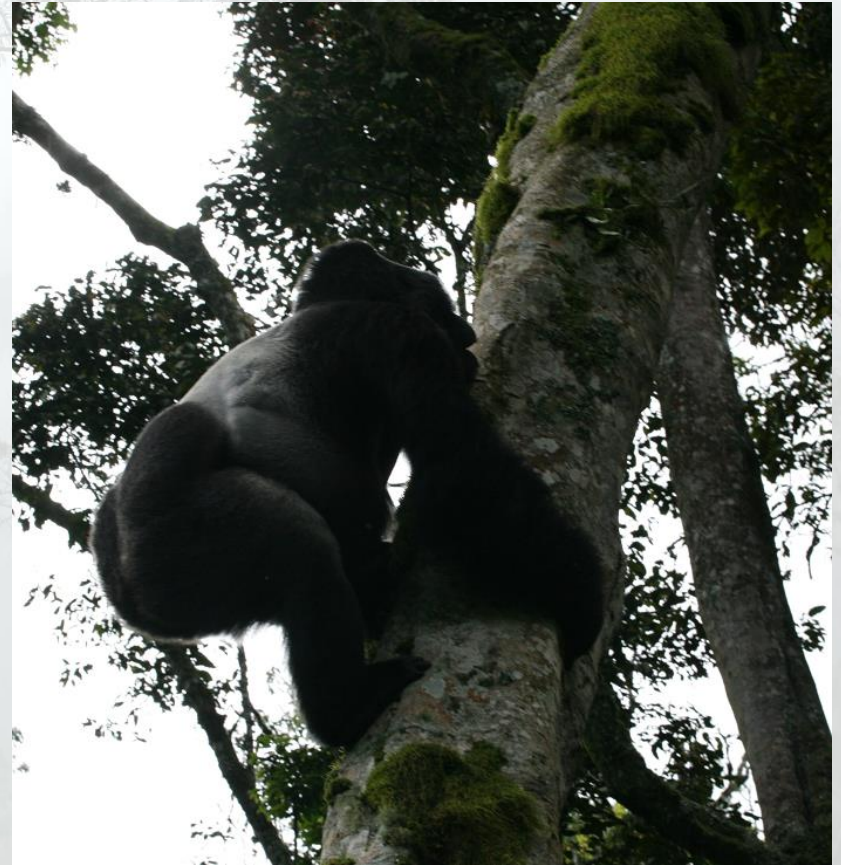
Results:

23 Potential Cultural Traits

- Differences between Western Gorillas & Mountain Gorillas = 11 (52%)**
- Intraspecific Variation = 12 (48%)**

Classified as being:

Foraging Related = 1
Environment Related = 9
Social Interactions = 7
Gestures = 5
Communication = 1



Conservation Implications for Understanding Culture in Gorillas:

Habitat Utilization

Human-Wildlife Conflict





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Overarching Recommendations

- Conserving animal culture should be integrated into the development of IUCN, CMS, and other conservation strategies.**
- Raising awareness about the value of conserving animal cultural diversity should be a priority of CMS initiative.**
- Evidence of behavioural diversity and animal culture should be collected for taxa of relevance to CMS.**
- Cataloguing the dimensions of cultural diversity in animals can assist in driving conservation actions and strategies.**

In Sum:

Recognize that animal culture is another aspect of biology that should be considered within existing conservation initiatives.



Raising Awareness in Academic Community

Science

POLICY FORUM

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Animal cultures matter for conservation

Philippa Brakes, Sasha R. X. Dall, Lucy M. Aplin, Stuart Bearhop, Emma L. Carroll, Paolo Ciucci, Vicki Fishlock, John K. B. Ford, Ellen C. Garland, Sally A. Keith, Peter K. McGregor, Sarah L. Mesnick, Michael J. Noad, Giuseppe Notarbartolo di Sciara, Martha M. Robbins, Mark P. Simmonds, Fernando Spina, Alex Thornton, Paul R. Wade, Martin J. Whiting, James Williams, Luke Rendell, Hal Whitehead, Andrew Whiten, Christian Rutz

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Understanding the rich social lives of animals benefits international conservation efforts

Raising Awareness in Conservation Community

Thank you!





