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1 **Not just the ivory trade: corruption undermines every aspect of** 2 **elephant conservation but can be reduced**

3 4 **Introduction**

5 African elephants are in decline through illegal killing for ivory, with estimated reductions in 75% of
6 306 studied populations (Wittemyer et al. 2014). The legal trade of ivory from natural mortality and
7 problem animal control has been suggested as a way to reduce this problem, as it can provide a
8 direct and regular source of funding to elephant conservationists in Africa (Stiles 2004), people who
9 currently depend on over-stretched government budgets and grants from international donors to
10 support their work. Such international trade has not taken place since 2008 but several African
11 countries stockpile their ivory in expectation of future sales and many countries outside Africa have
12 legal domestic markets for ivory certified as antique or coming from these legal stockpiles. A recent
13 article by Bennett (2014) argues that such trade is counter-productive and should be banned
14 because: (i) current legal domestic markets have been subverted by corruption and are allowing the
15 laundering of illegal ivory, and; (ii) reducing this corruption to acceptable levels within the next few
16 decades is impossible. The impact of corruption on conservation outcomes is often ignored in the
17 literature so we welcome Bennett's article for highlighting the issue. However, singling out the ivory
18 trade gives the impression that it is uniquely affected. Here we argue that corruption potentially
19 undermines every aspect of elephant conservation and there is no evidence that any approach is
20 more or less susceptible. Thus, the long-term future of elephants requires conservationists to learn
21 lessons from other sectors to understand and tackle this problem.

22 23 **What is corruption?**

24 There is an extensive literature on the definition of corruption in which common themes are the
25 abuse of office and implication that at least two willing parties are involved (World Bank 1997).
26 Corruption can take many forms and may be more easily understood when broken down into
27 component parts, such as bribery, cronyism, embezzlement, fraud and nepotism (Vargas-Hernández
28 2013). While corruption can occur in any institution or society, it tends to thrive when there is weak
29 rule of law, abnormal concentrations of power in one individual or institution, and no counter-
30 balancing mechanisms in place (Luo 2005). This is exacerbated when there is opportunity for
31 financial gain, and risks are heightened when working in certain geographical areas. In addition,
32 there are circumstances in which organizations are particularly vulnerable to corrupt exploitation,
33 such as when they rely on discretionary powers for permits, licenses or activities. Given this

34 background, it is reasonable to assume that many conservation organizations and initiatives are
35 highly vulnerable to the effects of corruption, especially when dealing with valuable commodities.
36 Despite this, we lack any systematic studies on key issues relating to corruption in conservation
37 (Smith & Walpole 2005) and the only available evidence comes from case-studies, media reports and
38 examples from other sectors.

39

40 **How does corruption impact elephant conservation?**

41 An increasing amount of evidence on the impacts of corruption in conservation comes from
42 elephant projects, as the recent increase in poaching has made this a high profile issue, with park
43 staff, enforcement officers and politicians all being implicated (Milman 2013). Furthermore, this
44 supports studies from the academic literature showing correlations between elephant population
45 trends and corruption (Smith et al. 2003; Burn et al. 2011) and documenting the role of corruption in
46 the illegal killing of elephants for ivory (Gross 2007) and meat (Stiles 2012). Bennett (2014) adds
47 compelling evidence for corruption undermining the legal sales of ivory but others argue the
48 alternative conservation strategy she advocates, namely banning the legal trade, is similarly
49 vulnerable. This is because both legal trade and trade bans are undermined by the collusion of
50 corrupt officials in the illegal killing of elephants and the smuggling of ivory from producer to
51 consumer states (Stiles 2014).

52

53 Indeed, elephant conservation involves a range of approaches and corruption could impact them all
54 (Table 1). Bribery undermines efforts to combat illegal trade, but also impacts on enforcement of
55 anti-poaching laws (Barnes et al. 1995), sustainable hunting and effective land-use planning.
56 Cronyism and nepotism reduce staff capacity and the likelihood of crimes being reported.

57 Embezzlement reduces conservation funding levels (Thouless & Sakwa 1995), undermines positive
58 incentives for community-based conservation through trophy-hunting and ecotourism (Leader-
59 Williams et al. 2009), and leads to decision makers focusing on the wishes of donors and elites more
60 than stakeholders (Norton-Griffiths 2007). Fraud also diverts and reduces conservation funding and
61 undermines donor confidence by claiming funds for non-existent projects or colluding to avoid
62 paying concession fees (Laurance 2004).

63

64 **How can we reduce corruption?**

65 This suggests the influence of corruption on elephant conservation is far reaching and should be
66 recognized as an important problem. Such a conclusion might appear depressing but fortunately
67 there is plenty of evidence from other sectors that corruption can be reduced at the country (Alam &

68 Southworth 2012), institutional (United Nations 2009) and local project level (Landell-Mills 2013). A
69 first step is to divide up the problem into specific issues based on type of corruption and type of
70 conservation approach, e.g. embezzlement of protected area budgets. This makes the task less
71 daunting, moving away from portraying corruption as a monolithic, unsolvable problem. Many of
72 these issues can then be tackled by standard good management such as auditing accounts, adopting
73 transparent hiring practices and prosecuting alleged miscreants (Transparency International 2013).
74 More broadly, organizations benefit from developing anti-corruption policies and culture that help
75 guide staff when dealing with the problem (Transparency International 2012). Issue-specific
76 solutions are also needed so, for example, lessons for the ivory trade could be learnt from the Forest
77 Stewardship Council (FSC) certification system. There are key similarities between the trade in ivory
78 and tropical hardwood, as both come from slow-growing species, are highly valued commodities and
79 their trade involves crossing national boundaries, obtaining permits and working with officials in
80 countries with high levels of corruption (Cashore et al. 2007). Despite this, the integrity of the FSC
81 certification process is widely recognized and is supported by most international conservation non-
82 governmental organizations (NGOs), although uptake in Africa is currently low (FSC, 2014).

83

84 This shows that corruption can be reduced but shifts focus to the institutional and political will
85 needed for this change. Therefore, one approach would be to focus on aspects of elephant
86 conservation where conservation practitioners have most influence, and these tend to be those that
87 act at the local to landscape level (Table 1). Increasing effectiveness at this scale would help ensure
88 healthy elephant populations and local support for their conservation, as well as tackling the
89 problem of ivory laundering at source. Moreover, this would have broader biodiversity benefits,
90 given that recent declines in African elephants are not unique and are similar to those of lower
91 profile African mammal species that are not impacted by international trade (Craigie et al. 2010).

92

93 Just as importantly, we need action and leadership at higher political levels. Anti-corruption policies
94 have been developed and enforced in other sectors through popular campaigns at the grassroots
95 level and pressure from donors. One obvious approach would be for international conservation
96 groups to lead on tackling the problem or to engage more closely with the anti-corruption
97 community. They could follow the example of CAFOD, Tearfund and Christian Aid, development
98 NGOs that recognized that corporate bribery was a major barrier to reducing international poverty
99 and so played an active role in supporting anti-corruption legislation, such as the recent UK Bribery
100 Act. A more radical approach would be to consider corruption when developing international policy.
101 For example, the international community generally makes policy recommendations based on

102 protecting elephants in countries where they are declining most rapidly. We would argue these
103 declines are likely to continue unless corruption is tackled and so elephant range states with
104 effective anti-corruption policies should have more of a voice in international debates.

105

106 **Conclusions**

107 We are more sanguine about the future of African elephants than Bennett (2014), but without
108 tackling corruption we fear their distribution patterns will resemble those of Africa's rhinos, with
109 relatively large populations in countries with lower levels of corruption (Smith et al. 2013) and
110 smaller populations in a few high-profile protected areas in countries where corruption is more
111 prevalent. Despite this, corruption is still down-played in the conservation literature and so we
112 applaud Bennett for raising the profile of this topic and detailing the countries involved. But this
113 needs to be a beginning. We need much more research to understand the specifics of the problem
114 and to start adopting tried-and-tested techniques for reducing corruption at every level. Such action
115 could be inspired by the anti-corruption community, who are confident that corruption can be
116 tackled given recent developments that include new legislation, new political commitment and
117 greater enforcement (CMS, 2013). Indeed, it would be ironic if conservationists were to conclude
118 that corruption is too hard to tackle just at the point when the rest of the world is concluding the
119 opposite.

120

121 **References**

122 Alam, A., and V. R. Southworth. 2012. Fighting Corruption in Public Services: Chronicling Georgia's
123 Reforms. World Bank.

124 Barnes, R. F. W., A. Blom, and M. P. T. Alers. 1995. A review of the status of Forest Elephants
125 *Loxodonta africana* in Central Africa. *Biological Conservation* **71**:125-132.

126 Bennett, E. L. 2014. Legal Ivory Trade in a Corrupt World and its Impact on African Elephant
127 Populations. *Conservation Biology*, in press.

128 Burn, R. W., F. M. Underwood, and J. Blanc. 2011. Global Trends and Factors Associated with the
129 Illegal Killing of Elephants: A Hierarchical Bayesian Analysis of Carcass Encounter Data. *Plos One* **6**.

130 Cashore, B., G. Auld, S. Bernstein, and C. McDermott. 2007. Can Non-state Governance 'Ratchet
131 Up' Global Environmental Standards? Lessons from the Forest Sector. *Review of European
132 Community & International Environmental Law* **16**:158-172.

133 CMS 2013. CMS Guide to Anti-Bribery and Corruption Laws. Frankfurt, Germany.

134 Craigie, I. D., J. E. M. Baillie, A. Balmford, C. Carbone, B. Collen, R. E. Green, and J. M. Hutton. 2010.
135 Large mammal population declines in Africa's protected areas. *Biological Conservation* **143**:2221-
136 2228.

- 137 FSC 2014 Global Forest Stewardship Council certificates: type and distribution November 2014 <
138 <https://ic.fsc.org/preview.facts-and-figures-november-2014.a-3810.pdf>>
- 139 Gross, L. 2007. In the shadows of the Congo basin forest, elephants fall to the illegal ivory trade.
140 PLoS biology **5**:e115.
- 141 Landell-Mills, P. 2013. Citizens against corruption: report from the front line. Troubador Publishing.
- 142 Laurance, W. F. 2004. The perils of payoff: corruption as a threat to global biodiversity. Trends in
143 Ecology & Evolution, **19**:399-401.
- 144 Leader-Williams, N., R. D. Baldus, and R. J. Smith. 2009. The influence of corruption on the conduct
145 of recreational hunting. Pages 296-316 in B. Dickson, J. M. Hutton, and W. M. Adams, editors.
146 Recreational Hunting, Conservation and Rural Livelihoods. Wiley-Blackwell, Oxford.
- 147 Luo, Y. 2005. An Organizational Perspective of Corruption. Management and Organization Review
148 **1**:119-154.
- 149 Milman, O. 2013. Ranger corruption 'impeding global fight against poaching'.
150 <[http://www.theguardian.com/environment/2013/mar/27/ranger-corruption-impeding-fight-](http://www.theguardian.com/environment/2013/mar/27/ranger-corruption-impeding-fight-poaching)
151 [poaching](http://www.theguardian.com/environment/2013/mar/27/ranger-corruption-impeding-fight-poaching)>
- 152 Norton-Griffiths, M. 2007. How Many Wildebeest Do You Need? World Economics **8**:41-64.
- 153 Smith, R. J., D. L. Roberts, R. Duffy and F.A.V. St John. 2013. New rhino conservation project in South
154 Africa to understand landowner decision-making. Oryx **47**:323-323.
- 155 Smith, R. J., R. D. J. Muir, M. J. Walpole, A. Balmford, and N. Leader-Williams. 2003. Governance and
156 the loss of biodiversity. Nature **426**:67-70.
- 157 Smith, R. J., and M. J. Walpole. 2005. Should conservationists pay more attention to corruption?
158 Oryx **39**:251-256.
- 159 Stiles, D. 2004. The ivory trade and elephant conservation. Environmental Conservation **31**:309-321.
- 160 Stiles, D. 2012. Elephant meat and ivory trade in Central Africa. Pachyderm **50**:26-36.
- 161 Stiles, D. 2014. Can elephants survive a continued ivory trade ban?
162 <[http://voices.nationalgeographic.com/2014/09/15/opinion-can-elephants-survive-a-continued-](http://voices.nationalgeographic.com/2014/09/15/opinion-can-elephants-survive-a-continued-ivory-trade-ban)
163 [ivory-trade-ban](http://voices.nationalgeographic.com/2014/09/15/opinion-can-elephants-survive-a-continued-ivory-trade-ban)>
- 164 Thouless, C. R., and J. Sakwa. 1995. Shocking elephants: fences and crop raiders in Laikipia District,
165 Kenya. Biological Conservation **72**:99-107.
- 166 Transparency International. 2012. Keeping REDD+ clean: a step-by-step guide to preventing
167 corruption, Berlin, Germany.
- 168 Transparency International. 2013. Business principles for countering bribery, Berlin, Germany.
- 169 United Nations. 2009. Business Against Corruption: case studies and success stories. United Nations,
170 New York.

- 171 Vargas-Hernández, J. 2013. The multiple faces of corruption: typology, forms and levels. Pages 111-
172 117. Organizational immunity to corruption: building theoretical and research foundations.
- 173 Wittemyer, G., J. M. Northrup, J. Blanc, I. Douglas-Hamilton, P. Omondi, and K. P. Burnham. 2014.
174 Illegal killing for ivory drives global decline in African elephants. Proceedings of the National
175 Academy of Sciences of the United States of America **111**:13117-13121.
- 176 World Bank. 1997. Helping Countries Combat Corruption: The Role of the World Bank. Poverty
177 Reduction and Economic Management. The World Bank, Washington DC, USA.

178 **Table 1: An overview of elephant conservation strategies, their spatial scale and the relative role**
 179 **of conservation practitioners in their implementation. Conservation practitioners are defined as**
 180 **people responsible for implementing conservation policy or practice and can include government**
 181 **staff, members of civil society and the private sector. Details will differ by country, region and**
 182 **project type, e.g. government plays a major role when land-use planning decisions involve state**
 183 **protected areas but the private sector can be more involved when planning in logging, agricultural**
 184 **and tourism concessions. However, we argue there is a general trend for the relative role of these**
 185 **practitioners to decrease as spatial extent increases, so site-based interventions are often those**
 186 **where conservation practitioners can have the most impact.**

Elephant conservation strategy	Spatial scale	Relative role of conservation practitioner
Protected area and habitat management	Site	Major
Positive incentives through revenue generation from ecotourism	Site	Major
Positive incentives through revenue generation from trophy hunting	Site	Major
Increasing tolerance through human-elephant conflict mitigation	Site	Medium to Major
Elephant population monitoring	Site to sub-national	Major
Enforcement of anti-poaching legislation (largely by government staff)	Site to sub-national	Minor to Major
Land-use planning to maintain and restore habitat and connectivity	Landscape	Minor to Medium
Implementation of government policy on elephants and conservation	National	Minor to Major
Enforcement of trade legislation on elephant products (mainly by government agencies)	National to global	Minor

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