

## Featured external publications

### **Primate conservation: Unmet challenges and the role of the International Primatological Society.**

By John Oates (2013) *International Journal of Primatology*, 34 (2): 235-245.

John Oates has been working on primate research and conservation in Africa since 1972, and this new paper gives a thoughtful reflection on the reasons why primates are becoming increasingly threatened around the world despite conservation recommendations and activities. To quote some of the main points of the abstract: "In the last 40 years, threats to the survival of wild primate populations have greatly increased. Primatologists have long been aware of these threats, and since 1978 have formulated plans to safeguard threatened species. Yet an increasing number of primate species face a high to extremely high risk of extinction.... [Conservation] actions have long been recommended, so why have they not worked better? Perhaps the pressures on the natural world are too great to be countered, but I suggest also that too many of the various actors involved in conservation are overly driven by materialism and self-interest. I recommend more attention to the common good and a greater emphasis on the ethical and spiritual reasons for conservation." The full text is well worth a read on the links below:

Summary:

<http://link.springer.com/article/10.1007/s10764-013-9664-1>

Full text:

<http://link.springer.com/content/pdf/10.1007%2Fs10764-013-9664-1>

### **Conserving large carnivores: dollars and fence.**

By Packer, C. et al. (2013), *Ecology Letters*, in press.

Do we have to build fences to save wild lions? The abstract from this article authored by 58 experts pretty much says it all: "Conservationists often advocate for landscape approaches to wildlife management while others argue for physical separation between protected species and human communities, but direct empirical comparisons of these alternatives are scarce. We relate African lion population densities and population trends to contrasting management practices across 42 sites in 11 countries. Lion populations in fenced reserves are significantly closer to their estimated carrying capacities than unfenced populations. Whereas fenced

reserves can maintain lions at 80% of their potential densities on annual management budgets of \$500 km<sup>2</sup>, unfenced populations require budgets in excess of \$2000 km<sup>2</sup> to attain half their potential densities. Lions in fenced reserves are primarily limited by density dependence, but lions in unfenced reserves are highly sensitive to human population densities in surrounding communities, and unfenced populations are frequently subjected to density-independent factors. Nearly half the unfenced lion populations may decline to near extinction over the next 20–40 years."

Read the rest on:

<http://onlinelibrary.wiley.com/doi/10.1111/ele.12091/full>

### **Comparative phylogeography of African savannah ungulates.**

By Lorenzen, E.D., Heller, R., & Siegismund, H. R. (2012), *Molecular Ecology*, 21 (15): 3656-3670.

This is a wonderful review of the historical distributions of African savannah ungulates, based on numerous genetics studies. This is the abstract: "The savannah biome of sub-Saharan Africa harbours the highest diversity of ungulates (hoofed mammals) on Earth. In this review, we compile population genetic data from 19 codistributed ungulate taxa of the savannah biome and find striking concordance in the phylogeographic structuring of species. Data from across taxa reveal distinct regional lineages, which reflect the survival and divergence of populations in isolated savannah refugia during the climatic oscillations of the Pleistocene. Data from taxa across trophic levels suggest distinct savannah refugia were present in West, East, Southern and South-West Africa. Furthermore, differing Pleistocene evolutionary biogeographic scenarios are proposed for East and Southern Africa, supported by palaeoclimatic data and the fossil record. Environmental instability in East Africa facilitated several spatial and temporal refugia and is reflected in the high inter- and intraspecific diversity of the region. In contrast, phylogeographic data suggest a stable, long-standing savannah refuge in the south."

Read the rest, and enjoy all the species maps, on:

<http://onlinelibrary.wiley.com/doi/10.1111/j.1365-294X.2012.05650.x/full>

**Introduced primate species of an Atlantic Forest region in Brazil: present and future implications for the native fauna.**

By Oliveira, L.C. & Grelle, C.E.V. (2012), *Tropical Conservation Science*, 5 (1): 112-120.

This is a very intriguing article about the negative impacts of introduced primate species on native fauna. To quote the main points from the abstract: “.....we recorded 17 primate species with at least one record within the state of Rio de Janeiro. At least eight taxa can be considered non-native to the state. Conservation implications for native fauna may include food resource depletion and competition, hybridization, and disease transmission. Some of these effects were already recorded on the native fauna. We believe the removal of non-native primate species from the state is necessary in order to preserve native fauna regardless of political and ethical issues.” One of the specific concerns the authors mention in the text is the potential for hybridization between introduced golden-headed lion tamarins and the endangered golden lion tamarins. Hybrids of other closely-related primates are apparently already common in and around Rio.

Full text available from:

[http://tropicalconservationscience.mongabay.com/content/v5/TCS-2012\\_mar\\_112-120\\_Oliveira\\_and\\_Grell.pdf](http://tropicalconservationscience.mongabay.com/content/v5/TCS-2012_mar_112-120_Oliveira_and_Grell.pdf)

**Conspecifics can be aliens too: A review of effects of restocking practices in vertebrates.**

By Jocelyn Champagnon, Johan Elmberg, Matthieu Guillemain, Michel Gauthier-Clerc, Jean-Dominique Lebreton (2012), *Journal for Nature Conservation* 20: 231-241.

A very useful review about numerous issues which can be unforeseen when adding captive-born animals to wild populations. To quote some of the main points from the abstract: “We review the indexed scientific literature (233 papers) dealing with ‘restocking’ of vertebrates, i.e. reinforcement of wild populations by release of individuals of the same species. We found evidence that restocking may have desired beneficial effects such as: increased genetic diversity and mitigation of Allee effects in small populations; increased size or even salvation of threatened populations; increased harvest opportunities; and, redirection of harvest pressure from wild to captive-bred individuals. However, restocking may also have negative effects like changes in behaviour, morphology, and demography in recipient populations, as well as enhancement of pathogen spread. Negative genetic effects on recipient populations include homogenisation, introduction of non-native genes, and loss of local adaptation.... Our

review demonstrates that restocking practices may and do cause significant disruptions of natural patterns in wild recipient populations....”

Full abstract available from:

<http://www.sciencedirect.com/science/article/pii/S1617138112000325>

**What is wrong with current translocations? A review and a decision-making proposal.**

By Pérez, I., Anadón, J. D., Díaz, M., Nicola, G. G., Tella, J. L., & Giménez, A. (2012), *Frontiers in Ecology and the Environment*, 10 (9): 494-501.

This is a thought-provoking article trying to prioritise existing translocation guidelines to help decide whether proposed reintroduction and other translocation projects are justifiable and likely to succeed. To quote directly from the summary: “Should a species be translocated? Uncertainty regarding the necessity and feasibility of many translocations complicates answering this question. Here, we review translocation projects, both published and unpublished. Our results indicate that most projects (1) addressed fewer than half of the basic criteria established for translocations and (2) were either unjustifiable from a conservation perspective or inadequately designed to guarantee success or preclude negative consequences. We propose a hierarchical decision-making system – an explicit method that integrates existing guidelines, thereby covering a key gap in conservation science – to reduce ambiguity when deciding whether to implement a given translocation project. This method will improve the likelihood of success in translocation projects and contribute to the efficient use of the limited resources available for these conservation efforts.”

Available from:

<http://www.esajournals.org/doi/abs/10.1890/110175?journalCode=fron>

**Conflicting and Complementary Ethics of Animal Welfare Considerations in Reintroductions.**

By Harrington, L.A., Moehrenschrager, A., Gelling, M., Atkinson, R.P.D., Hughes, J. & Macdonald, D.W. (2013), *Conservation Biology*, in press

This is a lengthy, in-depth review paper discussing animal welfare aspects of reintroductions and other translocations, with some helpful flow-charts and decision-trees to help practitioners incorporate animal welfare considerations into each phase of a project. To quote some of the main points from the abstract: “We systematically reviewed the recent scientific peer-

reviewed and online gray literature on reintroductions of captive-bred and wild-caught animals (mammals, birds, amphibians, and reptiles) to quantify the occurrence of animal welfare issues. We considered monitoring that could be indicative of the animal's welfare status and supportive management actions that could improve animal welfare (regardless of whether the aim was explicitly animal welfare orientated)... Practitioners can address animal-welfare issues in reintroductions by considering the potential implications for individual animals at all stages of the release process using the decision tree presented. We urge practitioners to report potential animal-welfare issues, describe mitigation actions, and evaluate their efficacy to facilitate transparent evaluation of common moral dilemmas and to advance communal strategies for dealing with them. Currently, comparative mortality rates, health risks, postrelease stress, effectiveness of supportive measures, and behavior of individuals warrant further research to improve animal welfare in reintroductions and to increase success of such projects.”

Full abstract available from:

<http://onlinelibrary.wiley.com/doi/10.1111/cobi.12021/abstract>

**The Social and Ecological Integration of Captive-Raised Adolescent Male African Elephants (*Loxodonta africana*) into a Wild Population.**

By Evans, K., Moore, R., & Harris, S. (2013), *Plos one* 8 (2): e55933.

Interesting study on the integration of captive-raised elephants to a wild population, including a thorough review of many issues related to release of captive elephants. The main points quoted from the abstract: “A rapid rise in the number of captive African elephants (*Loxodonta africana*) used in the tourism industry in southern Africa and orphaned elephants in human care has led to concerns about their long-term management, particularly males. One solution is to release them into the wild at adolescence, when young males naturally leave their herd. However, this raises significant welfare concerns: little is known about how well released elephants integrate into wild populations and whether they pose a greater threat to humans than wild elephants. We document the release of three captive-raised adolescent male African elephants in the Okavango Delta, Botswana....We show that captive-raised adolescent male elephants can integrate into a wild population. Long-term studies are required to determine the longevity, breeding success, and eventual fate of released male elephants, but we identified no

significant short-term welfare problems for the released elephants or recipient population.”

Full text available from:

<http://dx.plos.org/10.1371/journal.pone.0055933>

**Trophy hunting in Africa: long-term trends in antelope horn size.** By Crosmary, W.-G., Loveridge, A. J., Ndaimani, H., Lebel, S., Booth, V., Côté, S. D. & Fritz, H. (2013), *Animal Conservation* in press

Some of the main points from the abstract: “We investigated horn length trends of harvested male impalas, greater kudu and sable antelopes, from 1974 to 2008 in Matetsi Safari Area, Zimbabwe.... Hunting pressure and trophy value were higher for sable antelopes than for impalas and greater kudu. Accordingly, the decline of horn length in this species was more pronounced. More valuable trophy species, such as sable antelopes, require special attention because they may be exposed to higher hunting pressure, and are therefore more likely to experience a decrease in horn size.”

Full abstract available from:

<http://onlinelibrary.wiley.com/doi/10.1111/acv.12043/abstract>