Good science

The Amazon forest is burning, igniting the political sphere and beyond. The fire has been invited to all the discussions of the last “high level meetings”. It is encouraging to see that the environment is no longer marginal in the minds of decision makers, pushing responsible heads of state towards more serious commitments that will hopefully lead to action. The Pope even called out to save this forest, so important for all of us! Still, champions of denial and arsonists of the planet linger, and those alone jeopardize all hope.

We remember last year’s disappearance of Sudan, the last male of his kind (taken as an example in the MOOC on the conservation of species), which put an end to hopes of saving the species from extinction, then unavoidable. After harvesting these ovocytes, ecologists will be able to fertilize them with frozen semen taken from the last male rhinos before they died. The resulting embryos will be implanted on Southern White Rhino females, with the hope that they will be able to carry offspring.

If this is the case, then there will still be a long way ahead to restore the species, whose genetic diversity will be greatly reduced, but the hope remains that it can be saved, at the cost of incredible technical and financial efforts. To strengthen the genetic pool, scientists will also try to artificially create gametes based on tissue samples collected in the past from different Northern Rhinos. Another huge challenge, nearly science fiction, and yet accessible today.

The example - encouraging - of the potential “resuscitation” of this species reminds us of the absolute necessity to do everything we can in order not to reach this point. IPBES released a report in May that counts about a million species in danger of extinction in the very near future; the enormous scope of the task is graspable. And the urgency of silencing arsonists.


This new awareness is echoed by the progress of science. Last August, scientists were able to collect 5 oocytes from each of the last two remaining female Northern White Rhinoceros, currently raised in Ol Pejeta, Kenya.
Papaco MOOCs

Papaco’s first MOOC (Massive Open Online Course) was launched in 2015. Since then, we developed four other MOOCs, and the sixth one on New Technologies in protected areas will be released on 14 October 2019.

These courses are followed entirely online, they are completely free, they are open to all, regardless of your background. MOOCs are organised per session, and students who score an average over 75% get a certificate of completion for the MOOC in question.

Next session: 16 September to 15 December 2019

Registrations for the new session are open, and you will be able to access the courses from 16 September on. There is no specific rhythm you must comply to, all you need to do is to complete the exams by 15 December, which is very much feasible. You may also enrol in several MOOCs at once.

If you have any questions, contact us through Facebook or send an email at moocs@papaco.org.

MOOC New technologies: 14 October to 15 December 2019

We are in the process of finalising the MOOC on New Technologies. It will be launched a month after the start of the session, in other words, on 14 October 2019. Registrations are already open.

Registrations: mooc-conservation.org
Ambassadors

Papaco’s MOOCs

During the previous session, we selected five students from five different African cities to represent students of their respective regions. This coming session, we are extending the programme to other cities. We reached out to all our Facebook followers, and after much thought, here are all the ambassadors. You’ll notice there are only three English-speaking ambassadors, and this is just because very few English-speakers responded to the call. If you are interested, get in touch with us and we’ll consider you for the next session!

What are ambassadors for? Ambassadors are MOOC students who already have some experience with Papaco’s MOOCs, and who volunteered to help other students from their cities or countries. They are like class presidents or representatives and where possible, they are the link between the students and Papaco.

Click on the ambassador’s name to access their Facebook profile, or contact them through the means mentioned under their photo.
Research is an essential tool for biodiversity conservation. Not only does it improve biodiversity knowledge, but it also provides the technical tools that help protected area managers define strategies and take informed decisions with the participation of local communities.

This article provides examples of partnerships between researchers and protected area managers in Africa, working together to improve park management. Comoé National Park in Côte d’Ivoire, West Africa, is a striking example of how research contributed to the improvement of knowledge and of the state of biodiversity. For nearly 14 years, this World Heritage site was on the Danger List due to the drastic decline in mammal populations caused by poaching related to the political and military crisis that shook the country in the early 2000.

In 2011, after the crisis stabilised, the positive results from a research programme carried out by an Ivorian university (Nangui Abrogoua University) and a German one (Würzburg) contributed to the park being removed from the Danger List. To obtain this result, a monitoring programme was implemented and included the placement of camera traps in the South-Western part of the park, which in turn confirmed the presence of viable populations of Comoé’s flagship mammal species including the elephant (see map below), the buffalo and the chimpanzee. This example shows that research is most useful for biodiversity conservation when it is in alignment with managers’ needs.

In South Africa, research has been carried out in parks since the 1960s (Carruthers 2017). For example, the Kruger Park Rivers Research Programme (KNPRRP) which was launched in 1988 under the umbrella of a cooperation between the Department of Water Affairs, of Environmental Affairs, the Water Research Commission, the National Research Foundation and South African National Parks (the organisation in charge of park management). This joint research initiative lasted over a decade, with the goal being to find solutions for adaptive park management. The positive results extended outside the boundaries of Kruger park, thus showing how to adopt a multidisciplinary approach, inside and outside the park, on conservation issues, while not forgetting the social dynamics outside the park (Biggs 2003).

In a similar vein, in December 2018, park managers of the Saloum Delta National Park, IUCN experts and ICOMOS (International Council on Monuments and Sites) came together to discuss the link between cultural practices and biodiversity conservation. This meeting led stakeholders to note the importance of research in safeguarding the future of the park. Indeed, cultural practices related to the exploitation of mangrove products have helped preserve this ecosystem for several generations, a relationship which is not well-documented. As such, and in order to value this strong relationship between culture and nature, it was recommended that the new University of Sine Saloum should collaborate with protected area managers of the Saloum Delta World Heritage site to research mangrove conservation, which is the heart of the Saloum Delta’s local economy.
Among the research topics that were discussed, the importance of local knowledge was emphasised. In Saloum for instance, women are the holders of traditional knowledge on mangrove restoration. Thus, research could be carried out in partnership with these women in order to develop better restoration techniques for the mangrove ecosystem in the Saloum Delta. Another example in Madagascar also shows the importance of local knowledge for the conservation of Baobab alley (Marie et al. 2009).

Just like the context of the Saloum Delta, the role of local communities’ knowledge is key. This knowledge is recognised in the IPBES report which, in part, focuses on indigenous communities (IPBES 2019). In the context of protected areas managed by local communities, cooperation can also be developed with ICCAs (Indigenous and Community Conserved Areas) which are increasingly working with research institutions. Research, in protected areas, must be adapted to the context and to local priorities of the different actors, with a better recognition of traditional knowledge.

There are examples of relevant research problems for protected areas, that were developed by practitioners and researchers, recently published in the IUCN Parks journal (Dudley et +47 others 2018). This list of research questions covered the following topics: climate change, management, capacity building, ecology, social challengers, ecosystem services, protected area funding, political context and governance. These diverse topics show the need for diverse and complementary research.

To conclude, interesting partnerships can be made in the field of protected areas, between researchers and different stakeholders. This article showcases just a few examples among many others.

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Literature


Traffic - Briefing document

TRAFFIC, the wildlife trade monitoring network, is a leading non-governmental organization working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development. TRAFFIC has prepared a “briefing document” that outlines its views and advice on some priority issues and proposals on the agenda for CITES CoP18 (hold in Geneva, August 2019). TRAFFIC believes that policy decisions and recommendation should be informed and guided by credible evidence and impartial analysis and they have therefore highlighted recent TRAFFIC reports and other research that could assist Parties in their deliberations. Here are presented 2 advices regarding the conservation of Rhinoceroses.

Rhinoceroses (rhinocerotidae spp.) report of the standing committee and Secretariat

South Africa is home to 87% of all remaining White Rhinoceros and TRAFFIC is gravely concerned that its White Rhino populations are now suffering declines that are reversing decades of uninterrupted growth for the first time. According to the IUCN/TRAFFIC report, the Kruger National Park white rhino population, the largest in the world but continually facing the most serious poaching threat, has now declined back to 2004 numbers. The reported decrease in detected carcasses of illegally-killed rhino across Africa is mitigated by the fact that there are fewer animals to poach in many accessible locations—as many as 20% of the poached carcasses are never detected in places like Kruger and the reported losses still indicate that three rhino have been lost every single day from 2013 to 2017 inclusive. The impact of unabating poaching of Africa’s rhino over a decade is now being seriously felt with major population reduction of the key in situ White Rhino population. China (including Hong Kong SAR) and Viet Nam as destinations, Mozambique as an export/transit point, and South Africa as the major source country were recorded in the trade chains of over two-thirds of reported rhino horn seizures. TRAFFIC urges that these four countries remain priorities for action to curb the illegal rhino horn trade successfully (...). Enforcement action in Viet Nam has been far more limited than expected and its new Penal Code includes an exemption for possession of less than 50 grams of horn, meaning most consumers remain outside the scope of strengthened penalties, a very unsatisfactory omission. The retreat of illegal rhino horn trade into the deeper recesses of internet and social media trading in Asia presents a major challenge to effective law enforcement action. Discrepancies in trade data on South Africa’s rhino trophy exports are of concern and could serve to mask some degree of pseudo-hunting. For example, South Africa reports exporting 144 rhino horn trophies to Russia and 47 to Canada from 2013 through 2016, but these countries have reported no imports. Major discrepancies also characterize the data between South Africa and the United States, China and Poland (...).

Revisions to resolution conf. 9.14 (rev COP17) on conservation of and trade in African and Asian rhinoceroses

Kenya proposes to amend Resolution Conf. 9.14 to mandate the closure of domestic rhino horn markets with regular reporting on actions taken; to promote the destruction of rhino horn stockpiles; and to include privately-held rhino horn stocks as part of the annual reporting requirement on rhino horn stockpiles to the CITES Secretariat. While the closure of rhino markets may lie beyond the Convention’s expressed purview of international trade, it should be noted that Parties have already agreed domestic market closure in the context of elephant ivory (...) if such markets are “contributing to poaching or illegal trade”. In fact, most traditional rhino horn markets remain closed, including those in all major consuming countries. South Africa, however, has recently
instigated a legal domestic trade in rhino horn. This move follows a 2017 court ruling overturning a 2008 moratorium that was imposed by the government after evidence of domestic rhino horn stocks going into illegal international trade surfaced. Rather than re-impose a moratorium that accommodated standard public participation processes, South Africa has opted to allow domestic rhino horn trade under permit, even though the country functions as a source – not a consumer – country and continues to suffer from an illegal trade problem of unparalleled dimensions. Already, in April 2019, violations of domestic trade regulations have resulted in the arrest of two men and the seizure of 167 rhino horns that were under permit for domestic trade. TRAFFIC therefore supports domestic rhino horn market closures, as Kenya proposes – they appear justified under these circumstances and are in line with CITES precedent. Concerning the destruction of rhino horn stockpiles, it should be noted that a clear understanding of the impact of rhino horn stock destructions on illegal trade remains unclear and could result in unintended negative consequences. Demand reduction work in end-use markets has indicated that notions of rarity and acquiring something that very few people own has appeal to a certain segment of the consuming market and publicized destructions may exacerbate this form of consumption (…).


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**Local community engagement and support for conservation: Ecotourism at Andasibe, Madagascar**

Andasibe - Mantadia National Park is a high profile rainforest tourism destination and one of the most popular nature-based tourism destinations in Madagascar. Visitors are able to view the iconic Indri and nine other species of lemur, endemic birds such as couas, vangas and ground rollers, as well as a rich herpeto-fauna comprising chameleons and geckos. International and domestic tour groups are led by local guides sourced mainly from the village of Andasibe and surrounding areas. Mitsingo Forest Station is a community reserve under the protection of local people. Currently at least 70+ and up to 100 guides sourced mostly from the local community act as guides for tour companies and international tourists. A combination of tangible economic benefits and ongoing engagement with conservation organisations and the tourism industry has led to local community support for the protection of wildlife and associated forest.

Full article here.
More info on Panorama, here.

Chameleon observed during night visit to Mitsingo Forest Station
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