

Chimpanzees: best practice guidance for industry

Business relevance and implications

- Chimpanzees are our closest living relatives and have a special ecological, cultural and ethical status
- Impacts on chimpanzees are treated very seriously by lenders and conservation stakeholders and present material risk to projects
- Early and careful planning can minimise risks and create opportunities for positive outcomes

Why do chimpanzees require special attention?

All chimpanzee subspecies are listed as Endangered or Critically Endangered on the IUCN Red List (Figure 1). Chimpanzees only occur in sub-Saharan Africa where they are widespread, but declining rapidly throughout their range, primarily due to poaching, habitat loss and disease. Industrial development projects, including mining, infrastructure, agribusiness and hydropower can directly and indirectly exacerbate threats to chimpanzees and their habitats. Chimpanzees share more than 98% of our DNA – and they have many human-like behaviours. Impacts on chimpanzees are therefore treated very seriously by lenders and conservation stakeholders and present a material risk to projects.

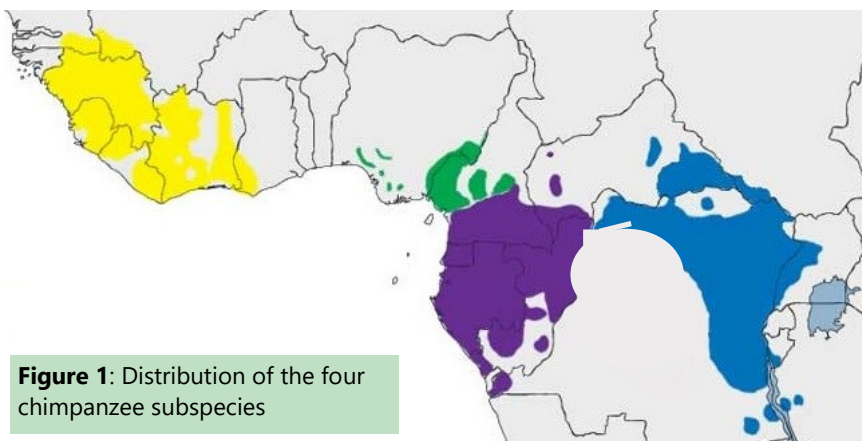


Figure 1: Distribution of the four chimpanzee subspecies

19,000–35,000	Western Chimpanzee (<i>Pan troglodytes verus</i>) Critically endangered
3,500–9,000	Nigeria-Cameroon Chimpanzee (<i>Pan troglodytes ellioti</i>) Endangered
70,000–120,000	Central Chimpanzee (<i>Pan troglodytes troglodytes</i>) Endangered
200,000–250,000	Eastern Chimpanzee (<i>Pan troglodytes schweinfurthii</i>) Endangered

At a glance

- Chimpanzees are declining rapidly throughout their range in sub-Saharan Africa; projects potentially posing a risk to chimpanzees attract scrutiny from stakeholders
- Poorly-managed projects can have significant direct and indirect impacts on chimpanzees, which is a material risk for a project
- Chimpanzees have complex behavioural characteristics, so effective action to avoid and minimise risk requires early and careful planning, based on sound data and expert interpretation
- Offsets are a last resort as they are likely to be complicated, sensitive and expensive
- Early stakeholder engagement and properly planned and timely data collection can help evaluate the significance of impacts, understand stakeholder expectations, garner support and reduce project-related risks.

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How chimpanzee ecology and behaviour affects project planning

Aside from ethical reasons, five features of chimpanzee behaviour and ecology mean that special attention is required in project planning:

1. Chimpanzees have a **slow reproductive rate**: Similarly to humans, female chimpanzees are late to reach sexual maturity, usually having one offspring at a time and looking after their first offspring for > 5 years before having a second one. Natural population growth rates are therefore very low. It is hard for chimpanzee populations to recover from even small impacts, and that impacts may only become apparent over a long timescale.
2. **Territoriality**: Chimpanzees live in communities (of 5-60 individuals) and actively defend their territories (which vary in size between 5-200 km²) from neighbouring communities, including by lethal violence. Disturbances that force chimpanzee communities to move into neighbouring territories can therefore result in high levels of mortality.
3. **Complex social system** (Figure 2): Chimpanzees use certain parts of their territory more intensively – these are the core areas, often located in the centre of their territory, away from neighbouring communities. Chimpanzees also rely on particular species for feeding and on water sources, especially for chimpanzees living in savannah habitat. Therefore impacts on core areas, key species and water sources, can be much more significant than simply loss of habitat. Chimpanzees have a fission-fusion social system where the community splits into smaller groups of variable size and composition to forage depending on food availability. This means that it can take several years to properly understand how chimpanzees use their territories.
4. **Behavioural variability**: There is a high level of variability between both individuals and communities. This means that different chimpanzee communities may respond to similar impacts (such as noise) in different ways, making it more difficult to anticipate actual impacts.
5. **Culture**: Certain chimpanzee communities display unique culturally transmitted behaviours, such as nut-cracking, which are sometimes unique to a particular area. In this case, project impacts could lead to the disappearance of certain cultural traits that can never be replaced or offset elsewhere.

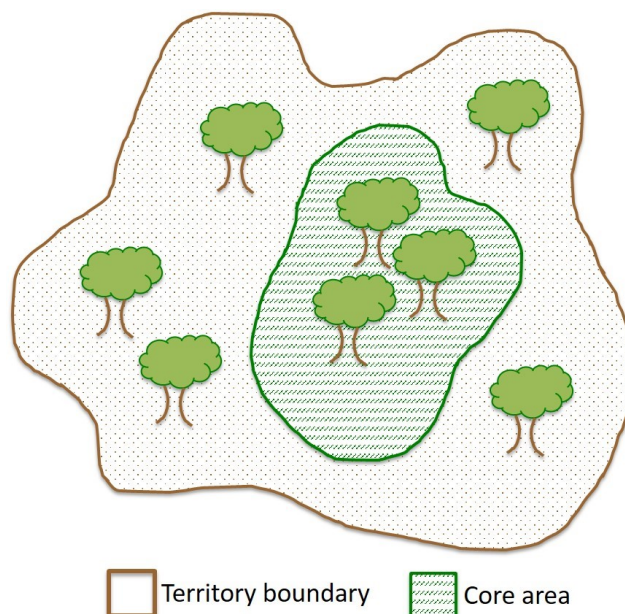


Figure 2: Chimpanzees use core areas of their territory more intensively, but still rely on their entire territory



Infant on mother's back, Fongoli Research Project, Senegal

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The mitigation hierarchy: emphasising avoidance and minimisation

Given the sensitivity of chimpanzees, avoiding (preventing) impacts on chimpanzees and their habitats in the first place is greatly preferable and the only sure way to reduce project risks. Avoidance measures could include moving infrastructure to avoid important chimpanzee habitat or sacrificing mineral extraction in land that overlaps chimpanzee core areas (sterilised resource) (Figure 3). Stakeholders will expect a clearly documented analysis of project alternatives showing that all feasible avoidance measures have been considered and adopted.

Minimisation measures shown to be effective include community sensitisation campaigns and increasing

patrol effort aimed at reducing poaching and trade of chimpanzees. However, other minimisation measures may require careful and long-term monitoring to assess their effectiveness. Stakeholders may consider even relatively costly minimisation measures to be justified for impacts on chimpanzees, further emphasising the importance of initial avoidance measures.

Avoidance and minimisation measures should target both direct and indirect impacts. Indirect impacts can be harder to predict with precision, but can be equally as significant as direct impacts and often more so. These can include project-induced in-migration, which can exacerbate existing threats such as habitat loss, poaching and competition for natural resources.

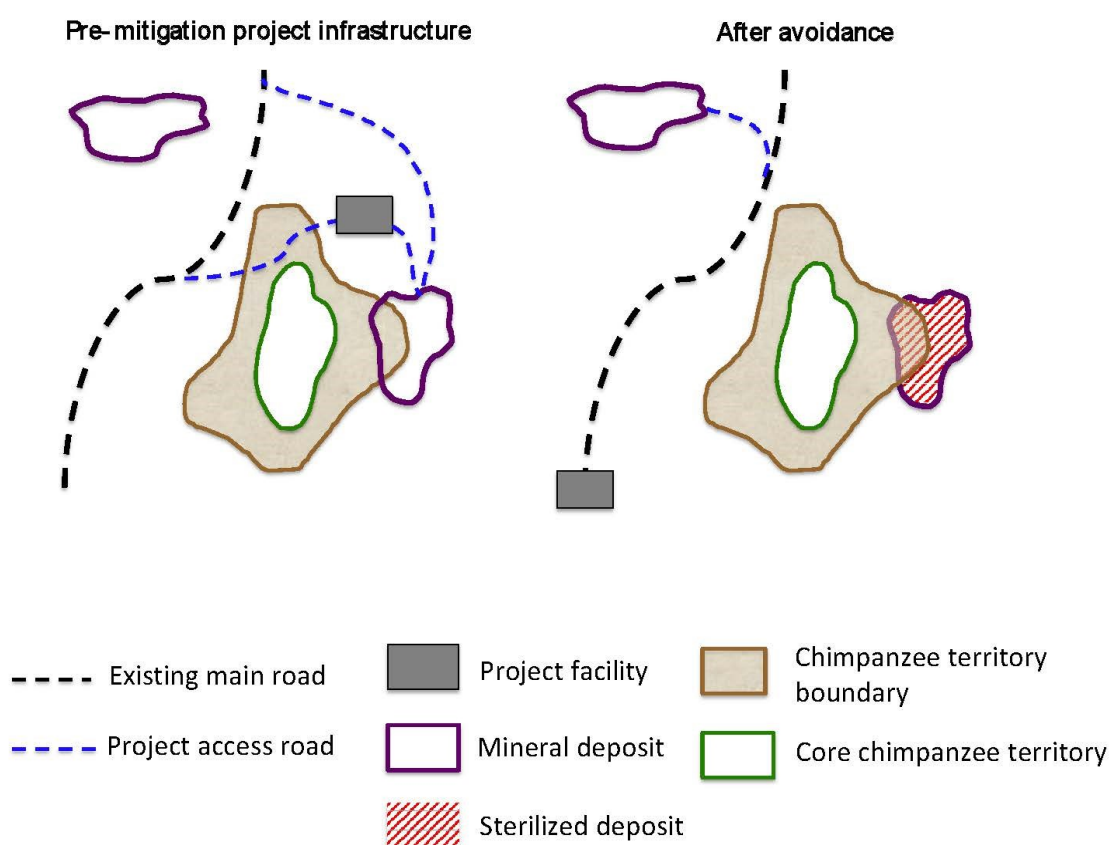


Figure 3: Illustrating avoidance: Left: before mitigation the project access road cuts through core chimpanzee territory, and the mineral deposit overlaps with the outer territory boundary. Right: after avoidance by design, the access road is re-routed to avoid chimpanzee territory and part of the mineral resource has been sacrificed to avoid loss of chimpanzee habitat.

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Rehabilitation and offsetting

In contrast to avoidance and minimisation, rehabilitation measures following impacts are complicated (for various reasons, see Table 1), and are likely to take too long for benefits to be realised during the lifetime of a project.

Offsets are even more complex – they are a last resort, never a way to bypass avoidance and mitigation measures. The wide confidence limits around estimates of residual impact mean that a precautionary approach to estimating offset requirements is usually appropriate. Consequently, the offset requirement for a given significant residual impact may be substantial. This limits the number of potential offset sites and is likely to mean offsets are costly.

The low reproductive rate of chimpanzees, combined with the likely slow recovery of an impacted population, means that for an offset to deliver conservation gains, it either needs to last for a long time, or to protect a large chimpanzee population (offsetting good practice is for gains to last at least as long as project impacts). It may be necessary and expected by stakeholders to consider funding and governance mechanisms for offsets that can persist well beyond the expected project lifetime or potentially in perpetuity. Additional conservation actions that are not linked to tangible in-situ conservation (such as financing research projects) may be worthy endeavours, but are unlikely to be sufficient in themselves to compensate for impacts.

In the event that offsetting could be necessary, stakeholders are likely to require a high level of assurance that offsets will in fact deliver tangible conservation gains for chimpanzees. Given the cost, complexity and potential reputational risk associated with offsets for chimpanzees, it is prudent to start planning and stakeholder involvement early in the project timeline.



Juvenile female chimpanzee sitting on termite mount, Fongoli Research Project, Senegal

Importance of stakeholder engagement

Chimpanzees are not ‘just another species’ – they require focused attention to ensure that good outcomes are delivered. Developing a project within chimpanzee habitat brings a risk of intense scrutiny from the general public and stakeholders. This is especially the case if significant residual impacts are expected, and/or offsets are planned. Engaging stakeholders at an early stage of the project can demonstrate a project’s commitment to good practice.

Where a project operates in chimpanzee habitat, nominating a specific individual as an ‘ape champion’ for the company can help ensure adherence to best practices.¹ This person should be integrated at a sufficiently senior level to ensure the necessary cross-departmental planning. The ‘ape champion’ can also support liaison with national authorities, as well as with national and international stakeholders. Important stakeholders to engage include local and international NGOs working in country with chimpanzees, chimpanzee researchers active in the region, as well as international organisations such as the Section on Great Apes of the IUCN/SSC Primate Specialist Group.

¹. As recommended by Arcus Foundation 2014

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Planning, mitigation and monitoring

Understanding the response of chimpanzees to project impacts requires careful and early planning to ensure thorough and relevant baseline data are available. Subsequent monitoring of chimpanzee responses to impacts is also important, especially considering that the effectiveness of minimisation measures may be uncertain.

Table 1: Key considerations and requirements for baseline and monitoring data collection

Stage	Key considerations and requirements
Baseline data collection	<ul style="list-style-type: none">• Ideally, baseline data should be collected over at least one full year to account for seasonality in behaviour and habitat use• To be meaningful and help guide avoidance and mitigation measures, data collection should start prior to conducting any significant disturbance to an area• Information on the number of chimpanzee communities, their composition and their ranging patterns is needed. More detailed information on the location of key species and water sources used within their territory is preferable• Specialist inputs and oversight to ensure the survey methods and design are planned and appropriately implemented is required• Survey area should be large enough to encompass entire chimpanzee territories, as well as the full extent of potential indirect impacts: this may well extend beyond the direct project footprint or concession boundaries
Monitoring	<ul style="list-style-type: none">• May need to continue for a long period, because chimpanzees are long lived and impacts may become apparent only after a significant time• Enables more precise quantification of residual impacts, and facilitates rapid adaptive management of mitigation measures if required• Survey design, effort and coverage, as well as the monitoring frequency will vary for each specific project• Camera trapping and non-invasive genetic analyses are promising techniques they can help provide data on the number/size/composition of and territory use (Figure 5). This information is important for mitigation planning, and is difficult to collect using traditional methods



Figure 5: Examples of chimpanzee monitoring methods.

Left: Collecting chimpanzee faeces for non-invasive genetic analysis

Top right: Camera-trapping

Bottom right: An image of a chimpanzee captured on a camera trap

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The mitigation hierarchy: implementing effective mitigation

Table 2 gives some possible project management and mitigation responses to five key features of chimpanzee behaviour and ecology.

Table 2: Potential project approaches for managing impacts to chimpanzees

Feature	Consequences	Key considerations and requirements
Slow reproductive rate	<ul style="list-style-type: none">• Slow population recovery from even small impacts• Impacts may only become apparent over long time-scales• Offset requirements may be large and long-duration for even small impacts	<ul style="list-style-type: none">• Emphasise avoidance and minimisation measures• Take precautionary approach when assessing scale of impacts• Conduct on-going monitoring, including parameters related to community size and composition• Plan early for offsets if residual impacts are expected
Complex social system	<ul style="list-style-type: none">• Project impacts can be much greater than simply the area of habitat lost	<ul style="list-style-type: none">• Map and avoid core habitat wherever feasible
Territoriality	<ul style="list-style-type: none">• Impacts that force chimpanzees into another neighbouring territory can result in significant mortality	<ul style="list-style-type: none">• Understand how many communities are present and map territories• Plan operations to avoid displacement of chimpanzees into another community's territory
Behavioural variability	<ul style="list-style-type: none">• Different chimpanzee communities may respond to similar impacts in different ways• Uncertainty around effectiveness of mitigation measures for chimpanzees	<ul style="list-style-type: none">• Take precautionary approach to estimating scale of impacts• Conduct on-going monitoring to understand actual impacts
Culture	<ul style="list-style-type: none">• Impacts may lead to the disappearance of certain cultural traits, which cannot be re-created or offset elsewhere	<ul style="list-style-type: none">• Emphasise avoidance and minimisation

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