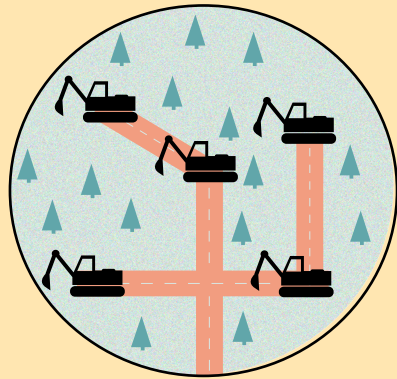


Threats of Mining to African Great Apes



Mining involves different phases, including exploration and exploitation. Currently, most mining projects in Africa are in the exploration phase. Impacts of exploration are often overlooked but can cause significant environmental damage.



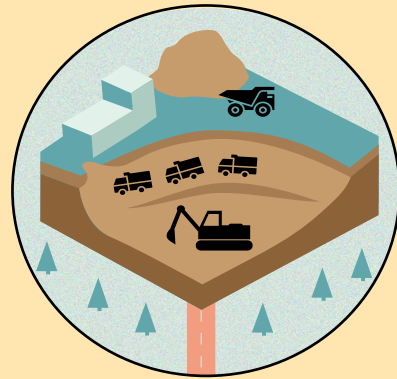
EXPLORATION

Exploration creates lower intensity direct impact but over a broader area

Exploration can lead to permanent impact on ape populations

Permits are shorter (~5 years) and can be up to 100 times cheaper than exploitation

Fewer environmental regulations



EXPLOITATION

Exploitation creates higher intensity direct impact in a more limited area

Indirect impacts are more significant during the exploitation phase

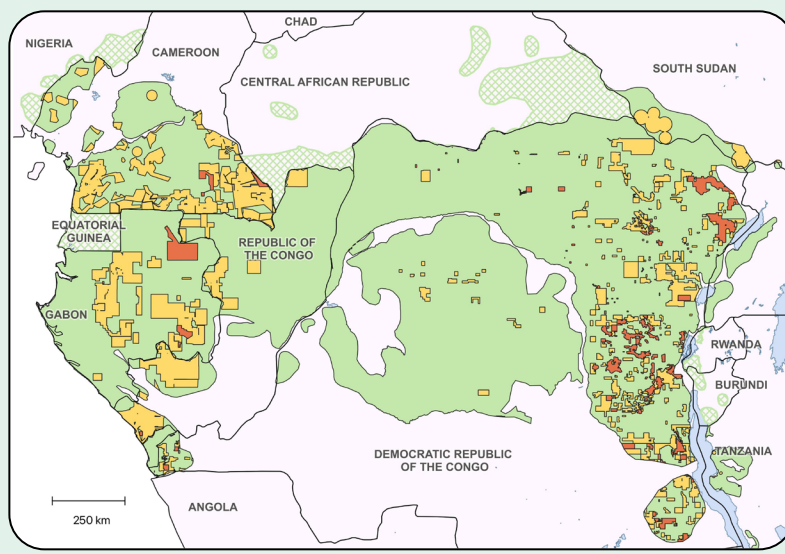
Permits are longer (~15 years) and more expensive to obtain

More environmental regulations

MINING EXPLORATION & EXPLOITATION CURRENTLY COVERS ~20% OF APE HABITAT*

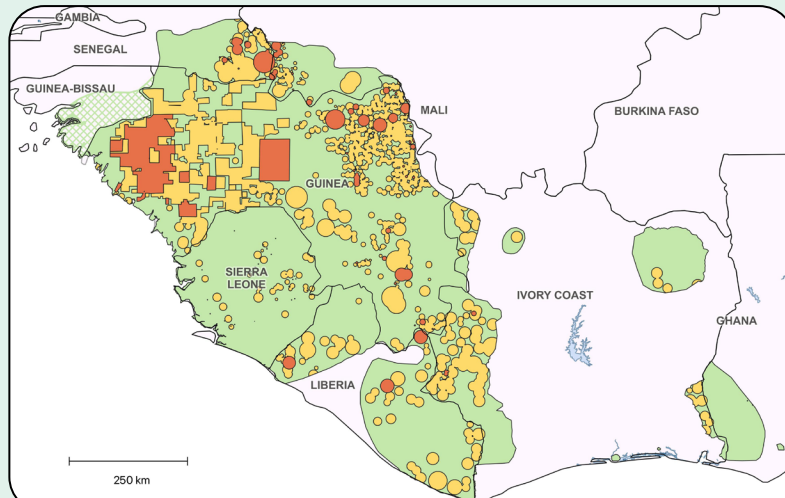
Central & East Africa

- Ape Habitat
- Exploration
- Exploitation
- No Data



West Africa

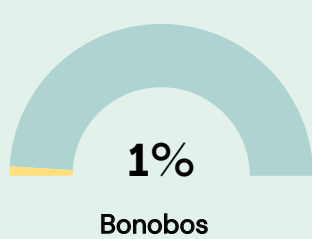
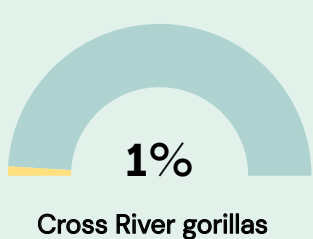
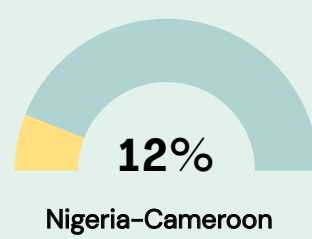
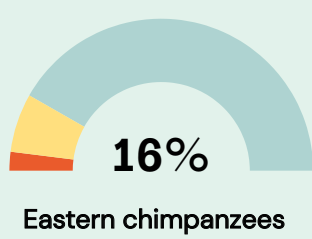
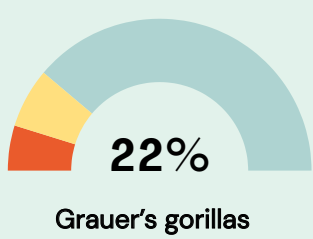
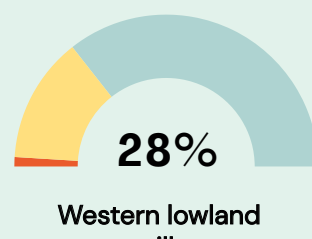
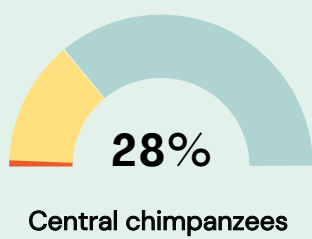
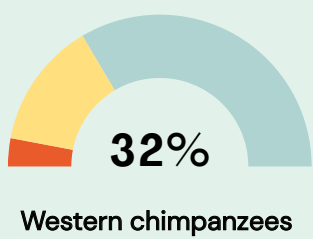
- Ape Habitat
- Exploration
- Exploitation
- No Data



60% of countries* have mining encroachment into protected areas

Specifically, mining permits overlap with the ranges of:

- Exploitation
- Exploration



*this is an approximation as not all countries within ape's range had mining data publicly available. This analysis reflects the overlay of mining permits on ape ranges, but did not consider the scope of indirect impacts, which can extend outside mining permits (for more information see Junker et al. 2024).

FUTURE TRENDS

Mineral production in Africa has increased ~30% in the last two decades. Trade in some minerals is expected to increase up to 1000%.

Projected % Increase of Mineral Trade Value from 2019 – 2030 (for minerals with the fastest future growth).



ACTIONS – WHAT CAN BE DONE?

Strengthen national regulations for the exploration phase and extend the certification process to include this phase

Reduction in consumption – reducing demand for minerals in products can reduce the supply

Commitments from researchers, NGOs and institutions to NOT engage with companies that are impacting protected areas (9 of 15* ape range countries have mining encroachment into protected areas)

Demand that projects collect baseline ape survey data when obtaining an exploration permit before any impact occurs

Promotion of recycling – recycling materials (e.g. aluminium) can reduce the demand for mining of new minerals

Improve awareness of where minerals are coming from so consumers can make informed choices

SOURCES:

Mining concession data: Global Forest Watch, Trimble Landfolio Cadastre Map Portals, Revenue Development, Tronimo (Online data repositories), unpublished research, mining company websites.
Protected Area layers: Protected Planet.
Ape range layers: IUCN
Mineral data: <https://www.ey.com>

CONTRIBUTORS:

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Jessica Avanihar: design



The IUCN SSC PSG ARRC Task Force advises industrial development projects on implementation of the mitigation hierarchy and recommends ways for companies to contribute positively to ape conservation.

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