



VANISHING TREASURES

PROTECTING ENDANGERED MOUNTAIN SPECIES



Conservation of Mountain Gorillas

Land-use change,
intensive agriculture and zoonotic diseases

Mountain Biodiversity Day, 13 January 2021

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THE GOVERNMENT
OF THE GRAND DUCHY OF LUXEMBOURG





GREAT APES SURVIVAL
P A R T N E R S H I P



- UNEP and UNESCO
 - Convention secretariats: CBD, CITES, CMS, WHC, Ramsar
 - 23 great ape range states
 - Over 50 NGOs, 4 private businesses
 - Donors governments and foundations
-
- Mandate: to conserve great apes and their habitats in Africa and Asia



Great Apes Survival Partnership (GRASP)

Mountain ecosystems are important for great ape conservation, including for Cross River gorillas and mountain gorillas



Great Apes Survival Partnership (GRASP)

Upcoming activities under Vanishing Treasures project:

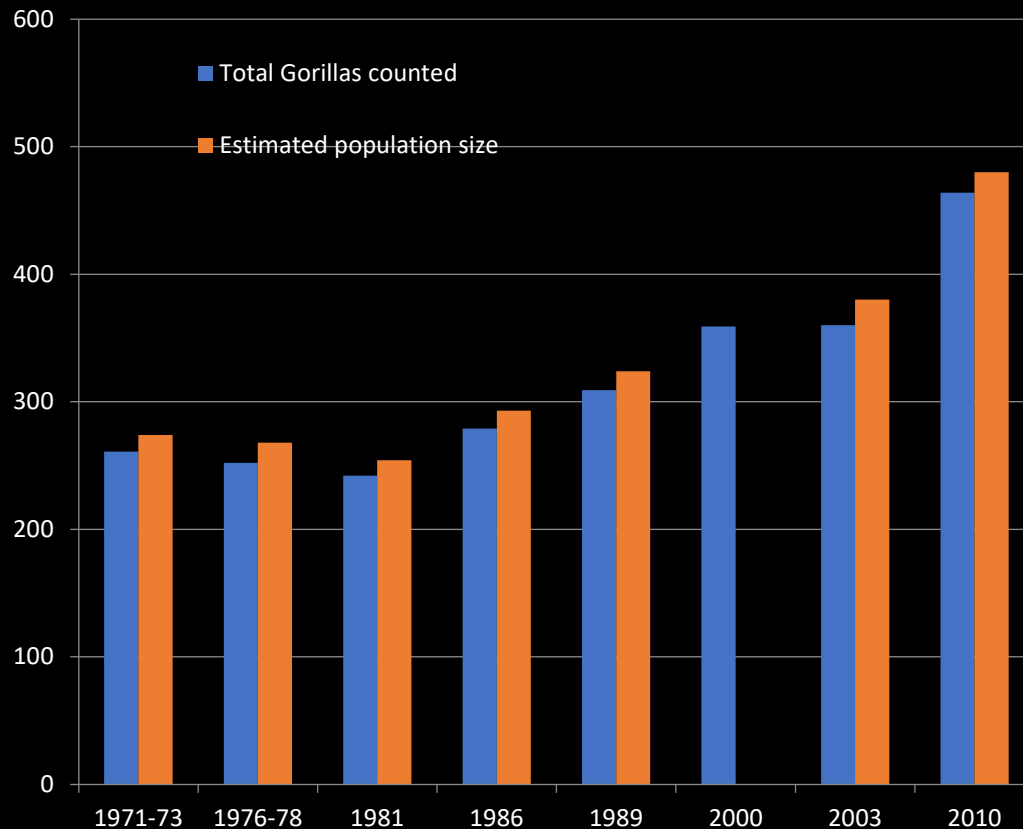
- Analyse long-term research data to assess gorillas' climate vulnerability
 - Improve buffer zone management and community livelihoods
- Increase climate resilience and adaptation of both gorillas and communities



Batwa guides. Photo credit: IGCP

Extreme Mountain Gorilla Conservation Efforts

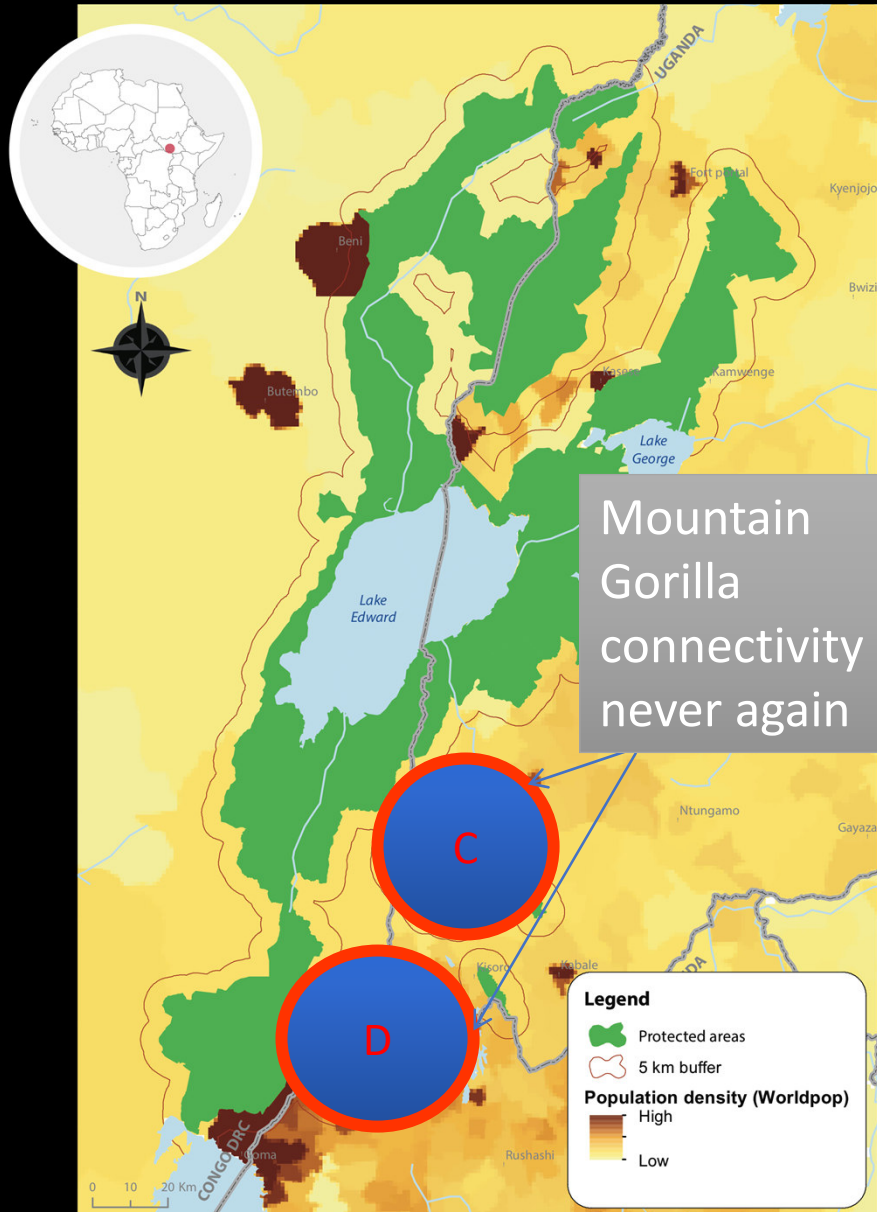
Virunga Mt Gorillas Population: 1971 to 2010



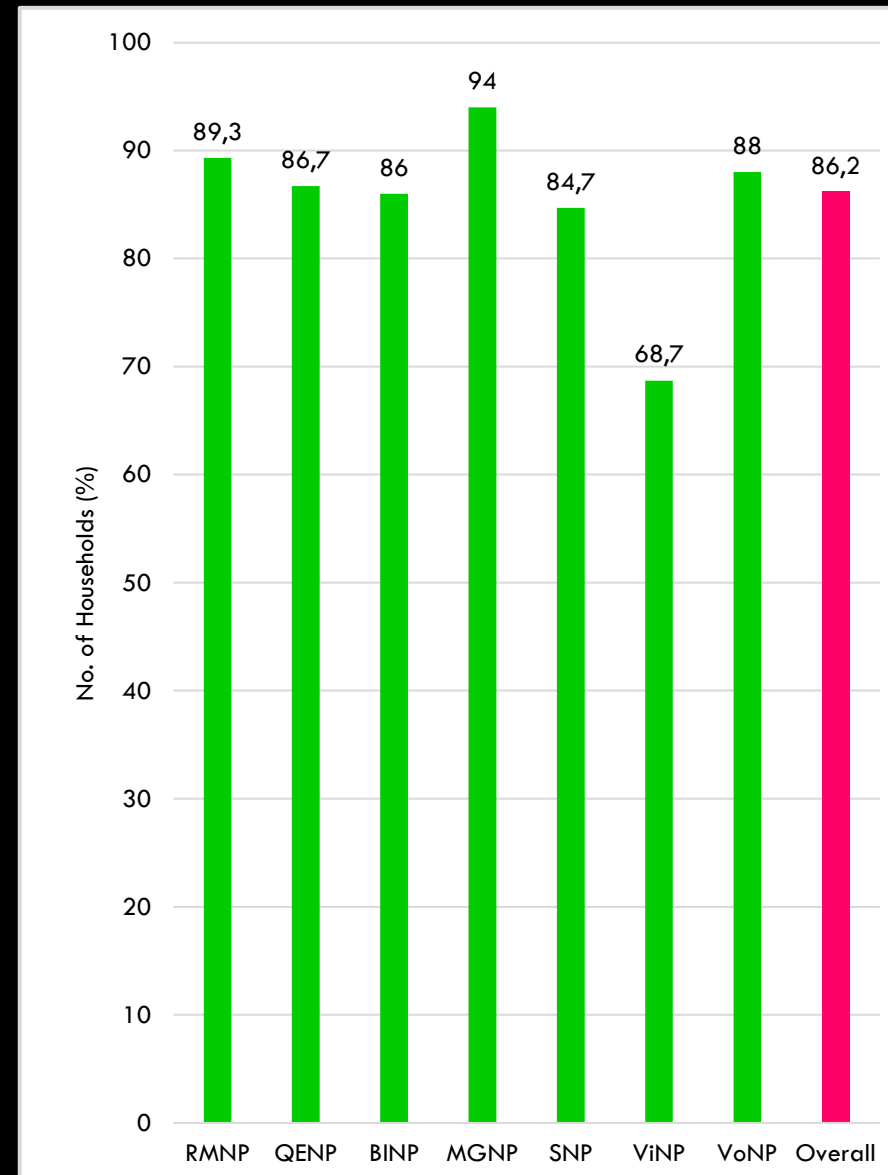
But still:

- i. Vulnerable:
 - population is very small and their range highly restricted.
 - A limited dispersal ability
- ii. Susceptible to disease
- iii. Climate stressors

Drivers - Anthropogenic / Land-Use Change



Agriculture is the main source of income for households in GVL

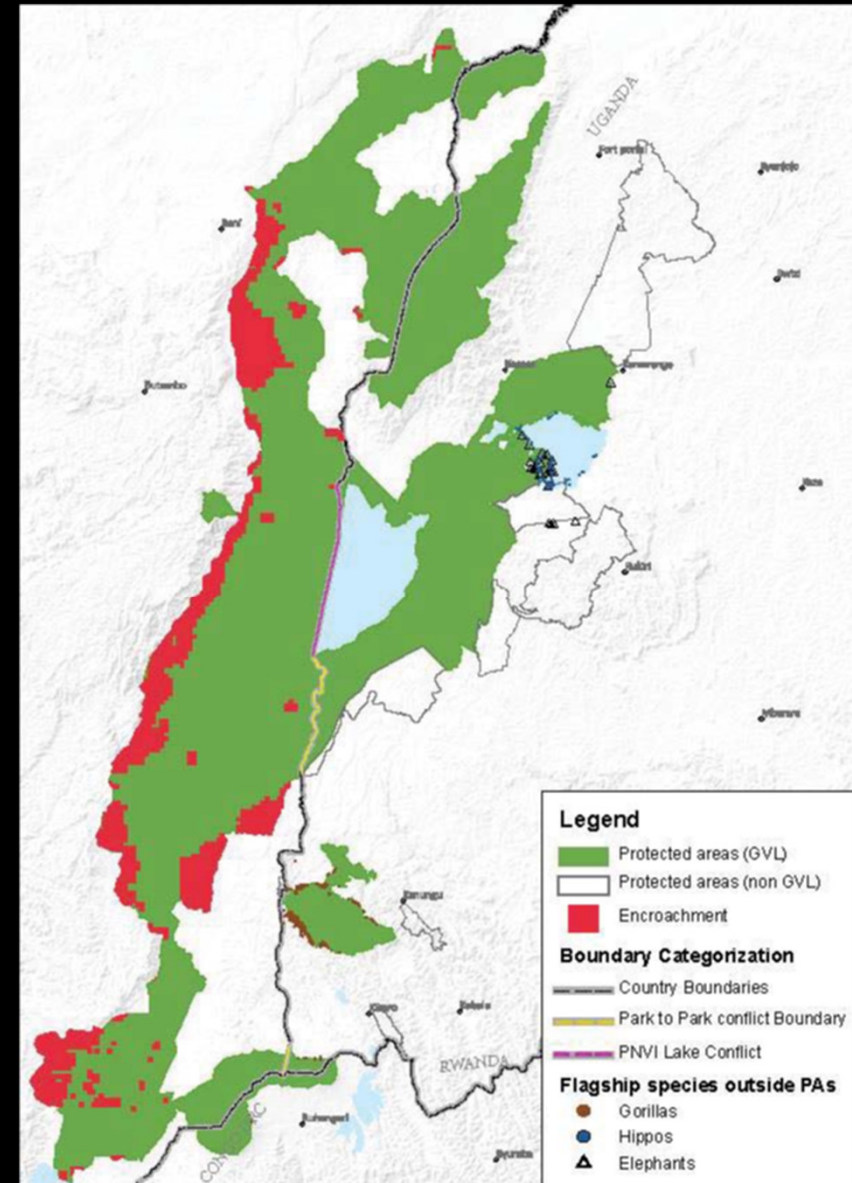


Climate Change and Mountain Gorillas

- Variability of rainfall and rising temperatures
- Negative impact on agricultural production, soil degradation, and income
- Human populations are poor, have high growth rates, and will be experiencing increasing water stress (domestic and agriculture)

Result:

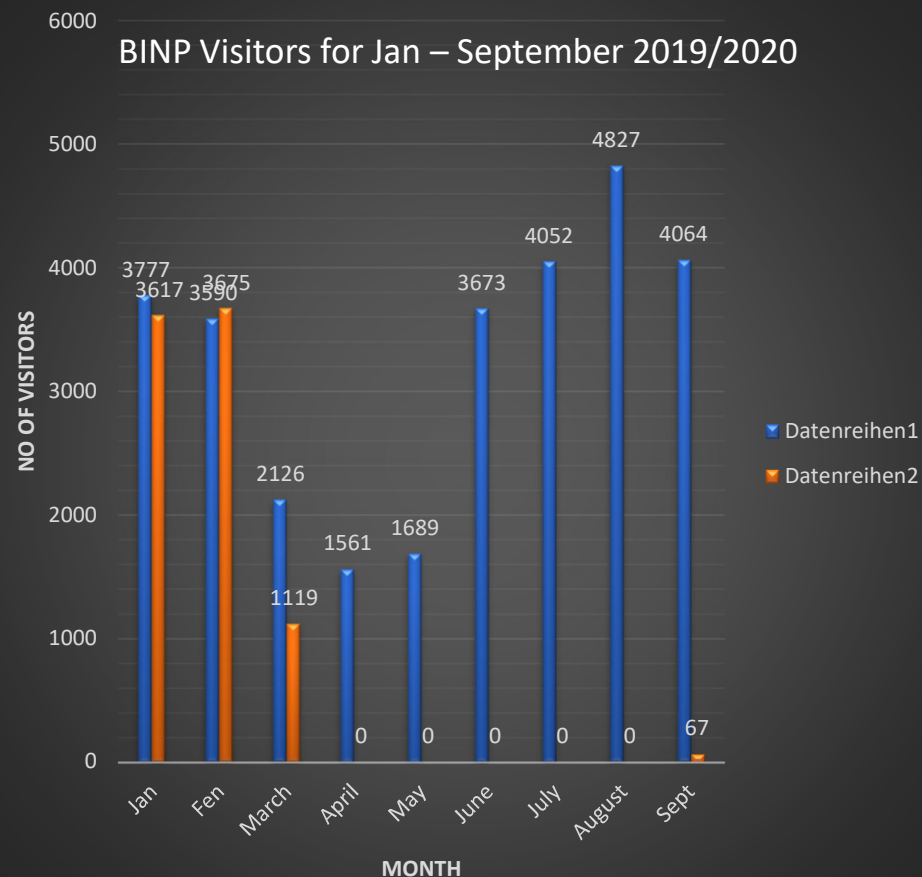
- No known direct impact on Mt gorillas
- Expansion of agriculture to boundaries of protected areas /encroachment
- Degradation around the edges
- Push for degazetting PAs
- Increased human wildlife conflicts-retaliatory killings



COVID-19 Impacts on Mountain Gorilla Conservation

Great apes are susceptible to infection with most human respiratory pathogens (Kondgen et al 2010, Palacios et al 2011).

Covid-19 Economic Impacts:



1. Loss in tourism/Revenue

Estimated loss of revenue from Gorilla parks:

Direct loss to PAs : 47,000 *

700 = \$ 32,000,000

Total Loss: 47,000*1,350 =
\$ 63,450,000

2. Revenue sharing and Gorilla Levy

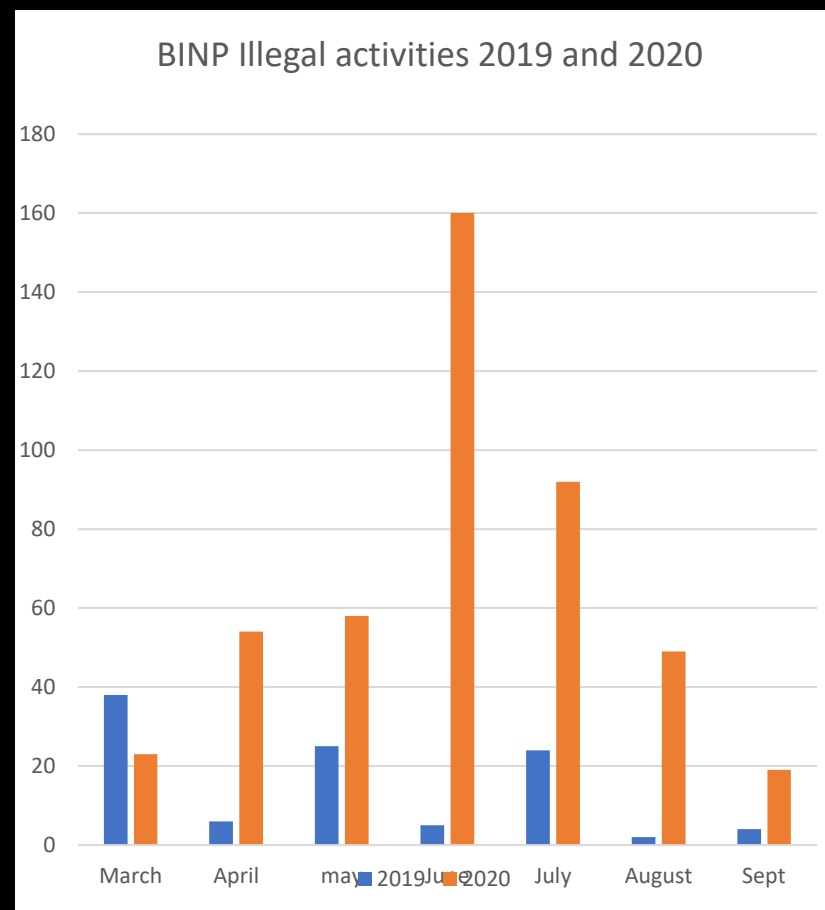
Gorilla Levy @ \$10 per permit =
47,000*10 = 470,000

Gorilla Levy contribution to Park
communities is 50% = \$ 235,000

Secondary Impacts of COVID-19: Increase in Illegal Activities

Illegal activities

- Long time patrol data analysis shows that BINP illegal activities were tending towards zero (GVTC annual Conservation Status Report 2018)
- However, there was a spike when tourism was completely stopped dropping to normal by September
- Park authorities attribute it to the loss of tourism-based source of livelihood for some community-members



Way Forward

- Promote basic sustainable land management practices
- Restore degraded ecosystems
- Enhance adaptive capacity of households – ecosystem services/tourism
- Manage increasing population pressure and demand for resources
- Up-scale research on climate change and mountains
 - Zoom on gorilla
- Establish sustainable financing mechanisms