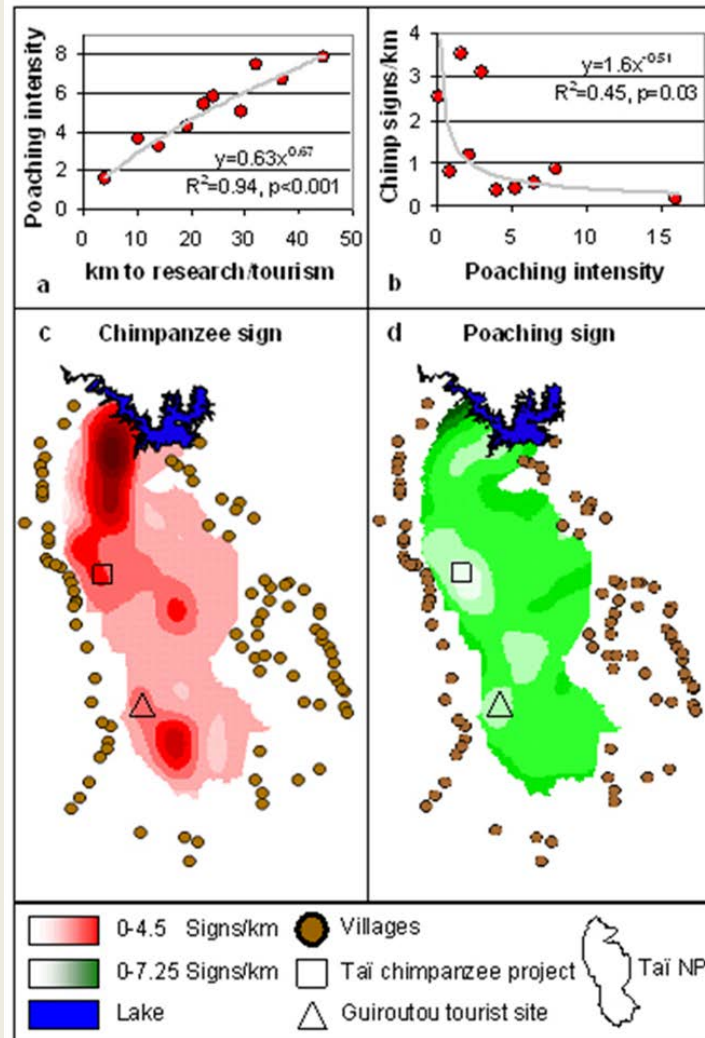


One Health and Conservation Strategies





Positive Presence through Tourism & Research as most effective Conservation Strategy



Köndgen et al. 2008
Also Tranquilli et al. 2014

Health Monitoring Program:

Four main objectives

I

Disease
Prevention:
Improved Human
Health &
Reduced Risk of
(Inter-species)
Disease
Transmission

II

Routine Health
Monitoring:
Regular
Collection of
Samples &
Observational
Health Data

III

Rapid
Response:
to Disease
Outbreaks &
Veterinary
Emergencies or
Interventions

IV

Diagnosis and
Investigation:
of Disease Outbreaks
and Wildlife Fatalities
& Disease and
Pathogen Research



DISEASE PREVENTION



➤ Hygiene Rules



➤ Health Rules



➤ Potentially: Vaccination of great apes





Standard Employee Health Programme (EHP)

- Health status baseline at time of hire and annual physical exams
- Ongoing surveillance & response
- Routine Vaccination, deworming
- Extension of EHP to family members
- Health & Hygiene Education





Routine Health Monitoring



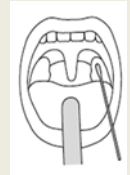
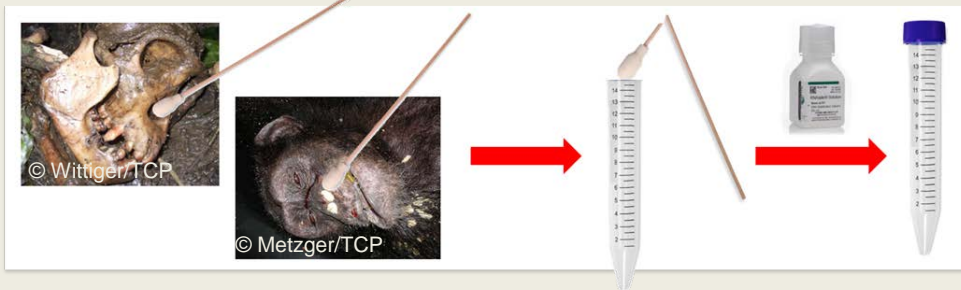
Two Main Components:

I Regular collection & preservation of biological samples

- + Feces
- + Urine

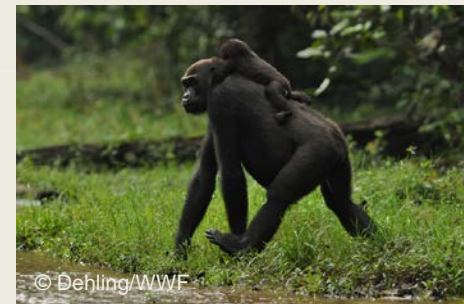


- + Throat swabs from human project staff and visitors
- + Minimally invasive samples from animal carcasses



II Regular observations & recording of observational health data

- + Presence / Absence of disease symptoms, injuries, abnormalities (coughing, nasal discharge, diarrhea..)



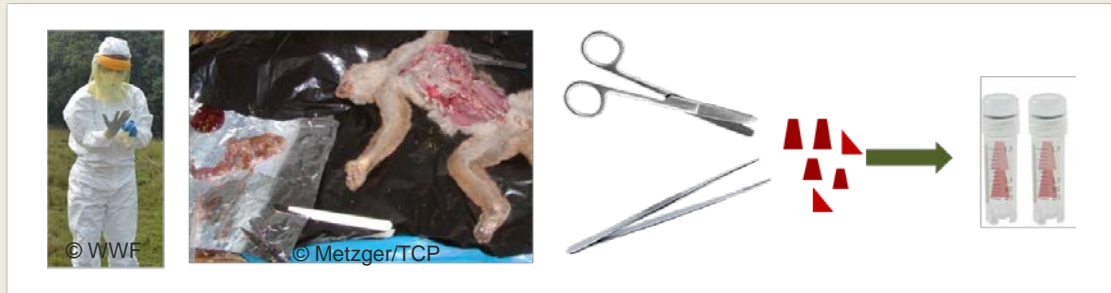


Emergency Intervention & Diagnosis and Investigation



Diagnosis and Investigation

+ **Disease outbreaks and death:** Necropsy/Tissue sampling by full trained and equipped veterinarian



+ **Rapid and On-site Laboratory Analysis** of samples allows the detection & diagnosis of many pathogens (Ebola, Anthrax, Respiratory viruses,...)

- Portable Field Labs established since 2012 equipped for:
 - sample processing
 - DNA/RNA extraction
 - standard PCR
 - basic parasitology including microscopy





Outbreak Intervention & Investigation

- ✓ Treatments during respiratory outbreaks
- ✓ Studied prevalence of pathogens in environment



- ✓ Sensitized local population to prevent disease



transmission and provided alert to health authorities

- ✓ Vaccination Campaigns against Measals & Anthrax



- Need for Rapid Diagnosis & Treatment & Research on:

oral vaccines, effectiveness of hygiene measures, anthropogenic

impacts on disease dynamics, landscape changes...



© Dehling/WWF



IMPACT:

- ✓ Early warning system for deadly infectious diseases such as Ebola.
- ✓ Improved health and hygiene status in local population.
- ✓ Main threat to the survival of great apes is significantly reduced.



© Metzger/WWF

© Dehling/WWF

Eco health

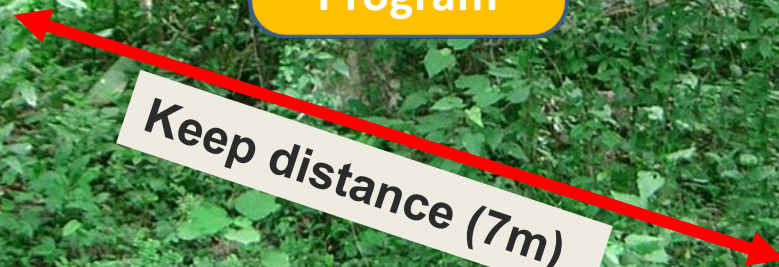


Wear mask



Health Monitoring Program

Collect & monitor



Keep distance (7m)

Be healthy and vaccinated



One Health Program



Employee Health program

