

Integrating One Health and Conservation

1st International One Health Webinar, November 10, 2014



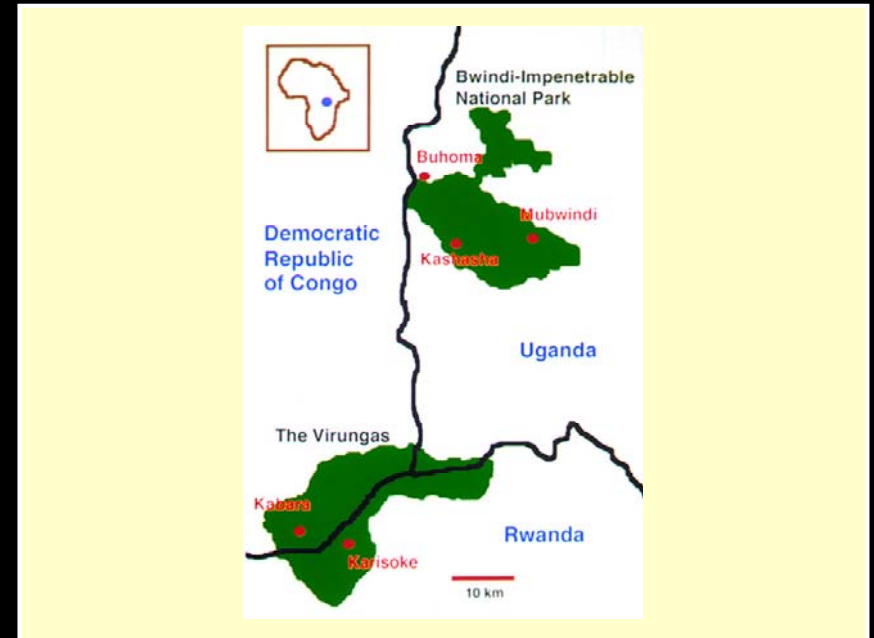
Dr. Gladys Kalema-Zikusoka

Ashoka Fellow, Whitley Gold Award Winner

Founder and CEO, Conservation Through Public Health



Mountain Gorillas critically endangered, **recently increased from 780 to 880**



Bwindi Impenetrable National Park

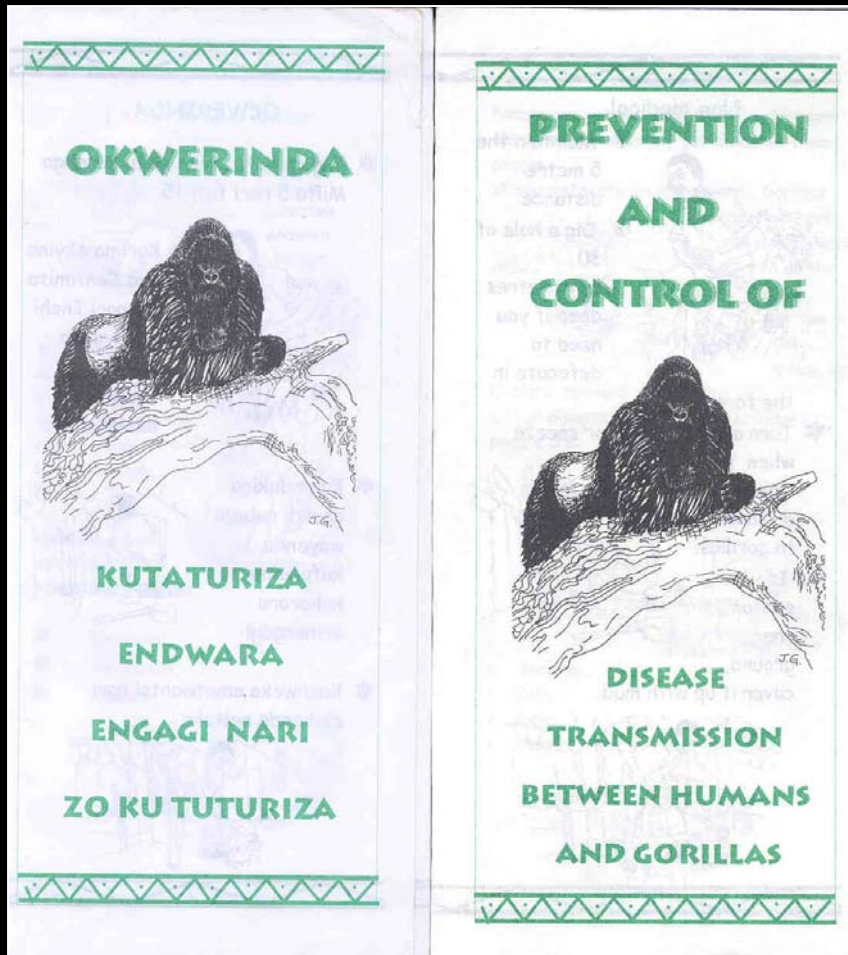
- Limited access to social services
- Poverty, disease, high human population growth
- Critically endangered species and fragile habitat
- Ecotourism is now thriving
- Integrated approach needed to better address these multifaceted problems



Threats: Human/Wildlife Conflict and Disease



Disease Transmission



Conservation Through Public Health

NGO and non profit founded in 2003

- **Mission:** To promote biodiversity conservation by enabling people, wildlife and livestock to coexist through improving their health and livelihoods in and around Africa's protected areas
- **Vision:** People, wildlife and livestock living in balance, health and harmony with local communities acting as stewards of their environment



CTPH Strategy - Integrated Programs



Wildlife Health/Zoonoses prevention

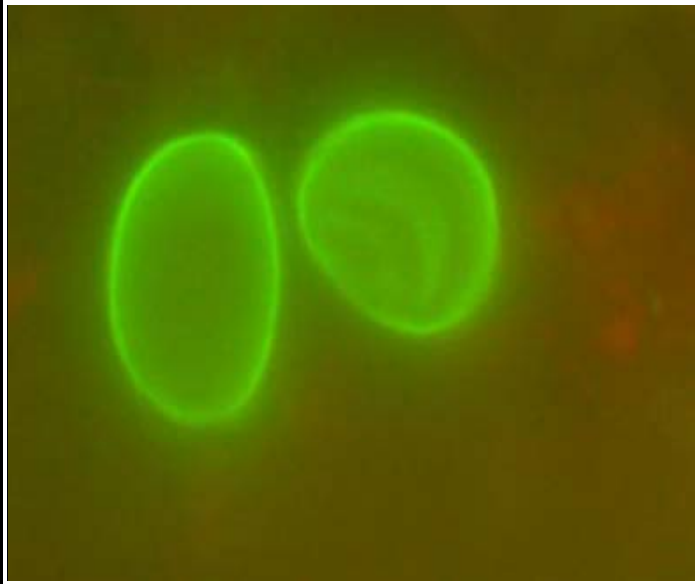
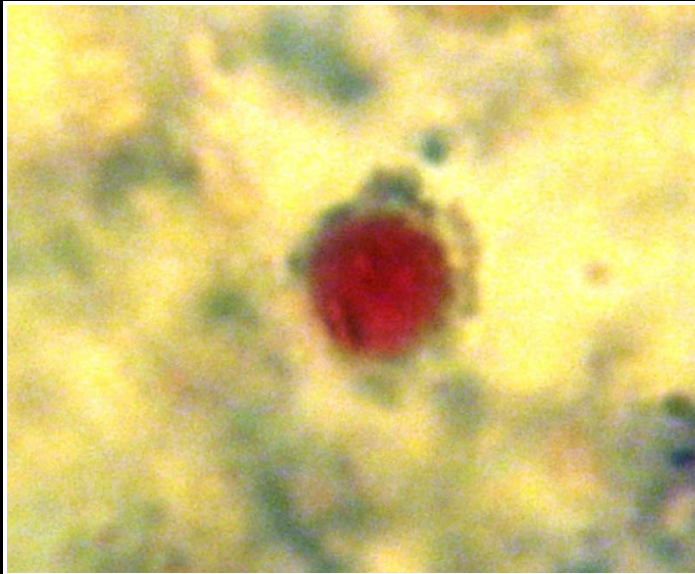


US Ambassador Steve Browning and wife, Susan visit Gorilla Research Clinic



Shared water sources (Giardia causing diarrhea)





OKWERINDA



KUTATURIZA

ENDWARA

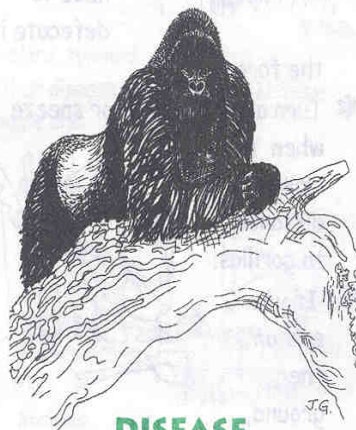
ENGAGI NARI

ZO KU TUTURIZA

PREVENTION

AND

CONTROL OF



DISEASE

TRANSMISSION

BETWEEN HUMANS

AND GORILLAS



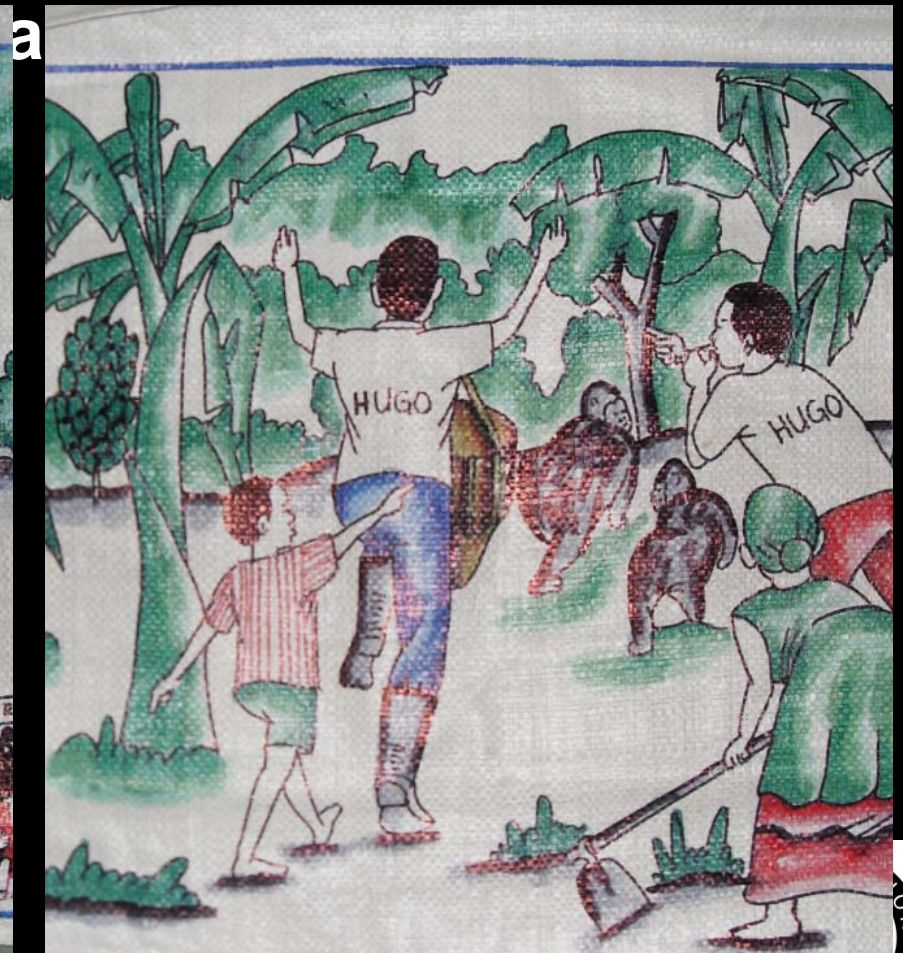
Village Health and Conservation Teams

- **Village Health Teams** - Recognized Ministry of Health (MOH) structure
- **Monthly Data collection for MOH and Uganda Wildlife Authority (UWA)**
- Hygiene and sanitation
- Family planning
- Disease identification and referrals (TB, scabies, HIV/AIDS, diarrhea)
- Nutrition and sustainable agriculture
- Conservation education
- Reporting human and gorilla interaction



Adding Family Planning

CTPH Population, Health and Environment (PHE)



Village Health and Conservation Teams (VHCTs) in Community Based Depopovera (CBDMPA) program with Family Health International (FHI360)



Sustaining Village Health and Conservation Teams with livestock and Village Savings and Loan Associations (VSLA)



Results – Health and Conservation

- 120 VHCT community Volunteers (Bwindi & Virungas) reaching 44,000 people
- Bwindi and Mgahinga Conservation Trust (BMCT) adopted the VHCT model in their VSLA groups, now reaching an additional 11,000 people
- Increased reporting of human and gorilla interactions
- Increased health monitoring at the human/gorilla/livestock interface (Intestinal helminths, Giardia, Cryptosporidia, Salmonella)



Health Impacts

- 12 fold increase in new family planning users, over 60% women above 28% of national average
- 50% increase in hand washing facilities, anal cleansing material, clean water storage containers, drying racks
- 11 fold increase in TB suspects referred
- Men more involved in family planning

Conservation Impacts

- Reduced human and gorilla conflict
- Reduced disease incidences in the gorillas
- Women and youth more involved in conservation
- Improved conservation attitudes (sustainable agriculture, gorillas protected in community land, reduced poaching and illegal forest off take)



Summary

- Integrating conservation, public health and microfinance can result in sustainable and scalable PHE model
- VHCTs and VSLAs
- GDN 2012 Japanese MIDP Award - scaling up a social service delivery model



Virungas - Mount Tshiabirimu, Democratic Republic of Congo (DRC) gorilla habitat



Building permanent Health and Gorilla Conservation Centre raised \$100,000 (\$200,000 remaining) (UWA and CTPH partnership)

- **THE CENTER**
- Will analyse over 2000 samples per year from gorillas, livestock and people who are sick to detect sharing of diseases
- **Will annually reach over 50,000 community members; 1000 tourists; and 200 students with health, conservation, ecotourism and livelihoods education and life skills**



We need funding to expand our impact



- **SCALING THE MODEL**
- **Village Health and Conservation Teams lifting homes out of poverty**
- In one year with \$30,000 will be able to reach 10,000 people in each parish
- **2,000 homes** in each parish will have a better quality of life through improvement of health, livelihoods and their environment

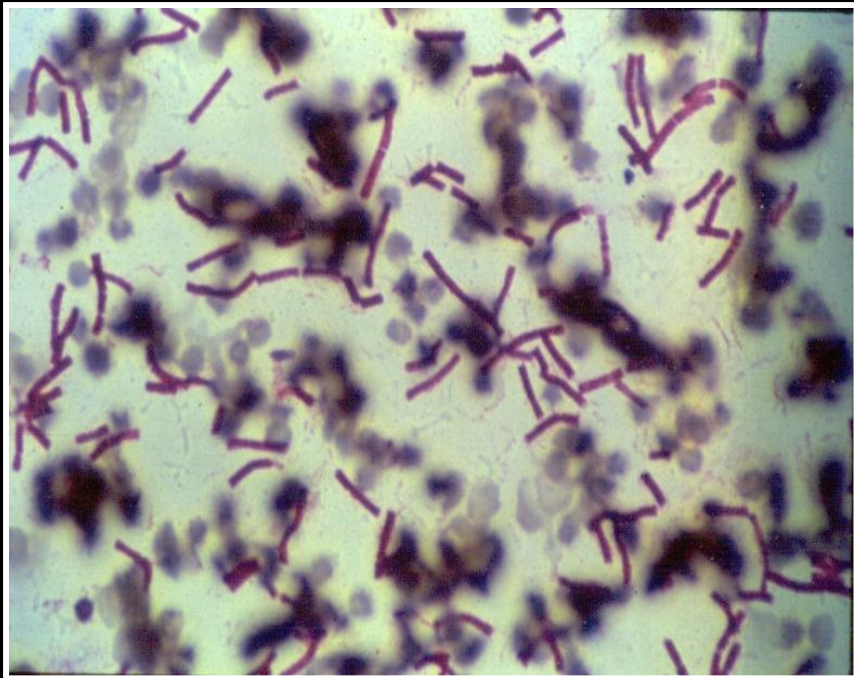




Baby elephant rescued by CTPH Community Volunteers in QENP, at UWEC



Anthrax in QENP strikes again!



National Disease Task Force (Anthrax, Ebola, Marburg)

- Ministry of Health
- WHO
- UNICEF
- MSF
- KCCA, Kasese District
Local Government,
Mpigi District Local
Government
- USAID
- CDC
- Uganda Red Cross
- Conservation for Public
Health
- Makerere University
College of Veterinary,
Animal Health and Bio
Security (COVAB)
- Global Health Security
- World Vision
- Uganda Prisons Services



Community Conservation Animal Health Worker (CAHWs) Volunteers Training (National Disease Taskforce)



July 27, 2010

Pian Upe Wildlife Reserve, Karamoja, Eastern Uganda

Survey of 2000 households from high conflict villages



- 17% want the park to be conserved, and only for cultural reasons
- Boiling milk – 14%
- Pit latrine (toilet) – 8%
- Animal House – 25.5%
- Kitchen – 37%
- Clean water storage – 73%
- Eating game meat – 100%

Promoting One Health and Conservation through Community Animal Health Workers



- Comparative disease surveillance of wildlife and livestock
- **Conservation Community Animal Health Workers**
- Village Conservation Committees headed by local leaders reporting to the CCAHWS and UWA
- Conservation and Culture



PHE Advocacy in Uganda



Uganda Population, Health and Environment Working Group

Fact Sheet



| PHE INDICATOR | 2000-2002 | 2006-2008 |
|---|-------------|-------------|
| Population Size (Millions) | 24.2 (2002) | 30.7 (2008) |
| Population Growth Rate | 3,2 | 3,2 |
| Total fertility rate | 6.9 | 6.7 |
| Urban | 4,0 | 4,4 |
| Rural | 7,4 | 7,1 |
| Percent of married women using contraception (modern methods) | 19,0 | 24,0 |
| Infant deaths per 1,000 births | 89,0 | 75,0 |
| Child deaths per 1,000 births | 158,0 | 137,0 |
| Urbanization (% urban of total pop.) | 12,0 | 13,0 |
| HIV prevalence (% of total pop.) | 7,9 | 6,4 |
| Percent of households with access to improved water source | 61,0 | 67,0 |
| Percent of households with access to improved and nonshared toilet | 41,0 | 58,0 |
| Percent of population using firewood and charcoal as fuel for cooking | 97,0 | 99,0 |



List of Members in Uganda PHE Working Group

| Name of Organization | Name of Organization |
|---|--|
| Conservation Through Public Health (CTPH) | Flora and Fauna International (FFI) |
| Population Secretariat (POPSEC)/MoFPED | Nature Harness Initiatives (NAHI) |
| Ecological Christian Organization (ECO) | Family Health International (FHI 360) |
| Jane Goodall Institute (JGI) | World Conservation Union (IUCN) |
| Nature Palace Foundation | Wildlife Conservation Society (WCS) |
| Pathfinder International | Straight Talk Foundation /Tree Talk |
| Uganda Network of Toxic Free Malarial Control | Private Sector Foundation |
| Uganda Wildlife Authority (UWA) | National Environmental Management Authority |
| Volunteer Efforts for Development Concerns | Ministry of Health (Environmental Health Division) |
| Bwindi-Mgahinga Conservation Trust (BMCT) | Nature Uganda |

Engagement with Universities

- Participate in research and field training with us and gain academic credit
- Individual research – Undergraduate, Masters, PhD
- Student Groups
- **One Health Residency/Rotation – hosting medical and veterinary students working together (later to include social scientists and environmental students)**



Hosting University Students



- Medical student from Australia and public health student from University of Cincinnati studying PHE in a forest ecosystem
- Duke University student studying the role of women in conservation



Veterinary Student from Penn State University - Kira Hydock



Get Involved

- Sign up for monthly e newsletter
- Visit us
- Volunteer with CTPH
- Participate in research and field training with us
- Make a donation (paypal, network for good, website)
- Follow us on facebook and twitter



Acknowledgements

- North Carolina One Health
- USAID, RESPOND
- North Carolina Zoological Park
- Universities: Makerere, MUST, Cornell, NCSU, Duke, OU, MSU, CSU, Royal Vet College
- MacArthur Foundation
- French Embassy in Uganda
- Woodrow Wilson Center
- PRB, FHI360
- WCS, WCN, Tusk,
- USFWS, AWF
- BALANCED, Expand Net
- Whitley Fund for Nature
- Global Development Network
- Japanese MIDP Award
- Irish Aid, MGVP, IGCP
- John Snow International
- Uganda Wildlife Authority
- MOH, MAAIF
- Kanungu, Kisoro and Nakapiritpirit District local governments
- Lake Victoria Basin Commission
- Dalai Lama Fellows
- The Kids League
- ECO, OSIENALA
- Ethiopia PHE Consortium
- CTPH Patron Queen of Buganda
- CTPH Board, Staff
- **VHCTs, CCAHWS**



Thank you



@CTPHUganda @doctorgladys

Facebook: Conservation Through Public Health

www.ctph.org

