

Conservation in the 21st Century; what is it and who is it for?

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Who am I?

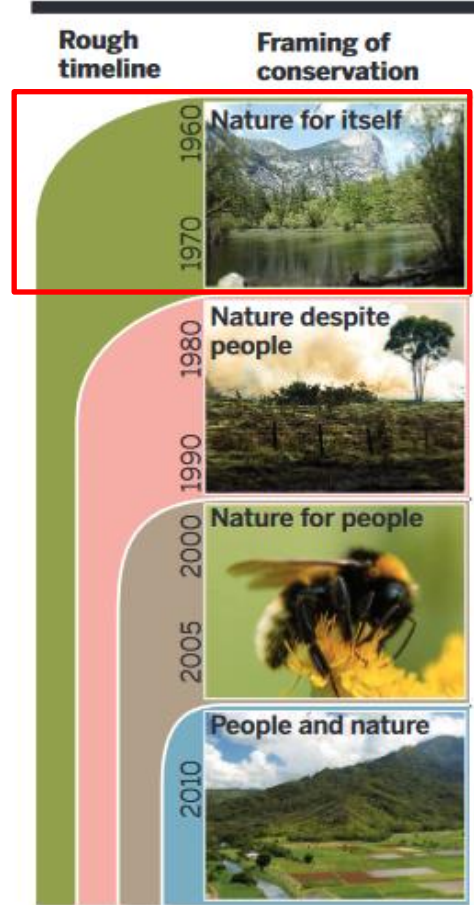


- Grandson of Frank and Rosemary Dorward
- Lived on the Nyika 1955 – 1957 working for the Nyika Forestry Development Syndicate
- Editors of “The Nyika Experience” set of memoirs



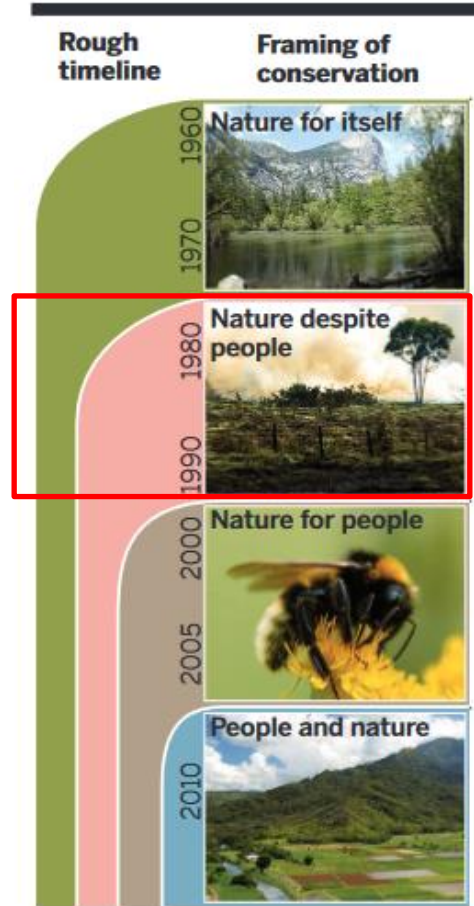


What is
Conservation?



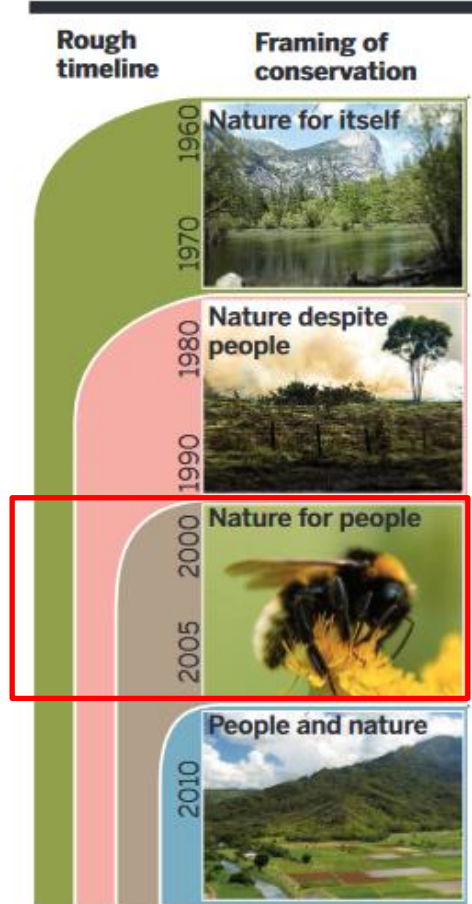
Nature for itself

- Pristine ecosystems: nature for it's own sake, without interference of humans
 - Wilderness protected areas



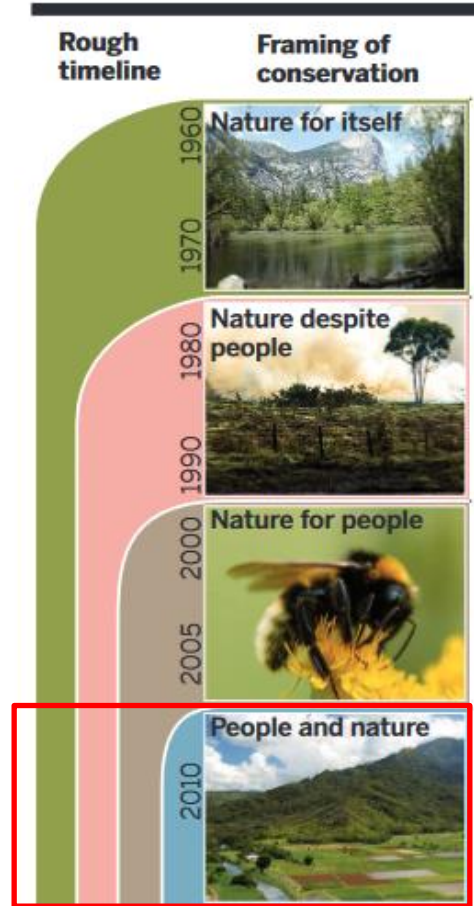
Nature Despite People

- Managing threats to nature
 - Pollution
 - Overharvesting vs sustainable use
 - Habitat loss
 - Invasive species
 - Extinction



Nature for People

- Ecosystem functioning and services
 - What economic, cultural, social benefits does nature offer humanity?
 - Millennium ecosystem assessment
 - Environmental economics



People and Nature

- Socio-ecological systems
 - Resiliency and adaptability of natural and human systems
 - Interdisciplinary social and ecological sciences



A diverse set of motivations and goals

- Nature for itself
 - Protecting wilderness and the “natural”
 - Protecting biodiversity
- Nature despite people
 - Minimising human impact and extinctions
- Nature for people
 - Ecosystem services
- Nature and people
 - Co-existence, integrated socioecological systems

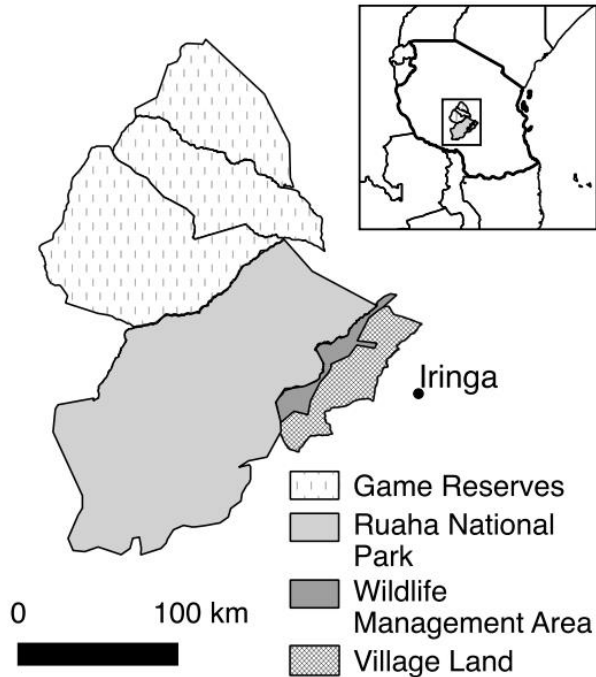
Who gets to decide the goals and direction that conservation takes?





People, Lions, Cows, and Conservation

Ruaha-Rungwa Landscape



- Protected area landscape in southern-central Tanzania
- Ruaha National park 23,000km²
- Part of protected area complex of 43,000km²
 - Game reserves
 - Wildlife Management Areas
 - Game Controlled Areas
 - Village land



Ecological context

- Eastern side classic east African acacia savannah, western side Miombo woodland
- Historically large elephant population ~34,000 in 2009, halved by 2015
- Over 1000 lions, estimated to be ~10% of the world's population
- Third biggest wild dog population
- One of the largest Cheetah populations in East Africa
- 570 bird species











Social context

- Diverse communities of over 30 ethnic groups
- Agriculturalists:
 - Mainly Bantu tribes
 - Smallholder subsistence maize and rice
- Pastoralists
 - Maasai, Barabaig, Sukuma
 - Relatively new to the area, 3-4 generations
 - Historically nomadic, now mostly settled
 - Cows, sheep, goats
 - History of persecution and marginalisation









Human-carnivore conflicts

- Many Maasai and Barabaig pastoralists live along the south eastern edge of the park
- Carnivores (mainly lions and hyenas) predate livestock
 - ~10% of livestock owning households suffer annual attack
- Carnivores are killed in retaliation for livestock losses or pre-emptively
 - Traditional hunts involving spears
 - Poisoning









Human-wildlife conflict

“An action by either humans or wildlife that has an adverse effect on the other” Conover (2001)

Human-mouse conflict



- Mice and other rodents impose huge health and economic costs around the world.
- 5-15% of Tanzania's annual maize harvest lost each year, can be as high as 48% in years with rodent outbreaks.

Human-snake conflict



- 81-138,000 people die each year from snake bites
- Widely persecuted species, venomous and non-venomous species killed on sight across Tanzania.



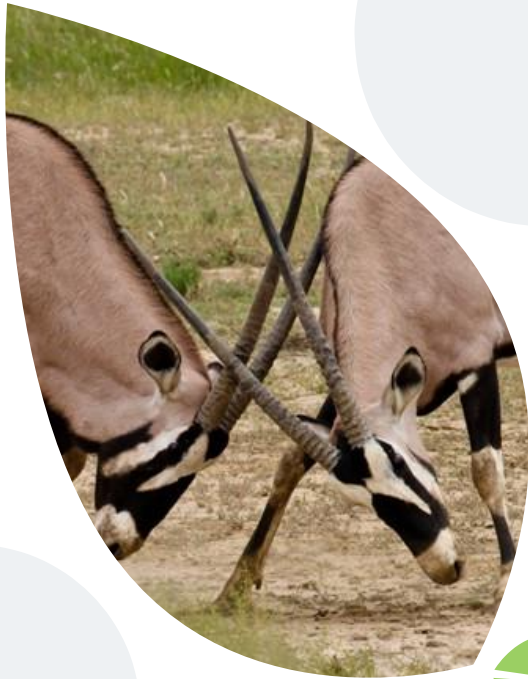
What makes it a human-wildlife conflict?

- Why does the killing of a lion become an act of human-wildlife conflict while the killing of mice is pest control?
- The majority of human-wildlife conflicts are really conflicts between human groups over how to manage wildlife and their impacts on people.
- Not necessarily about the impacts of people on wildlife and vice versa but about how wildlife and people are valued.



Problematic framing

- Focus' on efforts on the interactions between humans and wildlife.
- Solutions tend to be technical solutions to keep humans and wildlife apart.
- Ignores the different human values that are behind the conflict. Unless these are addressed then the conflict will never be resolved.
- Allows conservationists to think they are “neutral” intermediaries between people and wildlife – when actually they are deeply imbedded in the conflict.



Conservation Conflicts

1. Human Wildlife Impacts

- “Where people...impact negatively on biodiversity and where wildlife...impact negatively on the wellbeing or livelihoods of people”
- Technical and legal solutions to reduce the negative impacts humans and wildlife have on each other

2. Conservation Conflicts

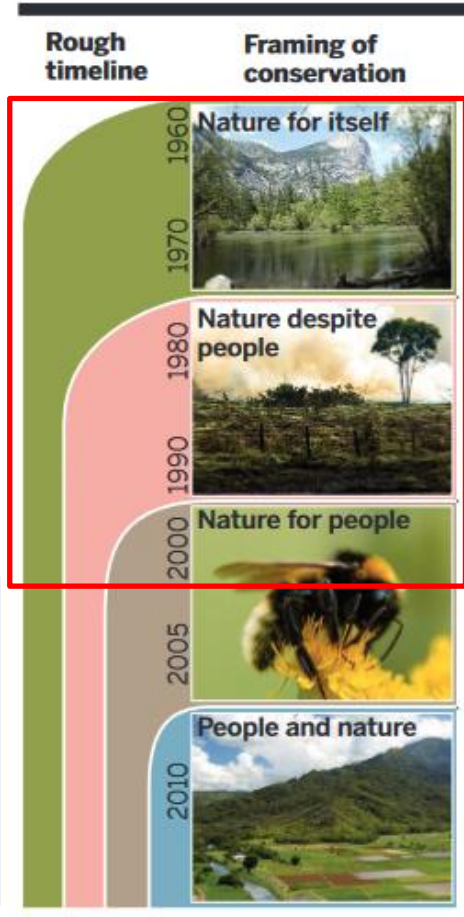
- Conflicts that result from interactions between human groups seeking to conserve species or biodiversity and those with other interests
- Much more complicated to resolve!

Young et al. (2010). The emergence of biodiversity conflicts from biodiversity impacts: characteristics and management strategies. *Biodiversity and Conservation*,

Who are the actors around Ruaha
and what are their interests?

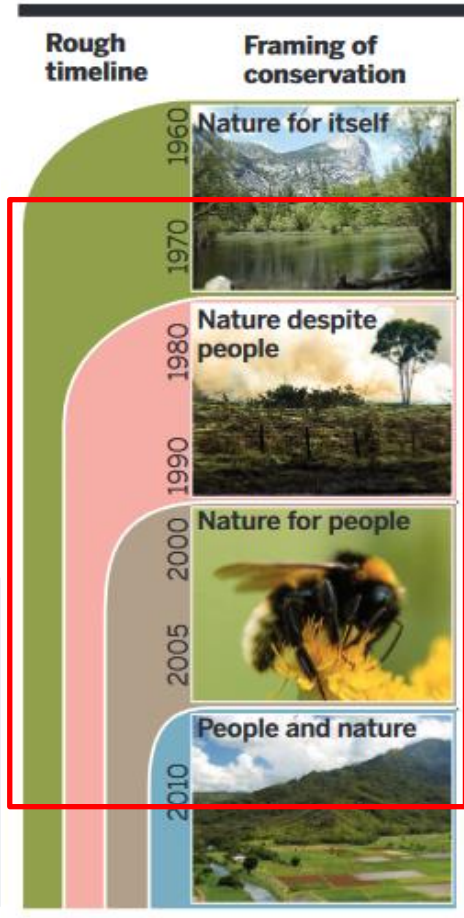


Wildlife authorities



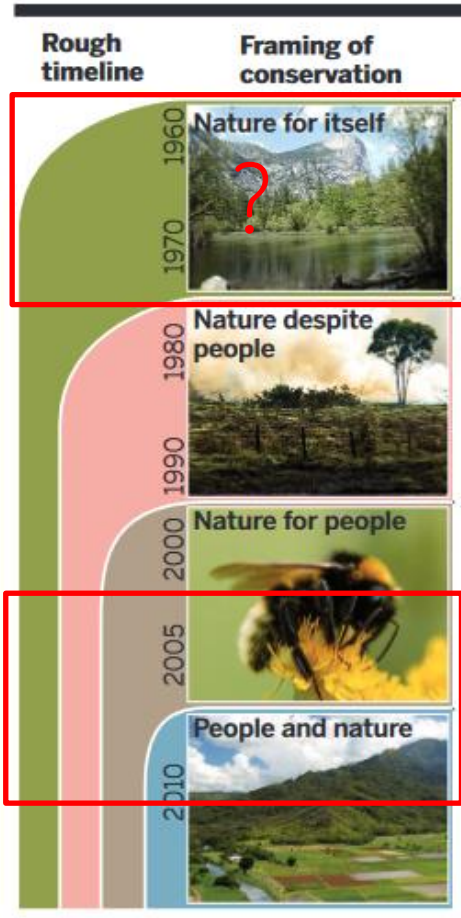
- Government agencies.
- Uphold wildlife law
 - Wildlife laws born during colonial era.
 - All wildlife owned by the government.
- Protect wildlife inside and around protected areas.
 - Manage tourism and trophy hunting
- Monitor wildlife populations
- Protect humans from wildlife outside protected areas.

Conservation NGO's



- Mostly managed by American/European immigrants.
- Majority of funding from Europe and US.
- Primary goal of protecting species/habitats, secondary goals of community development.
- Some support wildlife authorities with training and equipment.
- Engaged in ecological research and population monitoring, and conservation programmes
- Focus on large charismatic species
 - Elephants, large carnivores
- Complex power dynamics with communities and wildlife authorities.

Pastoralists



- Social and economic prestige tied to herd sizes
- Complex relationships with carnivores
- Traditionally nomadic, lifestyle that co-existed with carnivores for centuries.
- Lost much of their traditional rangelands to national parks and agriculture.
- Now live in marginal land on the border of the National Park.
- Reliant on seasonal rains for grazing
- Little institutional power compared to other actors
- Not homogenous!



Conservation Conflicts

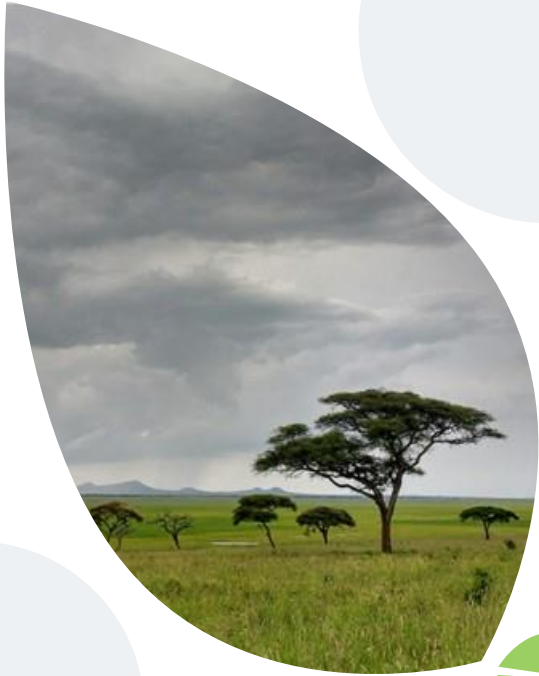
- Cattle vs carnivores
- Land for people vs land for wildlife
- Sharing of the benefits and costs of wildlife among different groups?
- Long history of structural persecution of pastoralists.
- Authorities legitimacy rests on colonial era laws.
- NGO's international funding and accountability

Solving the conflict



- Need to look beyond the dead lions and cows to the societal processes that have led to them.
- Important to bring pastoralist voices into places where decisions are made
- Find common ground in the values, beliefs and interests of the different groups and places where compromises can be made where values clash.

Solving the conflict



- Addressing deep structural and historical inequality very challenging.
- Restoring pastoralist rangelands that are now famous National Parks in Northern Tanzania is probably unrealistic – and would cause all sorts of new conflicts.



What is Conservation and who is it for?

- Very diverse movement with many different values, goals and motivations
 - Maybe not diverse enough!
- Conservation has a history of framing problems and solutions in a way that excludes certain stakeholders
- We need to ensure that the diversity of views is present when making decisions and framing problems
- Will make conservation more ethical and more effective

Thanks to my colleagues and mentors

Prof E.J. Milner-Gulland

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Harriet Ibbett

Prof Julia Jones

