



# ACLIE 2023 PROGRAMME



## Imagining the Future

THE THIRD AFRICAN CONFERENCE FOR  
LINEAR INFRASTRUCTURE AND ECOLOGY

[www.aclie.org](http://www.aclie.org)



# Day 1, Monday 18 September

09:00 – 09:30

## ACLIE 2023 Opening Ceremony

09:30 – 10:00

## ACLIE Mkutano: Imagining the Future

### Keynote speakers:

Dr. Patrick Omondi (CEO, Wildlife Research and Training Institute)

Hussein Yusuf Iman (Regional Infrastructure Manager, AfDB)

Dr. Njeri Mwangi (Senior Futurist, Institute for Futures Research)

10:00 – 10:45

## ACLIE Mkutano: The Systems Lens

### Keynote speakers:

Dr. Nick King (Environmental futurist)

Winnie Nunda (Research Officer, Centre for Agriculture and Biosciences International)

Dr. Nick Simpson (Senior Advisor, Africa Lead for Knowledge & Practice, Global Centre for Climate Mobility)

10:45 – 11:10

## Tea Break

11:15 – 12:15

### On the Line:

1: Powerline effects on grey crowned cranes in south-central and south-western Uganda; Sarah Kugonza

2: Northern Kenya Road Watch: Citizen science for informing retrofitting of a highway; Matthew Wachira and Redempta Njeri

3: Effects of linear infrastructure on vertebrates in Hluhluwe-iMfolozi Park and ISimangaliso Wetland Park, KwaZulu-Natal, South Africa; Cameron Cormac

### On the Line:

1: Comparison of cost-effectiveness of different types of wildlife crossing structure; Manisha Bhardwaj

2: The role of environmental, structural and anthropogenic variables on underpass use by African savanna elephants (*Loxodonta africana*) in the Tsavo Conservation Area; Michael Koskei

3: Linear infrastructure and primates: impact and mitigation examples from South Africa, Africa and beyond; Bibi Linden

12:20 – 13:20

### In the Lions' Den:

1: Animal vehicle conflict -a road safety blind spot in Botswana; Maatla Otsogile

2: Exploring wildlife crossing effectiveness on the N4 Toll Route (TRAC N4), Gauteng Province, South Africa; Thabo Hlatshwayo

3. Overcoming Data Limitations: Estimating the economic feasibility of primate canopy bridges for stakeholder meetings; Pamela Cunney-worth

### Design Desk:

Using Remote Sensing and Least-Cost Paths to optimise route planning

**Presenter:** Douglas Tilbury

13:20 – 14:10

## Lunch Break

14:15 – 15:30

### Integrated Issues:

Strengthening road ecology research and exchange between Asia and Africa

**Presenter:** Qilin Li

### Integrated Issues:

Towards more sustainable and inclusive development corridors in Africa

**Presenter:** Hamza Rafray Butt

15:30 – 16:00

## Break

16:00 – 18:00

### Curriculum Corner

Communicating your transport ecology story to the community, engineers and your Mum: Enthraling your audience with a captivating blog or stunning audio-visuals

**Trainers:** Rodney van der Ree, Peter Ndung'u, Kieren Topp

### Curriculum Corner

Gathering data for roads 101

**Trainer:** Wendy Collinson

18:30 – 21:00

## Welcome cocktail event



# Day 2, Tuesday 19 September

07:00 – 07:30

Morning forest walk in the Brackenhurst Indigenous Forest

09:00 – 10:00

**ACLIE Mkutano: The economics Lens**

**Keynote speakers:**

Mark Gerrard (Africa Director, Conservation Strategy Fund)

Conrad Savy (Regional Biodiversity Lead, IFC)

Lucy Waruingi (Executive Director, African Conservation Centre)

10:00 – 10:30

## Tea Break and Networking

10:30 – 11:30

### On the Line:

1: Apes and Forests at Risk: impacts of linear infrastructure (LI) on three species and landscapes - Hoolock gibbon in NE India, orangutans in Sabah, Borneo and gorillas in the trans-Virunga landscape; Megan Parker

2: Spatiotemporal patterns of wildlife along the Phalaborwa – Hoedspruit railway line in Balule Nature Reserve, South Africa; Siboniso Thela

3: Transport infrastructure and protection of fauna in the Czech Republic; Václav Hlaváč

### Design Desk:

A tool to predict the indirect and induced land-cover change caused by new road project

**Presenter:** Jayden Engert

11:35 – 12:25

### Design Desk:

The role of railways in sustainable mobility and habitat protection in Africa - outlining the International Union of Railways' recommendations for railway agencies and a new project launching in 2024

**Presenter:** Lorenzo Franzoni

12:30 – 13:15

### Policy Props

Capitalising on the biodiversity opportunity to secure ecologically sustainable pan-African linear infrastructure

**Presenter:** Wendy Elliott (Plenary discussion)

13:15 – 14:00

## Lunch Break

14:00 – 15:00

### In the Lions' Den:

1: Wild ungulates can use passages at-grade to cross road-barriers to the same extent compared to ecoducts or other types of wildlife-designed passages at different grades; Marcus Elfström

2: Book Launch: Impact assessment for Corridors: from infrastructure to development corridors; Hamza Rafray Butt

3: African primates in the face of transportation network expansion: challenges and opportunities for their conservation; Mattia

### Integrated Issues:

Student and youth event: Building a community of practice for the future

**Facilitator:** Sarah Chiles

15:00 – 16:30

### In the Lions' Den:

Dogs as a tool for the investigation and the protection of linear structures; Leopold Slotta-Bachmary

2. Erosion control and restoration of red clay highway slopes using the application of an innovative material: A Case Study in South China; Xiaochun Qin

3: Using the PathFindIR device to prevent collisions on our roads worldwide; Gregory Kent Smith

### Integrated Issues:

Integrating the concerns for mitigating the impact of linear infrastructure (Roads and Railways Line) on large mammalian species: Lessons from India

**Presenter:** Bilal Habib

16:30 – 17:00

### Break

17:00 – 18:00

### Curriculum Corner

Mainstreaming Wildlife Incident Management into Utilities in Southern Africa

**Trainer:** Lourens Leeuwner and Oscar Mohale

### Curriculum Corner

Cross-Continental Pachyderm Practices: Sharing Best Solutions for Elephant-friendly Linear Infrastructure

**Trainer:** Melissa Butynski



# Day 3, Wednesday 20 September

08:00 – 09:00

## ACLIE Mkutano: The Pamoja Lens

### Keynote speakers:

Sheila Ashong (Ag. Director Natural Resources, Ghana Environmental Protection Agency)  
Andrew Letura (Ecological Monitoring Officer, Grevy's Zebra Trust)  
Steve Itela (CEO, Conservation Alliance of Kenya)

09:05 – 10:05

### On the Line:

- 1: Martial eagles on the line: The enigma of tree-nesters in a treeless landscape; Gareth Tate
- 2: Amphibian Underpass Tunnels: A Boon for Endangered Western Leopard Toads; Kim Gordon
- 3: Research informing community management for peaceful coexistence along corridors jointly used by livestock, people, and wildlife; Jane Wanjira and Mary Wykstra

### Special session:

Sustainable Infrastructure in Kenya: The Future We Want

*(Continuing the legacy of Tobias Nyumba through research)*

Speakers: Rob Marchant, Toby Otieno, Stellan Ndiwa, Evans Sitati

10:05 – 10:30

## Tea Break

10:30

## Leave for day trips

### Day Trip 1: Nairobi National Park

### Day Trip 2: Kijabe Forest and the Rift Valley

For those who are attending online, tune in for a livestream of the day trips at 14:00.



17:00

## Return from day trips

1800 – 21:00

## Fireside dinner and awards

# Day 4, Thursday 21 September

09:00 – 10:00

## ACLIE Mkutano: The Innovation Lens

### Keynote speakers:

Mark Xavier (CEO, V-TOL Aerospace)

Thabo Hlatswayo (PhD candidate, University of KZN & Endangered Wildlife Trust)

Manisha Bhardwaj (Post-doctoral researcher, University of Freiburg)

10:00 – 10:30

## Tea Break

10:30 – 11:30

### On the Line:

1: For more sustainable railways: measures to prevent and mitigate impacts on a Brazilian railway; Tatiane Bressan Moreira

2: Trans-species accompaniment during the public participation process for a road planned to be built within endangered Western Leopard Toad habitat and breeding ponds in Cape Town, South Africa; Andrea Marais-Potgieter

3: Using acoustic monitoring to explore the impacts of a railway and road traffic on the local marine environment in False Bay, South Africa; Fannie Shabangu

### Design Desk:

Plans, trains and automobiles: using tools, data and AI to plan for sustainable linear infrastructure

**Presenter:** Hamza Rafray Butt

### On the Line:

1: Livestock & wildlife corridors to protect connectivity across roads and through developing areas in northern Kenya; Benjamin Loloju

2: Research status and challenges of road impacts on wildlife in China: a summary of 144 case studies conducted including on ungulates on the Tibetan Plateau, the giant panda and Asian elephant; Abudusaimaiti Maierdiyali

3: Incidences of power line collisions and electrocutions involving the Grey Crowned Crane in Western Kenya; Vivian Kitui

### Design Desk:

Navigating primate canopy bridges over roads: A case study from a Kenyan town and practical considerations and steps for successful implementation

**Presenter:** Pamela Cunneyworth

12:30 – 13:15

## Policy Props

A global international policy perspective: presenting states' international obligations to address linear infrastructure impacts on migratory species under the Convention on Migratory Species; Mark Attallah

13:15 – 14:00

## Lunch Break

14:00 – 15:00

### In the Lions' Den:

1: Community-Based Conservation, Ecosystem-Based Adaptation and Population Health and Environment in Rukiga, Southwestern Uganda; Phionah Orishaba

2: Mammal utilisation of non-wildlife railway underpasses within the Greater Kruger; Hannah de Villiers

3: Combining Citizen Science and animal movement data to Monitor Road kills in Northeastern Kenya; Ali Abdullahi

### In the Lions' Den:

1: An innovative approach to maintaining landscape connectivity and mitigating wildlife accidents on Swedish railroads through acoustic signals; Mattias Olsson

2: The growing potential of canopy bridges in fragmentation mitigation for arboreal mammals; Tremaine Gregory

3: Understanding automated detection systems for wildlife on roads; Steve Bega

15:00 – 16:30

### Integrated Issues:

Sharing experience on transport ecology policy and best practices between Africa and Europe

**Presenters:** Elke Hahn and Lazaros Georgiadis

### Integrated Issues:

Contextualising the impacts of linear infrastructure on African drylands and seeking mitigation

**Presenters:** David Kimiti and Sarah Chiles

16:30 – 16:45

## Break

16:45 – 17:45

## Curriculum Corner

Animal Detection and Driver Warning Systems

**Trainer:** Manisha Bhardwaj

17:45 – 18:30

## Closing ceremony Announcement of ACLIE 2025