

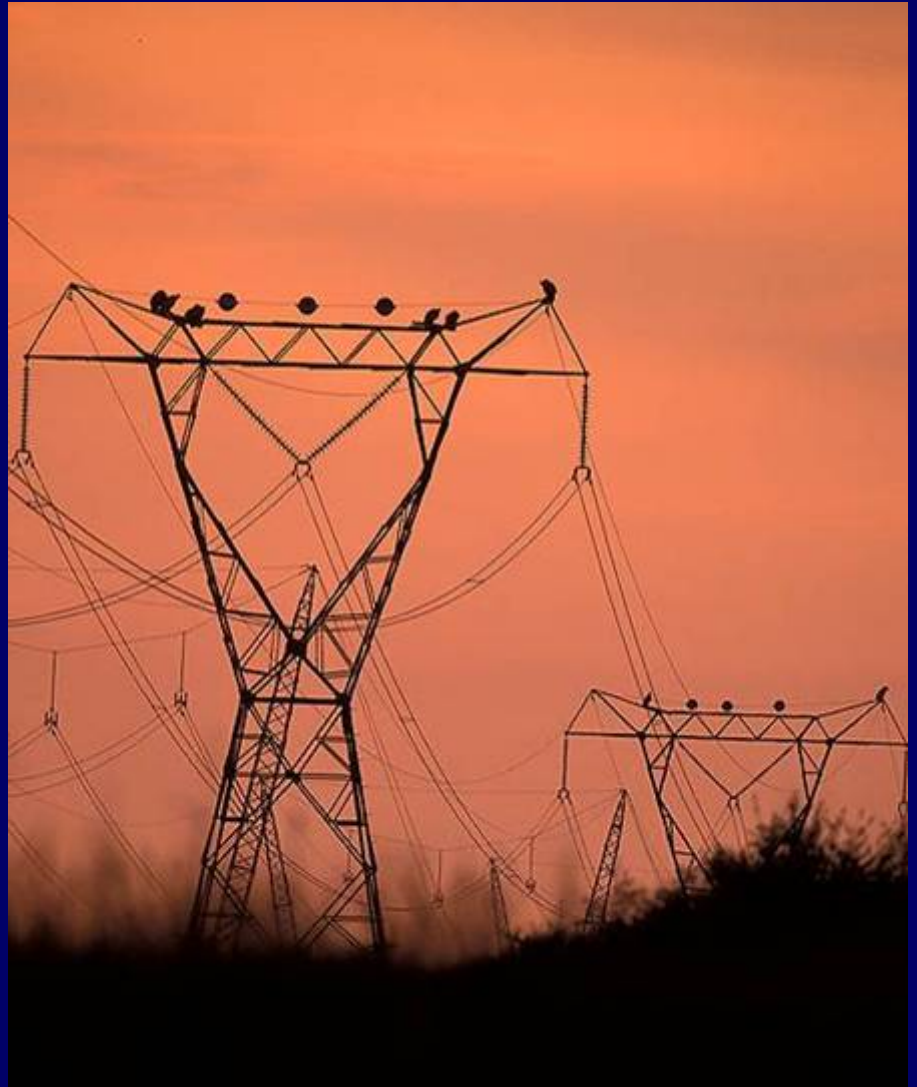


# Use of camera traps to investigate Cape Vulture (*Gyps coprotheres*) roosting behavior on power lines in South Africa

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# Presentation outline

- Problem statement
- Approach
- Results
- Recommendations

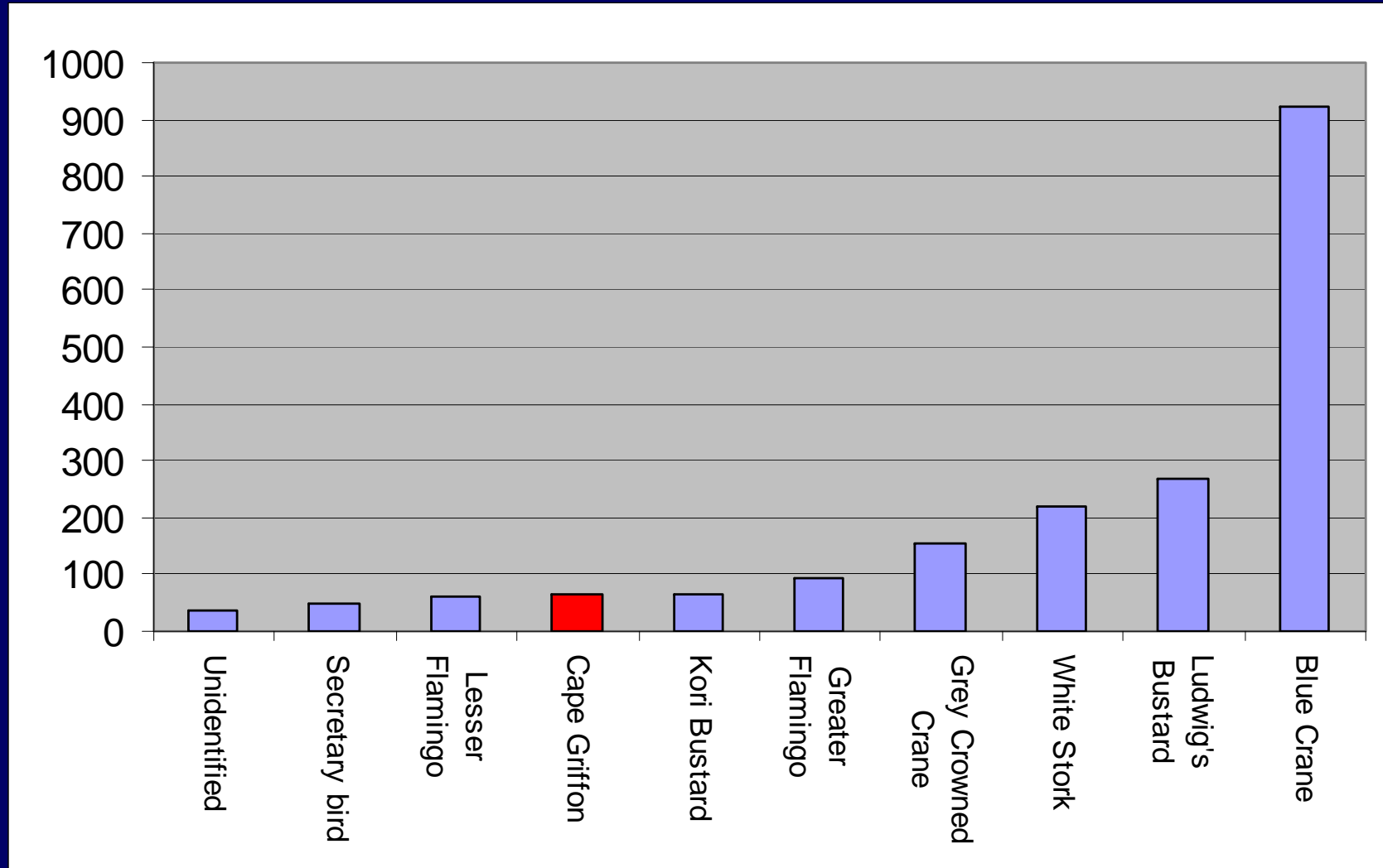


# The problem

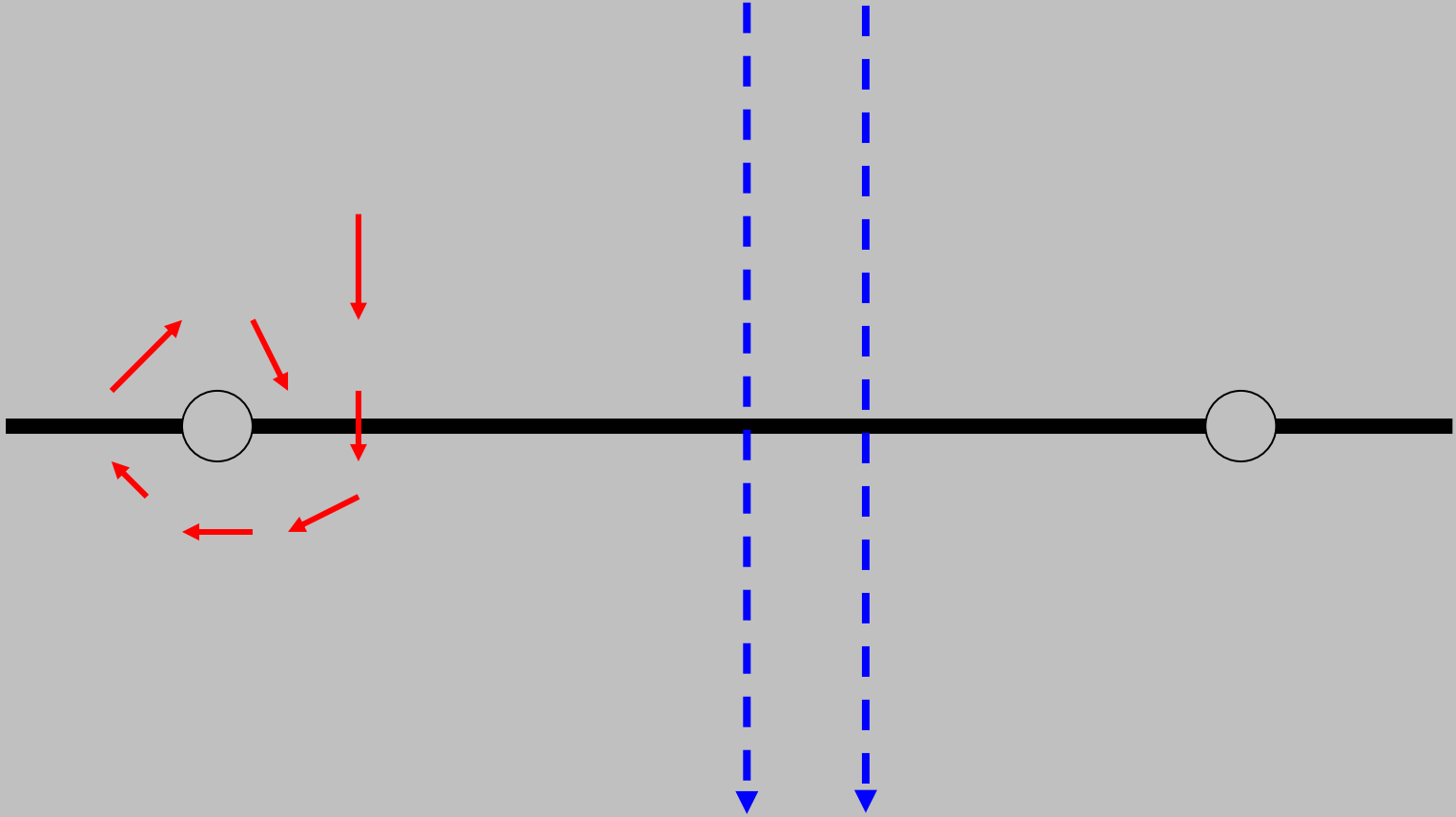




# Vultures - collisions







# Objectives

- Confirm collision as the mechanism of injury of the vultures
  - Time of entry & exit at roost
  - Angle of approach and departure from roost
  - Bird behaviour whilst on the roost
  - Preferred roost positions on the towers
  - Identification of cables which pose greatest collision risk
- Trial use of camera traps

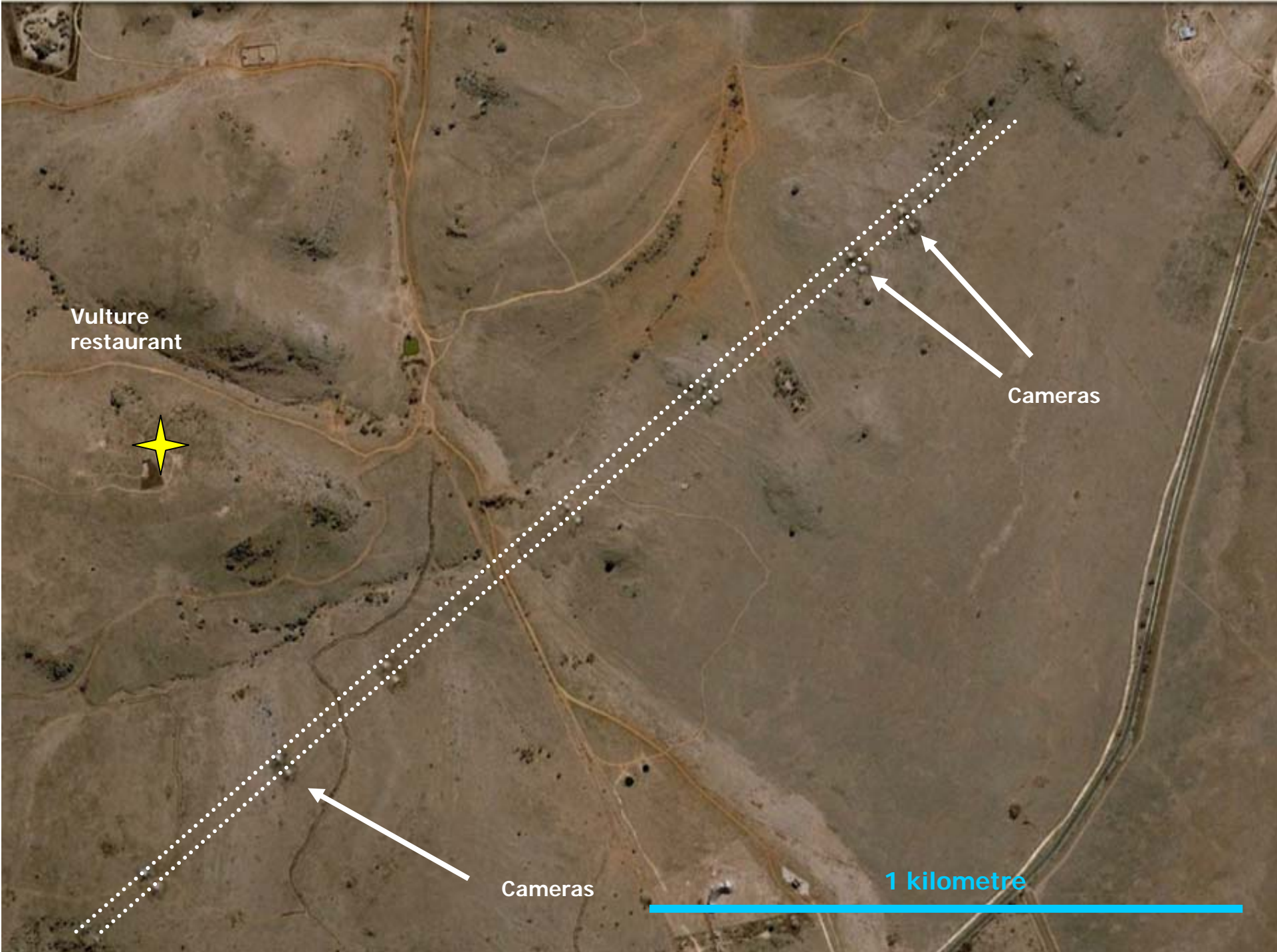


# The approach

- Preliminary human observation
- Remote data collection methods in the form of digital motion activated camera traps

# Equipment

- 'Cuddeback NoFlash' digital motion activated camera traps
- Focus set to infinity, 45 foot activation
- Still image + 10 sec video clip for each activation
- Time & date stamp



Vulture  
restaurant

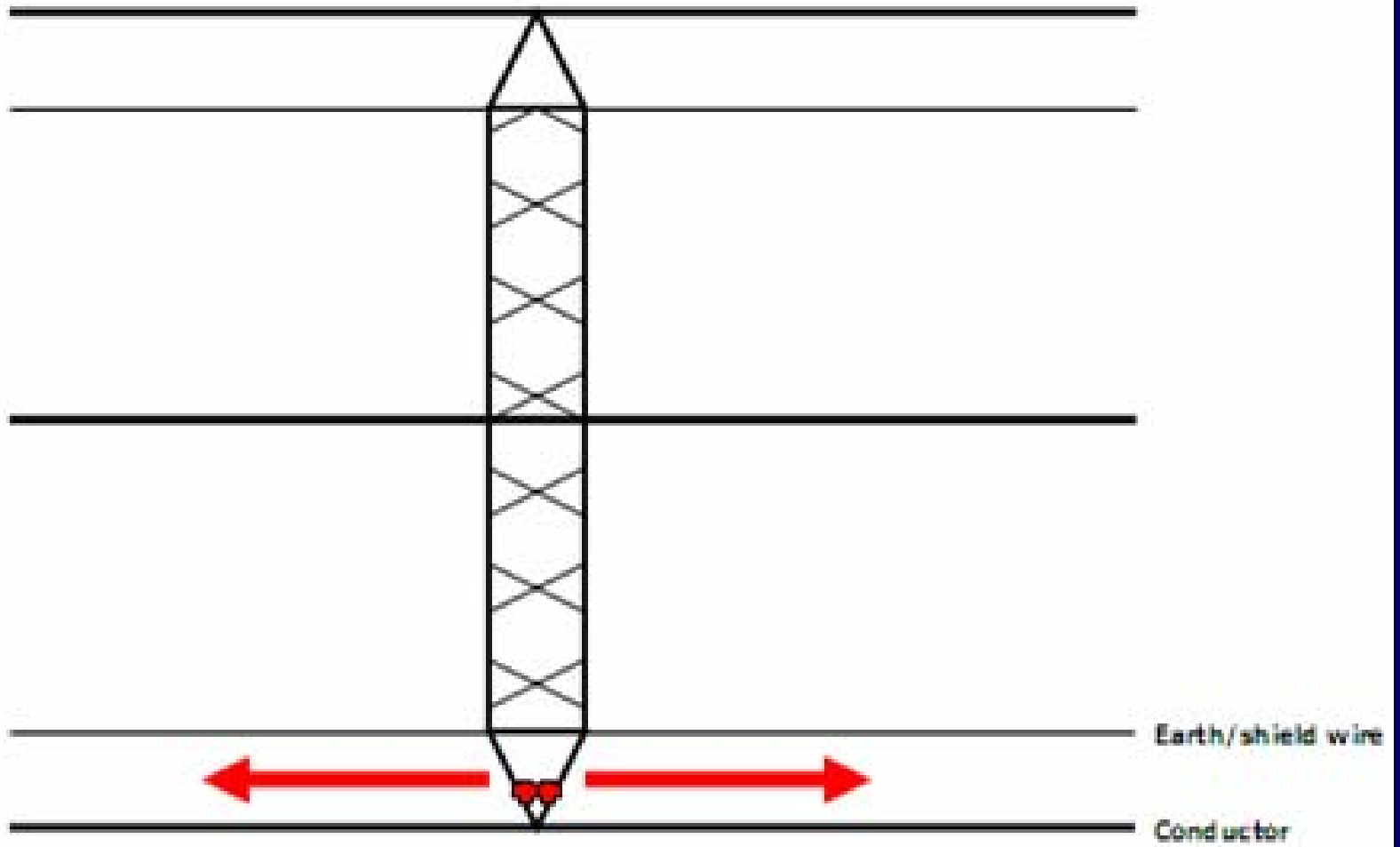


Cameras

Cameras

1 kilometre





**Results - vultures caught on camera...**



1/25/10 7:13 PM





2/01/10 6:04 AM







1/25/10 1:33 PM





2/05/10 5:58 PM





1/20/10 1:19 PM

EWT 011 486 1102





2/05/10 3:42 PM EWT 011 486 1102



2/09/10 9:29 PM





3/11/10 10:13 PM







2/19/10

4:48 PM

EWT 011 486 1102







3/06/10 4:25 AM





3/16/10 11:37 PM



# Results – suitability of methods

- Good battery & memory card life  
(e.g. 1500 still images + 1500 clips = <25% battery (4D-cell) & memory card (8GB CF))
- Fast trigger speed
- Reliance on utility to get data downloads is a limitation
- Volume of video clip data immense

# Results – bird behaviour

- Often enter roost after dark
- Frequently fly in mornings in cloudy weather
- Entry to the roost towers predominantly from the east
- Often circle the roost at close proximity well after dark
- Appear to be disturbed at intervals through the night, leaving, circling and re-entering the roost.
- Earth wire poses the greatest collision risk
- Nearby vulture restaurant puts food out late in day



# Recommendations

- Stop feeding at feeding station/vulture restaurant after midday
- Mark first 50m of earth wires with nocturnal and diurnal marking devices
- Place perch deterrents on earth peak in order to prevent birds landing and taking off close to earth wire



**Endangered  
Wildlife Trust**



**Eskom**

**Strategic Partnership**

**Thank – you!**