

Migration pattern, dispersal corridors and Bushmeat hunting of the white eared kob in the Ethiopia-South Sudan landscape

Cherie Enawgaw Beyene

Supervisors

- **Prof. Nils Chr. Stenseth**
- **Prof. Afework Bekele**
- **Dr. Nils Bunefeld**
- **Dr. Karen Lauresen**
- **Dr. Anagaw Atickem**



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Centre for Ecological and Evolutionary Synthesis



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Introduction

- Migration is a round trip movement usually between two locations
- Dispersal- movement beyond distribution limits
- Corridors- favorable habitat connecting larger ones

Migratory mammals of the world sharply declining

- Cutoff dispersal corridors
- Bushmeat hunting
- Climate change

Migratory ungulates, eg. Wildebeest, are derived by continuously changing resource (Holdo et al 2009),

- *White eared kob--- against rainfall*

White eared kob migration

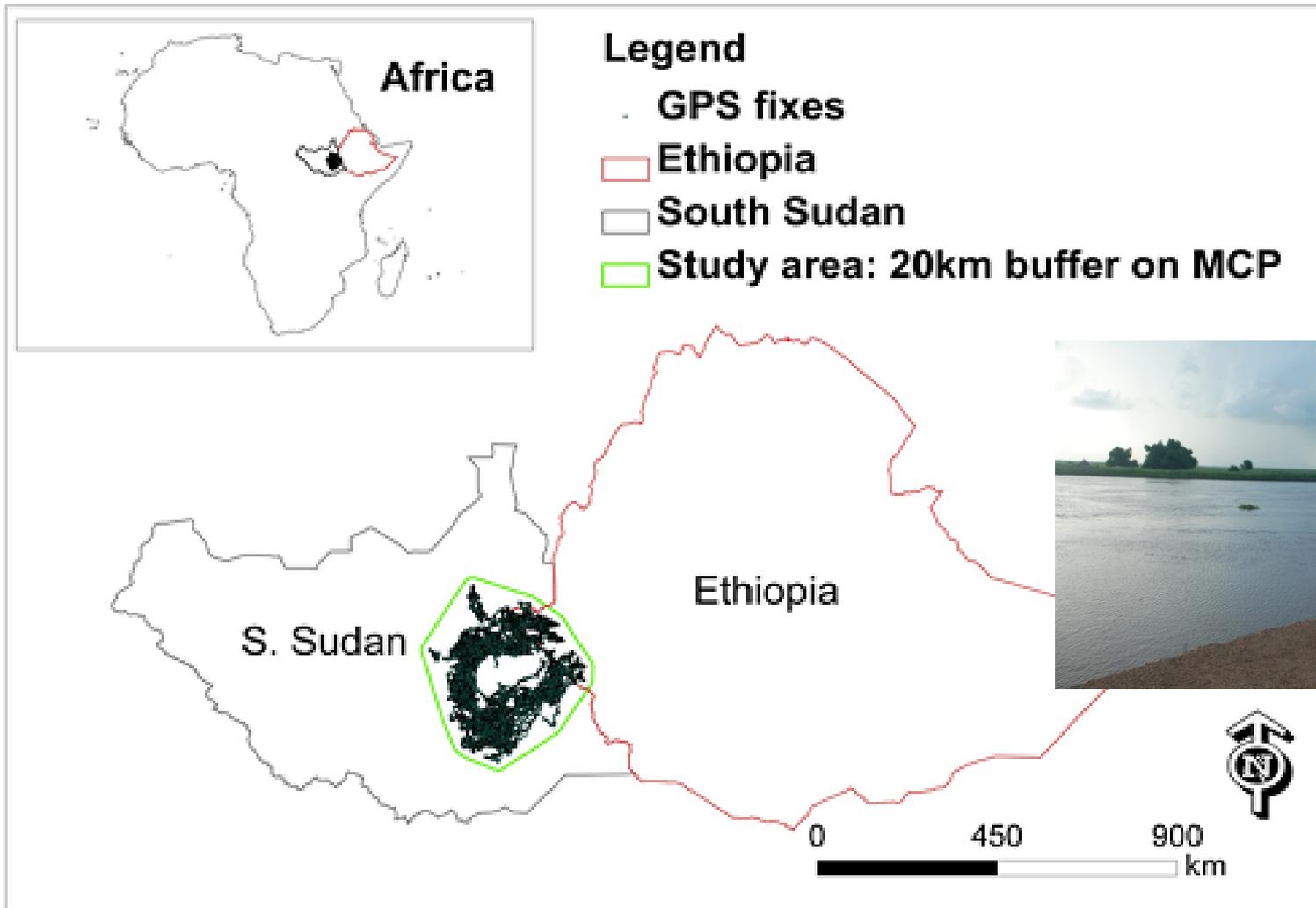
- About a million white eared kob crossing the Ethiopian-southern Sudan landscape -second largest mammal migration on earth
- No detailed research conducted on migration pattern and dispersal corridor of white/ eared kob

My PhD research project aims to determine

- Movement pattern and dispersal corridors
- Habitat preference and breeding ground
- Environmental factors driving migration
- impact of bushmeat hunting on the migration



Study area: 114,434 km² as measured from minimum convex polygon



Methods

1. Satellite collaring

- 45 collars were fitted (19 male 26 female)_EWCA And HoAREC/N 2013
- Land cover analysis from satellite image and ground truthing
- Questionnaire survey for bushmeat hunting assessment



Dispersal behaviour;

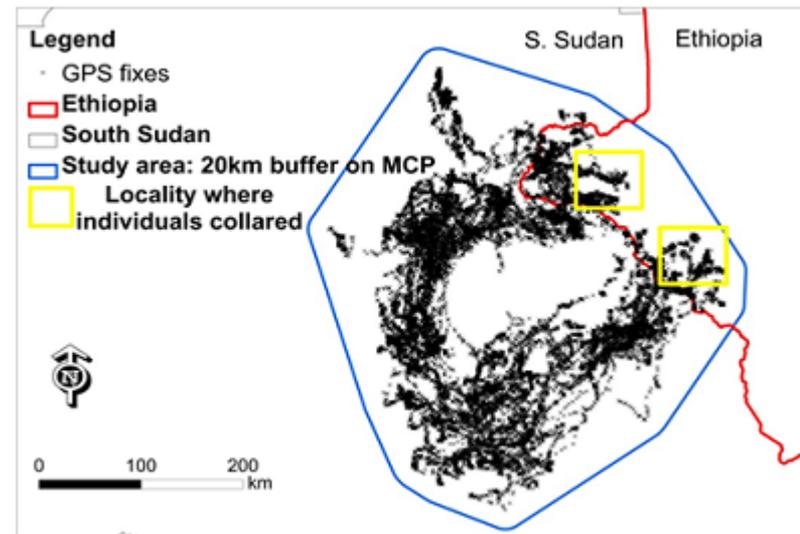
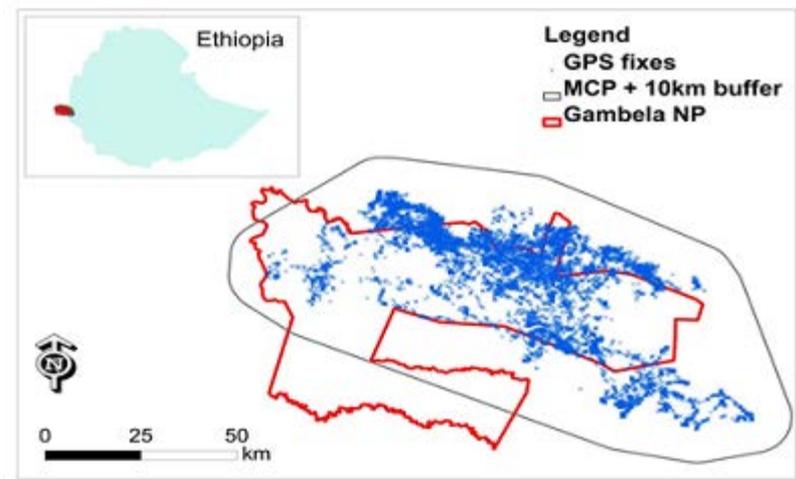
14 were resident

➤ 7 Female , 5 Male

23 were migrated

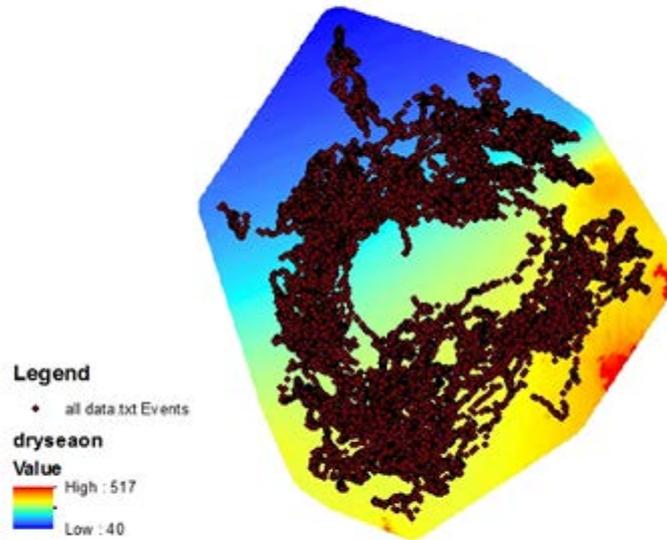
• 16 Female , 19 male

➤ traveled over 250 km- aerial distance

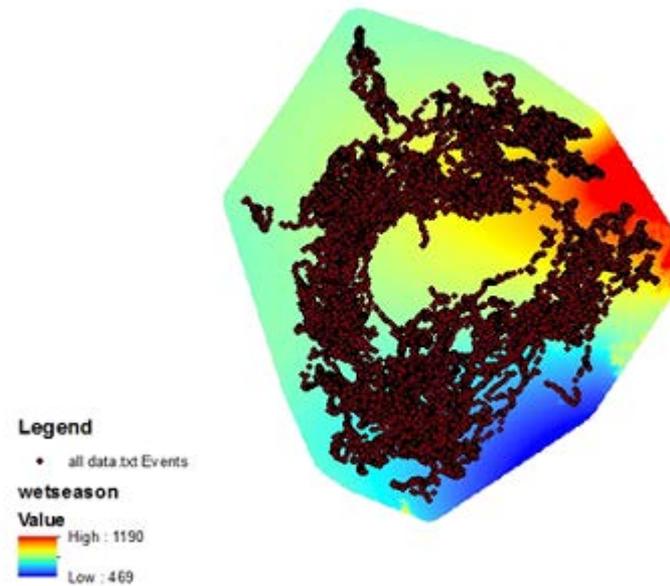


Dry and wet season distribution

Dry season distribution

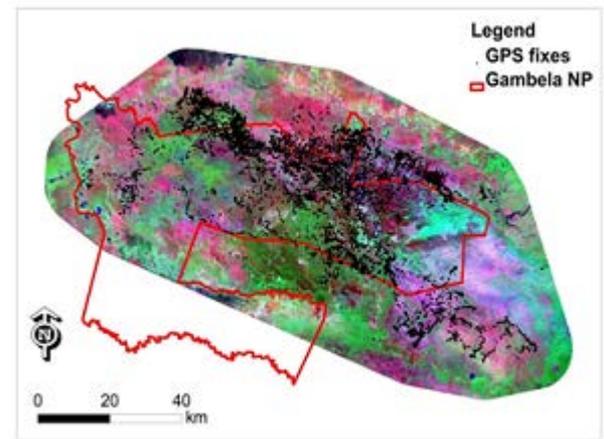


Wet season distribution



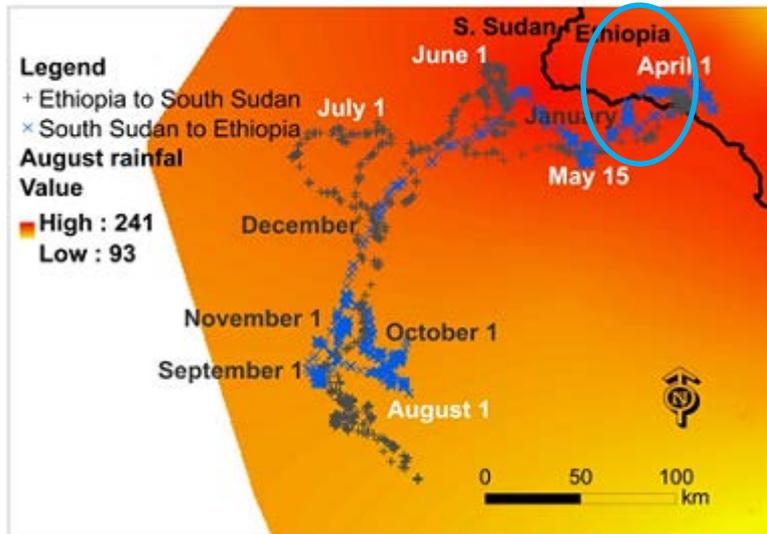
Habitat suitability map

Vegetation mapping underway

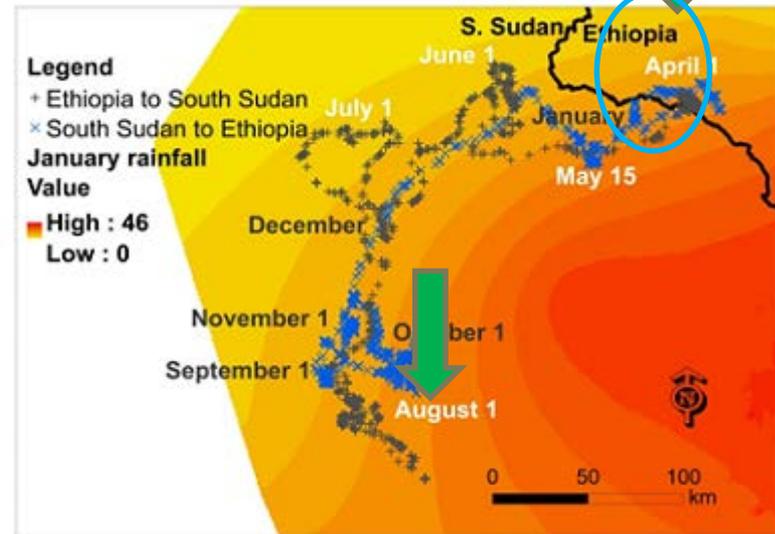


Movement pattern

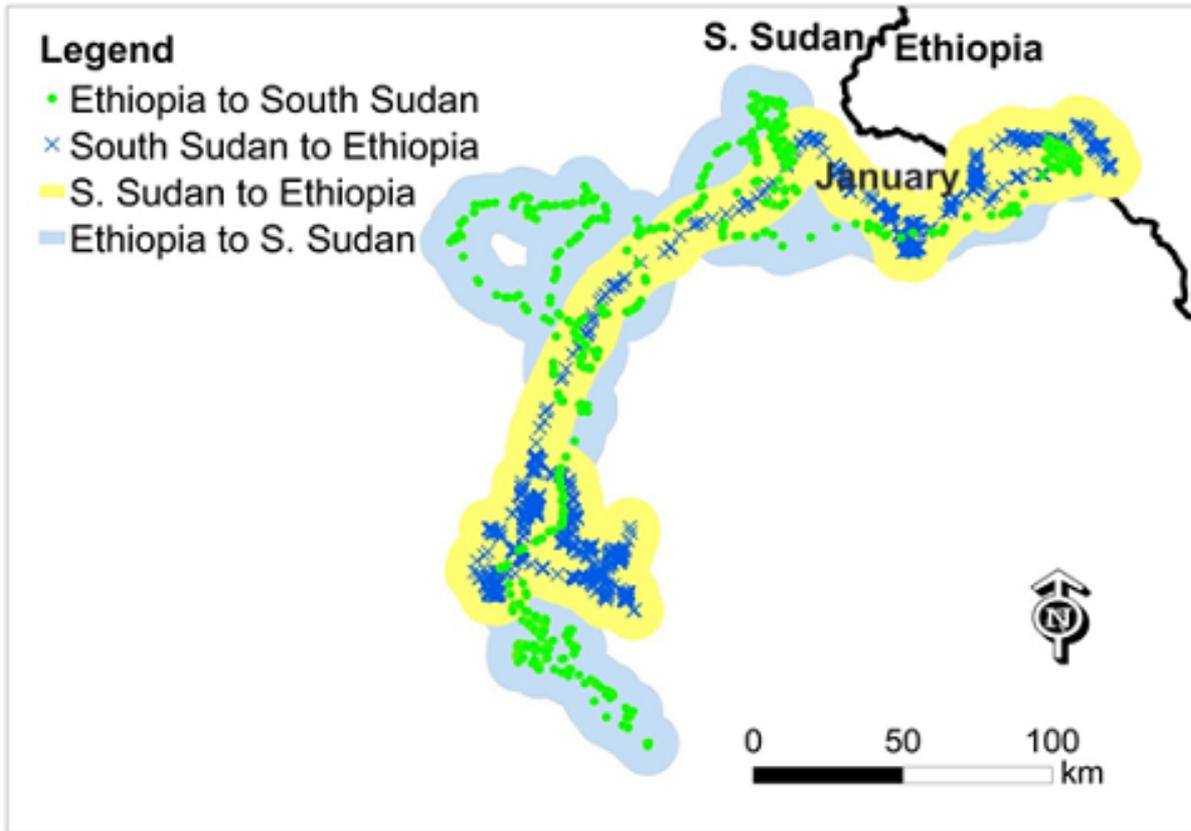
Wet season



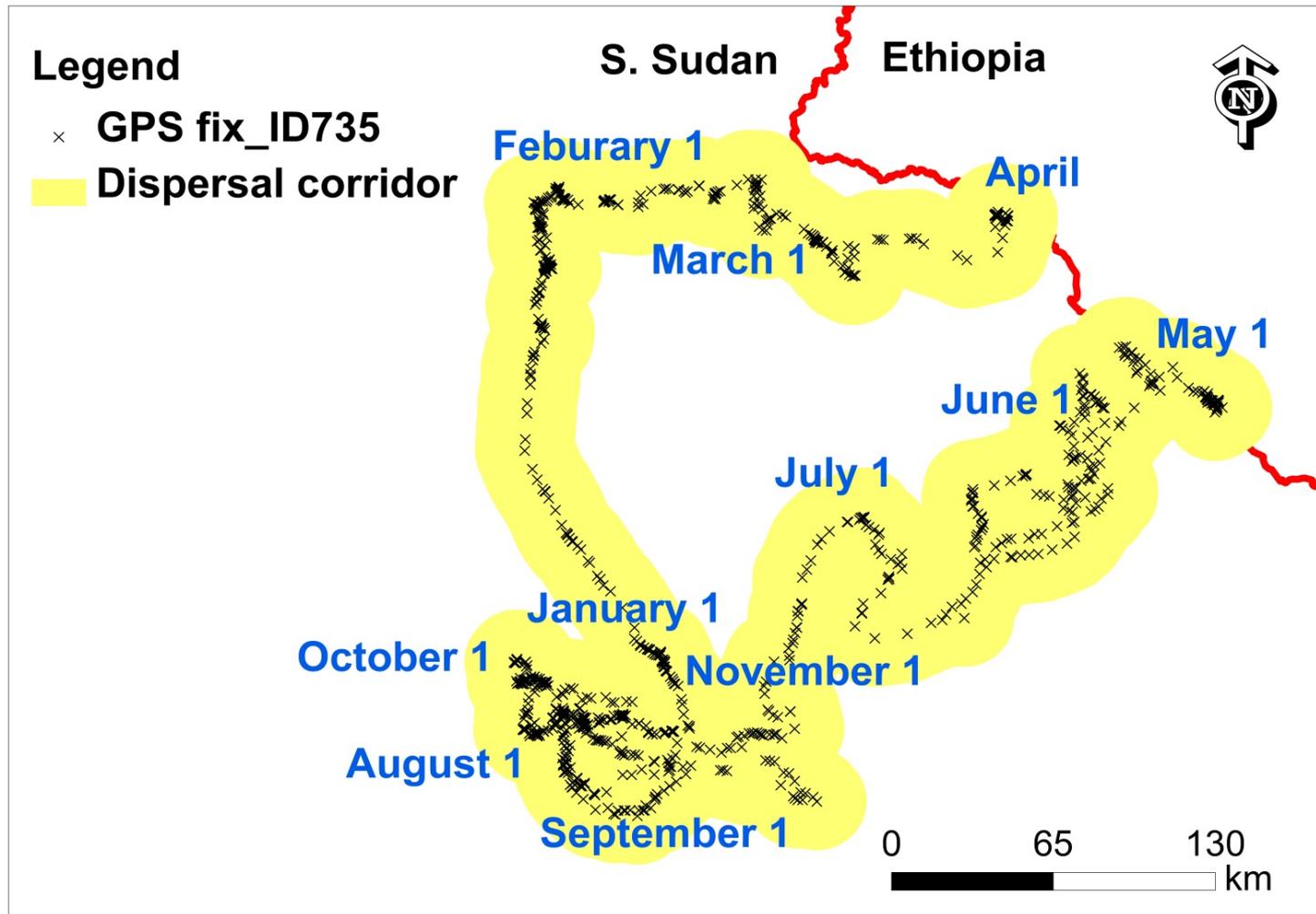
Dry season



Dispersal corridors



Dispersal corridors



Bushmeat hunting

- Focus group discussion was conducted with 15 village representatives
 - 120 individuals were interviewed following predetermined questionnaires,
 - Additional data will be collected in dry season
- Initial findings show that white eared kob is the most commonly hunted species
- Wildlife meat, mainly white eared kob, being used to feed troops and displaced people in South Sudan





Thank you!

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