

PARTICIPATORY SURVEY AND CONSERVATION OF KAMUKU ELEPHANTS AND ITS ENVIRON, NIGERIA



WHY PROTECTING THE ELEPHANT?

Elephants are an umbrella species that can be used to ensure the conservation of other endangered animals and plants.

They are not only a flagship species, but also a keystone species across the world particularly for the Sudan-Guinea Savanna vegetation.

Protecting elephants will help stimulate eco-tourism activities and derivation of other ecosystem services by local communities.



OBJECTIVE OF THIS PROJECT

- To strengthen the capacity of Park rangers and locals and raise awareness and enlightenment of local communities on the need for conservation of wildlife species, with special focus on the preservation and protection of the elephants of Kamuku National Park and its environment.

THE SPECIFIC OBJECTIVES ARE TO:

- determine the abundance and population density of elephants in KNP and its environ;
- identify key habitats of the animal;
- stimulate environmental sensitivity including conservation education and joint action towards the protection of elephants.

SYSTEMATIC SURVEY OF THE KAMUKU ELEPHANTS

METHODS:

1. Line Transect Survey Method (Barnes and Jensen, 1987).
2. Short-cut or Reconnaissance (“recce”) Method (Barnes, 1988).

MATERIALS NEEDED:

1. Compass (6)
2. Machetes (6)
3. Metre tape (6)
4. Hip-chain and topofil thread
5. Tape and Marker (6)
6. Pen and data recording sheet (6)
7. GPS
8. Digital Camera

- **Team:**
 - Six survey teams

- **Composition:**
 - Two-person cutting crew;
 - Two dung observers
 - A team leader

SELECTION OF TRANSECT LINES

- Stratification vs Random placement
- Minimum spacing out of Transect lines= 0.5 km
- Transect width= ≤ 2 m

DATA COLLECTION

- Finding and recording of dung piles along the transect;
- Categorizing dung pile decay state (following Barnes and Jensen, 1987);

DUNG DECAY CATEGORIES AS DEVISED BY BARNES AND JENSEN (1987)

STAGE	DESCRIPTION
A	Boli intact, very fresh, moist, with odour.
B	Boli intact, fresh but dry, no odour.
Ca	Some of the boli have disintegrated but more than half are still intact.
Cb	Less than 50% of the boli are distinguishable, the rest have disintegrated.
D	All boli completely disintegrated; dung pile now forms an amorphous flat mass.
E	Decayed to the stage where it would be impossible to detect at 2m in the undergrowth; it would not be seen on a transect unless directly underfoot.

SURVEY PROCEDURE

- At each sampling location a team will start on a road and walk at least 100 m into the woodland on a compass bearing perpendicular to the direction of the road.
- Starting at the 100-m point, a 1-km transect will be cut on the same compass bearing.
- A well cut, straight transect is crucial for good data collection. To do this, the compass bearing must be adhered to while minimum amount of vegetation is tampered with.
- After this, every elephant dung pile detected from the transect line by one of the two team members specifically assigned to searching for dung piles will be recorded.

SURVEY PROCEDURE Cont.

- Each time a dung pile is found; its decay state will be categorized and recorded. The dung diameter is also recorded.
- The perpendicular distance from the transect line to each dung pile will be measured to the nearest centimeter/meter with a tape measure. Perpendicular distance should be measured from the centre of the transect line to the centre of the dung pile.
- Distances along the transect at which a dung pile is found will also be measured with a tape or hipchain.

FOR OUR RECCE SURVEY

- At the end of each transect (in the line transect survey described above), the team will be split into two;
- Each will walk 50 m perpendicular to the transect at opposite direction.
- Moving in single file, each team will follow the path of least resistance while attempting to maintain a general compass bearing opposite that of the transect.
- All recce walks will span 1 km.
- Dung observations will be made as on transects, but no distance measurements will be made.

Thank you for Listening

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Stay blessed!