

**ABUNDANCE AND SPATIAL
DISTRIBUTION OF *Myrianthus holstii* IN
BWINDI IMPENETRABLE NATIONAL
PARK**

By

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Background

- *M. holstii* fruits are highly consumed by humans.
- Fruits are competed for by Gorillas, Chimpanzees, elephants, L'hoest monkeys, Baboons and squirrels.
- Multiple use assessment report (2009) recommended fruits of *Myrianthus* to be included on the harvesting list of plants for Kaara parish.

- Legalising harvesting of fruits by humans may lead to serious competition with other frugivores if no information on the density, population structure and distribution pattern of this fruit trees is available.
- This study seeks to avail information on density and distribution of *Myrianthus holstii* with emphasis on female productive adults.

Main objective

- Is to assess the abundance and spatial distribution of *M. holstii* in Bwindi Impenetrable National Park in relation to environmental factors.

Specific objectives

- To assess the density and pattern of distribution of *M. holstii* trees in the different parts of the forest

Specific objectives

- To assess the population structure of *M. holstii* in the different parts of the forest.
- To determine the effect of environmental variables on the density, population structure and distribution pattern of *M. holstii* in the different parts of the forest.

Method

- The study area is BINP and three sites were selected on the basis of altitudinal difference &
- Line transect method was used with two sampling procedures i.e. Distance sampling & fixed strip sampling.
- Eight (8) transects were systematically placed at interval of 700m apart with the first one randomly placed within each site.

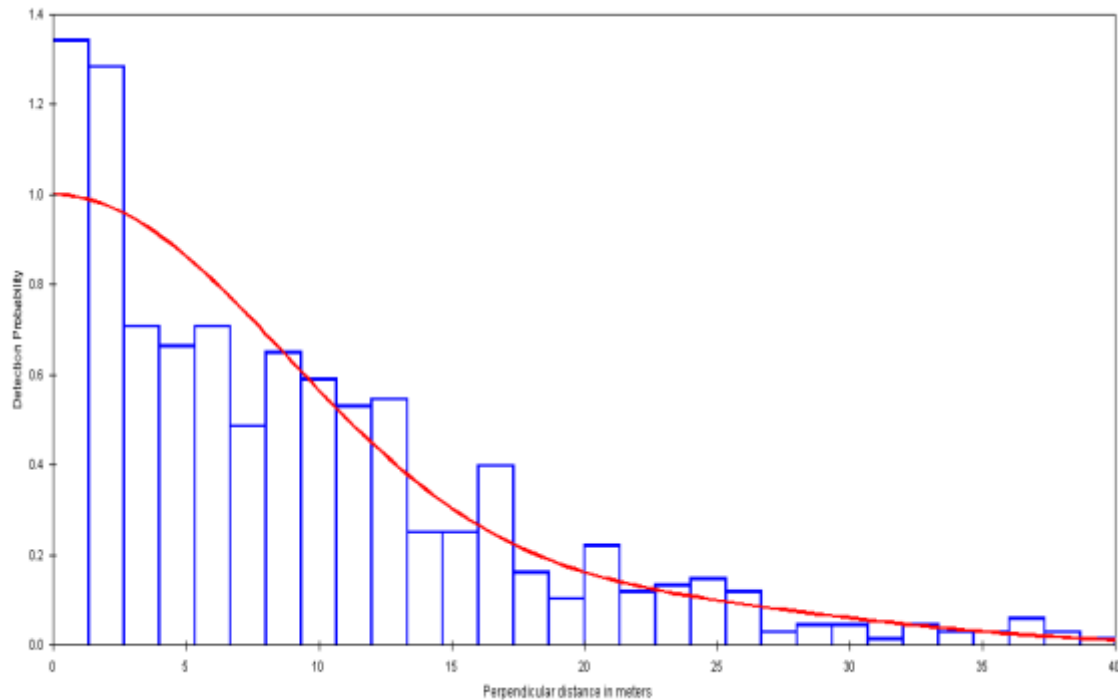
Tree enumeration & data analysis

- Number of trees & their perpendicular distance were determined. Distance software will be used to calculate the density.
- Diameters were measured & SCDs will be used to analyze population structure.
- Environmental variables enumerated were: Altitude, Percent slope, Canopy opening, Basal area, Distance to forest edge, Drainage and ground vegetation type multivariate analysis software.

Preliminary results

- Trees so far recorded is 1182
- Density /abundance occurs at less than 3 trees/ha
- Spatial distribution is clumped and exhibits sex segregation, they tend to occur more within 1 km of the edge & decrease as one moves into the forest interior.

- Detection with distance (e.g.)



- The likely environmental variables affecting the distribution are : Altitude, Basal area, Slope

Thanks for listening

