

## Precipitation Fact Sheet

# Bwindi Impenetrable National Park

- The Kabale rainfall station is the nearest station to Bwindi with a long and complete monthly rainfall record. This area has two pronounced rainy seasons, due to its equatorial location and the annual migration of the Intertropical Convergence Zone (ITCZ).
- The durations of the two rainy seasons are equal, but the amount of rain received in the first rainy season is significantly greater than the amount of rain received in the second rainy season.

Table 1a. Precipitation estimates and timing of the first (Onset 1, Cessation 1) and second (Onset 2 and Cessation 2) rainy seasons, from harmonic analysis of monthly data.

| Station | Period    | Prec. (mm)  | Onset 1 (days) | Cessation 1 (days) | Onset 2 (days) | Cessation 2 (days) |
|---------|-----------|-------------|----------------|--------------------|----------------|--------------------|
| Kabale  | 1917-1992 | 998.2 ± 171 | 13-Feb ± 29    | 1-May ± 19         | 24-Aug ± 33    | 10-Nov ± 22        |

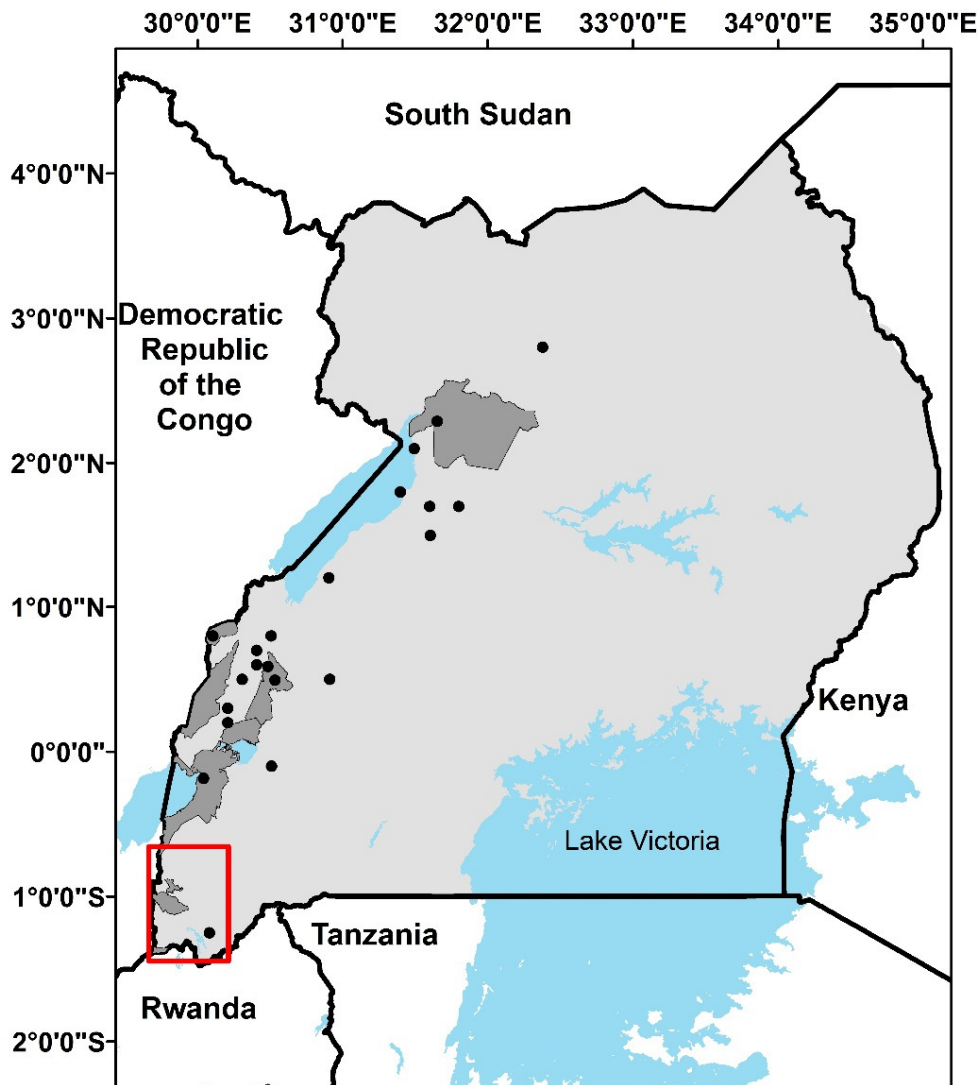


Figure 1. Mean annual distribution of rainfall at the Kabale rainfall station, near Bwindi Impenetrable National Park.

Monthly rainfall records obtained from the following stations:  
Kabale (30.0°E, 1.3°S, 1917-1992).

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- There is not a significant trend in annual precipitation over time at Kabale (Figure 2). One of the main concerns with climate change in this region is that the variability in annual precipitation or the timing of the rainy season will change over time. Based on the available data for this region, there is no observable change in the variability of rainfall or the timing of the rainy seasons.
- Having more rainfall observation stations around Bwindi Impenetrable National Park would improve the analysis of rainfall variability and trends over time.

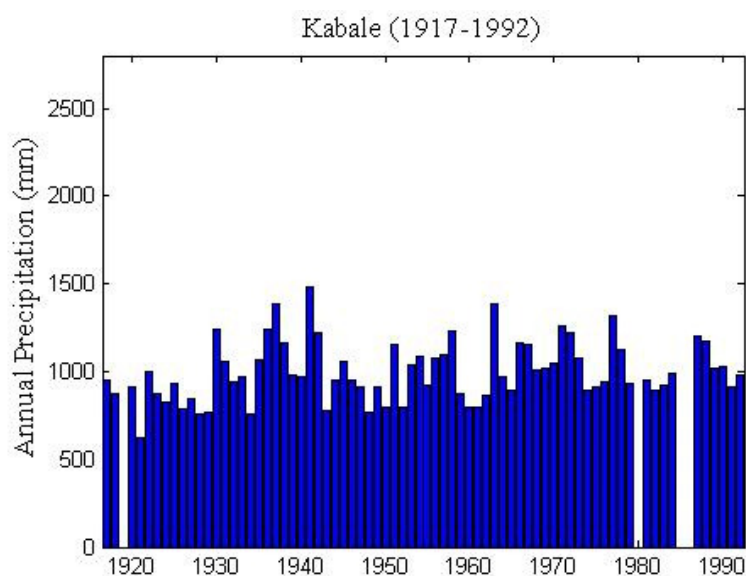


Figure 2. Annual precipitation over time at Kabale station.

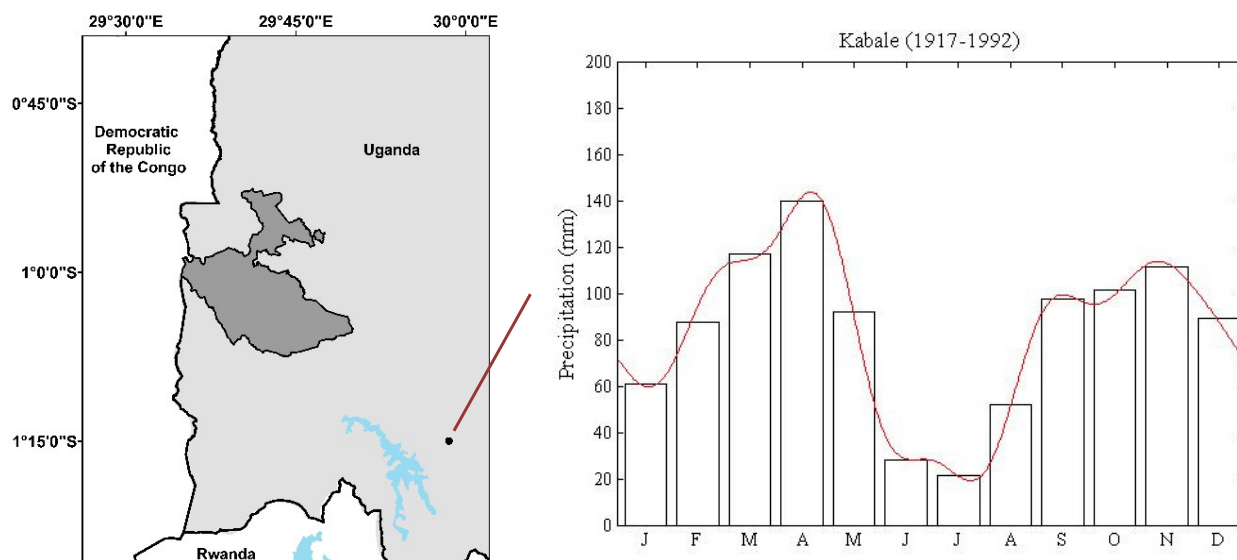


Figure 3. Mean annual distribution of rainfall at Kabale, near Bwindi Impenetrable National Park.

### PECAR: People, Environment, and Climate in the Albertine Rift

Principal Investigators: Joel Hartter, Jeremy Diem, Sadie Ryan, Colin Chapman.

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