

Precipitation Fact Sheet

Queen Elizabeth National Park

- The area around Queen Elizabeth National Park (QENP) has two pronounced rainy seasons, due to its location on the equator and the annual migration of the Intertropical Convergence Zone (ITCZ).
- The onset of the first rains is typically around late February for all four stations. The onset of the second rains is typically around mid-August.
- There is no significant difference in the duration of the two rainy seasons at any station.
- There is no significant difference in the amount of rainfall received during the two rainy seasons at any station, except for at Kitwe, where more rainfall occurs during the second rains than during the first rains.

Table 1a. Precipitation estimates and timing of the first rainy season, from harmonic analysis of monthly data.

Station	Period	Prec. (mm)	Onset 1 (days)	Cessation 1 (days)
Kitwe	1940-1975	1316.9 ± 392	24-Feb ± 29	7-May ± 26
Bunyaguru	1940-1975	1055.7 ± 257	26-Feb ± 25	10-May ± 26
Kasese	1972-1992	866.0 ± 122	28-Feb ± 28	14-May ± 39
Mweya	1979-2011	1298.1 ± 216	28-Feb ± 23	27-Apr ± 26

Table 1b. Precipitation estimates and timing of the second rainy season, from harmonic analysis of monthly data.

Station	Onset 2 (days)	Cessation 2 (days)
Kitwe	14-Aug ± 33	7-Nov ± 28
Bunyaguru	16-Aug ± 35	5-Nov ± 23
Kasese	14-Aug ± 24	4-Nov ± 31
Mweya	1-Sep ± 31	3-Nov ± 15

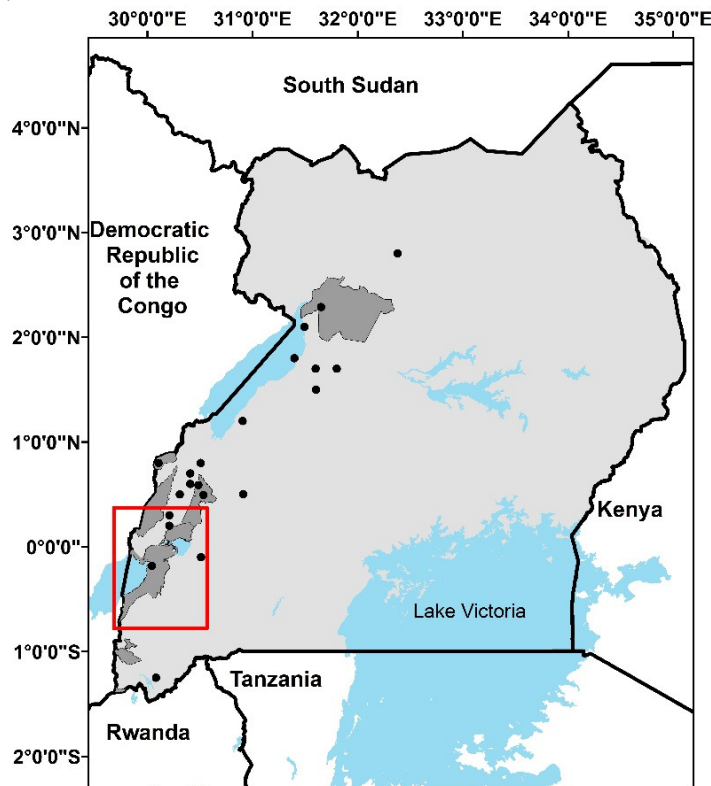


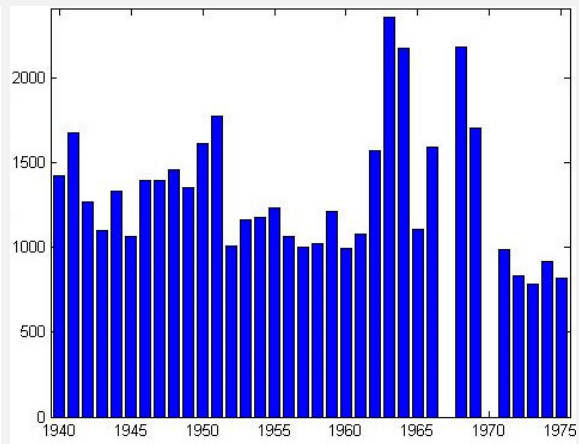
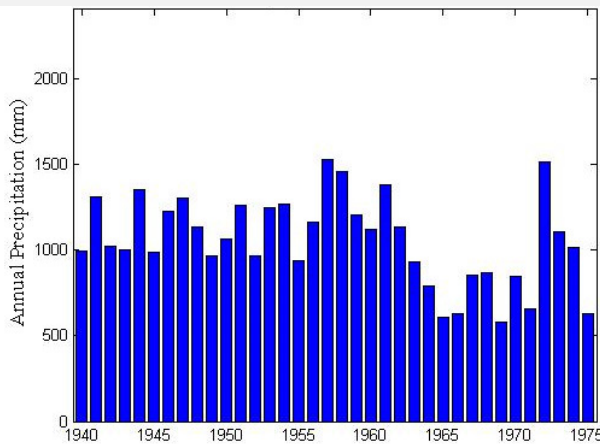
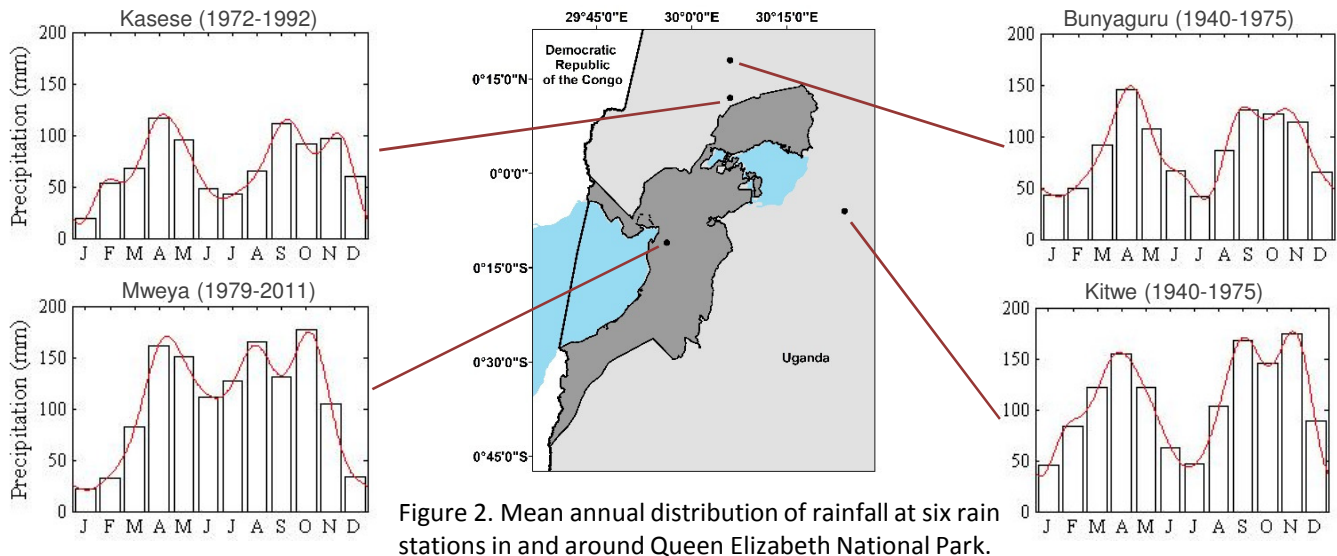
Figure 1. Map of Uganda with rainfall stations (dots) and the area around Queen Elizabeth National Park highlighted by the red box.

Monthly rainfall records obtained from the following stations:

- Kitwe (30.4°E, 0.1°S, 1940-1975)
- Bunyaguru (30.10°E, 0.3°N, 1940-1975)
- Kasese (30.1°E, 0.2°N, 1972-1992)
- Mweya (29.9°E, 0.2°S, 1979-2011)

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There do not appear to be any significant trends over time in annual precipitation at any of the stations (Figure 3). 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. Rainfall records are not long enough or complete enough to show any changes in variability in recent times for the area around Queen Elizabeth National Park.



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

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