

Late-Pleistocene Molluscan Bio-stratigraphy of Rusinga-Mfangano Island beaches, Lake Victoria-Kenya

Lake Victoria, a fresh-water lake with an area of 69,484km² has irregular quadrilateral shape on its shores, a length of 337km and breadth 240km, deeply indented coastline exceeding 3,220km. The waters fill a shallow depression, centered in the great plateau between the Western and Eastern Rift Valleys extending from Afar depression. The current lake's surface is 1,134m and a depth of 82m. It has numerous Islands with the Kenyan side as pelagic Rusinga and Mfangano Islands. We provide the deep and high lake level stands of Rusinga and Mfangano Islands from the Late Pleistocene molluscan biostratigraphic data of former low stand and high stand beaches. The first dated chronological sequence of molluscs of Rusinga and Mfangano Islands from the former beaches and high and low stands as fluctuations of the Lake Victorian levels from 340 yr BP to 40,000 yr BP. Low and older deep lake stands sequence almost as an abyssal plain in Nyakweri and Kogallo beach deposits, 3-4m beaches of Mfangano and Rusinga Islands dated 38100±934 and 25790±240yr BP respectively with molluscan species of *Bellenya unicolor*, *Pila ovata*, *Bulinus cf. truncata* and high older lake stand in Makira beach, 20-18m dominated with *Corbicula fluminalis* dated 34113- 35547yr BP in Mfangano Island. Lower and younger sequences in Wakula and Ulugi beaches, 3-4m, dated 400±58 and 450±43yr BP dominated with *Biomphalaria cf. pfeifferi*, *Lymnaea natalensis* and *L. acuminata* in Mfangano Island and *Bellemya bengalensis* in Rusinga Island and higher younger lake stands in Uuta beach, 12-14m beach deposit bearing *Melanoides tuberculata*, *Bellamyia constricta* and *B. unicolor* dated 3510±61BP in Rusinga Island. Consequently some low stand beaches deposits depicted older basin and some high stand beach sediments depicted younger lakes hence evidences of geological progressive tilting and micro-fractural history caused by subsequent transgression and regression of the Late-Pleistocene sequences of Lake Victoria basin.

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Session Classification: Accelerator Mass Spectrometry

Track Classification: Accelerator Mass Spectrometry