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ABSTRACT BOOK



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The primates from BPB (Bolt's Farm Cave System, South Africa)

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Beginning with the research of Robert Broom in 1936, the Bolt's Farm Cave System (BFCS) has yielded remarkable fossils of non-human primates. BFCS is situated in the Sterkfontein Valley in the Cradle of Humankind, recognised as a World Heritage Site by UNESCO in 1999. BFCS has several localities with deposits dated biochronologically between 0.9 and 4.5 Ma. Brad Pit B or BPB was discovered in November 2010 by the French-South African HRU team, associated with the HOPE (Hominid Origins and Past Environments) Research Unit. BPB is located on the Klinkert's property of BFCS and was excavated for the first time in November

2013. As in the case of many sites in the Cradle of Humankind, BPB is an eroded deroofed cave deposit which was fortunately not severely affected by lime-mining activities about 80 years ago. Three major areas of *in situ* breccia are recognized. Samples of breccia were carefully prepared with 5% acetic acid at the Ditsong Preparation Laboratory in Pretoria. This method facilitates good control of the preparation of fragile fossils, as in the case of the BPB material. The *in situ* breccia of "Parapapio Spot" was dated biochronologically (with rodents) between Waypoint

160 (Klinkert property, Bolt's Farm area, between 4.0 to 4.5 Ma) and the oldest deposits of Makapansgat (between 2.58 and 3.03 Ma). This breccia seems to be Mid-Pliocene in age. BPB has yielded two taxa of Cercopithecoidea (*Cercopithecoidea* and *Parapapio*) commonly found in the terminal Late Pliocene and Early Pleistocene in South Africa, and from the Pliocene to the Early Pleistocene in East Africa. These fossils could represent one of the oldest co-occurrences of these two genera in Southern Africa, corresponding also to a similar association at Sterkfontein (Member 2) dated at 3.67 Ma. The BPB fossils were compared to specimens from Makapansgat, Sterkfontein and the Bolt's Farm area. They display many similarities with *Pp. broomi* and *C. williamsi*. The BPB *Pp. broomi* specimens indicate a great age for this taxon in South Africa. *C. williamsi* has a wide geographical distribution: at Koobi Fora in Kenya, it occurs in younger deposits (2.5-1.5 Ma) except for an isolated M3 dated at around 3.5 Ma. Other primate remains have been discovered elsewhere at BFCS which is now recognised as being especially important for understanding the diversity of primates in the Cradle of Humankind World Heritage Site in South Africa.

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