

**REPRODUCTIVE PARAMETERS OF FOREST-DWELLING CAPTIVE DRILL MONKEYS
MANDRILLUS LEUCOPHAEUS IN NIGERIA**

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Reproductive characteristics of the highly endangered drill monkey *Mandrillus leucophaeus* have been published only for very small zoo populations, where reproduction is historically sporadic or absent. The Drill Rehabilitation & Breeding Center (DRBC) in Nigeria is a conservation-focused program that has recovered 76 wild-born drills orphaned by the illegal, commercial bushmeat trade. These drills are rehabilitated into natural-sized social groups after intensive medical screening and quarantine, and live in large, corral enclosures of natural drill habitat (0.5 - 7 ha). The population includes wild born, F1, F2 and F3 animals. Results presented here derive from data collected from 6 breeding groups, ranging in size from 13-63 animals, totalling 206 drills and describes life-history parameters for this population, including reproductive features from 56 females (wild born and captive bred F1 and F2 mothers), having 197 offspring over 12 years (1994-2005). Mother-rearing success, maturation/age at first swelling (2.71 years, SD = 63, n = 47), period of adolescent infertility (1.65 years, SD = 84, n = 46), and age at first birth (4.52 years SD = 1.01, n = 56), gestation length (175.7 days, SD = 5.45, n = 125) and interbirth interval (473 days, SD = 168, n = 140) are described. The results are further examined in light of the origin of mothers (wild-born vs. captive born) and show that age at first reproduction of captive bred females (4.11 years, SD = 0.53, n = 33) at DRBC is earlier than that of the wild born females (5.11 years, SD = 1.24, n = 23). These results are explored in light of seasonal and nutritional considerations within the drill's habitat. Overall survival and fertility curves for the entire DRBC drill population (1988-2005) are compared to other captive populations of *Mandrillus*, including SSP and EEP zoo populations of both drills and mandrills, a drill group at the Limbe Wildlife Center in Cameroon, and a population of mandrills at an in situ facility in Gabon (CIRMF). Female survival, mother-rearing success and reproductive output at the DRBC all exceed that at zoological facilities, and are comparable to that of the CIRMF population of mandrills. As very little data exists for drills, knowledge of life-history parameters from such a robust sample size should be helpful to conservation efforts.

Keywords: female life history, reproduction, conservation, in situ captive breeding