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Authors' addresses: HÅKAN TEGELSTRÖM, Department of Genetics, Uppsala University, Box 7003, S-750 07 Uppsala, and LENNART HANSSON, Department of Wildlife Ecology, Swedish University of Agricultural Sciences, Box 7002, S-750 07 Uppsala, Sweden

## A rare nipple anomaly in Ringtails, *Bassariscus astutus* (Procyonidae)

By INGEBOG POGLAYEN-NEUWALL and I. POGLAYEN-NEUWALL

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Ringtails typically have 4 mammae and 1 to 4 young per litter (POGLAYEN-NEUWALL and TOWEILL, in press). BURT and GROSSENHEIDER (1960) reported 6 mammae, CAHALANE (1947) and LECHLEITNER (1969) litters of up to 5 young. None of these authors indicated the source of his information. TOWEILL (pers. comm.) mentioned his pet ringtail (*Bassariscus astutus flavus*) having had 5 nipples, the supernumerary probably being non-functional.

On 25 May 1986 we trapped a female *Bassariscus astutus arizonensis* in a canyon in the Santa Rita Mountains of southern Arizona. This animal had 5 prominent mammae with well developed nipples, which appeared barely suckled; the vulva was conspicuously inflated indicating very recent parturition. We had neither measuring tools nor camera with us, therefore released the animal immediately.

On 7 June we returned to carry out another trapping operation. We recaptured this



Ventral view of ringtail with 5 mammary glands. (Photo by Dr. IVO POGLAYEN-NEUWALL)

female at the same location. The animal was anesthetized with Parke-Davis Vetular (Ketamine HCl) i.m., and the mammary region examined. Her aureolas and nipples were even more enlarged and obviously suckled (see figure). All 5 nipples were functional as evidenced by oozing of milk when manipulated by the authors.

It seems probable that the anterior and central nipples of the right side derived from the same "anlage". Both are at the same distance from, but neither is in line with the anterior nipple of the left side. In the case reported by TOWEILL (pers. comm.) the fifth nipple was also on the right side, but located posteriorly to the normal paired nipples.

There is no correlation between the number of functional nipples and the number of young; in 9 females with 14 litters of less than 4 young all 4 nipples were functional (POGLAYEN-NEUWALL and POGLAYEN-NEUWALL, pers. observ.). Suckling kittens show no nipple preference and freely change nipples from one suckling bout to another (POGLAYEN-NEUWALL and TOWEILL, in press).

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*Authors' addresses:* Dr. INGEBORG POGLAYEN-NEUWALL, 1765 N. Indigo Dr., Tucson, AZ 85745, USA and Dr. IVO POGLAYEN-NEUWALL, Dept. of Ecology and Evolutionary Biology, University of Arizona, Tucson 85721 USA

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Autor(en)/Author(s): Poglayen-Neuwall Ingeborg, Poglayen-Neuwall Ivo

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