

An Unusual Instance of Tool-use Among Wild Orang-utans in Tanjung Puting Reserve, Indonesian Borneo

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ABSTRACT. Despite several recent orang-utan (*Pongo pygmaeus*) field studies in Borneo and Sumatra, tool-use has never been reported among wild orang-utan populations in contexts other than agonistic displays or nesting/covering behaviors. During a continuous 9-year study at Tanjung Puting Reserve, Central Indonesian Borneo, only one instance of wild orang-utan tool-use outside these two contexts was observed: an adult male orang-utan broke off a dead branch and used it to scratch his rear for half a minute.

OBSERVATION

Since tool-use probably played an important role in the divergence of hominids and pongids (LANCASTER, 1968; NAPIER, 1960; WASHBURN, 1960), the technological skills of great apes are of considerable interest. Reliable reports of spontaneous and learned tool-use among all species of captive pongids are numerous (BECK, 1975; LAWICK-GOODALL, 1970; WARREN, 1976). However, while the occurrence of various tool-using and tool-making behaviors among wild chimpanzees has been extensively documented (LAWICK-GOODALL, 1968; SABATER Pí, 1974; TELEKI, 1974), until now the only authenticated instances of tool-use reported from wild orang-utan (GALDIKAS-BRINDAMOUR, 1975; HERR, 1972; MACKINNON, 1974; RIJKSEN, 1978; RODMAN, 1973) and gorilla (FOSSEY, 1970; SCHALLER, 1968) populations invariably involved the use of objects and materials in agonistic displays or in nesting/covering behaviors. Tool-use in these two broad contexts seems characteristic of pongid populations in both Africa and Asia. The present study indicates that tool-use in other contexts does occur at extremely low rates among wild orang-utans. Possibly long-term studies will also reveal its occurrence among gorillas.

During nine years of field work (1971-1980) involving 15,000 hr of direct observations on approximately 70 wild orang-utans in the lowland tropical rain forests of Tanjung Puting Reserve, Central Indonesian Borneo, such tool-use was observed once.

On September 12, 1976 a middle-aged adult male, sitting 10 to 12 m up in an ironwood tree, broke off the end of a dead branch and, with the left hand, reached under his left thigh and for 30 to 35 sec rhythmically scratched himself with the stick in the vicinity of his anus. The use of objects in agonistic displays and nesting/covering behaviors and now the observed instance of tool-use in another context by a wild orang-utan suggests, more than ever, that the tool-using capabilities which characterize the hominid lineage are firmly rooted in a very basic and widespread pongid pattern common to both Africa and Asia.

Acknowledgements. The late L. S. B. LEAKEY was instrumental in enabling me to begin the orang-utan research while ROD M. C. BRINDAMOUR's help enabled me to continue. I am very grateful to the Wilkie Brothers Foundation, the L. S. B. Leakey Foundation, the National Geographic Society, the

New York Zoological Society, the Herz Foundation, the Jane and Justin Dart Foundation and the Van Tienhoven Foundation of Holland for funding the research. The Indonesian Institute of Sciences and the Nature Protection Department served as sponsors.

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—Received March 26, 1981; Accepted June 12, 1981

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