

Fatality of a wild Bornean orangutan (*Pongo pygmaeus morio*): Behavior and death of a wounded juvenile in Danum Valley, North Borneo

Abstract

Reports of wild great ape fatalities have been very limited, and only two have described wild orangutan deaths. We found a wounded juvenile female Bornean orangutan on 7 October 2006 in the Danum Valley, Sabah, Malaysia, and observed the individual's behavior for 7 days until her death on 13 October 2006. The 5-6-year-old orangutan, which we had observed since 2004, was wounded in the left brachium, back, and right hand. The individual's behavior changed after injury; the mean nest-nest active time became significantly shorter than before injury (from 12 h 3 min to 9 h 33 min), the mean waking time became significantly later (0552-0629 hours) and the mean bedtime became significantly earlier (from 1747 to 1603 hours). In the activity budget, resting increased significantly from 28.0 to 53.3%. Traveling and feeding decreased significantly from 23.5 to 12.7% and from 45.6 to 32.8%, respectively. The rate of brachiation during traveling and nest making decreased, whereas ground activity increased from 0 to 9%. We observed one vomiting incident and four occurrences of watery diarrhea during the 7 days before the individual died. The results of an autopsy performed by a local veterinarian suggested that the cause of death was septicemia because of *Pseudomonas aeruginosa* infection of the severely contaminated wounds. The morphology and distribution of the wounds suggested they had been incurred during an attack by a large animal with fangs and/or claws. This juvenile female became independent of its mother at ~4-5 years of age, slightly earlier than average. This individual might have been vulnerable to predatory attack because of her small body size (~5 kg at death) and lack of the mother's protection.