COVER ILLUSTRATION



Cover illustration of Primates vol. 64 (2023)

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Cover illustration (Fig. 1): upper left: gray woolly monkey (*Lagothrix lagotricha cana*), upper right: Borneo orangutan (*Pongo pygmaeus morio*), bottom: baboon (*Papio ursinus griseipes*). The photographs were taken by Thiago Cavalcante, Tomoko Kanamori, and Lee Bennett, respectively; all rights reserved.

In order to select the cover illustration of the 2023 issues of *Primates*, I asked Associate Editors, winners of the Primates 2021 Most-Cited Paper Award and Social Impact Award, and members of Primate Society of Japan (PSJ) (*Primates* is a semi-official journal of PSJ) to submit candidate photographs. I sincerely thank everyone who offered photos of various primate species. Among the many fine photos offered in 2021 and 2022, I finally selected three photos of different species, in consultation with the two Vice Editorsin-Chief, Jim Anderson and Satoshi Hirata. The following are explanatory notes provided by researchers who took the photographs or who have conducted observations on the primates for years (Masayuki Nakamichi, Editor-in-Chief).

Gray woolly monkey (Fig. 2): gray woolly monkeys are large-bodied, opportunistic frugivorous primates that occur in the Amazon forests of Brazil, Peru, and Bolivia. They live in multi-male, multi-female groups of up to ca. 40 individuals. This taxon provides invaluable seed-dispersal services and its disappearance from tropical forests can alter longterm forest dynamics that maintains above-ground biomass and carbon stocks. This photograph of an adult individual vocalizing was taken in July 2016 in a forest fragment in the municipality of Cacoal (Rondônia state, Brazil), during a study on gray woolly monkeys' social dynamics. Woolly

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monkey social structure is typically described as characterized by male philopatry, with females usually leaving their natal groups. Their diet is mainly composed of fruit (up to 80%), and complemented with leaves, flowers, arthropods, and even small vertebrates. Intragroup feeding competition, especially over fruit, is an important modulator of their social dynamics. To sustain such large groups and highly frugivorous diets, their home ranges can reach up to more than 1000 ha. However, this monitored population had probably the smallest home range recorded for woolly monkeys (less than 100 ha). In such small, isolated habitats, feeding competition can be expected to occur at a high frequency due to the exploitation of patchily distributed and seasonally scarce high-quality food resources, as shown by the research carried out in the area. Rondônia has one of the highest deforestation rates of all states of the Brazilian Amazonia.



Fig. 1 Cover illustration of Primates, 2023



Fig.2 Gray woolly monkey (Lagothrix lagotricha cana). ©Thiago Cavalcante



Fig. 3 Borneo orangutan (Pongo pygmaeus morio). ©Tomoko Kanamori

Unfortunately, this population is increasingly facing serious threats from habitat loss, free-roaming domestic dogs, hunting, and forest fires. (Thiago Cavalcante).

Borneo orangutan (Fig. 3): The Danum Valley Conservation Area, located in Sabah, Malaysia, is the oldest primary forest in Borneo and is strictly protected. The forest vegetation in the area is lowland mixed dipterocarp forest, in which a phenomenon known as 'mast fruiting' occurs, when many tree species bear fruit at the same time once every 2–10 years. A Japanese team has been conducting long-term ecological research on wild orangutans in the Danum Valley since 2004. Researchers are still working on topics such as how foraging behavior, population density, and reproduction change depending on the mast fruiting season, DNA paternity testing, and stable isotope analysis, etc. In 2022, 63 orangutans were identified, of which 17 settled individuals are continuously being monitored. One of these is the orangutan in this photo. This adult male Borneo orangutan was



Fig. 4 Baboon (Papio ursinus griseipes). ©Lee Bennett

photographed in 2017 at Danum Valley. His name is SON and at the time he was estimated to be around 30 years old. When male orangutans reach maturity, large folds on both cheeks called "flanges" develop on the most dominant ones. SON has slightly thin flanges. He began to appear within our survey area in 2016 and was still observed in 2019. SON is not fearful of people and sometimes leaves the forest to roam around the village. Due to the pandemic, there was a period when researchers could not visit the survey area. However, since the survey was resumed in July 2022, he has been spotted occasionally. The photograph was taken when SON was eating fruit of *Area catechu*. (Tomoko Kanamori).

Baboon (Fig. 4): this is one of the male baboons from the Floodplain troop of Gorongosa National Park, Mozambique. This photo was taken where the Muzicadzi River in the park makes a sharp turn before joining the Sungue River. It is a popular crossing point for many animals but all of them are aware of the crocodiles that lurk just below the surface of the water. The whole troop had crossed earlier and this male was one of the "tail enders" and, like all of the baboons that had crossed before him, he put all of his energy into the leap. It is interesting to note that despite the water being only about 10 cm deep, which can be deduced by looking at the water level on the yellow-billed storks' legs, and that the riverbed is sand and not soft mud, the baboon still committed totally to his jump. He did not hesitate at all when he got close to the water; he made a short run and jumped, landing well clear of the water. Some of the young baboons hesitated before jumping, and only did so after seeing other troop members cross successfully, and when their feet got wet when landing they accelerated and looked startled (Lee Bennett & Susana Carvalho).

Data availability None.

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