

## LIFE HISTORY OF FEMALE JAPANESE MACAQUES AT ARASHIYAMA: HOW DO THEY COMPETE AND COEXIST?

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Female Japanese macaques have a long 20-year lifespan in the wild, which extends beyond 30 years in provisioning. They have been observed in a variety of environments (e.g., monkey parks, subtropical, temperate, coniferous, and alpine forests), presenting valuable data for evaluating the socio-ecological hypotheses concerning the evolution of primate societies. “Arashiyama East/West” have been ones of the most intensively studied field sites of Japanese macaques. Koyama (1967, 1970) confirmed Kawamura’s principles among adult female members of Arashiyama troop, and found that group fissions progressed along the female matriline, which is common to other macaca species. Norikoshi and Koyama (1975) discovered that matured males left their natal groups and transferred to non-natal groups, but adult females remained in natal groups (female philopatry). Here, I summarize long-term field data of female life history accumulated in Arashiyama troops. For example, as Fedigan (1991) pointed out, a trade-off between the onset of reproduction and lifespan of females may have existed in Arashiyama West, whereas the age of first births had no correlation with the number of lifetime births. Consistently, there was no significant difference in reproductive parameters (birth rate, infant mortality, birth sex ratio etc.) among female rank-groups. I compare these results with the data of wild populations to examine socio-ecological hypotheses concerning the female life history.

Keywords: Female competition, coexistence, Arashiyama, Japanese macaques