A103 Sex-biased maternal investment in Cheju pony, *Equus caballus*

Jeong Rae Rho* and Jae Chun Choe
Department of Biology, Seoul National University

Skewed sex ratio at birth and sex-biased maternal investment investment have observed in a variety of vertebrate species. We examined maternal investment patterns of the Cheju pony, *Equus caballus,* on Mt. Hallar from April 1997 to October 1999. Maternal investment was measured and analyzed as duration and interval of suckling for offspring aged 7, 14, 30, 60, 90, and 120 days. Our observations revealed that dominant females invested significantly more in daughters while subordinate females invested more in sons. Female-biased offspring sex ratio and subordinate female-biased investment by dominant mothers are consistent with the predictions of Trivers and Willard (1973).

A104 Dominance rank and offspring sex ratio in the Cheju pony, *Equus caballus*

Jeong Rae Rho* and Jae Chun Choe
Department of Biology, Seoul National University

Studies of birds and mammals suggest that parental features such as body condition and dominance rank influence offspring sex ratio. We examined the relationship between dominance ranks of mothers and sex rations of their offspring in the Cheju pony, *Equus caballus,* based on the data collected from 1986 to 1999. Dominance was found to be closely correlated with age, with older females holding higher ranks. Dominant females produced significantly more daughters, while subordinate females produced more sons. Adaptive reasons why dominant females should produce more daughters than sons in the Cheju pony are also discussed.