

P56

## Reproductive Ecology of Korean Chipmunks in Busan

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The reproductive ecology of wild Korean Chipmunks, *Tamias sibiricus sibiricus* was studied in an oak forest in Busan City. Animals bred twice a year, spring(from late February to mid-May) and summer(from early June to early September). Biannual breeding occurred even in the same females(n=2) at an interval of 100 or 120 days. The gestation period was confirmed in natural conditions, and was 31days(n=3). Females mainly fed buds, leaves and flowers in the spring breeding season, and animal matters in the summer one. This suggests that reproduction is achieved during the good season when animals were able to obtain nutritious foods. Comparing the reproductive parameters between *T. s. sibiricus* and *T. s. lineatus* which is distributed in northern Japan and breed once a year, the nursing period in the former(46 days) was shorter than the latter(59 days), although the gestation period was the same(31 days). This difference appeared to be reflected by the difference of annual breeding pattern; female *T. s. sibiricus* seemed to abandon her investment in vernal offspring before starting the next summer breeding, while female *T. s. lineatus* with annually single litter seemed better to continue her investment to her offspring as long as possible in order to reduce the mortality of the offspring. The mean atmospheric temperature and daytime length were much different between the vernal breeding period and the summer breeding period in Busan; that is, 5°C and 20°C, respectively, and 11.0 hours and 14.5 hours, respectively. It was interesting that mating occurred also at 5°C for *T. s. lineatus*, indicating that rise up to 5°C triggers the onset of mating in spring in both subspecies.