Mating system in Siberian flying squirrels

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Mating systems show considerable variation between species. One possibility to increase our understanding of mating systems is to study species deviating from general patterns shaping the gender relations, like species with reversed sexual size dimorphism. We studied the social and genetic mating system in Siberian flying squirrels, Pteromys volans, that has female-biased dimorphism in body mass. We observed that female reproductive success depended on body mass, a pattern that may be related to large female size in flying squirrels. Reproductive success of males also depended on body mass, larger males having more offspring than smaller males. The variation in reproductive success was clearly higher for males (standardised variance, Is = 1.6) than females (Is = 0.2), as many males were not assigned to any offspring. The mating system was promiscuous with multi-male paternity within litters. However, likely due to low densities of flying squirrels the number of multi-male litters remained low in our study (6 out of 36 polytocous litters). We conclude that the flying squirrel mating behaviour resembled that of related species with male-biased and sex-unbiased sexual size dimorphism.

[MEMO]