

## **Effects of housing conditions on behaviour and physiology in the Finnraccoon (*Nyctereutes procyonoides ussuriensis*)**

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### **Abstract**

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The welfare of juvenile Finnracons (*Nyctereutes procyonoides ussuriensis*) was compared between various housing conditions through the measurement of day-time behaviour and physiological variables. For the small control treatment (SC), Finnracons were raised in pairs in small cages; in the large area treatment (LA), in pairs in large cages; in the large control treatment (LC), in groups of four in large cages and in the large enrichment treatment (LE), in groups of four in large cages with access to a nest-box and a large tube, from weaning to pelting time. Study subjects consisted of a total of 152 Finnracons. As autumn progressed, day-time resting increased, especially allohuddling; while active behaviours decreased. Allohuddling was the most common type of resting; apart from in the LE treatment, resting shelters were used effectively alongside allohuddling. Locomotion was observed more frequently in LA and LC treatments, ie in large cages without shelters. The nest-box roof was preferred to the platform as an elevated location, and the nest-box to the tube as a resting shelter. Agonistic interactions were not observed. Males grew heavier than females and had heavier organs. No systematic differences in haematological and other physiological parameters were found between the treatments. Catching time was shortest in the SC treatment. The LE treatment compromised animals' cleanliness. Based on the intensive positive social interactions and regular shelter use, group housing and access to resting shelters are recommended for juvenile Finnracons.

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