

Table 3 The mean ( $\pm$  SD) percentage of main behaviours and detailed active behaviours from all daytime observations in the Finnraccoons of the SC (Small control), LA (Large area), LC (Large control) and LE (Large enrichment) treatment in SEP (September), OCT (October) and DEC (December) and the related statistics. The months with different superscript (in the month column) differ in pairwise comparison in the level  $P < 0.05$ . The pair-wise comparisons between treatments are provided in the text.

Category	Month	Treatment				Statistics		
		SC	LA	LC	LE	Treatment	Month	Treatment * Month
<b>Main behaviours</b>								
Resting	SEP <sup>a</sup>	58.3 $\pm$ 7.3	60.1 $\pm$ 6.9	60.6 $\pm$ 5.3	64.0 $\pm$ 5.5	F <sub>3,30.1</sub> = 0.34; ns	F <sub>2,56.7</sub> = 78.0; $P < 0.001$	F <sub>6, 56.7</sub> = 1.57; ns
	OCT <sup>b</sup>	67.2 $\pm$ 10.8	63.6 $\pm$ 7.7	64.5 $\pm$ 13.6	70.5 $\pm$ 12.3			
	DEC <sup>c</sup>	81.4 $\pm$ 5.7	80.8 $\pm$ 7.3	78.0 $\pm$ 8.0	76.9 $\pm$ 5.6			
Sitting	SEP <sup>a</sup>	8.0 $\pm$ 2.9	7.7 $\pm$ 2.1	9.2 $\pm$ 2.9	7.8 $\pm$ 3.3	F <sub>3,29.6</sub> = 0.46; ns	F <sub>2,55.8</sub> = 23.3; $P < 0.001$	F <sub>6, 55.8</sub> = 1.78; ns
	OCT <sup>b</sup>	13.7 $\pm$ 7.7	13.4 $\pm$ 4.4	13.9 $\pm$ 4.3	12.2 $\pm$ 6.9			
	DEC <sup>a</sup>	8.0 $\pm$ 3.5	8.6 $\pm$ 3.2	10.0 $\pm$ 3.6	11.7 $\pm$ 4.5			
Standing	SEP <sup>a</sup>	7.5 $\pm$ 3.3	7.2 $\pm$ 3.8	6.8 $\pm$ 1.8	6.1 $\pm$ 1.9	F <sub>3,30.6</sub> = 0.73; ns	F <sub>2,57.7</sub> = 32.3; $P < 0.001$	F <sub>6, 57.6</sub> = 0.66; ns
	OCT <sup>a</sup>	5.9 $\pm$ 3.5	6.3 $\pm$ 1.6	6.7 $\pm$ 2.7	4.5 $\pm$ 2.6			
	DEC <sup>b</sup>	3.3 $\pm$ 0.5	3.5 $\pm$ 1.7	3.7 $\pm$ 2.1	3.4 $\pm$ 1.7			
Activity	SEP <sup>a</sup>	23.5 $\pm$ 2.5	23.2 $\pm$ 2.6	22.3 $\pm$ 2.8	21.3 $\pm$ 6.1	F <sub>3,29.9</sub> = 0.19; ns	F <sub>2,57.1</sub> = 168; $P < 0.001$	F <sub>6, 57.1</sub> = 1.09; ns
	OCT <sup>b</sup>	12.5 $\pm$ 4.0	15.2 $\pm$ 3.3	14.3 $\pm$ 7.1	12.3 $\pm$ 4.9			
	DEC <sup>c</sup>	6.7 $\pm$ 2.5	6.7 $\pm$ 2.7	7.5 $\pm$ 3.5	7.8 $\pm$ 2.1			
Stereotypic behaviour	SEP <sup>a</sup>	2.7 $\pm$ 2.6	1.8 $\pm$ 3.2	1.1 $\pm$ 1.4	0.7 $\pm$ 1.3	F <sub>3,30.4</sub> = 0.69; ns	F <sub>2,56.4</sub> = 11.8;	F <sub>6, 56.4</sub> = 1.94; ns

	OCT <sup>b</sup>	0.7 ± 0.8	1.4 ± 2.7	0.6 ± 1.2	0.5 ± 1.2		<i>P</i> < 0.001	
	DEC <sup>b</sup>	0.5 ± 0.8	0.3 ± 0.6	0.8 ± 1.0	0.1 ± 0.4			
<b>Distribution of active behaviours</b>								
Locomotion	SEP <sup>a</sup>	5.4 ± 1.8	6.4 ± 1.1	6.8 ± 2.3	4.5 ± 1.2	F <sub>3,29.6</sub> = 4.46; <i>P</i> = 0.011	F <sub>2,56.7</sub> = 28.1; <i>P</i> < 0.001	F <sub>6, 56.7</sub> = 0.69; ns
	OCT <sup>b</sup>	3.8 ± 1.9	6.2 ± 1.8	5.9 ± 3.0	3.3 ± 1.0			
	DEC <sup>c</sup>	2.4 ± 1.8	3.7 ± 2.8	4.1 ± 2.5	2.6 ± 1.1			
Eating	SEP <sup>a</sup>	7.1 ± 0.8	6.2 ± 2.0	7.2 ± 1.4	5.6 ± 1.5	F <sub>3,29.9</sub> = 8.40; <i>P</i> < 0.001	F <sub>2,57.1</sub> = 82.1; <i>P</i> < 0.001	F <sub>6, 57.1</sub> = 1.45; ns
	OCT <sup>b</sup>	4.8 ± 2.4	4.9 ± 2.9	5.2 ± 3.6	5.1 ± 3.1			
	DEC <sup>c</sup>	2.9 ± 1.1	1.4 ± 0.7	1.6 ± 1.0	1.8 ± 0.9			
Drinking	SEP <sup>a</sup>	1.8 ± 1.3	2.1 ± 1.0	1.5 ± 1.1	1.5 ± 1.2	F <sub>3,29.8</sub> = 1.65; ns	F <sub>2,57.7</sub> = 43.0; <i>P</i> < 0.001	F <sub>6, 57.7</sub> = 1.62; ns
	OCT <sup>b</sup>	1.2 ± 0.6	0.8 ± 0.6	1.1 ± 1.2	0.3 ± 0.4			
	DEC <sup>c</sup>	0.3 ± 0.3	0.2 ± 0.2	0.3 ± 0.2	0.2 ± 0.2			
Grooming	SEP	1.8 ± 2.0	1.6 ± 0.8	1.1 ± 0.7	0.8 ± 0.8	-	-	-
	OCT	0.9 ± 0.7	0.7 ± 0.3	0.4 ± 0.5	0.4 ± 0.3			
	DEC	0.4 ± 0.5	0.5 ± 0.6	0.4 ± 0.3	0.3 ± 0.3			
Interacting with wooden block	SEP	0.6 ± 0.5	0.9 ± 0.2	0.7 ± 0.4	0.2 ± 0.2	-	-	-
	OCT	0.4 ± 0.5	1.0 ± 0.6	0.4 ± 0.2	0.1 ± 0.1			
	DEC	0.2 ± 0.2	0.5 ± 0.4	0.5 ± 0.4	0.2 ± 0.2			
Interacting with straw	SEP	0.7 ± 0.4	1.9 ± 1.6	1.1 ± 0.8	1.0 ± 0.8	-	-	-
	OCT	0.2 ± 0.3	0.5 ± 0.7	0.4 ± 0.5	0.2 ± 0.3			
	DEC	0 ± 0	<0.1 ± 0.1	0.1 ± 0.1	0.1 ± 0.1			
Activity on high location (platform	SEP <sup>a</sup>	4.2 ± 2.2	3.9 ± 1.3	2.9 ± 0.5	6.7 ± 4.8	F <sub>3,29.4</sub> = 5.01; <i>P</i> = 0.006	F <sub>2,55.6</sub> = 151.9; <i>P</i> < 0.001	F <sub>6, 55.6</sub> = 1.45; ns
	OCT <sup>b</sup>	0.6 ± 0.7	1.0 ± 0.9	0.9 ± 0.7	2.6 ± 2.3			

and roof of the nest box)	DEC <sup>c</sup>	0.2 ± 0.5	0.2 ± 0.4	0.4 ± 0.4	2.3 ± 2.3			
Other interaction with nest box and tube	SEP	-	-	-	0.3 ± 0.4	-	-	-
	OCT	-	-	-	0.3 ± 0.2			
	DEC	-	-	-	0.1 ± 0.2			

Table 6 The mean ( $\pm$  SD) body size parameters and organ weights for the males and females of the four treatments (SC = Small control, LA = Large area, LC = Large control, LE = Large enrichment) and statistics for the treatment, gender, their interaction and body weight (BW).

Variable	Gender	Treatment				Statistics			
		SC	LA	LC	LE	Treatment	Gender	Treatment $\times$ Gender	BW
BW at weaning	Male	2.7 $\pm$ 0.4	2.4 $\pm$ 0.3	2.5 $\pm$ 0.4	2.4 $\pm$ 0.5	F <sub>3,48.0</sub> = 0.37; ns	F <sub>1,95.7</sub> = 0.33; ns	F <sub>3,95.7</sub> = 1.89; ns	-
	Female	2.5 $\pm$ 0.4	2.5 $\pm$ 0.4	2.4 $\pm$ 0.3	2.5 $\pm$ 0.4				
BW in October	Male	11.6 $\pm$ 1.0	11.9 $\pm$ 1.0	11.5 $\pm$ 0.9	11.4 $\pm$ 0.7	F <sub>3,42.0</sub> = 0.50; ns	F <sub>1,92.5</sub> = 7.47; P = 0.008	F <sub>3,92.6</sub> = 1.90; ns	-
	Female	11.1 $\pm$ 1.1	11.1 $\pm$ 0.6	11.1 $\pm$ 0.8	11.5 $\pm$ 0.8				
Final BW	Male	15.5 $\pm$ 0.9	14.3 $\pm$ 1.7	14.8 $\pm$ 1.2	14.6 $\pm$ 1.3	F <sub>3,45.1</sub> = 0.74; ns	F <sub>1,94.6</sub> = 8.75; P = 0.004	F <sub>3,94.6</sub> = 1.78; ns	-
	Female	14.2 $\pm$ 1.4	14.4 $\pm$ 1.3	14.1 $\pm$ 1.0	14.2 $\pm$ 1.4				
Body length (cm)	Male	72 $\pm$ 3	71 $\pm$ 2	71 $\pm$ 2	72 $\pm$ 2	F <sub>3,35.6</sub> = 2.35; ns	F <sub>1,88.2</sub> = 2.72; ns	F <sub>3,85.0</sub> = 0.34; ns	F <sub>1,140.4</sub> = 46.2; P < 0.001
	Female	71 $\pm$ 2	70 $\pm$ 2	70 $\pm$ 1	71 $\pm$ 2				
BMI (kg/m <sup>3</sup> )	Male	41.1 $\pm$ 4.3	40.0 $\pm$ 2.1	41.1 $\pm$ 4.1	39.1 $\pm$ 3.8	F <sub>3,39.7</sub> = 1.41; ns	F <sub>1,89.1</sub> = 0.01; ns	F <sub>3,89.1</sub> = 1.12; ns	-
	Female	39.3 $\pm$ 4.8	41.4 $\pm$ 3.4	41.3 $\pm$ 2.9	39.5 $\pm$ 3.1				
Spleen (g)	Male	17.4 $\pm$ 3.1	16.3 $\pm$ 4.6	15.4 $\pm$ 3.0	14.4 $\pm$ 2.3	F <sub>3,47.6</sub> = 1.03; ns	F <sub>1,98.3</sub> = 3.25; ns	F <sub>3,96.0</sub> = 1.89; ns	F <sub>1,137.7</sub> = 5.75; P = 0.018
	Female	15.1 $\pm$ 3.3	14.7 $\pm$ 2.0	14.9 $\pm$ 2.5	14.7 $\pm$ 2.8				
Liver (g)	Male	416 $\pm$ 53	389 $\pm$ 86	408 $\pm$ 46	377 $\pm$ 86	F <sub>3,46.7</sub> = 1.17; ns	F <sub>1,97.4</sub> = 31.5; P < 0.001	F <sub>3,95.2</sub> = 0.20; ns	F <sub>1,137.3</sub> = 146.7; P < 0.001
	Female	337 $\pm$ 50	360 $\pm$ 63	350 $\pm$ 37	336 $\pm$ 53				
Sum of kidneys (g)	Male	65.6 $\pm$ 8.3	63.3 $\pm$ 11.2	60.9 $\pm$ 5.4	58.9 $\pm$ 10.9	F <sub>3,42.8</sub> = 1.51; ns	F <sub>1,95.4</sub> = 22.5; P < 0.001	F <sub>3,92.6</sub> = 0.66; ns	F <sub>1,142.0</sub> = 58.9; P < 0.001
	Female	55.4 $\pm$ 9.4	56.7 $\pm$ 6.1	55.0 $\pm$ 4.7	53.5 $\pm$ 7.0				
Heart (g)	Male	45.4 $\pm$ 6.0	43.7 $\pm$ 3.6	42.3 $\pm$ 4.1	44.6 $\pm$ 5.7	F <sub>3,45.2</sub> = 0.90; ns	F <sub>1,96.7</sub> = 11.8; P = 0.001	F <sub>3,94.2</sub> = 0.48; ns	F <sub>1,140.3</sub> = 15.3; P < 0.001
	Female	41.6 $\pm$ 5.2	41.9 $\pm$ 2.9	40.4 $\pm$ 4.0	41.2 $\pm$ 3.6				
Thymus (g)	Male	9.4 $\pm$ 3.7	9.6 $\pm$ 3.4	10.5 $\pm$ 3.4	8.6 $\pm$ 3.2	F <sub>3,42.5</sub> = 0.27; ns	F <sub>1,93.8</sub> = 1.06; ns	F <sub>3,91.3</sub> = 2.39; ns	F <sub>1,139.8</sub> = 13.9; P < 0.001
	Female	9.7 $\pm$ 4.7	8.5 $\pm$ 3.2	8.0 $\pm$ 2.1	8.3 $\pm$ 3.0				
Gastrocnemius muscle (g)	Male	42.9 $\pm$ 4.3	40.1 $\pm$ 3.1	41.0 $\pm$ 3.3	40.3 $\pm$ 5.3	F <sub>3,44.7</sub> = 0.11; ns	F <sub>1,96.3</sub> = 1.58; ns	F <sub>3,94.0</sub> = 0.74; ns	F <sub>1,141.0</sub> = 58.4; P < 0.001
	Female	38.8 $\pm$ 3.9	40.1 $\pm$ 5.1	39.7 $\pm$ 3.0	39.2 $\pm$ 4.0				
Adrenal,	Male	253 $\pm$	235 $\pm$	228 $\pm$	249 $\pm$	F <sub>3,47.4</sub> =	F <sub>1,96.6</sub> =	F <sub>3,95.1</sub> =	F <sub>1,135.7</sub> =

right (mg)		53	53	23	51	0.94; ns	0.14; ns	0.65; ns	20.7; $P < 0.001$
	Female	228 ± 36	239 ± 28	229 ± 29	244 ± 33				
Adrenal, left (mg)	Male	255 ± 41	249 ± 50	238 ± 33	260 ± 40	$F_{3,44.6} = 1.28$ ; ns	$F_{1,93.1} = 2.98$ ; ns	$F_{3,91.6} = 0.40$ ; ns	$F_{1,129.9} = 4.84$ ; $P = 0.030$
	Female	253 ± 49	268 ± 39	241 ± 36	263 ± 35				
Degree of asymmetry between adrenals	Male	-0.02 ± 0.09	-0.09 ± 0.12	-0.04 ± 0.08	-0.05 ± 0.12	$F_{3,44.4} = 0.86$ ; ns	$F_{1,98.8} = 1.14$ ; ns	$F_{3,97.4} = 0.88$ ; ns	$F_{1,125.7} = 4.17$ ; $P = 0.043$
	Female	-0.10 ± 0.11	-0.08 ± 0.07	-0.05 ± 0.09	-0.07 ± 0.08				