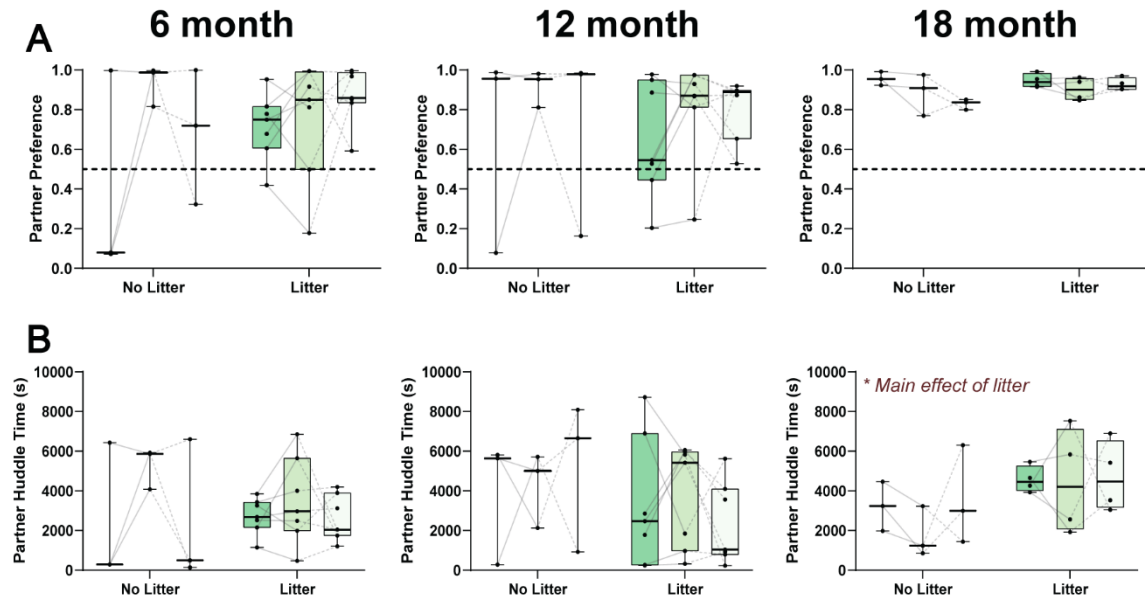


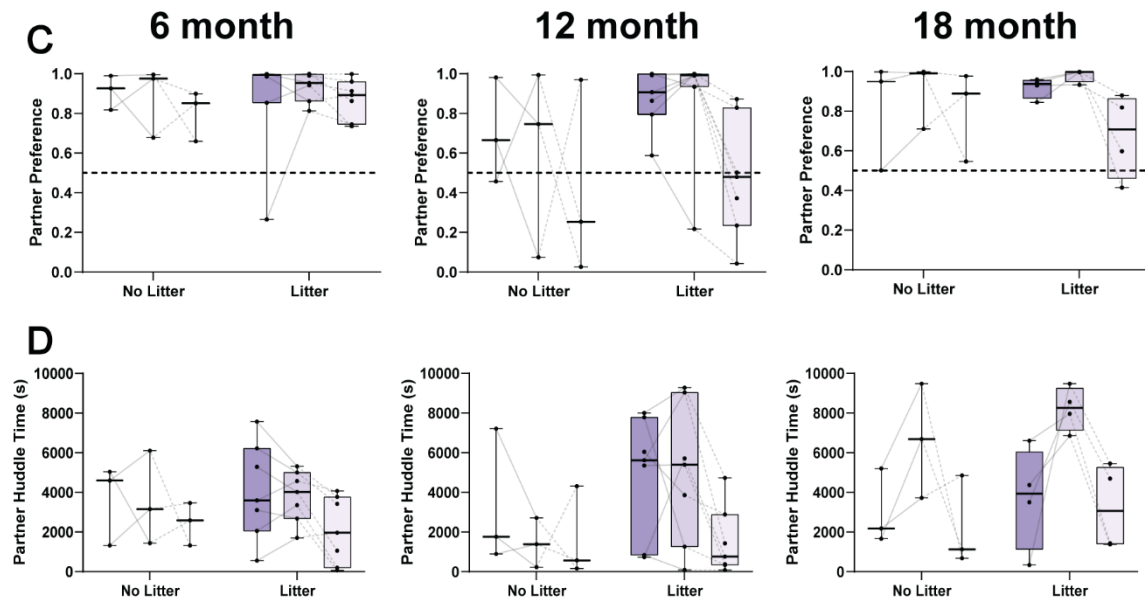
## MALES

2 days 2 wks 4 wks separation



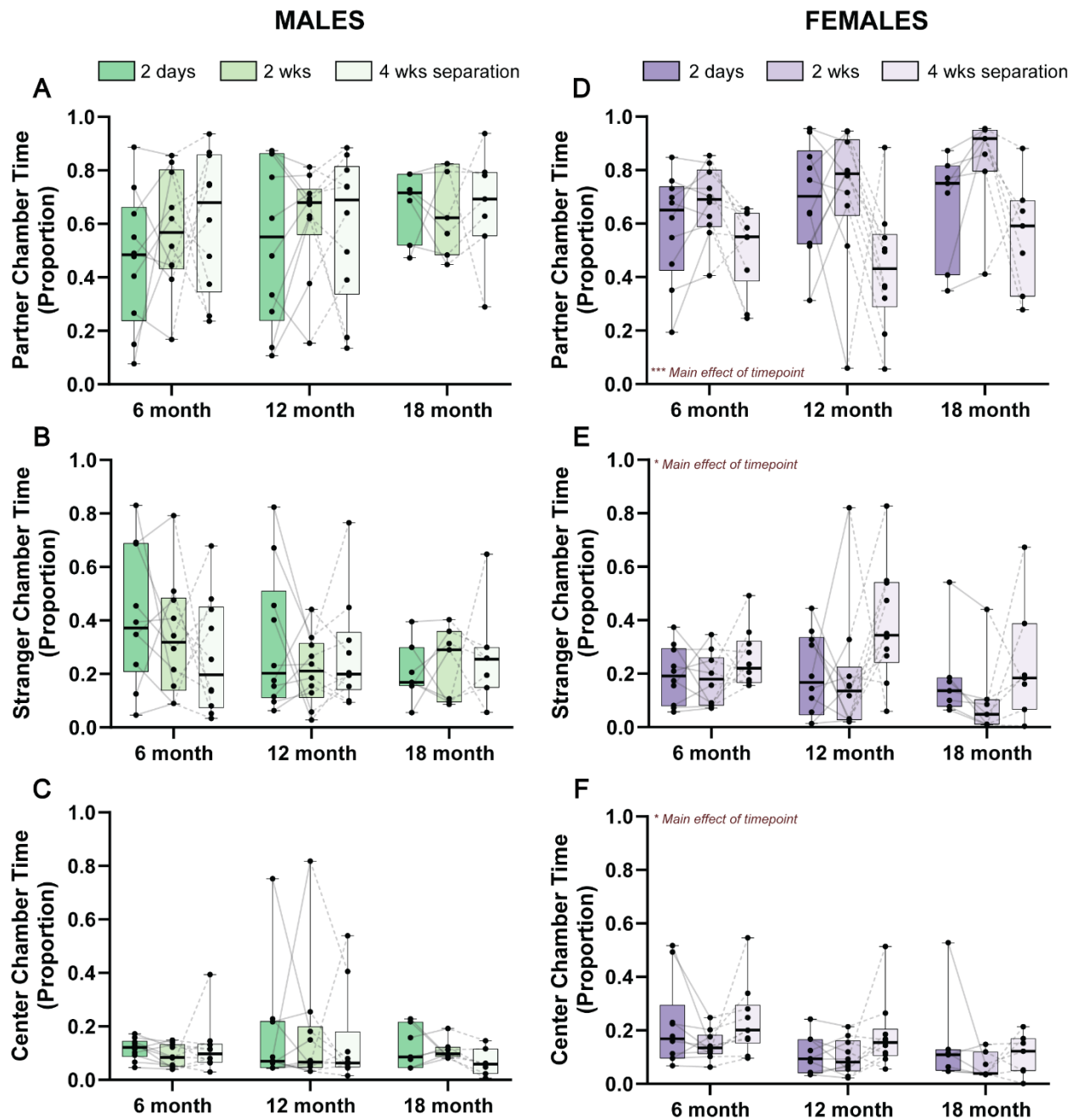
## FEMALES

2 days 2 wks 4 wks separation



Supplemental Figure 1. Lack of major effects of reproductive success on pair bonding metrics. A) Partner preference scores in male 6-, 12-, and 18-month voles as a function of reproductive success, which revealed no significant differences. B) Partner huddle time in male 6-, 12-, and 18-month voles as a function of reproductive success. Only 18-month males demonstrated a difference in partner huddle time such that those with litters huddled more with

their partners compared to those without litters. C) Partner preference scores in female 6-, 12-, and 18-month voles as a function of reproductive success, which revealed no significant differences. D) Partner huddle time in female 6-, 12-, and 18-month voles as a function of reproductive success, which also revealed no significant differences. n=3-7 animals per group; \*p<0.05.



Supplemental Figure 2. Effects of age and timepoint on proportion of time animals spent in different areas of the partner preference arena. Males across age and timepoint do not spend a greater or less proportion of their time in the A) partner, B) stranger, or C) center chamber of the partner preference arena. D) Female animals spent a greater proportion of time in the partner chamber after 2 wks cohabitation and less after 4 wks separation. E) These effects were mirrored in the opposite direction when observing proportion of time spent in the stranger chamber. F) With increasing age, there was a gradually decreasing proportion of time spent in the center chamber during the partner preference task in female animals. N=7-10 animals per group; \* $p < 0.05$ , \*\*\* $p < 0.001$ .

Supplemental Table 1: 12-month Free Interaction 15 Minute Time Bin Statistics

12-months				
Time Bin	Test	q statistic	df	p value
1	2 days vs. 2 wks	1.777	198	0.4215
	2 days vs. 4 wks sep	2.851	198	0.1110
	2 wks vs. 4 wks sep	1.074	198	0.7284
2	2 days vs. 2 wks	0.9542	198	0.7785
	2 days vs. 4 wks sep	2.370	198	0.2170
	2 wks vs. 4 wks sep	1.416	198	0.5769
3	2 days vs. 2 wks	1.128	198	0.7049
	2 days vs. 4 wks sep	3.121	198	0.0725
	<b>2 wks vs. 4 wks sep</b>	<b>4.249</b>	<b>198</b>	<b>0.0084</b>
4	2 days vs. 2 wks	1.188	198	0.6787
	2 days vs. 4 wks sep	3.162	198	0.0677
	2 wks vs. 4 wks sep	1.975	198	0.3448
5	2 days vs. 2 wks	1.808	198	0.4091
	<b>2 days vs. 4 wks sep</b>	<b>5.212</b>	<b>198</b>	<b>0.0009</b>
	<b>2 wks vs. 4 wks sep</b>	<b>3.404</b>	<b>198</b>	<b>0.0446</b>
6	2 days vs. 2 wks	1.491	198	0.5436
	<b>2 days vs. 4 wks sep</b>	<b>3.970</b>	<b>198</b>	<b>0.0151</b>
	2 wks vs. 4 wks sep	2.478	198	0.1885
7	2 days vs. 2 wks	2.392	198	0.2110
	<b>2 days vs. 4 wks sep</b>	<b>5.575</b>	<b>198</b>	<b>0.0003</b>
	2 wks vs. 4 wks sep	3.183	198	0.0654
8	2 days vs. 2 wks	1.784	198	0.4186
	<b>2 days vs. 4 wks sep</b>	<b>5.514</b>	<b>198</b>	<b>0.0004</b>
	<b>2 wks vs. 4 wks sep</b>	<b>3.730</b>	<b>198</b>	<b>0.0244</b>
9	<b>2 days vs. 2 wks</b>	<b>5.000</b>	<b>198</b>	<b>0.0015</b>
	<b>2 days vs. 4 wks sep</b>	<b>9.138</b>	<b>198</b>	<b>&lt;0.0001</b>
	<b>2 wks vs. 4 wks sep</b>	<b>4.139</b>	<b>198</b>	<b>0.0106</b>
10	<b>2 days vs. 2 wks</b>	<b>5.244</b>	<b>198</b>	<b>0.0008</b>
	<b>2 days vs. 4 wks sep</b>	<b>10.22</b>	<b>198</b>	<b>&lt;0.0001</b>
	<b>2 wks vs. 4 wks sep</b>	<b>4.974</b>	<b>198</b>	<b>0.0016</b>
11	2 days vs. 2 wks	1.426	198	0.5725
	<b>2 days vs. 4 wks sep</b>	<b>8.550</b>	<b>198</b>	<b>&lt;0.0001</b>
	<b>2 wks vs. 4 wks sep</b>	<b>7.124</b>	<b>198</b>	<b>&lt;0.0001</b>
12	2 days vs. 2 wks	0.2429	198	0.9839
	<b>2 days vs. 4 wks sep</b>	<b>9.268</b>	<b>198</b>	<b>&lt;0.0001</b>
	<b>2 wks vs. 4 wks sep</b>	<b>9.511</b>	<b>198</b>	<b>&lt;0.0001</b>