

**Table S1**

<b>Experiment Type</b>	<b>Foraging Group Name</b>	<b>Month</b>	<b>Year</b>	<b>Number of Foragers</b>	<b>Number of Foragers Removed</b>	<b>Colony</b>
Consistency + Removal	H1	January	2014	8	2	1
Consistency + Removal	H2	January	2014	11	4	1
Consistency + Removal	H3	February	2014	7	3	1
Consistency + Removal	H4	February	2014	10	4	1
Consistency + Removal	H5	April	2014	9	2	2
Consistency + Removal	H6	February	2016	12	4	3
Consistency + Removal	H7	April	2016	8	3	4
Consistency + Removal	H8	September	2016	8	4	5
Consistency + Removal	L1	October	2016	10	3	6
Consistency + Removal	L2	November	2016	12	4	7
Consistency + Removal	L3	November	2016	11	4	7
Consistency + Removal	L4	January	2017	11	4	8
Addition	A1	March	2016	7	NA	4
Addition	A2	May	2017	6	NA	9
Addition	A3	June	2017	11	NA	9
Addition	A4	June	2017	8	NA	9

Table S1: The experiments done, when it was done, the foraging group size, the number of foragers removed (in the case of removal experiments) and the colony to which the foraging group belonged to.

Table S2

Predictor	Number of Models Present In	Model Numbers
Colony Experience	5	1,7,8(*),9(*),10(*), 11(*)
Year	1	2
Month	3	2,7,8(*)
Foraging Group Size	5	3,9(*),12(*),14,15
Number of Foragers Removed	5	3,10(*),13(*),16,17
Proportion of Foragers Removed	6	4,11(*),12(*),13(*),18,19
Average Circuits (Pre-Removal)	5	5,14,16,18,20
Average Intensity (Pre-Removal)	5	5,14,16,18,20
Average Trips (Pre-Removal)	5	5,14,16,18,20
Average Circuits (Post-Removal)	5	6,15,17,19,20
Average Intensity (Post-Removal)	5	6,15,17,19,20
Average Trips (Post-Removal)	5	6,15,17,19,20

Table S2: Predictors used for model comparisons along with the number of models they are present in and the model numbers. Model numbers with (\*) indicate that an interaction term is present in the model between the two predictors.

Table S3

Predictor	Effect Size	Confidence Interval	p Value	Relative Importance of Predictor	Models Containing Predictor	AICc	dAIC of Model containing Predictor	Cumulative Weight
Proportion of Foragers Removed	-0.981	-5.560 – 3.589	0.675	0.53	1	24.7	0.00	0.494
Colony Experience	-0.023	-0.371 – 0.325	0.897	0.47	1	25.0	0.24	0.437

Table S3: Important predictors, effect sizes, confidence intervals, p Values, relative importance, the number of models the predictor is present in, the AICc, dAIC and cumulative weight of the model for the difference in intensity of foraging groups.

Table S4

Predictor	Effect Size	Confidence Interval	p Value	Relative Importance of Predictor	Models Containing Predictor	AICc	dAIC of Model containing Predictor	Cumulative Weight
Proportion of Foragers Removed	4.615	-0.905 – 10.135	0.101	0.49	1	29.2	0.00	0.473
Colony Experience	0.307	-0.123 – 0.737	0.161	0.32	1	30.1	0.86	0.307
Foraging Group Size	-0.322	-0.616 – -0.029	0.032	0.18	1	31.2	1.98	0.176
Number of Foragers Removed	0.485	0.149 – 1.119	0.134	0.18	1	31.2	1.98	0.018

Table S4: Important predictors, effect sizes, confidence intervals, p Values, relative importance, the number of models the predictor is present in, the AICc, dAIC and cumulative weight of the model for the difference in circuits/trips of foraging groups.

Table S5

Bee Number	Foraging Group	Probability		Intensity		Circuits/Trips	
		Difference	p Value	Difference	p Value	Difference	p Value
1	H1	0.087	0.998	0.193	0.989	0.269	0.961
<b>2</b>	<b>H1</b>	<b>1.757</b>	<b>&lt;0.001</b>	-0.391	0.738	<b>1.248</b>	<b>0.001</b>
<b>3</b>	<b>H1</b>	<b>1.512</b>	<b>&lt;0.001</b>	-0.048	1.000	<b>1.340</b>	<b>&lt;0.001</b>
<b>4</b>	<b>H1</b>	-0.300	0.531	<b>-1.482</b>	<b>&lt;0.001</b>	<b>-1.090</b>	<b>0.006</b>
<b>5</b>	<b>H1</b>	-0.482	0.072	<b>-2.132</b>	<b>&lt;0.001</b>	-0.476	0.630
6	H1	-0.271	0.646	-0.246	0.962	-0.418	0.756
7	H2	-0.039	1.000	-0.435	0.973	-0.286	0.998
8	H2	0.548	0.925	0.705	0.742	1.045	0.310
<b>9</b>	<b>H2</b>	<b>1.458</b>	<b>0.047</b>	0.524	0.929	1.330	0.089
10	H2	0.334	0.995	-0.175	1.000	0.120	1.000
11	H2	1.073	0.284	-0.030	1.000	1.164	0.193
<b>12</b>	<b>H2</b>	<b>1.595</b>	<b>0.021</b>	-0.478	0.956	1.022	0.336
13	H2	0.660	0.825	-0.411	0.981	0.375	0.990
<b>14</b>	<b>H3</b>	<b>2.245</b>	<b>&lt;0.001</b>	0.693	0.158	<b>2.286</b>	<b>&lt;0.001</b>
15	H3	0.419	0.199	-0.673	0.180	-0.019	1.000
<b>16</b>	<b>H3</b>	<b>0.904</b>	<b>&lt;0.001</b>	-0.696	0.156	0.188	0.908
17	H3	0.407	0.224	0.528	0.405	0.222	0.845
<b>18</b>	<b>H4</b>	<b>2.281</b>	<b>&lt;0.001</b>	0.385	0.931	<b>2.164</b>	<b>&lt;0.001</b>
<b>19</b>	<b>H4</b>	<b>1.483</b>	<b>&lt;0.001</b>	-0.417	0.902	<b>1.365</b>	<b>0.001</b>
<b>20</b>	<b>H4</b>	<b>0.758</b>	<b>0.014</b>	-0.363	0.947	0.309	0.947
<b>21</b>	<b>H4</b>	<b>0.794</b>	<b>0.009</b>	-0.383	0.933	0.208	0.993
22	H4	0.511	0.218	-0.348	0.956	0.143	0.999
23	H4	0.276	0.846	0.625	0.586	0.176	0.997
24	H5	0.155	1.000	0.349	0.982	0.439	0.937
25	H5	-0.367	0.987	1.100	0.092	-0.083	1.000
26	H5	-0.322	0.994	0.376	0.972	-0.084	1.000
27	H5	0.730	0.656	0.628	0.703	1.067	0.113
28	H5	-0.341	0.991	-0.449	0.928	-0.455	0.924
29	H5	-0.041	1.000	-0.936	0.226	-0.051	1.000
30	H5	0.595	0.841	0.064	1.000	0.384	0.969
31	H6	-0.278	1.000	-0.587	0.900	-0.672	0.865
32	H6	-0.884	0.639	-0.975	0.369	-1.153	0.254
33	H6	0.124	1.000	-1.149	0.178	-0.586	0.933
34	H6	-0.637	0.912	-1.169	0.162	-0.930	0.532
35	H6	-0.261	1.000	0.027	1.000	-0.242	1.000
<b>36</b>	<b>H6</b>	-0.666	0.890	<b>-1.455</b>	<b>0.034</b>	-1.266	0.158
37	H6	0.029	1.000	-0.388	0.991	-0.201	1.000
38	H6	-0.254	1.000	-0.562	0.920	-0.330	0.998
39	H7	0.687	0.606	-0.592	0.467	0.497	0.890
<b>40</b>	<b>H7</b>	<b>1.686</b>	<b>0.004</b>	-0.181	0.993	<b>1.487</b>	<b>0.029</b>
41	H7	0.687	0.606	-0.360	0.876	0.147	1.000
42	H7	0.359	0.960	-0.277	0.956	0.485	0.900
<b>43</b>	<b>H7</b>	<b>1.555</b>	<b>0.027</b>	0.740	0.348	1.129	0.274
44	H8	0.976	0.154	-1.484	0.064	-0.037	1.000
45	H8	0.980	0.151	-0.591	0.809	0.316	0.978

46	H8	<b>1.840</b>	<b>&lt;0.001</b>	-0.588	0.812	1.348	0.125
47	H8	0.959	0.167	0.176	0.997	0.982	0.400
48	L1	-0.633	0.914	-0.695	0.660	-1.051	0.325
49	L1	0.096	1.000	-0.716	0.625	-0.352	0.994
50	L1	0.248	1.000	-1.145	0.105	-0.652	0.843
51	L1	0.014	1.000	-0.620	0.773	-0.435	0.979
52	<b>L1</b>	-0.827	0.733	<b>-1.364</b>	<b>0.028</b>	-1.330	0.100
53	L1	-0.597	0.935	-0.175	1.000	-0.616	0.878
54	<b>L1</b>	<b>-1.625</b>	<b>0.049</b>	<b>-1.525</b>	<b>0.009</b>	<b>-1.712</b>	<b>0.012</b>
55	<b>L2</b>	<b>-1.181</b>	<b>0.010</b>	<b>-1.418</b>	<b>0.001</b>	-0.696	0.153
56	L2	-0.309	0.983	-0.413	0.897	-0.382	0.838
57	<b>L2</b>	0.916	0.096	0.517	0.721	<b>0.880</b>	<b>0.027</b>
58	L2	0.917	0.096	0.002	1.000	0.475	0.620
59	<b>L2</b>	<b>1.207</b>	<b>0.008</b>	<b>-1.022</b>	<b>0.033</b>	0.303	0.950
60	<b>L2</b>	<b>1.361</b>	<b>0.002</b>	0.468	0.814	<b>1.673</b>	<b>&lt;0.001</b>
61	<b>L2</b>	<b>1.026</b>	<b>0.041</b>	0.163	1.000	0.544	0.443
62	L2	0.505	0.774	0.086	1.000	0.297	0.956
63	L3	-0.137	1.000	-0.936	0.193	-0.474	0.524
64	L3	-0.977	0.075	-0.654	0.622	-0.622	0.198
65	L3	-0.186	0.999	-0.278	0.994	-0.214	0.986
66	<b>L3</b>	0.836	0.191	<b>-1.194</b>	<b>0.039</b>	-0.217	0.985
67	<b>L3</b>	-0.484	0.805	<b>-1.410</b>	<b>0.008</b>	<b>-0.864</b>	<b>0.019</b>
68	L3	0.877	0.148	-0.307	0.989	0.267	0.953
69	<b>L3</b>	<b>1.179</b>	<b>0.015</b>	-0.121	1.000	0.565	0.302
70	<b>L4</b>	1.240	0.134	0.395	0.743	<b>1.284</b>	<b>0.031</b>
71	L4	0.592	0.887	0.718	0.093	0.814	0.404
72	L4	1.110	0.237	0.262	0.960	0.981	0.190
73	L4	0.393	0.987	-0.292	0.930	0.062	1.000
74	<b>L4</b>	<b>1.662</b>	<b>0.013</b>	0.721	0.091	1.069	0.119
75	L4	0.200	1.000	-0.383	0.855	-0.181	1.000
76	L4	-1.367	0.149	0.408	0.811	-0.249	0.999

Table S5: Difference in average scaled dance activity between Post and Pre Removal conditions for 76 foragers in 3 parameters along with single step adjusted p values. Foragers which show a significant change in at least one parameter as well as the parameter in which they show the change are highlighted in bold.