

SUPPLEMENTARY INFORMATION

Table S1: Honey bee activity codes, based on [19], with additional tasks added and their order reorganized. The 7 general task descriptions were for statistical analyses only.

Code	Specific Task	General Task
1	Walking	Walking
2	Resting	Resting
3	Grooming self	Worker maintenance
4	Grooming other	Worker maintenance
5	Groomed by other	Worker maintenance
6	Inspecting empty/egg cell	Hive maintenance
7	Inspecting larvae	Nursing
8	Into pollen cell	Hive maintenance
9	Into honey cell	Hive maintenance
10	Cleaning cell (deep in cell, abdomen moving, bee is rotating)	Hive maintenance
11	Sleeping (deep in cell, not rotating, abdomen is pulsating)	Resting
12	Feeding worker (other bee's proboscis between focal bee's mandibles)	Worker maintenance
13	Fed by worker (proboscis extended)	Worker maintenance
14	Beg for food (worker antennates another, exchange food)	Worker maintenance
15	Antennate with worker, no food exchanged	Worker maintenance
16	Attend queen	Worker maintenance
17	Feed queen	Worker maintenance
18	In festoon	In festoon
19	Building comb with new wax	Hive maintenance

20	Mouthing sealed brood	Nursing
21	Mouthing sealed honey	Hive maintenance
22	Chew on wood in hive	Hive maintenance
23	Chew on wax in hive	Hive maintenance
24	Working with propolis	Hive maintenance
25	Chew pollen on worker	Hive maintenance
26	Uncap brood	Worker maintenance
27	Capping brood	Nursing
28	Capping honey	Hive maintenance
29	Extend mouthparts to ripen honey (fluid bubble at end of proboscis)	Hive maintenance
30	Fanning	Hive maintenance
31	Undertaker (holding a dead bee)	Hive maintenance
32	Tremble dance (lateral wiggle resembling the dance of St. Vitus)	Foraging
33	Shaking signal (rapid up and down atop another bee)	Foraging
34	Waggle dance (forager)	Foraging
35	Attending waggle dance	Foraging
36	Guarding at entrance	Foraging
37	Orientation flight (zigzag at entrance, but bee does not depart)	Foraging
38	Exiting hive	Foraging
39	Entering hive	Foraging
40	Returning forager with pollen	Foraging
41	Returning forager with propolis	Foraging
42	Unloading nectar	Foraging
43	Foraging outside of the colony	Foraging