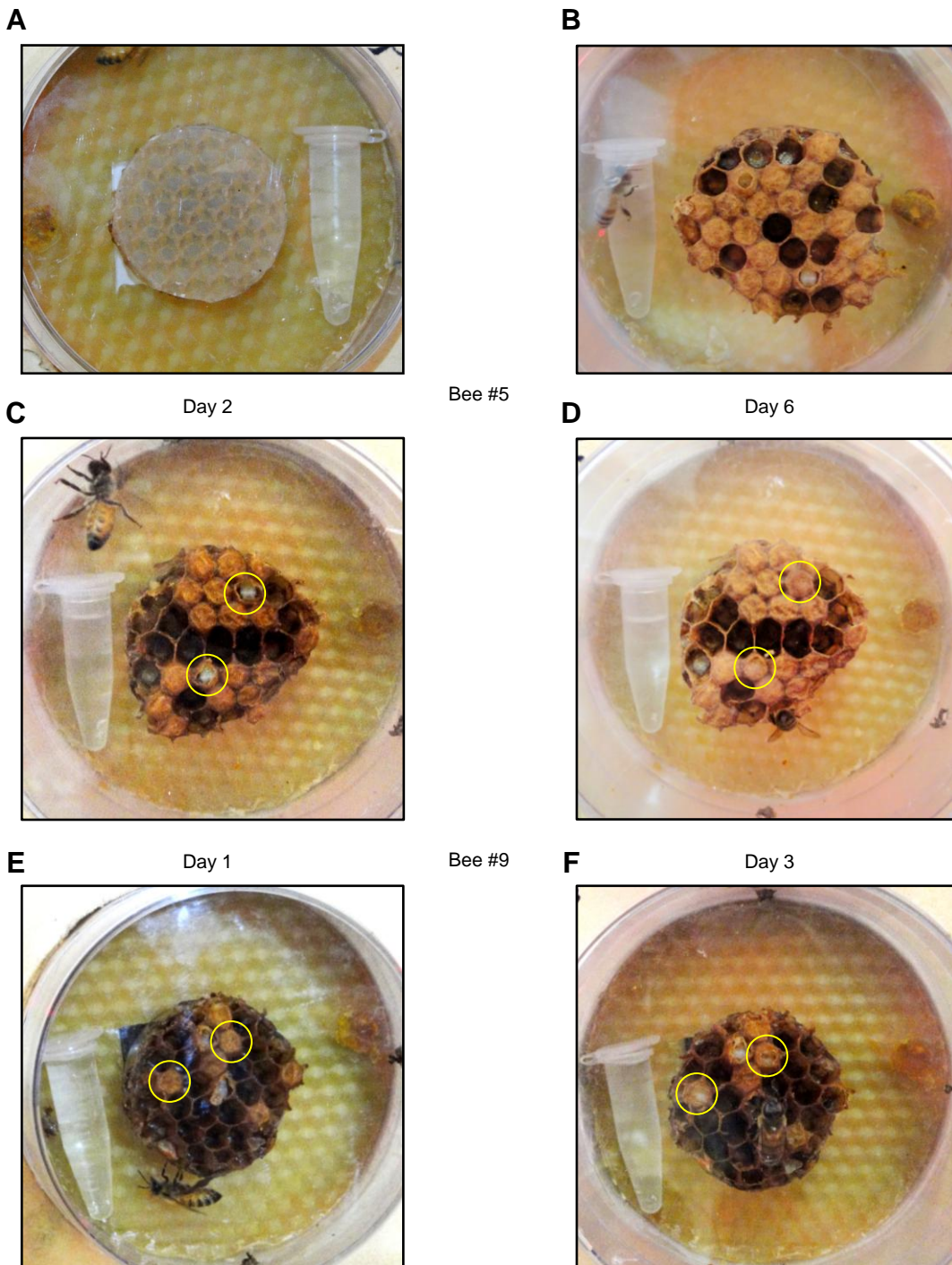
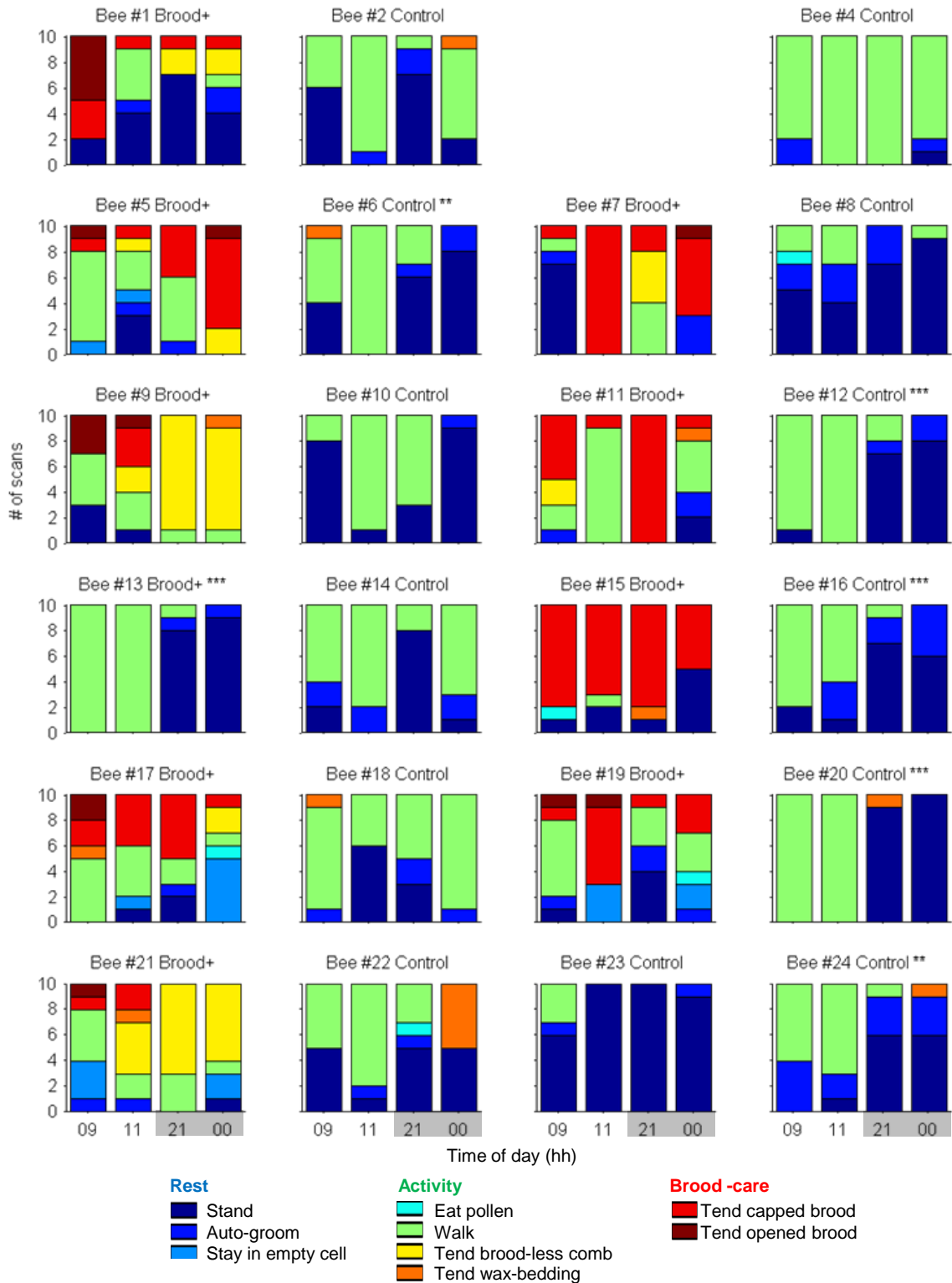


Supplementary information:



**Figure S1. Representative combs of individually-isolated nurse-bees from Exp. 4.** **A** and **B**. Examples of cages in which observers recorded the behavior of individually isolated nurses without or with brood ('**Control**' and '**Brood+**' treatments, respectively). **C** and **D**. Cells which were artificially opened by the experimenter (yellow circles; **C**) and were later recapped by Bee #5 (**D**), a behavior typical of nurse bees in normal sized colonies. **E** and **F**. Bee #9 opened capped cells (yellow circles)—a behavior reminiscent of hygienic behavior seen in the colony.



**Figure S2: Summaries of the behavioral observations of all bees observed in Exp. 4.** The X-axis shows observation time. Night observations are marked with a grey background. The Y-axis summarizes the number of 6-minute scans in which the bees performed each behavior during the one-hour observation sessions. Each color depicts a different behavior as seen in the legend below. Asterisks indicate statistically significant P-values (\*\*-  $P < 0.01$ , \*\*\*-  $P < 0.001$ ), in a two-sided Binomial test comparing the total amount of activity (including brood-care and general activity, see **Table 2**) in day vs. night observations. **Brood+**- bees housed in a cage with capped-brood. **Control**- bees housed in a cage with a wax-sheet and no brood, as a control.

## Movies



**Movie 1: The influence of the presence of capped brood on the behavior of individually isolated nurse bees in the laboratory (Exp. 4).** The video shows the behavior of representative bees without (Bee #14, left) or with (Bee #15, right) brood. The recording was carried out during the day at 10:40. In the absence of brood, the bee walks around the nest periphery. In the presence of brood, the nurse stays mostly on the brood-comb at the center of the cage, inspects and tends the wax-caps with her antennae and mouthparts.



**Movie 2: Brood-cell capping behavior of a nurse bee isolated with brood (Exp. 4).** The video records the final stages of a brood-cell recapping by nurse #15. The cell was opened by the experimenter prior to the experiment.