P058

Work or rest? Resting of bumblebees in a social context

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Sleep in vertebrates is essential and has accordingly received a lot of attention. Much less is known about resting behaviours in invertebrates. Social insects constitute an especially interesting case as there should be a trade-off between the optimal individual resting time at the individual and at the colony level. Whilst the individual should optimize its regeneration the colony should optimize its efficiency. We established 4 different states of resting behaviour in the bumblebee *Bombus terrestris* and monitored resting and working behaviours of workers in three different social contexts (isolated solitary bees, groups of 5 bees without brood and groups of 5 bees with brood) under laboratory conditions. The individual, non-social bees rested significantly longer than bees in a social context. In the social context bees with brood rested significantly longer than bees without brood. We will discuss these novel results on the so far neglected resting behaviour of social insects in the light of conflicts of interest in a bumblebee colony.