

Social conflict in insect societies

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Insect societies represent prime systems in which to investigate the balance of cooperation and conflict involved in social evolution. One reason is that, in colonies of the social Hymenoptera (ants, bees and wasps), inclusive fitness theory predicts the occurrence of kin-selected conflicts. My group's work seeks to test predictions from inclusive fitness theory with respect to social conflict, and so elucidate the evolution of general processes influencing conflict, such as policing (mutual inhibition of reproduction) and resource inheritance. Our study system is the bumble bee *Bombus terrestris*. In this talk, I will therefore first consider queen-worker conflict over male parentage in relation to worker policing, which we have sought to analyse quantitatively in *B. terrestris* for the first time. I then consider queen-worker conflict over male parentage in relation to colony life history and queen ageing, which represents a specific instance of conflict over resource inheritance.