

Foraging activity and survival of common wasp (*Vespula vulgaris*) workers in relation to their body size

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Eligible for student prize

Common wasp (*Vespula vulgaris*) workers within the same colony can show impressive variation in body size. Yet, it is largely unknown whether and how wasp size is linked to individual activity and survival. We studied four common wasp colonies, and used radio-frequency identification technology to measure the lifelong foraging activity levels and survival of *V. vulgaris* individuals of known size. We found that common wasps are incredibly active foragers, and that there is a striking variability in foraging effort and survival between nestmates. Compared to smaller nestmates, larger wasps tended to perform more trips per foraging day. In general, larger individuals were also more likely to become foragers, tended to start their foraging activity earlier, and showed reduced life expectancy. High mortality was associated to the beginning of the foraging career, and a general trade-off between foraging effort and longevity emerged.

