**Alternative reproductive strategies in male eastern carpenter bees**

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Males of the eastern carpenter bee (Xylocopa virginica), arrive to their nesting site before females (protandry) and hold territories to compete for access to mates. The persistence of these strategies is explained by sexual selection theory; however, males may use alternative tactics to avoid competitors, which is often associated with body size. Using 5 years of observations, we investigated patterns in the phenology and body size of X. virginica males to highlight selective pressures influencing their mating behaviour. Bees were individually measured and marked at several nest aggregations near Brock University, where we recorded daily flight activity. Most males were protandrous and remained at the same aggregation, while late-arriving males exhibited transient movement across aggregations. Large males were more likely to hover than small males, however, body size declines during the breeding season indicated replacement by smaller males. Thus, X. virginica males exhibit alternative reproductive strategies likely to maximise their access to mates. Our study further highlights the importance of multi-year studies to explain mechanisms underlying male reproductive strategies.