**Exploring selection on the complex mating displays of wolf spiders in the genus *Tigrosa***

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Advertising for mates can be a costly and dangerous endeavor. Mating displays consume energy and can attract predators. Despite these potential costs, male wolf spiders have evolved elaborate multi-modal displays to attract often very aggressive females. Although *Tigrosa* wolf spiders are common and widespread in the southeastern US, their mating behaviors have not been investigated or described. We present results of a suite of experiments aimed at (i) describing the complex mating displays and the sequence of male-female behaviors leading to copulation in *Tigrosa annexa* and *Tigrosa georgicola*, and (ii) understanding the selection pressures shaping these displays. In *T. annexa*, we recorded and analyzed male vibrational and visual signals in the absence of females. We then measure the mating success of these males in trials with a virgin female and a competing male. To investigate the relationship between male display and body condition, we make morphological measurements of body parts used in the display. In *T. georgicola*, we analyzed male vibrational and visual signals in the absence of females and then measured mating success in trials with a virgin female (but no competing male). Further, we quantify the potent evolutionary pressure of female aggression and occurrence of cannibalism by females.