Session 4: Posters

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Room: Seminar Room

The female perspective of personality in great tits: repeatable aggressiveness relates to exploration behaviour

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Males often express traits that improve competitive ability, such as aggressiveness. Females also express such traits but our understanding about why is limited. During the breeding season, females behaving aggressively towards intruding females might prevent the latter from destroying the eggs and taking over the territory or nest site. Moreover, intruding females might settle nearby with another male thereby reducing food availability and increasing predation risk, or take over the mate of the resident female. Hence, intraspecific aggression between females might be used to gain access to reproductive resources but simultaneously incurs costs in terms of energy and time available for reproductive activities, resulting in a trade-off. Although consistent individual differences in female behaviour (i.e. personality) like aggressiveness are likely to influence these reproductive trade-offs, little is known about the consistency of aggressiveness in females. To quantify aggression we presented a female decoy to free-living female great tits (*Parus major*) during the egg-laying period, and assessed whether they were consistent in their response towards this decoy, which was placed on top of the female's nestbox. Moreover, we assessed whether female aggression related to consistent individual differences in exploration behaviour in a novel environment. We found that females consistently differed in aggressiveness, although first-year females were on average more aggressive than older females. Moreover, conform life history theory predictions, 'fast' exploring females were more aggressive towards the decoy than 'slow' exploring females. Given that personality traits are often heritable, and correlations between behaviours can constrain short term adaptive evolution, our findings highlight the importance of studying female aggression within a multivariate behavioural framework.