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ORAL PRESENTATION

Conspecific attraction in a landscape of fear: How different sources of information about predation risk affect sociability in lizard

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Predation is an important selective force in the evolution of prey behaviour. Anti-predator behaviours fundamentally enhance survival influencing fitness in many organisms. Among strategies, grouping behaviour can decrease the probability to be preyed upon through a risk-dilution effect, but at the cost of increased parasitism and competition. A fine-tuned assessment of predation risk is therefore needed to achieve the best benefit-cost ratio. To do so, individual may use different sources of information: private (i.e. from personal experience during lifetime), social (i.e. from conspecific cues) and transgenerational (i.e. from the prenatal environment through maternal effects). We experimentally assessed the interaction between maternal, personal and social information about predation risk on the sociability in common lizard, *Zootoca vivipara.* The risk of predation was manipulated over two generations in a full-crossed design: gestating females from the 1st generation were maintained with or without predator scent. After hatching, each clutch was divided in halves and raised with or without predator cues in order to have all combination of treatment between 1st and 2nd generation. Sociability of the 2nd generation was tested in individual terraria where lizard could chose between areas with or without conspecific odor from either lizards previously exposed or unexposed to predation. The results showed that the multiple sources of information interactively shape lizard sociability: social information is more influential when private and maternal information are conflicting. We recommend that multiple sources of information should be examined while studying anti-predator defenses.