

## Assessment of predation risk via illumination level: facultative central place foraging in the cricetid rodent *Phyllotis darwini*

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It is well known that the risk of predation affects prey decision making. However, few studies have been concerned with the cues used by prey to assess this risk. Prey animals may use indirect environmental cues to assess predation hazard since direct evaluation may be dangerous. I studied the assessment of predation risk, manipulated via environmental illumination level, and the trade-off between foraging and predation hazard avoidance in the nocturnal rodent *Phyllotis darwini* (Rodentia: Cricetidae). In experimental arenas I simulated dark and full moon nights (which in nature correlate with low and high predation risk, respectively) and measured the immediate responses of animals to flyovers of a raptor model. Second, varying illumination only, I evaluated patch use, food consumption, central place foraging, and nocturnal variation of body weight. During flyover experiments, animals showed significantly more evasive reactions under full moon illumination than in moonless conditions.