

To feed or not to feed? Testing different hypotheses on rut-induced hypophagia in a mountain ungulate

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In many ruminant species, males dramatically reduce forage intake during the rut. To date, different hypotheses have been suggested to explain this rut-induced hypophagia. To assess the predictions of the main hypotheses, we analysed Alpine ibex (Capra ibex) activity budget and compared the behaviour of males and females before, during, and after the rut. Only males spent significantly less time foraging during the rut than outside of it, whereas females allocated a similar proportion of time to foraging before, during, and after the rut. Our results showed that during the rut males also reduced lying time, while the ratio of time spent feeding to time spent lying did not change for males among peri- ods. In conclusion, during the breeding season males maximized energy intake when not actively engaged in mating activities and rut-induced hypophagia appeared to result from time budget constraints generated by mating-related activities. Accordingly, the foraging constraint hypothesis seems appropriate to explain this phenomenon in Alpine ibex males.

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