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THE BEHAVIORAL AND EVOLUTIONAL CHANGES OF CACHE PROTECTION AND PILFERAGE

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ABSTRACT

Food-storing animals hide food in times of abundance and rely on memory to recover those caches several days if not months later when supplies are scarce. Food-storing animals use a range of cache protection behaviours, which may reduce the level of cache theft they experience from competitors. It is possible that many of these behaviours simply constitute a response to the presence or absence of a competitor. This review focuses on the different models that have been proposed to explain the evolution of food caching, specifically those models that describe how food caching might have evolved in an environment of cache pilferage. We discuss the use of cache protection behaviour in caches, and the success of these behaviours in bringing about a reduction in cache theft, before looking at the behaviours of prospective thieves that facilitate cache pilferage. Finally, we consider the insights these behaviours give us into the cognitive abilities of food-storing animals.

KEYWORDS: Behaviours, Cache, Food, Pilferage, Storers.

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