

Contrafreeloading in Parrots: Applying Cognitive Abilities in Daily Practice

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Abstract: In nature, animals expend energy foraging and competing with others to access resources while avoiding predation. Hence, most animals aim to forage optimally to obtain the highest caloric intake in the shortest time with the least effort. In captivity, we observe contrafreeloading, the choice to expend excess energy by foregoing freely available food to extract food from a puzzle box. Colleagues and I tested grey parrots,¹ kea,² and umbrella cockatoos³ on contrafreeloading tasks differing in ecologic relevance. On one task, more kea contrafreeloaded than grey parrots and did so slightly more often, but kea completely ignored a second task (i.e., shelled versus unshelled nuts). Cockatoos tested on the second task also exceeded the grey parrots but results were affected by dominant or subordinate behavior and other individual differences. A subsequent study (unpublished) on grey parrots examined specific effects of task or task familiarity on contrafreeloading. Results suggest contrafreeloading occurs if birds consider tasks as play, not work, which would influence design of enrichment programs. Acknowledging parrots' intelligence, individual differences, and playfulness can ensure their welfare.

References

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