

1086-92-2252

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A kleptoparasitic interaction occurs when one individual (a kleptoparasite) attempts to take resources from another individual. Some animals exhibit different behavior in similar interactions, and we would like to understand why they may have evolved to do so. Internal states, such as health, age, or hunger, can affect what behavioral strategies yield optimal gains. To study this effect, we have created a mathematical model that describes the outcomes of these interactions in terms of the value of contested resources, the cost of a fight (or a similar conflict), and the internal states of individuals involved. Changing the degree to which internal states affect an individual's appraisal of resources changes optimal behavior, as indicated by our model. When this degree is high, it can happen that individuals should forgo stealing from weaker individuals, and this does not happen when the degree is low. This degree can also be set so that the constant strategy of always stealing is optimal behavior; however, for most parameter settings, optimal behavior is not a constant strategy (i.e. a strategy of always making the same decision). Optimal behavior should, in most cases, be adaptive to changes in resource value, cost of conflict and internal health. (Received September 25, 2012)