An Experimental Study to Determine the Food Preferences of Coconut Crabs (Birgus latro) in Captivity

The Birgus latro, commonly known as the coconut crab, is the largest terrestrial arthropod found in the Indo-Pacific region. Few research studies have been conducted on these crabs, as they are usually nocturnal and difficult to observe in their habitats at night. To understand more about their food preferences, in particular, if B. latro prefer coconuts versus other food, four were captured in the village of Maloata, American Samoa, and raised in captivity for 63 days. It was hypothesized B. latro would prefer coconuts over other foods a greater percentage of the time it was fed in captivity. Every two to five days, half of a coconut was fed to each crab, as well as another food item. The results indicate the coconut crabs in this experimental study ate a higher percentage of other foods over coconuts, thus, disproving the hypothesis. Although no studies were documented which compared coconut crabs food choices, other researchers have observed B. latro eat a wide range of food in nature. This research could be used in future studies with additional coconut crabs and food choices to determine if B. latro prefer a particular variety of food more often than coconuts. Additionally, the results would be helpful in raising B. latro in captivity on islands where they are an endangered species.

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