



Macronutrient balancing and limitation of arthropod predators in the wild

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Contrary to previous opinion that the prey of predators are always high-quality food, and that predators therefore never evolved the ability to regulate their macronutrient intake, we have documented that they actively defend an Intake Target, i.e. a specific ratio of lipid and protein, and that this serves to maximize their fecundity. The talk will concentrate on the question to what extent arthropod predators in nature are able to maintain an optimal macronutritional balance. Two schools within Nutritional Ecology have made opposite predictions: proponents of Ecological Stoichiometry claim predators should be mainly protein limited, while proponents of the Nutritional Geometry Framework argue that they should lipid (energy) limited. We have developed simple experimental procedures that allow us to settle this dispute empirically. The approach also allows us to compare the macronutritional niches of predators and omnivores.



Friday, September 22th from 13.00 to 13.45 in the Zoophysiology Seminar Room (1131-127)