

Looking for graduate students and a Post Doc for a research on the behavioral games between a predator and its prey

A predator in a patchy environment should consider the anti-predatory behavior of its prey and use tactics such as managing the fear of the prey to maximize prey capture. To avoid predation the prey should use time allocation and vigilance. The prey behavior is also dependent on prey density and the behavior of other prey individuals.

We studied the behavioral game of two players in an artificial arena that was built specifically for this purpose in which a fish eating bird – little egret – is free to capture fish that are found in three different fish pools. The fish can chose to either hide undercover or to forage for food in the risky part of the pool.

Earlier results of this study can be seen in the following publications:

Katz, M. Z. Abramsky, B. P. Kotler, O. Altstein & M. L. Rosenzweig 2010. Playing the waiting game: predator and prey in a test environment. *Evolutionary Ecology Research*. 12: 793-801.

Katz, W. M. Z. Abramsky, B.P. Kotler, M.L. Rosenzweig, O. Alteshtein & G. Vasserman 2013. Optimal foraging of Little Egrets and their prey in a foraging game in a patchy environment. *American Naturalist* 181: 381-395.

Katz, W.M. Zvika Abramsky, Burt P Kotler, Inbar Roth, Ofir Altstein¹ & Michael L. Rosenzweig. 2014. A predator-prey behavioural game: How does number of food patches influence foraging tactics? *Evolutionary Ecology Research* (In Press. – Can be seen in EER site).

The study is supported by a new ISF grant.

For more details get in touch with Prof. Zvika Abramsky:

Tel - +972 528795851

Mail - Zvika@bgu.ac.il

