

SHORT COMMUNICATION

Foraging innovation in an artificial environment: a case of little egret luring prey goldfish through beak dipping

Sundararaj Vijayan^{a,*}, Lotan Tamar Tov Elem^a, Reut Vardi^b, Anjala Pyakurel^a and Zvika Abramsky^a

^aDepartment of Life Sciences, Ben Gurion University of the Negev, Beer Sheva, 8410501, Israel

^bThe Jacob Blaustein Institute for Desert Research, Mitrani Department of Desert Ecology, Ben-Gurion University of the Negev, Midreshet Ben-Gurion 84990, Israel

*Corresponding author. E-mail: vijayan.sundararaj@tamuk.edu

Supplementary material

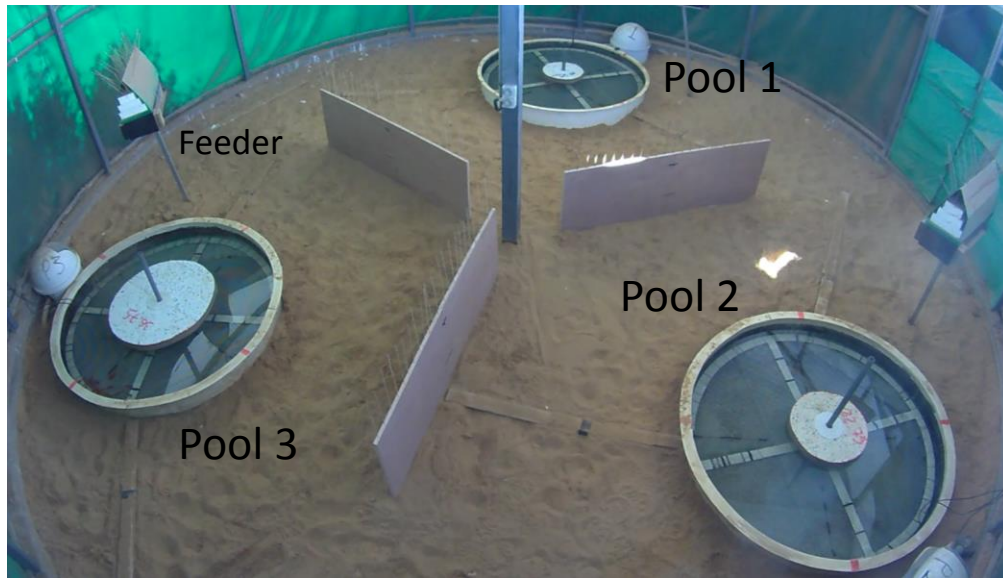


Figure S1. Panoramic view of one experimental arena showing the three equally spaced ponds, 1.52 m in diameter and 0.60 m in depth. Each pool is installed with a top feeder that disburses food pellets through time at regular intervals. The center of each pool has a central protective cover that the fish can hide under and seek refuge from the foraging predator. The protective cover ranges from small (18.75 cm radius, pool 1), medium (22.75 cm radius, pool 2) and large (36.75 cm radius, pool 3). The open water represents risky areas for fish.



Figure S2a. The little egret dipping its beak to lure the prey goldfish out to open water from under cover. Note that it stands in quarter 1 where the overhead feeder is located.

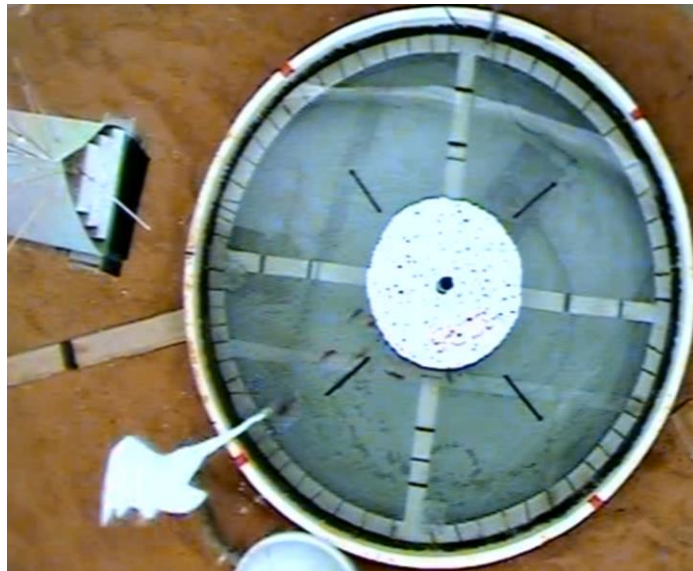


Figure S2b. The prey goldfish respond to the beak dipping bait by coming out of the central cover immediately followed by an egret attack.