

The impact of cattle egret on lizard community structures in Mediterranean woodlands

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Lizard communities in Mediterranean woodlands are shaped by various factors under the rapidly changing environment. Our recent observations on lizard predation by Cattle Egret (*Bubulcus ibis*), which often escort cattle in grazed woodlands, raised the question about the role of such predation on lizard community structures.

We combined data on lizard assemblages and egrets diet in Northern Israel by: (1) mapping the egret nesting colonies; (2) sampling lizards using direct observation in sites along a distance gradient from colonies; (3) monitoring egret activity in the field using direct observation and trapping cameras; and (4) exploring the diet of egrets during nesting seasons by sampling vomits in six large nesting colonies near woodlands.

The results have indicated that (1) nesting colonies are widespread; (2) there is low species richness and abundance of lizard communities in proximity to egret colonies; (3) there is a higher foraging activity in sites grazed by cattle in proximity to colonies; and (4) there is a substantial lizard representation in the egret food menu.

The present study demonstrated the high abundance and wide distribution of Cattle Egrets throughout Northern Israel, and their impact on lizard community structures in cattle managed woodlands. Action regarding colonies expansion should be addressed.