

## Pattern formation in a predator-prey model with defense in fearful prey

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This paper deals with mathematical modeling and analysis of a predator-prey interaction model with fear-induced anti-predator defense. The main goal of this non-linear study is to investigate the drivers that are responsible for pattern formation in the predator-prey system. To my knowledge, this study is the first systematic study showing the simultaneous effects of fear and group defense mechanisms in the complex predator-prey relationship. Conditions for instability have been discussed and numerically obtained patterns give us an understanding of such complex ecological interaction.

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