A PREY-PREDATOR MODEL FOR FISHERY RESOURCE

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Abstract

The optimal management of renewable resources as .shery is a topic of interest of many researchers in the recent years. Some authors consider a prey-predator system in a two patch environment with some conditions. In this paper we considered a more generalized case where both the patches are accessible to both prey and predator. We suppose that the prey migrate between two patches randomly. The growth of prey in each patch in the absence of predators is assumed to be logistic. The predator consumes the prey with intrinsic growth rates $á_1$ and $á_2$ in two patches.