Abstract

Today, hunting and fishing regarding to the needs of communities, trade and commercial relations governing it, have special importance in Economic aspect. But overhunting and overfishing have caused the destruction of natural ecosystems and the extinction of plant and animal species and it is one of the factors that limiting economic growth. In current study, using the bio-economic model, incidentally investigating the factors affecting the population of ram and ewe, also used to determine the rate of hunting. The results indicated that average of the rainfall, fertility rate, sex ratio and population in previous years had a significant effect on population growth. Determine of hunting rate, between zero and one bound, showed that when hunt rate is close to one, population for the future years declines with steep slope and if hunt rate is close to zero, in addition have rate of hunting, stability and maintaining a minimum population for future years will be guaranteed. Hunting rates obtained for calves, yearlings, adult females and adult males 0.004, 0.058, 0.024 and 0.0067 respectively. Given that, in the primal years, with the rising population for the rams and increasing number of hunting permits that have been proposed, profits increased also, but in subsequent years due to reduce the number of hunting licenses, profits will decrease in next.

Keywords: Bio-economic model, Hunting management, Wildlife, Golestan National Park



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