

Density-independent and density-dependent factors are extrinsic to the organism. Outside of any regulating factors, it could be that some populations have an innate instability. Intrinsic factors--those based on the anatomy, physiology, or behavior of the organism--can also affect population size and growth rates. Recruitment and migration are other intrinsic social means by which the population sizes of more complex organisms are regulated. Territoriality and dominance hierarchies are behaviors that affect population size and growth rates. Ecologists have developed models that predict complex, erratic changes in even simple systems. For example, a computer model of Dungeness crab populations assumed that adults produce many larvae and then die.