

REGULATION OF MORTALITY RATES IN JUVENILE QUEEN CONCH

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We examined the interactive effects of habitat type, queen conch density, and queen conch size upon mortality rates of juvenile queen conch, *Strombus gigas*, in nature. Juveniles ranging in total shell length from 80 - 100 mm and 120 - 140 mm were tethered for three months at two densities in sand flats and seagrass beds with and without natural conch populations. Concurrent size-frequency samples were used to compare experimental mortality rates with those of the wild population. Habitat type and queen conch density were most significant in controlling mortality rates, whereas queen conch size was not as important in the range of sizes examined. However, factor interactions were important, precluding singular conclusions regarding main factor effects.