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## Weight-Length relationship and relative condition of the holothurian *Isostichopus fuscus* at Espíritu Santo Island, Gulf of California, México

María Dinorah Herrero Perezrul & Héctor Reyes Bonilla

Holothurians were heavily exploited worldwide during the last decade. The high prices of the product prompted the opening of new fishing grounds in the west coast of American countries, such as Mexico and Ecuador. In these countries, the target species is *Isostichopus fuscus*. There is good information regarding the reproductive biology, growth and abundance of this sea cucumber, however, more studies are still needed, especially those which can supply information on the physiological condition of the individuals. The objective of this study was to estimate the relative condition of an exploited population of *I. fuscus* at Isla Espíritu Santo, in the southern Gulf of California, Mexico. A total of 1 446 individuals were analyzed during 1996-1997. Length and weight were monitored each month. We calculated the weight-length relationship and the index of relative condition (Kn). The mean length and weight were 23.3±0.1 cm and 385.9±3.9 g respectively. The weight-length relationship showed that *I. fuscus* grew allometrically at the study site. The index of relative condition (Kn) had an average of 1.040 ±0.027, and ranged from 0.123 to 2.816. There were no statistical differences in Kn along the year, although the highest values appeared from November to April. Kn presented a parabolic relationship with total length, and peaked at 21 cm length, the size of first maturity. This pattern may indicate that the condition of individuals is slowly improving with age up to a point and then decreases gradually, a possible evidence of aging and the first indication of senescence in holothurians.

Palabras clave: *Isostichopus fuscus*, Gulf of California, holothurians, weight-length relationship, relative condition

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