Comparison between corporal subjetive classification and body condition index (BCI) for *Chelonia mydas* (Testudines, Cheloniidae) caught in Brazilian coast

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ABSTRACT

Chelonia mydas, green sea turtle, is an endangered species by the IUCN (2012) and a vulnerable species in Brazil. The threats are catch, habitat degradation (including pollution) and diseases. The fibropapillomatosis (FP) is one of the greatest threats against the survival of *C. mydas* due to the multifactorial causes and impact all over the world. Biometric data (Curved Carapace Length-CCL, Curved Carapace Width-CCW and Body Mass-BM) of green sea turtles from Ubatuba-SP, Praia Grande-SP and Vitória-ES were recorded. Straight Carapace Length (SCL) was calculated from CCL and was used to obtain the Body Condition Index (BCI = BM / SCL3). BCI was tested versus subjective body condition (poor, fair and good), which evaluates the general aspect and concavity of plastron. The results demonstrated that the subjective classification is reliable for animals with poor condition; nevertheless, this classification is not clear for turtles estimated as fair and good. On the other hand, the objective classification (BCI) was an appropriate indicator for body condition. BCI of specimens caught by fishing net (1.54 ± 0.03) was higher than green sea turtles from rehabilitation (1.30 ± 0.08) or those found stranded or floating (1.23 ± 0.05). BCI was higher in females (1.45 ± 0.03) than males (1.28 ± 0.06). Further studies will attempt to correlate BCI with presence and intensity of FP and levels of organochlorine pollutants in tissues samples from *C. mydas* caught in other areas of Brazilian coast, aiming to clarify the role and impact of FP for green sea turtles conservation.