PHYSICAL MATURITY AND GROWTH OF FRANCISCANA, *PONTOPORIA BLAINVILLEI*, ON THE NORTH COAST OF SANTA CATARINA STATE, SOUTHERN BRAZIL

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The knowledge about vital parameters such as age, growth and age structure of the populations is essential for the elaboration of management and conservation measures. The Santos Basin Beach Monitoring Project (PMP-BS) has systematically recorded the stranding of marine tetrapods throughout the coast of Santa Catarina State since September 2015. The objective of this study was to analyze the age and growth ratios of male and female franciscana, *Pontoporia blainvillei,* of the north coast of Santa Catarina, corresponding to the south of FMA II ("Franciscana Management Area") (between 26º07´01 "S / 48 ° 36´58 "W and 26 ° 34´50" S / 48 ° 39´50 "W). The carcasses found until December 2016 were analyzed in order to identify the sex and to measure the total length. Age was estimated by counting the number of GLGs ("Growth Layer Groups") in the histological sections of the teeth. To describe the growth and investigate how the total length varies with age and sex, the Gompertz model was adjusted separately for 16 females and 28 males. The females had a mean total length of 121.18 cm (73-145 cm) and age estimated from 0 to 16 years. Males had mean total length of 110.83 cm (65-139 cm) and age between 0 and 9 years. Asymptotic growth, which corresponds to physical maturity, was estimated at 116 cm for males and 138 cm for females. The equation describing the growth of the males was $CTt=138,0004*exp(-exp(-1.1639-(0.8103*t)))$, $R^2=0.443$; and for females was $CTt=116.3977*exp(-exp(-0.8186-(1.6349*t)))$, $R^2=0.229$, where t represents the age of the individuals in years. In this way, we estimated that males reach physical maturity at 3 years old and females at 6 years. The models did not show a good fit, evidenced by the low values of R^2, which may be related to the low sample size, especially for older females. Even so, the tendency for later physical maturation in females than in males in this species was confirmed in this region.

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