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Reproductive biology of the silky shark *Carcharhinus falciformis* (Chondrichthyes: Carcharhinidae) off the west coast of Baja California Sur, Mexico

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The silky shark *Carcharhinus falciformis* population has declined drastically in the last few years, due to extensive by-catch in tuna purse-seine and longline fisheries in the eastern Pacific Ocean. No information exists on the reproductive biology of this species in the eastern Pacific Ocean to support fishery or conservation management. A total of 295 silky sharks were analyzed, with 179 females captured, ranging between 88 and 316 cm TL and 116 males, ranging between 142 and 260 cm TL. The sex ratio of females to males was 1: 0.6. The increase in of oocytes instead of ovarian egg and oviducal gland diameters as well as the presence of uterine eggs or developing embryos indicated that female maturation occurred at about 180 cm TL; while clasper development and the presence of sperm clumps indicated that males matured at about 182 cm TL. The short-term sperm storage found in females could be an advantage for species that present sexual segregation and live in open waters, increasing reproductive efficiency. In the 20 gravid females examined, the average number of embryos per female was five, with a range of 2-9 embryos. Females with embryos 6-8 cm TL were observed in July and September; whereas embryos 20-30 cm TL were found from September to November. One female with full term embryos (80 cm) was captured at the end of June suggesting an 11-12 month gestation period.

Palabras clave: Carcharhinus falciformis, silky shark, reproductive biology

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