

INSTITUTO POLITÉCNICO NACIONAL CENTRO INTERDISCIPLINARIO DE CIENCIAS MARINAS



Repositorio Institucional

Cerdenares-Ladrón de Guevara, G., E. Morales Bojórquez & **R. Rodríguez Sánchez** (2011). Age and growth of the sailfish *Istiophorus platypterus* (Istiophoridae) in the Gulf of Tehuantepec, Mexico. Marine Biology Research, 7(5): 488-499. DOI: 10.1080/17451000.2010.528201

Age and growth of the sailfish *Istiophorus platypterus* (Istiophoridae) in the Gulf of Tehuantepec, Mexico

Genoveva Cerdenares-Ladrón de Guevara, Enrique Morales Bojórquez & Rubén Rodríguez Sánchez

We analysed the recreational-dependent and the commercial fishery data of *Istiophorus platypterus* from the Gulf of Tehuantepec, Mexico. We estimated the age and growth of sailfish in our study based on growth rings in the cross-sections of the fourth dorsal fin spine. We sampled 4976 individuals, with length and weight data collected from 2000 to 2008. We analysed the ages of 535 sailfish, with their individual growth estimated by using two models. The first was the Schnute generalized-growth model and the second was the von Bertalanffy growth function. The parameters in each model and their confidence intervals (CI) were computed. The best candidate model was selected using Akaike's information criterion. We found the growth curve for sailfish from the Gulf of Tehuantepec is based on the three-parameter model rather than the generalized Schnute model. The parameters estimated and confidence intervals were (1) mean asymptotic eye–fork length=180.6 cm (CI=176–186 cm), (2) Brody growth coefficient=0.36 (CI=0.34–0.39), and (3) hypothetical age at length zero=

Palabras clave: Istiophorus platypterus, Ageing, AIC, fin spines, Sailfish

Para obtener copia del documento contacta con el autor (rrodrig@ipn.mx) o con el personal de la biblioteca (bibliocicimar@ipn.mx).