

## CENTRO INTERDISCIPLINARIO DE CIENCIAS MARINAS



Repositorio Institucional

Ruiz Cooley, R.I., **D. Gendron**, **S. Aguíñiga García**, S.L. Mesnick & L.D. Carriquiry (2004). Trophic relationships between sperm whales and the jumbo squid using stable isotopes of C and N. Marine Ecology Progress Series, 277: 275-283.

## Trophic relationships between sperm whales and the jumbo squid using stable isotopes of C and N

R.I. Ruiz Cooley, Diane Gendron, Sergio Aguíñiga García, S.L. Mesnick & L.D. Carriquiry

The trophic position and the predator-prey relationship between the sperm whale *Physeter macrocephalus* and the jumbo squid *Dosidicus gigas* were examined by measuring stable isotope ratios of carbon and nitrogen. Skin samples of sperm whales and muscle samples of small and large jumbo squid were collected between 1996 and 1999 in the Gulf of California. Gender determination through molecular analysis and field identification of size were used to identify adult male, female and immature male sperm whales. The stable isotope ratios of C and N of females and immature males were significantly different from those of adult male sperm whales; however, between females and immature males they did not differ significantly. The

Palabras clave: stable isotopes, Cetaceans, Trophic relationships, Trophic position, Sperm whales, Jumbo squid

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