

Aspects of the biology of two scyliorhinid sharks, *apristurus brunneus* and *parmaturus xaniurus*, from the upper continental slope off southern California

Jeffrey N. Cross¹

¹*Southern California Coastal Water Research Project (SCCWRP), Long Beach, CA*

ABSTRACT

The distribution, abundance, reproductive cycle, and food habits of two scyliorhinid sharks are discussed. Catsharks occurred on 87% of 71 longline sets and in 6% of 48 trawls. Longline catches were stratified by habitat into banks (hard substrate) and mud (substrate). *Apristurus brunneus* occurred more frequently on mud sets than on bank sets, but it was more abundant on bank sets. Catches of both species consisted of adults and adolescents; juveniles were rare or absent. Historical collections suggest that juveniles are mesopelagic.

Male *P. xaniurus* matured at a smaller size than male *A. brunneus*. Females of both species matured at about the same size and fecundity increased with female size. The proportion of body weight devoted to gonads and maximum oocyte size were greater among *P. xaniurus*, but fecundity and the proportion of females carrying egg cases were greater among *A. brunneus*. Seasonal changes in gonadal development were not well defined for either species. Members of populations may have been reproductively active throughout the year.

The diets of both species comprised, in order of importance, crustaceans, teleosts, and squids. Most prey consumed were pelagic; however, it is not known where in the water column the catsharks obtained their prey.

Due to distribution restrictions, the full-text version of this article is available by request only.

Please contact pubrequest@sccwrp.org to request a copy.