



A re-description of the eastern Pacific swellshark, *Cephaloscyllium ventriosum* (Garman 1880) (Chondrichthyes: Carcharhiniformes: Scyliorhinidae), with comments on the status of *C. uter* (Jordan & Gilbert 1896)

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Abstract

The genus *Cephaloscyllium* Gill 1862 (Chondrichthyes, Carcharhiniformes, Scyliorhinidae), arguably has one representative species in the eastern Pacific, *C. ventriosum* (Garman 1880). While the *C. ventriosum* holotype was collected from central Chile, a dubious species, *C. uter*, (Jordan & Gilbert 1896) was described from California. Garman (1913) classified *C. uter* as a junior synonym of *C. ventriosum*. This study marks the first morphometric and meristic analysis comparing the holotype of *C. ventriosum* from Chile with California *Cephaloscyllium* specimens and presents a revision of the genus for the eastern Pacific. Based on a comparison of morphometric and meristic data from specimens collected from Monterey, California; Santa Catalina Island, California; Santa Barbara, California; Guadalupe Island, Mexico; and Valparaiso, Chile, it is concluded that the California and Chilean *Cephaloscyllium* species represent a single, wide-ranging species, *C. ventriosum*.

Key words

Carcharhiniformes, Scyliorhinidae, *Cephaloscyllium*, swellshark, California, Chile, eastern Pacific, re-description

Introduction

Members of the genus *Cephaloscyllium* Gill 1862, also known as swellsharks, can be separated from other genera in the family Scyliorhinidae by the lack of labial furrows, a second dorsal fin much smaller than the first, and the presence of supraorbital crests on the chondrocranium (Compagno 1988). They possess the unique ability to swallow either air or seawater, inflating their stomachs to deter predation. *Cephaloscyllium* species are occasionally observed by divers, but their cryptic coloration and nocturnal habits make them elusive (Nelson & Johnson 1970). Of the 13 currently recognized species of the genus, only one species is endemic to the eastern Pacific, *Cephaloscyllium ventriosum* (Garman 1880), which ranges from Monterey, California to southern Mexico, and also central Chile (Compagno *et al.* 2005).

Cephaloscyllium ventriosum has a rather complex taxonomic classification history. Originally, *Scyllium ventriosum* was described by Garman in 1880 from one Chilean specimen, which is housed at the Museum of Comparative Zoology (MCZ 496) at Harvard University. Jordan and Gilbert (1896) later described an eastern North Pacific swellshark, *Catulus uter*, from California. They stated at the end of their brief description that “it is probable that the Californian species is distinct from the Chilean *ventriosu[m]*” but did not explain how it differs from the Chilean form. To complicate matters, the authors did not designate any type specimens for