

Acoustic characterization of the squat lobster *Munida gregaria* (Decapoda, Munididae)

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The squat lobster (*Munida gregaria*) is a well known benthic species in the Argentine Sea (SWAO). Historically, the occurrence of shoals has been occasionally reported and were anecdotic records. However, since 2008 the presence of large pelagic swarms has become very common in Patagonian waters, extending for as much as 20 nm. The causes of this phenomenon are still a matter of research, yet it has become clear that the species behaviour together with its physical properties makes *Munida gregaria* suitable for its acoustic detection and thus its population assessment. The acoustic response measured in situ shows significant differences in comparison to other pelagic crustacean of similar length, showing higher TS values but a much lower TS increase with frequency, for the sound frequency range 38 kHz ? 200 kHz. Tilt angle curves of TS, obtained at 120 kHz for individuals of different sizes are presented. The larger individuals exhibited pronounced maxima and minima. Some of the physical parameters that are acoustically relevant, such as body density and sound speed contrasts, were measured experimentally and here reported.