*Chaetopterus variopedatus* tubes, a stepping-stone habitat for introduced and tropical-temperate species in the English Channel

The polychaete *Chaetopterus variopedatus* lives in large, leathery U-shaped tubes in subtidal sands or gravel. The species is scarcely distributed in the English Channel and thus not easy to find. The studied animals and their associated fauna originate from beam trawls or were washed up on beaches in Normandy.

In the upper part of the tube, near the prostomium of *C. variopedatus*, we found the following commensal species: the crab *Astenognathus atlanticus* and the polychaetes *Harmothoe glabra* and *Gattyana cirrhosa*. For the tropical-temperate crab *A. atlanticus* our findings represent an extension of its geographical range.

Moreover, at the tube’s extremity several epifaunal species were present, among them the ascidian *Styela clava*, an introduced species from Japan.

Undoubtedly, tubes of *C. variopedatus* provide an excellent habitat for associated species and further studies involving the interaction of the host and its commensals could prove very interesting. Our results suggest also that these tubes represent a stepping-stone habitat for the introduction of non-native species and the geographical extension of tropical-temperate species in the English Channel.

Keywords: Non-Native Species, commensalism, coarse sand, geographical extension

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