Microhabitat Distributions of Juvenile Hydrothermal Vent Gastropods

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> Master of Science In Marine Science

> > by

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Early gastropod settlement patterns around a hydrothermal vent at 9°50' N East Pacific Rise were determined and compared to the distribution of adults of the same species. Post-settlement processes were also examined by deploying caged and uncaged settling blocks. These blocks were deployed in 4 different zones at the vent site for a 5-month period. The zones were characterized by different intensities of hydrothermal influence. Juvenile (<1mm) gastropods were identified and counted from the blocks. The most abundant species were Lepetodrilus spp., Eulepetopsis vitrea, Clypeosectus delectus and Gorgoleptis sp. (Clypeosectus and Gorgoleptis were combined due to morphological similarity). The number of juvenile Lepetodrilus spp. was higher in the area of high hydrothermat influence compared to no influence. There was a significant difference between adult and juvenile distributions for Lepetodrilus spp. and Clypeopsectus/Gorgoleptis across all zones. Juvenile Eulepetopsis vitrea were more abundant on the caged than the uncaged blocks. These data suggest that initial settlement patterns of vent gastropods are modified by postsettlement processes for Lepetodrilus spp. and Clypeopsectus/Gorgoleptis.

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