

## ***The Effect of Human Beach Use on the Abundance and Distribution of Ghost Crabs in East Mediterranean***

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Ghost crabs (*Ocypode cursor*) are one of the important elements of the coastal and marine ecosystems. They are exposed to increasing anthropogenic pressures and experience local and regional population declines. Therefore, we investigated ghost crab populations at four beaches in Mersin, Turkey with contrasting anthropogenic pressures and habitat characteristics in 2016 summer. Understanding the factors affecting ghost crab populations is instrumental for efficient coastal zone planning. We surveyed abundance, distribution and behavior of ghost crabs using quantified methodologies. A total of 12 transects, which are located in METU beaches as a protected area with limited human use and a total of 13 transects, which are located in neighboring public beaches as an unprotected area with intense human use have been surveyed. Our results showed that burrow composition, density and distribution significantly differed in response to human use. Protected sites hosted more ghost crab burrows and more diverse age groups than public beaches. The negative impact of human use on ghost crab populations was also observed within the protected sites. Furthermore, this study revealed that the protected areas act as a refuge area for ghost crab populations and support the populations in neighbouring beaches facing higher anthropogenic pressures.