

Assessing the impacts of anthropogenic pressures on coastal nurseries along the eastern Adriatic coast

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The concentration of human activities along the Mediterranean shoreline induces high levels of pressure, notably visible by the proliferation of coastal and marine infrastructure and continuously nourished beaches. Previous studies suggested that significantly modified juvenile fish communities in recent decades along the Adriatic may be the result of constant human embankment and construction of marine infrastructure along the coast. However, the importance of natural beaches and impact of beach anthropogenic nourishment on the juvenile and adult fish communities remains non-adequately studied, and the contribution of such habitats to fish life cycles is poorly understood. To address this gap, we propose a comprehensive sampling design involving two large-scale areas, each with a representative number of impacted and non-impacted beaches with varying bottom compositions. In each of selected research locations a combination of different underwater visual census techniques, as well as extractive sampling techniques will be proposed to ensure a comprehensive assessment of the entire fish community. A range of natural and anthropogenic variables will be considered, with the aim of identifying factors that significantly influence the structure of fish assemblages. This proposed methodology serves as a model for future studies on this topic, enabling reliable comparisons and enhancing our understanding of the effects of anthropogenic stressors on natural coastal habitats along the Mediterranean.