{rokbox title=|Map of the study areas showing the location of the four sites sampled :: Image: Authors|
thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-effects-fishing-ontogeny-trophic-position-body-condition-small-sized-temperate-marine-fish-moranta-et-al-2020-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-ieo-effects-fishing-ontogeny-trophic-position-body-condition-small-sized-temperate-marine-fish-moranta-et-al-2020.jpg{/rokbox}

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The effects of fishing on the ontogeny of trophic position and body condition of a small-sized temperate marine fish.
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Abstract: Using rainbow wrasse as a model species, we evaluate the impact of protection on the relationship between body size and: i) trophic position (TP), based on δ15N; and ii) body condition (BC), based on weight-at-length. We found that the biomass of the rainbow wrasse, their predators and their competitors was higher inside the no-take marine protected area (NTA) than in the area open to fishing. The TP of rainbow wrasse was higher inside the NTA but the BC was lower. A domed relationship between TP and size was observed in both areas: the TP increased with size up to 12.6 cm total length, when all individuals shifted to terminal males, and then decreased. Although other confounding environmental variables may exist, the indirect effects of fishing on competition and predation risk are the most likely explanation for the changes in TP, BC and the ontogenetic dietary shift of the rainbow wrasse.

Keywords: Isotopes, δ15N, Fish community descriptors, Size-dependent mechanisms, Body size, Dietary shifts, *Coris julis*, Mediterranean rainbow wrasse