Scientific note

First record of the snapping shrimp, *Automate branchialis* Holthuis & Gottlieb, 1958 for Croatian waters
(Decapoda, Alpheidae)


The impact of substantially detrimental anthropogenic activities such as eutrophication, sewage discharge, inorganic pollution, etc., has put the future of Mediterranean biodiversity at stake. This calls for a dramatic increase in conservation efforts. Brijuni National Park is one of the few marine protected areas (MPAs) in the Northern Adriatic, i.e. one of the most polluted parts of the Mediterranean. Bio-inventories are needed to assess the conservation outcome of this small, but historic MPA. In our first survey of the area using minimally invasive data acquisition methods, we found indications of high decapod species richness (Melzer et al. 2016).

A more recent second field campaign has increased the number of recorded decapods on circa 90 species, including several rare ones.

Among these finds, a specimen of *A. branchialis* deserves particular attention. It was found at 44.9228° N, 13.7361° E south of Cape Vrbanj under a stone in the upper infralittoral in an area with a mix of rock ledges and sediment spots. Some of the diagnostic features are depicted in Figure 1.

*A. branchialis* had previously been recorded for only eight localities (Katagan & Kocatas 2001) with a single Adriatic record from the Gulf of Manfredonia off the coast of Italy, circa 400 km south of Brijuni (Froglia 1975, 2010). These records transformed *A. branchialis* from a putative Lessepsian migrant (Holthuis & Gottlieb 1958) into an autochthon Mediterranean species. As can be concluded from the previous records, our sample of *A. branchialis* from Brijuni MPA represents the first record for both, Croatian waters and the Northern Adriatic.

Acknowledgements. Our inventory of Brijuni MPA was conducted with permission of the Croatian Ministry of Environment and Energy in Zagreb. Special thanks go to the park rangers for taking us to some very close to pristine underwater spots.

References


![Fig. 1. *Automate branchialis* from Brijuni MPA, extended depth of field photos (ZSMA20160784). A. Dorsal view of anterior body section with deeply concave carapace margin and short, pointy rostrum (arrow). B. Dorsal view of hind section of the body; asterisk, telson with specific armature; arrowheads, diaeresis on uropod’s exopod; arrow, tooth and spine on outer margin. Scale bars = 1 mm.](image)