Abstract: Ever since the discovery of the site of Lepenski Vir, it was recognized that fishing had an important role in the settling of the Danube Gorges in the Mesolithic. The importance of wild game hunting has also been confirmed by the analyses of animal bones and emphasized ever since the first published archaeozoological reports. The issue of the role of terrestrial vs. aquatic resources in the diet has been addressed from the perspective of stable isotope analysis, with somewhat contrasting results. The analyses of carbon ($\delta^{13}C$) and nitrogen ($\delta^{15}N$) isotope ratios have suggested that the Mesolithic inhabitants of the Danube Gorges consumed considerable amounts of fish, with gradual broadening of the dietary spectrum to include terrestrial resources at the onset of the Neolithic (Bonsall et al. 1997; 2000; 2004; Grupe et al. 2003; Borić et al. 2004), whereas the analysis of sulphur ($\delta^{34}S$) isotope ratio has suggested that there have been significant inter- and intra-site variabilities in dietary practices (Nehlich et al. 2010). However, this issue had not so far been addressed in greater detail from an archaeozoological perspective, mainly due to great difficulties and biases in cross-referencing quantified mammal and fish remains, but also due to the fragmentary nature of faunal assemblages from some of the sites. Although the assessment of precise proportion of wild game meat vs. fish in the diet is elusive, particularly due to the differences in mammalian and fish skeletons, and biases affecting their survival and recovery, we attempted to tackle this issue by estimating their dietary contribution on the basis of the sum of average weight of the minimum number of individuals for both mammals and fish. In addition, we estimated the proportion (size and number) of economically most important fish (cyprinids, Wels catfish and acipenserids) in the assemblages from the sites of Lepenski Vir, Vlasac and Padina. Even with methodological biases concerning recovery techniques employed during the old and new excavations, and different areas of the sites they have encompassed, we found that fish species composition on the three sites varied to some extent. Given the site locations, their short distance from one another and similar landscape and environmental conditions (vicinity of cataracts and large whirlpools), this propensity towards fishing particular kinds of fish could suggest that the sites functioned as specialized fishing centres, and held different species of fish in special regard.