

# Distribution and biology of the gobies (Family Gobiidae) in Bulgaria.

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(Summary of PhD Thesis)

The aim of this work is to revise and present new data for the distribution and biology of family Gobiidae in Bulgaria, also to study the gobies as object of the commercial fishing.

During this work all official and trivial names of each Bulgarian goby species were taken in consideration and the names presented in this work should be considered as official.

This work presents for the first time very detailed maps of the distribution of large fish taxon in Bulgaria. There are 25 maps for each species of goby that is found in Bulgarian waters. The work contains all available information on the distribution of family Gobiidae from the known literature compiled with the original data of the author into database containing a total of 661 entries as more than 50% of them (367) are new, original data of the author.

For *A. minuta*, *B. brauneri*, *G. buccichi*, *G. cobitis*, *G. niger*, *G. paganellus*, *M. batrachocephalus*, *N. eurycephalus*, *Pom. Marmoratus*, *Pr. marmoratus*, *Z. ophiocephalus* the original data of the author confirms the distribution described in the literature. For *K. longicaudata* and *N. ratan* the original data of the author shows significant decrease in their areals. It is observed big increase in the areals with uncovered new localities: *B. stellatus* – 4, *C. quadrivittatus* – 1, *K. caucasica* – 14, *N. fluviatilis* – 60, *N. melanostomus* – 23, *N. gymnotrachelus* – 45, *N. kessleri* – 8, *P. bathi* – 3, *Pr. semilunaris* – 21.

Three goby species (*N. cephalargoides*, *N. syrman*, *P. minutus*) were not registered during the period of this study.

New data was collected regarding the biology of some of the species from family Gobiidae in Bulgaria. New maximum lengths for three species are described: *G. niger* with TL – 156 mm, *G. paganellus* with TL – 231 mm, *N. eurycephalus* with TL – 222 mm. New data is presented for the most common species regarding the sex ratio, condition, fecundity, breeding periods and their changes during the year. Two species (*Kn. caucasica* and *Pom. marmoratus*) show new sex ratios that differ from the ones described in the literature.

This study is first of its kind that has studied in details the composition of the gobies found in industrial fishing catchings. The main goby species found in the industrial catches are: *N. melanostomus*, *G. niger*, *G. cobitis*, *G. eurycephalus* and *M. batrachocephalus*.