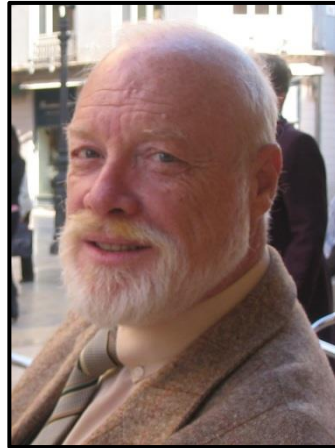


In memoriam dr Slobodan Regner, scientific advisor



Dr Slobodan Regner (75), scientific advisor at the Institute of Marine Biology-University of Montenegro passed away on August 8, 2019 in Belgrade. His departure dealt a huge blow to the Montenegrin academic and scientific communities due to his role as founder and keeper of modern marine fish biology in Montenegro. After his death we were left without a man who knew a great deal about the sea, that dedicated his whole life to revealing its mysteries and a one who selflessly and effortlessly shared his knowledge.

Dr Slobodan Regner was born on November 4, 1944 in El-Shatt, Egypt.

He finished primary school and high school in Belgrade after which he enrolled in biology studies at the University of Belgrade, Faculty of Natural Sciences. During the summer courses of his studies he spent time researching Adriatic benthos in the Institute of Marine Biology in Rovinj. After finishing his studies in 1967 he received a scholarship from the Institute of Oceanography and Fisheries in Split to attend the third degree studies of biology (system-ecology) at University of Zagreb, Faculty of Natural

Sciences. There in Split his scientific career begins, devoted to the exploration of the Adriatic sea, especially the economically important fish species. He defended his MSc thesis " A contribution to the knowledge of the ecology of the planktonic stage of anchovy life, *Engraulis encrasicolus* (Linnaeus, 1758), in the middle Adriatic" in 1970 and his PhD thesis " Ecology of the planktonic stage of anchovy, *Engraulis encrasicolus* (Linnaeus, 1758), in 1980, at the University of Belgrade, Faculty of Natural Sciences. Time spent on the Institute of Oceanography and Fisheries in Split he dedicated to researching the ecology of plankton stadiums of fish species, beginning with the qualitative and quantitative analysis of ichthyoplankton in the Adriatic, research of the spatial-temporal distribution of eggs, larvae and postlarvae of fish in the Adriatic sea plankton, examining the growth and development characteristics of eggs, larvae and postlarvae of certain fish species in experimental conditions, analyzing the causes of fluctuation in abundance of planktonic stadiums of fish species, especially anchovies, to assessing the biomass of sardines and

anchovies in the Adriatic sea based on their daily egg production and relative fecundity. He also conducted research on population dynamics of the adult small blue fish, foremost the sardines and anchovies, by long term data analysis of their previous catch numbers and by long term prognosis on their future catch numbers based on their mathematical approximation of their time series.

As a member of several councils and work groups, he helped create the model for development and organization of marine fishery of former Yugoslavia. He was the vice president of the Commission for Scientific Research and Technological Development of Marine Fisheries, which was a part of Marine Fisheries Business Communities of Yugoslavia. He was the vice president of the University of Split work group charged with establishing the fisheries studies on the Faculty of Maritime Studies. Dr. Regner in the early 80-s was responsible for building the blueprint for the reconstruction of the "BIOS" ship, at that time the largest ship for scientific research in Yugoslavia. The ship was fully reconstructed, equipped with state of the art equipment and facilitated for multidisciplinary research, from physical to biological oceanography, for studying natural characteristics, fish stock assessment and conservation of the Adriatic sea. With all the above mentioned he was also a mentor to two distinguished marine biologist, dr. Ivan Katavić and dr. Jakov Dulčić from the Institute of Oceanography and Fisheries in Split.

He spent one part of his career in Belgrade, where from 1991-1993 he worked as Head of Department in the Museum of Natural History. Afterwards he worked in the Serbian Ministry of Science and Environmental Protection from 2006 to 2007, and the Institute for Multidisciplinary Research, University of Belgrade from 2007 to 2011. As a mentor he led two PhD thesis, he expanded his interests on the analysis and forecast of Pontic shad *Alosa immaculata* catchment in the Danube river, and the

prediction of fish catch in the Danube river based on long-term variability in environmental parameters and catch statistics.

It is safe to say that with the arrival of dr Slobodan Regner the Institute of Marine Biology in Kotor in 1994, begins the new era of marine fisheries in Montenegro. Of course having in mind that from the time the Institute (Department of Marine Biology) was established in 1961, there was research and work in the field of marine fisheries done by the Departments associates, especially in the morphology and taxonomy of various fish species, the structure of the ichthyofauna in the Bay of Kotor, as well as in the fish parasitology field.

Along with his rich and extensive experience gathered in the Institute of Oceanography and Fisheries in Split and participation in marine scientific expeditions with Italian colleagues, dr Regner also introduced the fisheries biology components in the Montenegro marine fisheries resource research.

The key to responding adequately to the demands and standards of the General Fisheries Commission of the Mediterranean lay in the partnership with the Ministry of Agriculture. Based on the population dynamics of economically significant fish, crustacean and cephalopods species an estimate of their biomass in territorial and international waters near Montenegro is given. From these data a fishing effort is calculated- the optimal number of fishing vessels, or in other words the maximal biologically sustainable level of annual use. This marks the beginning of responsible fishing in Montenegro. Montenegrin fishermen that understood the necessity of proper resource management became key partners in that process. In an easy and simple way dr. Regner showed the fishermen how to take greater care of fishing and the importance of science in the process of sustainable resource management.

At the same time as a member of the Montenegrin delegation, together with the

representatives from the Ministry of Agriculture, dr Slobodan Regner represented Montenegro in all international bodies tied with the fishing in the Mediterranean. His opinion was held in very high regard, and through his scientific work Montenegro took its rightful place in the family of fishing Mediterranean countries and became a crucial partner in all marine fishing matters.

Dr Regner's study was broadened to include the ecology of benthic fish, crustacean and cephalopods species in the dredge fishing of Montenegro. For the first time analysis of population dynamics of common pandora, red mullet and prawns were performed because these were the most economically significant species in previously mentioned catches. He also conducted research of the population dynamics of juvenile and adult stadiums of the small blue fish, foremost the sardines and anchovies in the Bay of Kotor, their natural spawning and feeding area. For the first time as part of an international scientific survey, the biomass of small blue fish in Montenegrin waters was given.

Through mentorship, dr Slobodan Regner has trained 5 junior associates of the Institute of Marine Biology-University of Montenegro, and with that formed a team which together with him continued to research demersal and pelagic resources of Montenegro. He is also credited for the formation of the Laboratory of Ichthyology and Marine Fisheries Institute, which was equipped to perform any task that the FAO (Food and Agriculture Organization of the United Nations) and GFCM (General Fisheries Commission of the Mediterranean) required. Even now, on the abovementioned meetings dr Regner's methods and research are frequently mentioned, especially the mathematical and statistical models for the approximation of time series for the fluctuation of small blue fish in the Adriatic.

As part of the preparation for the European Union accession, Montenegro as an EU candidate country intensively worked on its European fisheries policy. As a consequence, a new law of Fisheries and mariculture was passed, in 2009. Dr Regner's

contribution in the making of this law was immense. His vast experience was deeply ingrained in the fabrics of what will become the Sustainable Development of Aquaculture and Fisheries in Montenegro. Simply put any activity tied to marine fisheries in Montenegro could not be imagined without dr Regner's participation. Even after retirement, he gladly attributed to the betterment of the Montenegrin fisheries.

Recognizing and promoting marine fisheries as a significant part of the economy of Montenegro, while holding scientific principles in high regard, is for the most part the achievement of dr Slobodan Regner and the Ministry of Agriculture and Rural Development. Corresponding ministers and their assistants, that collaborated with dr Regner, had a great deal of respect for the man and held his opinion in high regard.

Although aware that life comes to an end, that we call death, we are never truly prepared for it. Maybe that moment shouldn't be considered as extinction, and more like a transfer to some other dimension, previously unknown to us. Still Slobodan Regner left the plane of physical and into heavens embrace, of that we are certain. We knew that all along that there is where his path would take him because of his mildness, kindness and huge heart washed with a friendly smile secured him a spot in Paradise a long time ago.

We as his scientific children are grateful to God for giving us a chance to meet him. Maybe that acquaintance wasn't by chance, maybe it was written somewhere, and his arrival in Kotor was just a part of that written path.

Dr Aleksandar Joksimović, scientific advisor
Institute of Marine Biology,
University of Montenegro, Kotor