

DETERMINATION OF BIOGENIC CAPACITY ON FĂINA-MIRAJ SECTOR OF VASER RIVER IN ORDER TO INCREASE THE SALMONIDS POTENTIAL

Vlasin Horia-Dan, Danci Cristian, Sîngeorzan Steluța-Maria

¹University of Agricultural Sciences and Medicine Veterinary Cluj-Napoca,

Faculty of Forestry and Land Surveying, Romania

E-mail: horia.vlasin@usamvcluj.ro

The purpose of the present study is to determine the biogenic capacity and the salmonoids potential of Făina-Miraj sector of Vaser river in order to increase the livestock by population and river-bed construction works.

The main objectives of the study aim to establish the real live stock on the studied river sector, the biogenic capacity calculation, to determine the existing salmonoids potential and proposals for the increase of salmonoid productivity.

The researches have been conducted on Vaser river in Maramures Mountains Natural Park, Maramures county, Romania, on a sector of 4.2 km. The determination of the biogenic capacity was established according to the method elaborated by National Institute for Research and Development in Silviculture „Marin Drăcea” Bucharest, analysing the abiotic, biotic and anthropic factors which influence the salmonoids production.

After analysing the field data, we established a biogenic capacity of 68, thus, the evaluation class on the investigated sector being VII, a class belonging to the category of rich waters. The established salmonoids production is 19.6 kg/km of river.

The interpretation of data and the field observation result in a better understanding of the present situation, offering information on salmonoids biodiversity on the analysed river sector and the present situation of the river bed construction works. All these represent a starting point in order to increase the salmonoids production by proposing the building of floored waterfalls, anchored trees placement, small lakes for fry, and juvenile trout population.

The river bed construction works, salmonoides fry introduction and river protection represent premises for the increase and amelioration of salmonoides population, of the ecosystem they belong to, which, in time, determine a substantial economic contribution by selling fishing authorizations and also by developing zonal tourism, by promoting nature and its resources long-lasting management.

Keywords: piscicultural stock, river bed construction works, salmonoids potential.