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## IL LAGO TRASIMENO

### SUMMARY

THE TRASIMENO LAKE. - The morphological, geological and hydrological features of Lake Trasimeno, the biggest laminar lake in Italy, are described. A long term series of physical and chemical data (1969-81, 1987-88) was statistically elaborated to identify the principal environmental processes and their dynamics during the period considered.

In particular, the eutrophication process of the waters was analyzed and the nitrogen and phosphorous contents were evaluated. Locating the various sources of these two nutrients was important in order to draft a reclamation plan which takes into consideration the present levels of dissolved nutrients compared to the naturally occurring levels.

As regards the plant community, results of a cane thicket study are reported: the numerical biomass determination, fresh and dry weight; the evaluation of the organic biomass measurements of the water fraction and the nitrogen and phosphorus contents. This information on the interaction of these important factors of Lake Trasimeno is essential for establishing a rational management program.

In addition, the principal characteristics of the phytoplanktonic, zooplanktonic and zoobenthonic communities are described.

With regard to the ichthyic fauna, the list of species currently present clearly demonstrates the variations which has occurred in the community structure.

The data on the harvested fishes are used to infer the economic importance of some species and their productive value, as well as to analyze the management criteria of this fundamental resource for economic exploitation and simultaneous environmental conservation of Lake Trasimeno.