



## SUMMARY

*A research project was undertaken during 1987-89 in order to provide a classification of Spanish rivers by means of their fish fauna. It is a first step for the suitable protection of Spanish freshwater fishes, since it allows the development of the "Directive about Freshwaters" given by the European Communities Council (18th, July 1978). Knowledge of distribution, ecology and biology of Spanish freshwater fishes is still insufficient, but further advances and new data coming from the field work carried out since 1987 are presented.*

*Rivers were distributed in rivers sections, which were included in one of the two categories proposed by the Directive: "Salmonicolas" and "Ciprinicolas". Criteria for this classification were as follows:*

*Criteria for "**Salmonicolas**" river sections:*

*Criterion 1. Occurrence of bullhead (*Cottus gobio*).*

*Criterion 2. Occurrence of brook lamprey (*Lampetra planeri*).*

*Criterion 3. Occurrence of native populations of trout (*Salmo trutta*) in southern Spain.*

*Criterion 4. Joint occurrence of the two native salmonid species, the salmon (*Salmo Salar*) and the trout (*Salmo trutta*).*

*Criteria for the "**Ciprinicolas**" river sections:*

*Criterion 1. Occurrence of endangered species.*

*Criterion 2. High faunistic richness, valued by the threat categories (ICONA, 1986) and the native origin of species.*

*Provisionally, 31 "Salmonicolas" river sections were listed; 9 of them after the application of criteria 1 and 3, and 22 after the criteria 2 and 4. Likewise, 115 "Ciprinicolas" river sections were catalogued; 7 of them for the occurrence of endangered species (criterion 1) and 108 for the degree of faunistic richness (criterion 2).*

*Present and potential threats for fish are offered together with descriptions of selected river sections, as well as some recommendations for the improvement of water quality and the appropriate management of rivers and fish populations.*