



Enviefh

Working Meeting on Methodology

Barcelona, 12-15 May 2006

CSIC- Instituto de Ciencias del Mar

The meeting focused on the use of GAMs and agreement among partners on the criteria to consider when using GAMs.

First results allowed a preliminary characterization of anchovy and hake spawning areas, for eggs and larvae separately. Input data for the response variables were presence/absence data.

Maps were produced on other potential spawning areas, by expanding the selected environmental ranges to other western Mediterranean areas. Maps were done using the routine for the final EFH mapping design by HCMR.

Further analyses regarding anchovy and hake spawning areas will be performed. All available data dealing with each case study will be pooled (data collected at the beginning of spawning, during the peak, and at the end of spawning, when possible). Thus, the possibility to define the conditions, not only during the peak of spawning (the most favourable ones), but also those triggering spawning, and at the end of spawning, will be tested. The environmental ranges defining each EFH will be mapped against the conditions in different years, so as to determine the extension of a given EFH accordingly.

Other case studies envisaged relate to experimental bottom trawl surveys, and the analysis of monthly landings series along the Catalan Coast, by species and port. The environmental database included monthly and weekly satellite data, and other surveyed environmental data.

Data used in the analyses were as followed:

LLUCET survey- autumn 1998 to summer 1999.

Study area: Catalan coast

CTD data: temp, salinity, density (sigma-t), fluorescence

Other data: monthly temp, chlorophyll, and salinity; weekly temp, sea level anomaly, chlorophyll, photosynthetically active radiation.

Response variable: number of hake eggs; number of hake larvae

Project: EC Contract FAIR CT-97-3522.

"Impact of fishery and environment on hake recruitment in the Northwestern Mediterranean".

Project: CICYT (MAR99-1202). "Estudio de la adveccion de aguas del Rodano hacia la costa Catalana a finales de primavera y sus implicaciones en el transporte de larvas de anchoa y comunidades planctonicas asociadas (2000-2001)".

MPHMED survey- July 1993

Study area: western Mediterranean (Gulf of Valence and Gulf of Lions) and Ligurian Sea

CTD data: surface (5m depth)- temp, salinity, fluorescence

Other data: monthly temp and salinity; weekly temp, sea level anomaly

Response variable: number of anchovy eggs

Project: EC DG XIV. Fisheries. Research Contract n MA 3730 (1992-1994).

"Northwestern Mediterranean Anchovy : Distribution, Biology, fisheries and biomass estimation by different methods".

ARO survey- June 2000

Study area: Southern of Gulf of Lions to Central Catalan Coast.

CTD data: temp, salinity, density (sigma-t), fluorescence

Other data: weekly temp, sea level anomalies, chlorophyll, salinity

Response variable: number of anchovy eggs; number of anchovy larvae