

FAO/GFCM/JRC SUMMER SCHOOL IN QUANTITATIVE FISHERIES STOCK ASSESSMENT

Introduction

The capacity to quantitatively assess the status of fisheries stocks and evaluate the trade-offs of management actions is an important asset to make informed decisions in fisheries management. Most well management fisheries rely on some form of stock assessment as basis for management advice, varying from the data demanding and costly methods used in large-scale and high-value fisheries to the less data intensive approaches used in some small-scale fisheries.

In the context of the Mediterranean and Black Sea region, FAO have a long history of actions towards the improvement of the knowledge on the status of stocks as well as the management of fisheries, namely through the work of the General Fisheries Commission of the Mediterranean (GFCM) and the FAO Regional Projects (AdriaMed, CopeMed, EastMed and MedSudMed) . The European Commission Joint Research Center has been giving stock assessment trainings since 2012 to support the stock assessment technical groups of the STECF Committee in both Mediterranean and Black Sea. Despite the observed improvements in the quantity and quality of the stock assessments in the region, there are still large differences in technical capacities on new methods and tools among Mediterranean and Black Sea countries, hampering a more productive collaboration in the assessment of stocks at the sub-regional level as well as in the provision of advice in support of decision making. In addition, a large number of stocks remain unassessed because of inadequate data and/or approaches to deal with assessments in data-limited situations. Closing these gaps will require a continuous improvement of national capacities in fish stock assessment through appropriate education and training programmes. Such improvements will be instrumental to meet the objectives of the Mid-term Strategy (2017–2020) and the EU Common Fisheries Policy towards the sustainability of Mediterranean and Black Sea fisheries, promoted respectively by the GFCM and EC JRC/STECF in collaboration with other relevant partners and with the participation of the FAO Fisheries Department.

Objective

With the objective to enhance and maintain a high level of technical expertise in fish stock assessment in the region, FAO, GFCM and JRC are organizing the second edition of the “Summer School in Quantitative Fisheries Stock Assessment”. The summer school is intended to offer a regular and extended learning opportunity to fisheries scientists from the Mediterranean and Black Sea to keep up to date with new methods and tools for the assessment of stocks, and with the ultimate aim to create a pool of experts that can enhance the provision of advice on the status of stocks within the framework of the Scientific Advisory Committee on Fisheries (SAC) of the GFCM and the stock assessment EWGs of the STECF . The summer school is planned to run every year for two weeks during the summer months, to avoid overlaps with other technical and statutory meetings of GFCM, FAO Mediterranean Regional Projects and STECF EWGs. The first edition of the Summer School, held in 2017, was attended by a total of 34 participants from 10 countries.

Dates and venue

The summer school will run from **9 – 21 July 2018** and take place in Institute for Marine and Coastal Environment (IAMC-CNR) in Capo Granitola, Sicily (Italy).

Target audience

The school is intended for fisheries scientists engaged in stock assessment within fisheries departments, research institutes and non-governmental organizations in the Mediterranean and Black Sea, as well as to young scientists seeking specialization in applied quantitative methods for natural resources management.

Program

The summer school will combine theoretical lectures with practical, hands-on sessions where researches will have the chance to work on case study data sets provided by instructors. The course will be based on the R language for statistical computing and graphics.

The course will be divided in two consecutive Modules of 5 days each. The first Module will provide participants with some basic understanding of how to work with R to handle and analyse data, with a focus on fisheries data, including carrying basic analysis using simple assessment methods. The Module will also introduce basic population dynamic concepts and main reference points currently used in the evaluation of stock status. The second Module will introduce some of the most common stock assessment methods currently in use, varying from data-demanding to data-poor methods. Participation to the second module is conditional on a proved intermediate knowledge of R. During the course, students will be also exposed to the scientific advisory process to fisheries management through lectures and practical work. A more detailed outline of the course content will be provided in due time. The specific contents of the Modules would be adapted yearly, depending on identified needs and demands in the region.

Language and Prerequisites

The modules will be delivered in English. The course is intended for fisheries scientists and will assume a basic understanding of population dynamics, fisheries biology, basic statistics and quantitative data analysis. Basic knowledge of programming language(s), including R, will be desirable for Module 1 and intermediate knowledge of R will be a requirement for Module 2.

Hardware/Software Requirements

All software used throughout the course will be open-source and freely available for download from the internet. Participants will be required to provide their own laptops which should, ideally, be wifi enabled. A specific share point will be created to store course material and data used during the training as well as to provide an online follow-up support after the training.

Enrolment

Registration is free and open to fisheries researchers working in the Mediterranean and Black Sea countries. Maximum attendance is 25 participants per Module. Considering the limited availability of seats, preference will be given to applicants from different countries.

In order to apply for the school, applicants should submit a [registration form](http://www.faocopemed.org/html/regform.html) (available on the registration page: <http://www.faocopemed.org/html/regform.html>), indicating which Module they wish to attend, by the **30 April 2018**.

Participants can register to one module only.

Limited financial support is available to cover the travel and living expenses while attending the school. The allocation of the funds will be based on the analysis of the applications and will be preferably given to researchers from developing countries.

About the venue

The school will be hosted by Institute for Marine and Coastal Environment (IAMC-CNR) in Capo Granitola (www.iamc.cnr.it). The IAMC-CNR is placed along the southwestern Sicilian coast (Italy) in the Municipality of Campobello di Mazara. Participants will be accommodated in hotels in Mazara del Vallo (10 minutes driving distance) and commute daily to IAMC-CNR by shuttle bus.

Mazara is widely considered to be one of the most important fishing centres of Italy. Its port gives shelter to the largest fishing fleet in Italy. There are numerous venues for dinner as well as opportunities for walking and sightseeing through the city and in surrounding areas. It is about 90 km southwest from the international airport in Palermo and 60 km from the airport in Trapani.

