

Recommendation GFCM/42/2018/7
on a regional research programme on blue crab in the Mediterranean Sea

The General Fisheries Commission for the Mediterranean (GFCM),

CONSIDERING that the objective of the Agreement for the establishment of the General Fisheries Commission for the Mediterranean (GFCM Agreement) is to ensure the conservation and sustainable use, at the biological, social, economic and environmental level, of marine living resources in the GFCM area of application;

RECALLING that, in giving effect to the objective of the GFCM Agreement, the GFCM shall adopt recommendations on conservation and management measures aimed at ensuring the long-term sustainability of fishing activities, in order to preserve the marine living resources and the economic and social viability of fisheries and that, in adopting such recommendations, the GFCM shall give particular attention to measures to prevent overfishing and minimize discards as well as to the potential impacts on small-scale fisheries and local communities;

RECALLING that in giving effect to the objective of the GFCM Agreement, the GFCM shall foster, as appropriate, a subregional approach to fisheries management and aquaculture development in order to better address the specificities of the Mediterranean and the Black Sea;

CONSIDERING that the GFCM shall adopt management measures based on an ecosystem approach to fisheries to guarantee the maintenance of stocks at levels which can produce maximum sustainable yield (MSY);

CONSIDERING that the GFCM shall apply the precautionary approach in accordance with the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks of 4 August 1995 and the Code of Conduct for Responsible Fisheries of the Food and Agriculture Organization of the United Nations (FAO);

CONSIDERING that the FAO Code of Conduct for Responsible Fisheries provides that states “should apply the precautionary approach widely to conservation, management and exploitation of living aquatic resources in order to protect them and preserve the aquatic environment, taking account of the best scientific evidence available. The absence of adequate scientific information should not be used as a reason for postponing or failing to take measures to conserve target species, associated or dependent species and non-target species and their environment”;

CONSIDERING that certain fisheries management measures need to be revised and adapted to the evolution of both the status of exploited stock and scientific knowledge and that an appropriate method shall be established to this end;

CONSIDERING the socio-economic impact in the Mediterranean Sea of fisheries exploiting blue crab, which is considered as a non-indigenous species of commercial interest that constitutes a fishery resource providing profits for local communities;

ADOPTS, in conformity with Articles 5 b), 8 b), and 13 of the GFCM Agreement, the following recommendation:

PART I
Objectives, scope and definitions

Objectives of the research programme and of the transitional measures

1. This recommendation shall establish a regional research programme towards the sustainable exploitation of blue crab in the Mediterranean Sea (hereafter “regional research programme”) aimed at ensuring socio-economic sustainability.
2. This recommendation applies to all commercial fishing activities exploiting blue crab in the Mediterranean Sea.
3. The regional research programme established by this recommendation shall support the work of the Scientific Advisory Committee on Fisheries (SAC).
4. Contracting parties and cooperating non-contracting parties (CPCs) who are actively fishing in the Mediterranean Sea agree to implement the regional research programme in accordance with the objectives of this recommendation.

Geographical scope

5. The regional research programme established by this recommendation shall apply to the Mediterranean Sea.

Definition

6. For the purpose of this recommendation, “blue crab” means the species *Portunus segnis* and *Callinectes sapidus*.

PART II
Operational and specific objectives

7. The operational objective of this recommendation shall be to improve scientific, technical and socio-economic knowledge of the fisheries exploiting blue crab by establishing a regional research programme on blue crab.
8. The specific objective of this recommendation shall be to collect data on fishing activities in order to improve research and scientific knowledge for the sustainable exploitation of the stock, aiming at maintaining the stock at MSY levels as well as the socio-economic viability of blue crab fisheries.
9. The SAC, at its twenty-third session in 2021, shall assess the outcomes of the regional research programme established by this recommendation. The SAC shall report to the GFCM at its forty-fifth session in 2021, and, if deemed necessary, present proposals for the adaptation of the measures set by this recommendation and for complementary management and control measures.
10. Based on the recommendations and advice under paragraph 9, the GFCM, at its forty-fifth session, may adapt these measures in accordance with the objectives set out in Parts I and II of this recommendation.

PART III
Regional research programme and scientific monitoring

11. CPCs with fishing activities targeting blue crab shall ensure that a mechanism for adequate scientific monitoring of blue crab catches in the Mediterranean Sea is duly in place, with a view to facilitating the implementation of the regional research programme and to allowing the SAC to provide descriptive information and advice on at least the following:

- a) deployed fishing effort (e.g. number of fishing days/week) and overall catch levels at the national or supranational levels, indicating the fishing gear used; and
- b) biological and socio-economic effects of alternative management scenarios, including input/output and/or technical measures, such as fishing gear/environmental impacts, as proposed by CPCs.

12. The GFCM Secretariat shall provide terms of reference, including costs, services and other requirements to support the implementation of a research programme on blue crab in the Mediterranean Sea, as described in Annex 1 of this recommendation. The regional research programme shall be launched in 2019.

PART IV
Final provisions

13. These measures shall be assessed by the SAC and, if necessary, reviewed by the GFCM at its forty-fifth session in 2021.

14. In light of the results of the regional research programme referred to in Part III of this recommendation, the GFCM may propose and adopt new appropriate management and control measures, including the monitoring of fishing activities and catches.

Key elements of the regional research programme on blue crab in the Mediterranean Sea

Introduction

There is high need for scientific and research projects aimed to fill gaps of knowledge on blue crab as a fishery resource.

Main features of the regional research programme on blue crab in the Mediterranean Sea

- Clear objectives defined in advance (e.g. biomass in tonnes, in number of km², spatio-temporal distribution patterns);
- Priority given to the collection of useful data for the provision of scientific advice in support of management (length, age, life cycle);
- Combination of fishery-dependent and fishery-independent sources of information to ensure a regular monitoring;
- All CPCs should be involved;
- The regional research programme should also provide guidelines and facilitate harmonization, standardization of protocols, coordination and comparison of the results obtained by past, ongoing and future national, regional and international research programmes addressing blue crab.

Work packages

Work packages are designed to address the main aspects mentioned above as well as the need to evaluate the social and economic aspects of the blue crab fishery in the context of the sustainable management and exploitation of the stock.

Work Package 1 – Biology and ecology

Work Package 2 – Fishery-independent data collection – Surveys-at-sea

Work Package 3 – Fishery-dependent data collection

Work Package 4 – Stock assessment

Work Package 5 – Socio-economic elements

Work Package 6 – Management proposals

Main objectives of each work package

WP 1 – Biology and ecology of blue crab, including demography. Biology: studies on size, density, abundance, biomass, recruitment, growth, reproduction, physiology, environmental parameters, habitat, feeding and bycatch surveys. Ecology: genetics, interactions with other species, impacts of fishing gear on the marine environment.

WP 2 – Fishery-independent data collection through multiannual demersal beam trawl/dredge surveys-at-sea, e.g. biomass and abundance indices, size/age distribution, bycatch.

WP 3 – Fishery-dependent data collection through port sampling (e.g. landings, length/distribution, fishing techniques used and vessels engaged in the fishing activity, value), and through observers on board (e.g. bycatch, days at sea).

WP 4 – Stock assessment: investigation on methodologies for assessing the status of blue crab including by compiling historical data.

WP 5 – Socio-economic elements: socio-economic survey on the sector, trade, markets and development of economic indicators, external aspects affecting the fisheries, economic sustainability of related fishing gears.

WP 6 – Management proposals: identification of possible additional measures through management strategy evaluation (MSE) for the sustainability of the blue crab fisheries.

Implementation of the regional research programme

The GFCM shall:

- Assess progress in the different work packages;
- Define standardized methods (e.g. in ageing) as well as research protocols, and
- Organize capacity-building activities.