INTERNATIONAL COMMISSION FOR THE CONSERVATION OF ATLANTIC TUNAS



COMMISSION INTERNATIONALE POUR LA CONSERVATION DES THONIDES DE L'ATLANTIQUE

COMISION INTERNACIONAL PARA LA CONSERVACION DEL ATUN ATLANTICO

Madrid, 21 February 2023

ICCAT CIRCULAR # G-0194/2023

SUBJECT: GBYP WORKSHOP ON BLUEFIN TUNA CLOSE-KIN MARK-RECAPTURE (CKMR), INCLUDING BIOLOGICAL SAMPLING COORDINATION (hybrid/Madrid (Spain), 14-16 March 2023)

I am pleased to inform you that the *GBYP Workshop on Bluefin Tuna Close-Kin Mark-Recapture (CKMR)*, including Biological Sampling Coordination will be held between 14 and 16 March 2023.

Attached please find the background, objective and tentative agenda of the workshop and other relevant information about the organization. I would appreciate it very much if you could distribute this announcement to scientists who may contribute by participating in the workshop. This announcement will also be published on the current meetings page of our website.

In order to organize the hybrid workshop in advance of the session, in particular with regard to the number of in-person participants, you are kindly requested to send to the Secretariat a list of delegates who will participate in the workshop by 1 March 2023. All participants (online and in-person) must also register for the workshop by 1 March 2023 using the online registration form which will be available shortly on the meetings page of our website.

Funding is available to cover travel and subsistence expenses for key speakers and a limited number of other scientists which can provide useful contribution related to the workshop's objectives. Requests for financial assistance should be sent by 1 March 2023 to gbyp@iccat.int including explications of the applicant's expected contribution to the achievement of the workshop's objectives and, if applicable, an abstract of the scientific paper/presentation they would provide. The requests will be evaluated by the GBYP Steering Committee and successful applicants will be notified prior to the Workshop.

Please receive the assurances of my highest consideration.

Executive Secretary



Camille Jean Pierre Manel

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Attachment: Objective, Tentative Agenda and Information for participants.

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GBYP WORKSHOP ON BLUEFIN TUNA CLOSE-KIN MARK-RECAPTURE (CKMR), INCLUDING BIOLOGICAL SAMPLING COORDINATION

(Hybrid/Madrid (Spain), 14-16 March 2023)

Background

Genetic Close Kin Mark Recapture (CKMR) uses the frequency of closely related individuals (e.g. parent offspring, siblings) to estimate absolute number or exploitation rate, either of which can be directly used in stock assessments or harvest control rules.

The ICCAT GBYP contracted in 2016 the Commonwealth Scientific and Industrial Research Organisation (CSIRO), which is the institution that developed the CKMR, to develop a feasibility study for application of the CKMR approach to the eastern Atlantic bluefin tuna (EBFT) stock. The report stated that in principle CKMR was potentially feasible for EBFT, whenever the high numbers of samples for genotyping from individuals of known age and stock of origin, but recommended holding a workshop focusing on genetic techniques before following up with the next phase of the feasibility study. Recent developments, such as the initial success of a pilot study applied to western Atlantic bluefin, advances in genetic techniques to distinguish stock of origin and improvements in biological sampling, have changed the scenario. Consequently, the GBYP Steering Committee (SC) decided to convene a workshop, which due to the COVID pandemic was finally held online in February 2021. As a result of this first workshop, a list of recommendations was elaborated on the steps to be taken to prepare a proposal for a CKMR study for EBFT (see SCRS/2021/023 for details). Following these recommendations, the GBYP SC decided to initiate some pilot studies (epigenetic aging, possibility of using of BFT larvae as source of "juvenile" samples) aiming to provide data relevant to take well informed decisions. In addition, following the BFT work plan for 2023 being adopted by the 2022 SCRS Plenary meeting, it was decided to convene a second workshop on CKMR in March 2023, aiming to advance on the completion of the feasibility study for implementation of the CKMR approach to EBFT. This GBYP workshop is organized in close collaboration with the new SCRS BFT Subgroup on CKMR for ABFT and BFT biological sampling coordination.

Objective

The main objectives of the workshop are (1) to analyze the relevant factors for developing a complete feasibility study for a CKMR-based abundance estimation of eastern Atlantic bluefin tuna, and (2) to identify existing biological sampling programs and discuss additional sampling opportunities.

Participants

The target participants are CKMR methodology developers and researchers with direct experience in its application in other BFT stocks, as well experts in EBFT stock structure and biological sampling. However, the workshop is open to any interested SCRS scientists.

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Tentative Agenda

- 1. Opening, adoption of agenda and meeting arrangements
- 2. Brief overview of CKMR
- 3. Relevant case studies
 - a. SBT CKMR
 - b. PBT CKMR
 - c. WBFT CKMR
 - d. Others, time permitting
- 4. Review of tagging studies to determine distribution and movement patterns
- 5. Review of genetic studies on population connectivity
- 6. Synthesis of current knowledge on eastern and Mediterranean stock structure (discussion)
- 7. Review of genetic methodologies for stock ID, kinship analyses and sex determination
- 8. Reproduction/fecundity at age and identification of spawning sites as it pertains to CKMR parameterization
- 9. Review of the potential of epigenetic aging for ABFT
 - a. Desk study
 - b. Previous studies
 - c. Presentation of ongoing study
- 10. Biological sampling
 - a. ICCAT GBYP existing programs
 - b. CPC sampling programs
 - c. Additional opportunities for sampling (larval surveys; ICCAT/national observer programs)
- 11. Sampling requirements for CKMR
- 12. Next steps

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Additional information for participants

1. Date and venue

The workshop will be held in hybrid format between 14 and 16 March 2023. The in-person workshop will be at the ICCAT Secretariat. Workshop hours will be from **09:00 – 18:00 CET** (Madrid time).

2. Contact information

Secretariat Contact: Francisco Alemany(francisco.alemany@iccat.int; gbyp@iccat.int)
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Tel: +34 91 416 5600; Fax: +34 91 415 2612

3. Language

The working language for the workshop will be English, as no simultaneous translation can be provided.

4. Registration

Participants are kindly requested to register for the workshop by **1 March 2023** at the latest. Early registration is essential for the Secretariat to ensure the setting up of the online platform. **Online registration** must be completed through the ICCAT current meetings page or Registration form. All delegates from CPCs wishing to attend the workshop must notify in advance their Head Delegate or Head Scientist to ensure that they are included in the official list that will be sent to the Secretariat by **1 March 2023**.

5. Online settings

Online participation will be held on Zoom. It is generally advisable that you connect to the meeting using the Zoom client. You can find the hardware requirements to join an online meeting at the following link: Zoom Hardware requirements. Participants must be logged into their Zoom client using the email that they used to register for the meeting. We strongly suggest using headphones with a microphone to be able to hear and speak comfortably during the meeting. A brief and clear introduction of the Zoom application can be found at the Zoom-overview webpage, if you have further questions, please contact the Secretariat for support. All participants duly registered will receive an e-mail from the Zoom platform with a link to join the meeting.