GBYP Steering Committee Meeting (Madrid, 24 September 2019)

The meeting of the GBYP Steering Committee (SC) was held at hotel Abba in Madrid on 24 September 2019, with the participations of the SC members Gary Melvin (SCRS Chair), John Walter (W-BFT Rapporteur), Ana Gordoa (E-BFT Rapporteur), Ivan Katavic (SC External Member), Camille Jean Pierre Manel (ICCAT Executive Secretary) and Miguel Neves dos Santos (ICCAT Assistant Executive Secretary). Francisco Alemany (GBYP Coordinator), Alfonso Pagá García (GBYP Database Expert) and Stasa Tensek (GBYP Assistant Coordinator) joined the meeting, invited by the Steering Committee. The meeting was held back to back with the Bluefin Tuna Species Group (SG) meeting.

The GBYP Coordinator presented an outline of issues to consider for finishing the activities of Phase 9 and planning of Phase 10 (**Annex 1**).

Last activities of Phase 9

SC recommended extending the current Phase 9 till April 2020 in order to finish the initiated activities, while it will not have any influence on the budget. Therefore, it was decided that the Grant amendment be prepared and submitted to the EU.

Growth in farms study

GBYP Coordinator informed the SC about the status of the activities related to growth in farms study. Although the Commission initially asked that the study be carried out by monitoring the direct growth of the individual fish, it was possible to carry out the tagging only in Portuguese and Croatian farms, because other farms were reluctant to undertake it. In addition, there was a problem of a very high mortality connected to tagging in Portuguese farm that was not foreseen, which caused important financial loss to the farm. It was concluded that the Commission should be informed that the effort and the expenses needed to conclude the study, as it was conceived, is substantially greater than originally perceived.

As regards estimating weight during caging with stereo-cameras, it was noted that one of the most important sources of bias is a selective, no-random choice of fish to be measured. Although the Secretariat receives the caging videos from CPCs, they are in most cases not complete. Therefore, it is decided to recommend to the Commission to make mandatory sending the whole video to the Secretariat, which would include all BFT individuals entering the cage.

As regards the length-weight conversion, the question was raised if a single algorithm should be used, or different ones depending on the size class of fish and the area where the farm is located. It was decided to further discuss it in a later phase.

Habitat model

With reference to developing the habitat model, which would be used for correcting the aerial survey index and potentially other indices as well, it was decided to wait for the outputs of the SG meeting.

Data recovery

With respect to the recovery of the data on YOY in the Mediterranean, it was noted that the presence on board of the national observers for bycatch might be taken advantage of. It was

decided to recommend to the Commission through SCRS to make mandatory collecting BFT samples from bycatch.

Tagging workshop

It was planned to organize a tagging workshop at the beginning of 2020, the dates to be decided in dependence of the availability of the key speakers. It was recommended to start the preparation process and announce the Workshop as soon as possible.

Planning of Phase 10

Coordination

It was decided to bring to the SCRS the question of the structure of GBYP Steering Committee, especially considering including the EU representative and the role of GBYP Coordinator.

Biological studies

Regarding biological sampling, it was decided to take advantage of the national sampling programs as much as possible, especially to the EU Data Collection Framework. Regarding the samples from the Mediterranean, it was recommended to use the Stock Synthesis Model in order to determine the gaps in the length frequencies of available samples and later decide if special effort should be put in filling them. Other activities should be dedicated to providing samples from the Atlantic for the purpose of mixing. As for the sampling of adults in Mediterranean farms, it was decided to continue with the activity, for the purpose of ageing and developing ALK. It was also decided to use these samples for the study on growth, by back calculating, given that the caging and harvesting dates are known. It was also recommended that the otoliths in following years get collected by national programs instead of GBYP. Regarding the tissue samples provide by ROPs, it was decided to further discuss it during the SG. It was noted that national observer programmes are even more likely to provide these samples in case they SCRS considers it necessary.

Concerning the analyses, it was decided to continue with both microchemical and genetic analyses, focusing on determination of stock of origin and mixing. As for the otolith analysis, it was decided not to continue in 2020 with the massive otolith reading, because most of the available otoliths have already been read. Instead, it was recommended to focus on providing support to the SCRS group calibration exercise or other activity needed to provide updated ALK needed for the purpose of stock assessment. In addition, it was recommended to provide support to the national larval survey activities and possibly organize a coordination meeting, including the active teams in the Mediterranean, aiming at ensuring standard methodology is used.

Tagging

It was decided to continue conventional tagging as an opportunistic activity only. Es for the electronic tagging, it was recommended to concentrate to the Northern Atlantic and to explore the possibility of tagging in the Eastern Mediterranean. In the Northern Atlantic there are already some national tagging programs established that already expressed their willingness to deploy tags provided by GBYP without additional cost. Therefore, in the next year funds may be dedicated to buying more electronic tags this year.

Further decisions on tagging will be taken after the GBYP tagging workshop, where it is expected to discuss other tagging options like using internal archival and acoustic tags. It was also commented that MSE might be taken advantage of, in order to identify the areas where tags should be deployed.

Other issues

Close kin

Given the valuable information that close kin methodology started to provide for Western BFT, it was decided to consider the possibility of resuming the activity for the Eastern BFT as well, depending on the inputs of the SG meeting. It was noted that massive sampling needed for the close kin is easier than it was few years ago when the method was abandoned, especially considering the possibility of using larvae instead of juvenile fish and taking opportunity of national sampling programs and ICCAT ROPs.

Next meeting

It was decided that the next meeting be held in the last week of October 2019 over Skype when the Phase 10 activities will be further detailed.



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Annex 1

ISSUES TO CONSIDER FOR PHASE 10 PLANNING

Coordination

• Structure of GBYP SC. 2 or 1 external experts? Donors representative (EU) as ex officio member or as observer. Role of GBYP coordinator?

Biological studies

- Growth in farms must continue. New areas (Morocco) to be monitored? Suggestions: by now leave it as planned, an only if the analysis of questionnaire answer indicate than a given strategy has not been covered or the future global analyses based on the stereocameras/harvesting data (once operative database be built up) detect "outliers"
- Continue massive adults sampling in farms (western and Central Med)?. The objective would be, as in previous years, to ensure samples for ALK and potential use for Close Kin) It is worth pointing out that this year we took advantage of the growth in farms study to ask for massive biological sampling in Turkish farms, and they agreed to provide samples at a relatively very low cost. Their main concern was that it would be almost impossible to get the otoliths because of the shooting in the head, but I told them that in other places they manage to get otoliths from shooted fishes. We agreed that they would do their best in getting otoliths, and according to the results we would take further decisions next year. Since on phase 10 the growth in farms study will continue, we could again integrate the biological sampling in the same contract
- Sampling priorities: Fix (not only suggest) sampling priorities in the Call or leave it open to any statistical area as done in previous phases?. Waiting for input from EU DFC LP Group to know exactly what is being done under DFC.
- Samples from ROPs? They were sending only some genetic samples from a couple of places in the Med. This activity started because of the close kin, but was not cancelled when close kin was. This year I told MRAG responsible to stop temporary this activity, since there was not any plan behind. However, we could resume it in a well planned way. For example, it could contribute to get samples for close kin.
- Analysis priorities: Continue focusing on stock of origin and mixing? Initiate some "close kin" related analysis?. Regarding ageing analysis, most of available otoliths at tissue bank have been already read. Support to reanalysis of previous readings? Support to reference Collection generation and/or new calibration exercises?
- Should we organize a meeting involving Close Kin specialists before deciding on any other close kin related activity?
- Coordination meeting larval surveys. On 2020 a wide ichthyoplankton survey targeting BFT will be carried out in Turkish waters. From initial contacts with Turkish scientist we know they would be grateful to get advice from the Spanish researcher leading this type of studies. Moreover, both in Sicily and Tunis there are researchers trained by the same Spanish teams, and hence it would be not difficult to implement BFT larvae surveys in Central Med. It represents a nice opportunity for developing, for the first time a global Eastern stock larval index. Should GBYP promote the cooperation among these CPCs, for example organizing a coordination workshop on this issue?

Tagging

- Continue conventional tagging as opportunistic activity? A decrease in recoveries have been detected, but maybe is related to the lower tagging effort in last years. Any further action to further promote tag recovery?
- Satellite tags: A huge improvement in tagging performance (increased time spent on ٠ fish) have been observed in the tags deployed in 2018 using improved tethers and tagging fish on board. It seems that 2019 tagging activities will be also very successful. National programs have been consolidated in several Countries in northern Atlantic (United Kingdom, Ireland, Sweden, Norway...). They have offered themselves to deploy GBYP tags. This open the door to change our strategy, since instead of open calls we could sing MoUs with different institutions. We should only provide tags, and they would take care of deploying them within their national programs. Obviously the condition should be that raw data from all GBYP tags, and at least relevant info from the "national" tags (or also the raw data with some restriction of use in the short term) should be provided to GBYP, and that standardized methodologies are used (this is not a problem, since the people involved is the same that attended GBYP tagging methodologies meeting, and they contributed to define these new protocols, and hence they are already "convinced" that these are the best methodologies. In this way we could deploy much more tags and get info from much more at a relatively low cost (only tags purchase).
- Tagging in Levantine sea. E-tagging is currently performed in that area by Israel, with the support of Barbara Block (Morris Kann RC, Haifa University. The Morris Kann center manager has contacted us recently to offer their collaboration in ICCAT research. Unfortunately political/administrative constrains prevent to agree on formal collaborations. However, maybe we could sign contracts or agreements with Stanford University...On the other hand, an ettagging program will be launched next year in Turkey, and hence we could also sign a MoU with them for accomplishing with the objective of deploying tags in Eastern Med.
- Use of other type of etags (archival, acoustic..)?
- Workshop on tagging. This activity has is already included in Phase 9 work plan, but considering that one of the main objectives should be to agree on joint analysis of available DB, it was delayed till a more clear data policy be agreed. It is planned to be held around March 2020.

Aerial surveys

- Some technical problems have prevented the fully achievement of the feasibility study on the use of acoustic techniques (scientific sonar MS70), but some promising results have been obtaining. Given the low cost, I think we could repeat the activity next year, since almost for sure the technical problems will be solved by then.
- Calibration survey has shown some worrying results. Should we continue deepening in this line? The expert has proposed a new activity, which is in fact a validation, not a calibration. It would consist in coordinating the standard aerial surveys with purse seine fishing operations in each area, in such a way that fishing vessels would inform the scientific responsible of each aerial survey about imminent fishing purse seine operations, to give the opportunity to the GBYP airplane to fly, whenever possible,

over the schools that are going to be fished. Thus, the accuracy of the aerial observation could be measured a posteriori, once the data from the fishing operation be available. Is it worth to explore this possibility? I must say that on the paper it seems easy, but in practice probably it is not.

• What to do with area G? The problem is that most of sightings are of "small" category, when we know that much larger fishes are also there. According to info from one of the professional spotter, who worked many years in that area as fishing captain, this is expectable, since he says that adult fish there usually swim between 40 and 80 m depth. If this is true it violates the basic assumption to perform aerial surveys, it is that fish must be available in daytime for aerial observation.

MSE

• Waiting for inputs from MSE meting