

SHORT-TERM CONTRACT FOR BIOLOGICAL STUDIES  
(ICCAT GBYP 06/2018-B) OF THE ATLANTIC-WIDE  
RESEARCH PROGRAMME ON BLUEFIN TUNA  
(GBYP Phase 8)

DELIVERABLE #6

Consortium “**Next-Generation BFT**”

represented by

Alma Mater Studiorum - University of Bologna

Dept. Biological, Geological and Environmental Sciences

Bologna, Italy (UNIBO-BiGeA)

Bologna, 8<sup>th</sup> August 2019

## CONTEXT

The Partnership “NextGeneration BFT” is established by the within University of Bologna, Dept. Biological, Geological and Environmental Sciences, Bologna, Italy (UNIBO-BiGeA) the Centro di Competenza sulla Biodiversità Marina, University of Cagliari, Cagliari, Italy (Com.Bio.Ma) and the Department of Fisheries and Oceans Canada, Large Pelagics Group of the Saints Andrews Biological Station, Canada (DFO) to tendering the Call for Tenders ICCAT GBYP 06/2018 - BIOLOGICAL STUDIES and specifically for services concerning Maintenance and management of the ICCAT GBYP tissue bank (a), Sampling (b) and Genetic Analyses (d) as requested by the Call.

According to the awarded activities, the Partnership “NextGeneration BFT” is in charge of the sampling of biological samples and otoliths from 500 BFT of the sampling areas of Central and Western Mediterranean (strata 11, 12d, 13b, 13c, 15, 15c of the ICCAT GBYP BIOLOGICAL SAMPLING STRATA TABLE attached to Call 06/2018) since these areas are most relevant for BFT fisheries in the Mediterranean and critical to disentangle the spatio-temporal dynamics in whole basin. Types of data recorded and of tissues collected are homogeneous with collections carried out in the previous phases. A total minimum number of 100 individuals per sampling area and size class is guaranteed, according to Table 1 reported below.

**Table 1.** Summary of the sampling strata awarded to the Partnership “NextGeneration BFT” in Phase8

ICCAT GBYP PHASE 8 BIOLOGICAL SAMPLING STRATA TABLE						SAMPLING AWARDED BY NEXT GENERATION BFT for 2018 - Number of specimens			
SAMPLING STRATUM CODE	SAMPLING AREA	AREA CODE	SUBAREA	SAMPLING SUBAREA CODE	GEAR CODE	JUVENILES	MEDIUM	LARGE	TOTAL
11	Central Mediterranean	CMED	South Sicily, Strait of Sicily	SSI	LL		50	50	100
12d	Central Mediterranean	CMED	Sicily (East Sicily and Ionian Sea)	ESI	LL	50	50	50	150
13b	Central Mediterranean	CMED	Adriatic Sea	AS	LL	50			50
13c	Central Mediterranean	CMED	Adriatic Sea	AS	LL		50		50
15	Western Mediterranean	WMED	Tyrrhenian Sea	TY	HL	50	50		100
15c	Western Mediterranean	WMED	Tyrrhenian Sea	TY	LL		50		50
<b>TOTAL</b>						<b>150</b>	<b>250</b>	<b>100</b>	<b>500</b>

## ACTIVITIES

### b) Sampling Task – Sampling of strata 11, 12d, 13b, 13c, 15, 15c

Scientists and technicians of the UNIBO-BiGeA have established agreements with local authorities, local fishermen and industries to carry out the needed sampling activities within national jurisdictions.

All sampling materials and labelled tubes have been provided to “NextGeneration BFT” partners and collaborators right after the communication of the assigned sampling strata, i.e. in the second half of June 2018.

Labelling of samples was performed in accordance with the GBYP DB requirements. We have continued the numbering of samples according to the samples provided in 2017 by the consortium “NextGeneration BFT” (NGBFT) as detailed in Table 2.

**Table 2.** Labelling of the sampling strata awarded to the Partnership “NextGeneration BFT” in Phase8

ICCAT GBYP PHASE 8 BIOLOGICAL SAMPLING STRATA TABLE					SAMPLING AWARDED BY NEXT GENERATION BFT for 2018 - Labelling of specimens		
SAMPLING STRATUM CODE	SAMPLING AREA	AREA CODE	SUBAREA	SAMPLING SUBAREA CODE	JUVENILES	MEDIUM	LARGE
11	Central Mediterranean	CMED	South Sicily, Strait of Sicily	SSI		NGBFT-SSI-M-01>50	NGBFT-SSI-L-01>50
12d	Central Mediterranean	CMED	Sicily (East Sicily and Ionian Sea)	ESI	NGBFT-ESI-J-14>63	NGBFT-ESI-M-51>100	NGBFT-ESI-L-01>50
13b	Central Mediterranean	CMED	Adriatic Sea	AS	NGBFT-AS-J-01>50		
13c	Central Mediterranean	CMED	Adriatic Sea	AS		NGBFT-AS-M-51>100	
15	Western Mediterranean	WMED	Tyrrhenian Sea	TY	NGBFT-TY-J-16>65	NGBFT-TY-M-36>85	
15c	Western Mediterranean	WMED	Tyrrhenian Sea	TY		NGBFT-TY-M-86>135	

Sampling activities are finished and sample collected are reported in the following Table 3.

**Table 3.** Summary of the number of BFT individuals sampled according to strata.

ICCAT GBYP PHASE 8 BIOLOGICAL SAMPLING STRATA TABLE					SAMPLING ACCOMPLISHED BY 07/02/2019 - Number of specimens			
SAMPLING STRATUM CODE	SAMPLING AREA	AREA CODE	SUBAREA	SAMPLING SUBAREA CODE	JUVENILES	MEDIUM	LARGE	TOTAL
11	Central Mediterranean	CMED	South Sicily, Strait of Sicily	SSI		0/50	0/50	<b>0/100</b>
12d	Central Mediterranean	CMED	Sicily (East Sicily and Ionian Sea)	ESI	50/50	50/50	19/50	<b>119/150</b>
13b	Central Mediterranean	CMED	Adriatic Sea	AS	0/50			<b>0/50</b>
13c	Central Mediterranean	CMED	Adriatic Sea	AS		50/50		<b>50/50</b>
15	Western Mediterranean	WMED	Tyrrhenian Sea	TY	44/50	50/50		<b>94/100</b>
15c	Western Mediterranean	WMED	Tyrrhenian Sea	TY		48/50		<b>48/50</b>
					<b>94/150</b>	<b>198/250</b>	<b>19/100</b>	<b>311/500</b>