

ICCAT GBYP TAGGING PROGRAMME 2025

Atlantic-Wide Research Programme for Bluefin Tuna (GBYP PHASE 14)

TAGGING OF ATLANTIC BLUEFIN TUNA WITH ICCAT TAGS ON MEDITERRANEAN SPAWNING GROUNDS

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FINAL REPORT

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Introduction

More than 60% of the catch of Eastern Atlantic Bluefin Tuna (ABFT) is caught on the Mediterranean spawning grounds, mostly by purse seiners (PS). This segment supports the largest ABFT fishery and providing information on individuals from the spawning grounds is thus key to inform about movements of fish actually targeted by the ABFT fishery. Previous tagging work from these locations has proved valuable as it has led to propose hypothesis on the size-dependency of ABFT transitions between the Mediterranean and the Atlantic, showing that larger individuals >200 cm displayed large migrations that included Mediterranean/Atlantic transitions, whereas smaller individuals did not show such transitions (Rouyer *et al.*, 2019, 2022, 2020). More recent work from the same team using the ICCAT e-tagging database showed the validity of this hypothesis and identified the transition size to be about 175 cm, meaning that ABFT started to display Mediterranean/Atlantic transitions at about that size (Anonymous, 2023). Tagging operations from spawning aggregations are very valuable, but logistically challenging, because they ride on professional activities and within a very short time-frame, but thanks to a tight collaboration with french professionals (SATHOAN), the spanish association Scientific Angler and a funding from France Filière Pêche (PROMPT project), since 2023 three operations permit to target ABFT from the spawning aggregations and during the spawning season for two major spawning/fishing grounds : south of Malta (Central Mediterranean) and the Balearic area (Western Mediterranean). This allows to spread the risks and to ensure that objectives are met, but also to cover the two most important areas regarding catch by PS. In 2024 8 tags were deployed for one year. Among these 8 tags, 6 tags remained 1 year at large (75%), whereas the last two popped-off after about 1 and 8 months, respectively. These deployments yielded interesting results, such as transitions between the Balearic spawning ground and Newfoundland. This year, only 5 pop-up tags, including 4 GBYP tags, were deployed on fish between 182 cm and 219 cm (CFL). The objectives are to answer the many scientific questions related to migrations, such as fidelity to the spawning ground.

Materials and Methods

Tagging generalities

Tagging was performed by three experienced taggers from IFREMER that can all demonstrate recent records of tags whose retention times hit more than 365 days. The protocol followed is described in (Rouyer *et al.*, 2020). The tags are prepared with a rigging using an XL Domeier for the main anchor and a Large titanium dart anchor for

the secondary anchor, which is attached to a loop acting as a retainer for the tag to limit horizontal movements. The first anchor is inserted in the pterygiophores of the second dorsal fin. Two genetic samples are taken using specifically designed tools (Tissue Sampling Unit, TSU, Allflex). This tool allows for quick and efficient sampling, with single use vials that are self sealed once the sample is taken, avoiding contaminations.

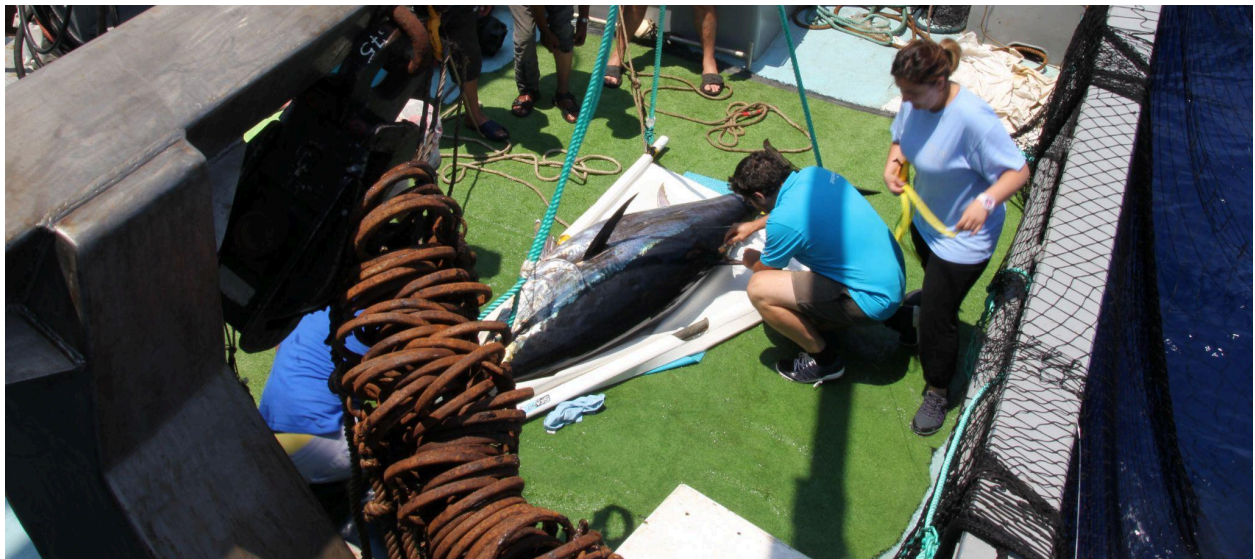


TSU AFX Large Applicator



Operation on purse seiner

This operation was done onboard a french purse seiner from SATHOAN (SSF II and SSF III). All details of the operations can be found in (Rouyer *et al.*, 2020). The fish is recaptured from the PS net once the set has been done. This operation is very challenging as it depends on how smooth the fishing season goes, but also on how quickly the fish is transferred from the PS to the cage.



Operation in Santa Pola

This operation is organized by Scientific Angler. It is one fishing event that is organized for the purpose of tagging. In June in Santa Pola, the location is favorable to catch large fish coming to spawn in the Balearic spawning ground. Several recreational fishing boats are available to help with the operation. Each fish that is caught is transferred to a tagging boat where the tagging team could operate. The fish was transferred after being secured on a mouth grip with a rope, thrown from the catching boat to the tagging boat.



Operation in the Balearic onboard french longliners

This operation takes place onboard french longliners that operate in the area before and after the PS fishing season, here the 2 frères VI. The operation was successfully carried out for the first time in 2023. The operation is very similar to what is done onboard the PS. Once a fish still alive is caught, it is taken to a stretcher, from where it is then hauled onto the deck for the tagging. This operation is very efficient, but critically depends on how many fish are caught on a given night, as the priority for the fisherman is to load trucks with a minimum quantity. In a night with little catch, no fish will be tagged.



Results

The tagging operation onboard the PS proved complex, primarily because it didn't go to Malta, but to the Balearic islands, where fish are usually more difficult to catch with a handline (the behavior is different from Malta) and where the transfer between the PS and the cage is usually faster because the distance from the cage to the PS is often shorter. To our surprise, we managed to get the fish into a feeding frenzy and to tag one of them. It was chosen not to place a GBYP tag as the fish was less than 180 cm.

This year, the Santa-Pola operation was not successful, because of the adverse meteorological conditions. Only one GBYP tag was deployed during that operation.

Finally the operation on the French LL allowed the deployment of three GBYP tags. The operations went well, but the quota was completed very fast by the vessels, which limited our capacity to tag more fish.

Table 1: Information about the fish that were tagged from the three operations. The weights were obtained using the length and girth of the fish. The relationship used was validated by comparing predicted weights to measured weights on a sample of 30 tunas.

SN	LAT	LON	DATE	TIME	OPERATION	BOAT	CFL	W	SPAG
25P0623	38.0227635	-0.3146295	14/06/2025	18h26	SANTA POLA	BARAMENTE	182	96	241
24P2130	38.4981130	0.6810967	18/06/2025	23h49	LL	2 Frères VI	210	153	235
25P0631	38.5312352	0.6012135	19/06/2025	01h00	LL	2 Frères VI	215	156	244
25P0520	38.9964903	0.6553909	23/06/2025	00h18	LL	2 Frères VI	219	130	242

Conclusion

2024 was complex, with 8 tags over ten were successfully deployed. However 2025 proved also very difficult, specifically because of adverse meteorological conditions during some events. Four tags have been deployed on fish targeted by fisheries in the Balearic spawning grounds, ICCAT can be thus sure that they are of Mediterranean origin and they could offer valuable information on the fidelity to the spawning grounds.


Acknowledgements

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Les informations contenues dans ce document sont valides en date d'impression du 30/04/2024

 <p>GOUVERNEMENT <i>Liberté Égalité Fraternité</i></p>	<p>Autorisation de pêche à des fins scientifiques dans le cadre du projet PROMPT visant à améliorer la compréhension des processus biologiques et écologiques du thon rouge</p>	<p>2024/923752/PROMPT/000004</p>
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<p>Références réglementaires</p>	<p>*Règlement (CE) n°1224/2009 du Conseil du 20 novembre 2009 instituant un régime communautaire de contrôle afin d'assurer le respect des règles de la politique commune de la pêche ; *Règlement (UE) n°1380/2013 du Conseil du 11 décembre 2013 relatif à la politique commune de la pêche ; *Articles R.921-76 et suivants du Code rural et de la pêche maritime *Protocole scientifique pour le projet PROMPT.</p>		
<p>Nom du navire autorisé</p>	<p>ST SOPHIE FRANCOIS 3</p>	<p>OP : SA THO AN</p>	
<p>Immatriculation du navire autorisé</p>	<p>ST 923752 Quartier N° immatriculation</p>		
<p>Nom de l'armement</p>	<p>SSF</p>		
<p>Caractéristiques techniques du navire</p>	<p>Longueur hors tout : 37.50 (en mètres)</p>	<p>Puissance : 516.00 (en kw)</p>	<p>Jauge : 251.00 (en UMS)</p>
<p>Pour la période du : 26/05/2024 au 01/07/2024</p>			
<p>Condition de l'autorisation</p>			
<p>Activité(s) réglementée(s)</p>		<p>Condition(s) spéciale(s)</p>	
<p>Observateur sur demande</p>		<p>Tout ou partie d'une mission se déroulant dans les eaux d'un Etat membre tiers doit prévoir l'obligation pour le pêcheur d'embarquer un observateur de cet Etat membre sur simple demande.</p>	
<p>Date de délivrance : 30/04/2024</p>			

<p>Actions sur l'autorisation</p>			
<p>Liste des périodes de suspension</p>			
<p>Date de début</p>	<p>Date de fin</p>	<p>Motif juridique de suspension</p>	
<p>Abrogation</p>			
<p>Date d'effet</p>	<p>Motif juridique d'abrogation</p>		
<p>Retrait</p>			
<p>Date d'effet</p>	<p>Motif juridique de retrait</p>	<p>Observation</p>	

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 <p>GOUVERNEMENT Liberté Égalité Fraternité</p>	<p>Autorisation de pêche à des fins scientifiques dans le cadre du projet PROMPT visant à améliorer la compréhension des processus biologiques et écologiques du thon rouge</p>	<p>2024/859076/PROMPT/000003</p>
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<p>Références réglementaires</p>	<p>*Règlement (CE) n°1224/2009 du Conseil du 20 novembre 2009 instituant un régime communautaire de contrôle afin d'assurer le respect des règles de la politique commune de la pêche ; *Règlement (UE) n°1380/2013 du Conseil du 11 décembre 2013 relatif à la politique commune de la pêche ; *Articles R.921-76 et suivants du Code rural et de la pêche maritime *Protocole scientifique pour le projet PROMPT.</p>		
<p>Nom du navire autorisé</p>	<p>ST SOPHIE FRANCOIS 2</p>	<p>OP : SA THO AN</p>	
<p>Immatriculation du navire autorisé</p>	<p>ST 859076 Quartier N° immatriculation</p>		
<p>Nom de l'armement</p>	<p>SSF</p>		
<p>Caractéristiques techniques du navire</p>	<p>Longueur hors tout : 37.50 (en mètres)</p>	<p>Puissance : 516.00 (en kw)</p>	<p>Jauge : 251.00 (en UMS)</p>
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