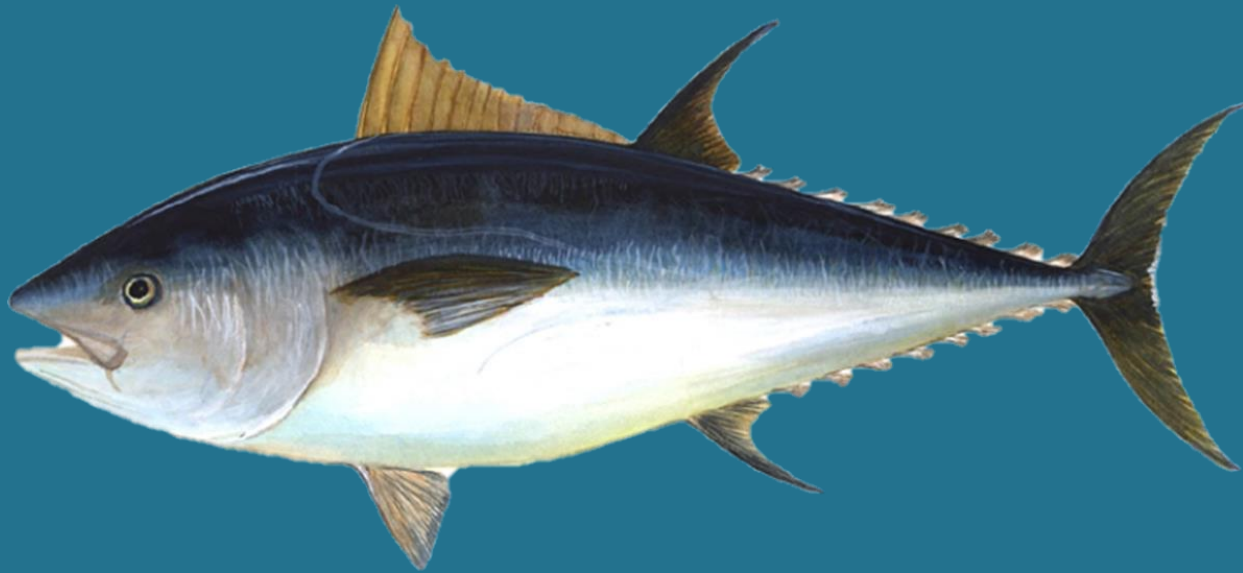


SHORT-TERM CONTRACT FOR THE  
TAGGING PROGRAMME 2018 (AREA B)  
OF THE ATLANTIC-WIDE RESEARCH PROGRAMME FOR BLUEFIN  
TUNA  
(ICCAT GBYP 07/2018-PHASE 8)

**Final report on tagging activities in the Celtic  
Seas Area 2018**



Bluefin Tuna (*Thunnus thynnus*) Linnaeus 1758

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Cover Image: Wikimedia Commons

## **Table of Contents**

<b>1. Executive Summary of Bluefin Tuna Tagging In Ireland in 2018 .....</b>	<b>3</b>
<b>2. Introduction.....</b>	<b>3</b>
2.1 Legislative & formal preparation .....	6
2.2 Financial preparation .....	6
<b>3. Tagging Locations and Methods .....</b>	<b>7</b>
<b>4. Results.....</b>	<b>8</b>
<b>5. References .....</b>	<b>13</b>
<b>6. Acknowledgements .....</b>	<b>14</b>
<b>7. Appendix I .....</b>	<b>15</b>
<b>8. Appendix II .....</b>	<b>16</b>

## **1. Executive Summary of Bluefin Tuna Satellite Tagging in Ireland, 2018**

In 2018, the Marine Institute responded to a call for a short term contract for the tagging programme 2018 (Area B) of the Atlantic Wide Research programme for Bluefin Tuna (ICCAT GBYP 07/2018-Phase 8) and were successful in this bid and received 10 satellite tags and associated funding for tagging activities and production of reports and information. An additional 14 satellite tags were made available by the Marine Institute.

Satellite tagging of Atlantic bluefin tuna was successfully carried out in October/ November 2018 with 24 individuals tagged and released with Wildlife Computers, pop-off satellite archival tags (Table 1) and numbered spaghetti tags. All tagging was carried out under a project licence from the Irish Health Products Regulating Authority (HPRA) with licenced and trained personnel. The Irish Sea Fisheries Protection Agency (SFPA) were made aware of the programme and identities of the vessels, skippers and scientific personnel and a derogation was obtained for scientific research fishing for a specified area and period. A Research Mortality Allowance (RMA) (Appendix I) was obtained from ICCAT who also supplied ICCAT coded floy tags for identification of fish if recaptured at a later stage. An Invitation to Tender for the Supply of a Commercial Vessel to tag Bluefin Tuna off the Coast of Ireland for the Marine Institute was issued in August 2018.

## **2. Introduction**

Electronic tagging using archival tags by Block et al. (2005) highlighted the potential importance of the coast of Ireland and the UK as migratory routes for Atlantic bluefin tuna. A 191 cm fish tagged in waters off North Carolina showed trans-Atlantic migrations to the Mediterranean Sea and multi-annual site fidelity to waters off Ireland and the UK. This single track suggested that after a juvenile foraging period in the west, Atlantic bluefin foraged in the waters of the east Atlantic off Ireland and then undertook migrations to the Balearics and other known Mediterranean spawning areas. Many other western released fish have moved into these waters (Block et al. 2005). The only dedicated electronic tagging activity off Ireland was conducted in 2003 and 2004 by a scientific team from Stanford University and an Bord Iascaigh Mhara - Irish Sea Fisheries Board (Cosgrave et al, 2008; Stokesbury et al. 2007). Tagging of fish in Irish waters demonstrated that Atlantic Bluefin released in Irish waters travel between European foraging grounds, known eastern breeding regions (Mediterranean Sea; Malta) and western Atlantic waters. These data also highlighted a tentative link between bluefin caught off Ireland and western management regions. In addition, recent electronic tagging of ABFT off Scotland has shown local movements of Atlantic bluefin tuna around Scottish waters (Neat et al. 2014), to the north of Ireland, and further south. Given these insights it is important

that stock origin, habitat utilisation and large-scale movement patterns of these Atlantic bluefin are characterised in more detail to ensure that the population models and concepts used in Atlantic bluefin tuna stock assessment and Management Strategy Evaluation (MSE) are parameterised as accurately as possible.

Investigation of the distribution and movements of Atlantic bluefin tuna in Irish waters is now a research priority for Ireland. The ocean waters off south Donegal are currently regarded by the International Commission for the Conservation of Atlantic Tuna (ICCAT) as an important area for Atlantic bluefin tuna and indications are that significant numbers arrive in the area over the period August to November each year. The Department of Agriculture Food and the Marine (DAFM) requested that the Marine Institute carry out a bluefin tagging programme in autumn 2016 to support the International Commission for the Conservation of Atlantic Tuna (ICCAT) Grand Bluefin Year Programme (GBYP) Atlantic research programme for Bluefin tuna.

ICCAT is an inter-governmental fishery organization responsible for the conservation of tunas and tuna-like species in the Atlantic Ocean and its adjacent seas. ICCAT compiles fishery statistics from its members and from all entities fishing for these species in the Atlantic Ocean, coordinates research, including stock assessment, on behalf of its members, develops scientific-based management advice, provides a mechanism for Contracting Parties to agree on management measures, and produces relevant publications. The Atlantic-wide research programme for Bluefin tuna was officially adopted by the ICCAT Commission in 2008 with a key priority being to improve understanding of key biological and ecological processes through electronic tagging experiments to determine habitat and migration routes. GBYP was adopted as official acronym of the research, which was initiated at the end of March 2010.

(ICCAT) manage Atlantic bluefin stocks under a two stock hypothesis for management and assessment i.e.

- Eastern Atlantic Ocean and Mediterranean Sea stock, that spawns in the Mediterranean Sea
  - Western Atlantic Ocean stock, that spawns in the Gulf of Mexico,
- with a boundary line dividing the stocks at 45 W longitude.

Results of Block et al. (2005) as well as tagging research by others including ICCAT and their collaborators indicates that movement across the currently assumed east-west boundary in the Atlantic, does occur. Scientists have used the spatial data to improve management models (Taylor et al. 2011, Kerr et al. 2016). ICCAT now recognises the need to develop quantitative knowledge of mixing

rates and integrate this knowledge into the current assessments, as well as new models to improve the multiple stock evaluation processes.

The Mediterranean and Eastern Atlantic bluefin tuna (considered a single stock) is a highly regulated species with annual catch limits set by the International Commission for the Conservation of Atlantic Tunas (ICCAT) based on scientific advice.

The EC became a Contracting Party to ICCAT (the International Commission for the Conservation of Atlantic Tunas) in 1997. EU TACs and quotas for Bluefin Tuna were set by Council for the first time at the December, 1997 meeting in order to implement ICCAT catch limits/TACs for these species. Ireland did not have a track record of targeting bluefin tuna and does not have a quota. Ireland has access to a by-catch “others” quota for MSs without a quota share to cover by-catches of BFT in commercial fisheries subject to certain conditions. Ireland has no quota to cover recreational fishing for BFT and has had no such quota since 1997. This tagging programme has been developed to improve understanding of the stock and migratory patterns.

In 2016, the Marine Institute obtained expert guidance from Stanford University (USA), University of Acadia (Nova Scotia, Canada) to successfully tag and release 16 Atlantic bluefin tuna off the coast of Donegal with satellite tags to identify spawning stocks and the level of mixing of stocks in Irish waters. Training in application of satellite tags to bluefin was provided to staff of the Marine Institute by these international tagging experts as direct experience in handling and tagging these extremely large fish is essential for future Irish tuna research work. A consortium continued to tag Bluefin tuna off the Donegal coast over the period September to October 2017 and was expanded to include Queens University, Belfast to investigate early behaviour and swim responses of bluefin tuna post capture and tagging. In total 9 fish were tagged with satellite tags and 3 fish tagged with accelerometer tags. The consortium works closely with ICCAT.

In 2018, the Marine Institute responded to a call for a short term contract or the tagging programme 2018 (Area B) of the Atlantic Wide Research programme for Bluefin Tuna (ICCAT GBYP 07/2018-Phase 8) and were successful in this bid. This report, taking into account the relevant scientific literature, contains:

- a. Full description of the work carried out for the tagging activities, with the total number of tagged tunas in each area and specification of any double tagged tuna;
- b. Detailed description of the methodology and protocols;
- c. Maps of the areas in which the tagging was carried out;

- d. Detailed tables with the definitive number of tagged specimens by area, size composition and type of tag (miniPATs + conventional spaghetti tag);
- e. Copy of the data input worksheets from the ICCAT tagging database;
- f. possible recommendations for adjusting the tagging strategy for tagging in future Phases of ICCAT GBYP;
- g. An Executive Summary.

## 2.1 Legislative/formal preparation:

Registration was required with the Irish Animal Welfare Authorities (HPRA) for licencing of the project under EU Directive 2010/63 and S.I. No. 543 of 2012 e.g. application for and receipt of short term Animal Welfare Licences for individuals from USA, Canada and the UK. Tagging as carried out under an Animal Welfare Licence (Project AE19121/P001 as required under Directive 2010/63 /EU and S.I. No. 543 of 2012).

ICCAT included the Marine Institute in the International Research Mortality Allocation (RMA) in 2018.

Derogation of fishing for Bluefin Tuna fishing for the purposes of research was reviewed and granted from the Irish Sea Fisheries Protection Authority (Appendix I).

## 2.2 Financial preparation:

ICCAT provided funds under contract to tag 10 BFT between September and October 2018 and to provide reports on tagging, tagging data and information. The Marine Institute supported a research budget to cover technical equipment (14 satellite tags), vessel charter, technical support of Marine Institute staff, fees for HPRA Animal Welfare licences and other costs.

An Official call and open tender (ETender) process for Vessel Charter and formal evaluation of tenders was implemented (Appendix II). Vessel charter was by open advertised competition and was awarded to skippers of the Leah C and the Evie Rose, vessels which had previously been used for tagging bluefin tuna in 2017 and 2016 (Appendix I).

Ordering and purchase of Marine Institute ten satellite tags to arrive in time for the charter period.

Establishment of new telemetry platforms with the ARGOS Satellite service group (CLS) for each new tag under Marine Institute account.

### **3. Tagging Locations and Methods**

Pop-up Satellite Archival Transmitting Tags (PSATs) are designed to track the large scale movements and behaviour of pelagic fish and other animals. Depth, temperature and light-level data are used to estimate location. At a user-specified date and time, a pin is corroded, releasing the PSAT to float to the surface and transmit summarised information via the Argos satellite system. Daily longitude of the migration track, is calculated onboard the PSAT using geo-location by light level techniques. Daily latitude can be calculated from transmitted light level curves using software provided by the tag manufacturer. The results provide the migration path and depth and temperature preferences of the study animal, as well as oceanographic data, in the form of depth-temperature profiles.

Accelerometer tags measure acceleration in three spatial axes and when attached to an animal, provide very high resolution measurements of relative activity levels and behaviour of the tagged animal. For fishes, accelerometers can provide powerful measurements of swimming effort including tail-beat frequency and amplitude, and can identify burst events associated with predation attempts. Since they index gravity, accelerometers can also reveal orientation of the animal in space (e.g. pitch and roll angles); important information for identifying abnormal swimming behaviour. The accelerometer devices are typically coupled with additional sensors including swim speed, water depth, and water temperature.

All fish were tagged off the Donegal coast within sight of shore (Figure 1, 2 and 3). Ten PSAT tags were provided by ICCAT while the Marine Institute provided 14 more. One vessel was used during the tagging period i.e. the Leah C. This vessel is equipped with transom doors to bring fish on board with specialized gear, fighting chairs to land the fish.

All fish were captured using angling methods and squid spreader bar lure setups with up to 11 separate plastic squid lures per rig. Only the last in the train bears a hook. Once the lure is taken the fish are played to the boat as quickly as possible and landed through the transom door of the vessel using a lip hook technique developed by the Block lab (Block et al. 2001). On board, the team performed



individual tasks e.g. placing of damp cloth over the eyes of the fish to keep the fish calm, constant irrigation of the gills using fresh saltwater, insertion of the PSAT into the dorsal musculature using a titanium tag dart or Domeier dart with retention loop. Two other numbered marker tags (spaghetti tags) were also applied to aid in recovering information from tagged fish. Small samples of tissue were removed for genetic analyses. As quickly as possible the fish were then released back into the water. The onboard procedure takes approximately 3 to 5 minutes. A length and girth were recorded as well as comments on the fish appearance in general, the landing, tagging and release condition of the fish upon release. The position of hook-up and release is noted and recorded. Details of tagging for satellite tags are given in Table 1 with supplemental information in Table 2. All fish caught were larger than 180cm with the largest being 233cm.

No significant problems were encountered during tagging operations and no modifications were made to the tagging protocols as outlined in the HPRA project licence. All fish were released alive with satellite tags and conventional tags attached (Table 1 and 2). ICCAT data sheets containing details are included in Appendix III.

#### **4. Results and possible recommendations for adjusting the tagging strategy in future Phases of ICCAT GBYP**

Since tagging, two tags have prematurely popped off : these were Marine Institute tags 165869 (Atlantic west of Plymouth 3rd November 2018) and 165877 (North coast of Spain 9th November 2018). No other tags have so far popped.

Long term retention of satellite tags is essential to obtain the best value for money as well as the most complete information on the migration and behaviour of bluefin tuna. It is essential to have operators who have tagged bluefin tuna with satellite tags on board at all times. Training of new taggers operators should be under strict control and be supervised by experts with at least two years of tagging bluefin tuna experience. Only limited numbers of tags should be placed by newly trained taggers.

Fish for satellite tagging should be brought to the boat as quickly as possible to avoid exhausting the fish. Handlining or retrieving the fish with the rod in the rod holder can assist with bringing the fish in quickly (Figure 3). Tagging of the fish while still in the water alongside the boat would be advantageous in terms of eliminating much of the stress associated with tagging on board, provided the tag could

be deployed quickly and easily. However, it is not possible to do this in all sea conditions and therefore, the presence of a transom door and ramp on the vessel is essential in order to avoid lifting the fish excessively onto the boat. Sufficient space is needed to be able to turn the fish and release it after tagging. Liphooking and bringing the fish onboard is also an operation which needs to be taught by experienced operators.

Types of anchor and tethering materials are crucial. Titanium anchors should not be too sharp to avoid them pulling out of the muscle too quickly. The use of a retention loop and a second anchor is highly recommended.

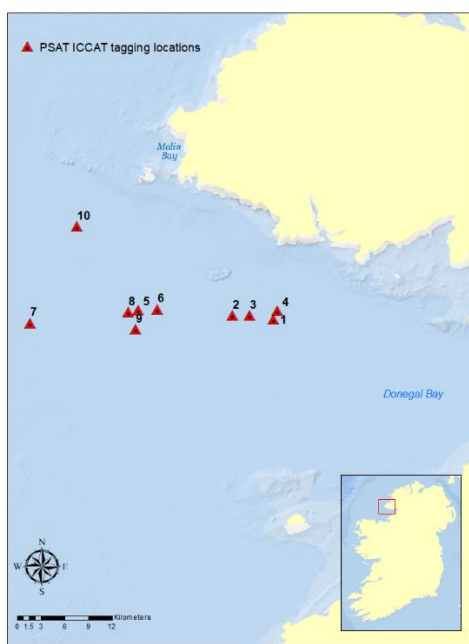


Figure 1 General area of bluefin tagging in 2018 – Tags provided by ICCAT.

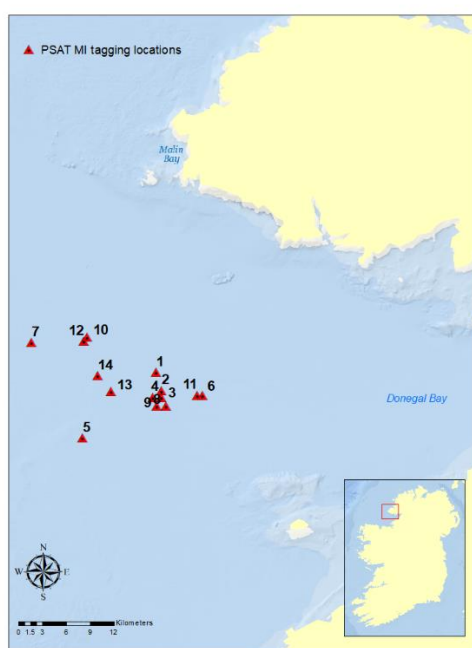


Figure 2 General area of bluefin tagging in 2018 – Tags provided by Marine Institute.

Table 1 Tagging details for Bluefin Tuna tagging in Ireland 2018

PSAT Tag Code	1st Floy Tag No	2nd Floy Tag No	Tagging Date	PTT No	Agency	Loop Anchor type	Tag Anchor Type	Latitude	Longitude	Length cm	Half Girth cm	Est. Wt kg
18P0273	BYP029393	BYP077572	27/09/2018	62332	ICCAT	WC Domier	WC Titanium	54 34.203	8 41.188	208	79	190kg
18P0176	BYP029381	BYP077557	27/09/2018	62334	ICCAT	Block Lab	Block Lab	54 34.350	8 43.987	221	85	230kg
18P0200	BYP029384	BYP077555	27/09/2018	62341	ICCAT	Block Lab	Block Lab	54 34.350	8 43.987	211	74	130kg
18P01777	BYP029379	BYP077561	27/09/2018	62335	ICCAT	Block Lab	Block Lab	54 34.526	8 40.941	205	70	110 kg
18P0175	BYP029400	BYP077554	28/09/2018	62333	ICCAT	Block Lab	Block Lab	54 34.55	8 50.395	211	82	150kg
18P0245	BYP029392	BYP077575	28/09/2018	62348	ICCAT	Block Lab	Block Lab	54 34.594	8 50.205	210	79	190kg
18P0246	BYP029378	BYP077553	28/09/2018	62313	ICCAT	Block Lab	Block Lab	54 34.052	8 57.743	210	79	190kg
18P0236	BYP029396	BYP077565	28/09/2018	34827	ICCAT	Block Lab	Block Lab	54 34.477	8 51.071	227	77	180kg
18P0201	BYP029383	BYP077549	28/09/2018	62342	ICCAT	Block Lab	Block Lab	54 33.802	8 50.566	227	85	200kg
18P0238	BYP029390	BYP077566	28/09/2018	34836	ICCAT	WC Domier	WC Titanium	54 37.859	8 54.587	200	73	110kg
17P0221	BYP077558	BYP027605	29/09/2018	41487	MI	WC Domier	Block Lab	54 32.257	8 49.316	212	70	110kg
16P1251	BYP029389	BYP077574	29/09/2018	165869	MI	WC Domier	WC Titanium	54 31.540	8 48.933	188	75	90kg
16P1269	BYP029386	BYP077563	29/09/2018	165877	MI	WC Domier	WC Titanium	54 31.282	8 49.537	228	84	200kg
16P1257	BYP029385	BYP077562	29/09/2018	165871	MI	WC Domier	WC Titanium	54 31.282	8 49.537	221	77	190kg
18P0560	BYP027593	BYP077583	12/10/2018	64735	MI	Block Lab	Block Lab	54 29.680	08 54.279	220	74	140kg
18P0555	BYP027641	BYO077540	14/10/2018	64732	MI	Block Lab	Block Lab	54 31.364	08 46.151	217	68	N/A
18P0544	BYP027621	BYP077571	14/10/2018	64726	MI	Block Lab	Block Lab	54 33.429	8 57.745	219	73	180kg
18P0550	BYP027591	BYP077541	14/10/2018	64728	MI	Block Lab	Block Lab	54 30.929	8 49.252	189	67	90kg
18P0553	BYP027579	BYP077569	14/10/2018	64729	MI	Block Lab	Block Lab	54 30.923	8 49.252	208	72	115kg
18P0554	BYP027645	BYP077548	14/10/2018	64730	MI	Block Lab	Block Lab	54 31.364	8 46.151	220	75	150kg
18P0559	BYP027635	BYP077564	14/10/2018	64734	MI	Block Lab	Block Lab	54 33.658	8 53.966	195	72	170kg
18P0547	BYP027613	BYP077544	14/10/2018	64727	MI	Block Lab	Block Lab	54 33.489	8 54.195	223	76	215kg
18P0564	BYP027611	BYP077573	15/10/2018	64736	MI	Block Lab	Block Lab	54 31.497	08 52.344	223	74	140kg
18P0557	BYP027594	BYO077550	15/10/2018	64733	MI	Block Lab	Block Lab	54 32.122	08 53.26	217	74	140kg

Table 2 Supplementary information relating to sampling and capture

PSAT Tag Code	DNA Sample No	Time to Boat	Handling Time	Injuries/Comments	Name of Boat	Type of Bait/Lure	Tissue sample
18P0273	YES	12	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0176	YES	25	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0200	YES	15	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P01777	YES	17	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0175	YES	20	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0245	YES	24	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0246	YES	20	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0236	YES	15	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0201	YES	18	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0238	YES	10	< 4 mins	NONE	Leah C	Plastic Squid	yes
17P0221	YES	21	< 4 mins	NONE	Leah C	Plastic Squid	yes
16P1251	YES	18	< 4 mins	NONE	Leah C	Plastic Squid	yes
16P1269	YES	60	< 4 mins	NONE	Leah C	Plastic Squid	yes
16P1257	YES	38	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0560	YES	19	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0555	YES	15	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0544	YES	17	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0550	YES	22	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0553	YES	12	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0554	YES	19	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0559	YES	12	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0547	YES	18	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0564	YES	16	< 4 mins	NONE	Leah C	Plastic Squid	yes
18P0557	YES	20	< 4 mins	NONE	Leah C	Plastic Squid	yes



Figure 2. Squid spreader bar being fished with up to four sets operating close to the surface (orange circles) – note proximity to land during some fishing operations in 2017.



Figure 3. Bluefin tuna being played into the boat quickly using the rod rest to avoid stress; tagging procedure on board. Note constant irrigation of gills with fresh seawater during tagging and subsequent sampling of tissues for genetic stock identification. (Figure not to be reproduced without permission)

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## **6. Acknowledgements**

Particular thanks go to Adrian Molloy and Michael Callaghan who skippered the vessels and to a number of anglers who caught fish for the project. Michael Stokesbury (Acadia University, Nova Scotia, Canada), Barbara Block and Robert Schallert provided expert guidance, advice and assistance with tagging. Leonie O'Dowd (MI) provided assistance with tendering and procurement.

## **Appendix II Derogation to conduct scientific research fishing 2017**



AN t-ÚDARÁS UM  
CHOSAINT  
IASCAIGH MHARA

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PROTECTION  
AUTHORITY

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04<sup>th</sup> September 2018

DSR 13/2018

Dr Niall Ó'Maoileidigh  
Marine Institute  
Ireland

### **DEROGATION TO CONDUCT FISHING FOR SCIENTIFIC RESEARCH**

#### **"LEAH C" & "EVIE ROSE"**

Dear Dr Ó'Maoileidigh

Please note that the Sea-Fisheries Protection Authority is pleased to agree to your request for a specific derogation to conduct fishing for scientific research subject to compliance with the terms outlined below:

**Type of survey:** A research consortium has been formed comprising the Marine Institute, Stanford University (USA) and Queens University (Belfast). The consortium will aim to tag between 10 and 20 Atlantic bluefin tuna (ABFT) with electronic satellite archive tags (PSATS) and conventional tags in the coastal waters of the North West of Ireland between September and mid- November 2018. The tags are supplied by the International Commission for the Conservation of Atlantic Tunas ICCAT and the Marine Institute. The consortium will also undertake biological sampling of fin and muscle tissue.

**Vessel Details:** Name: **LEAH C & EVIE ROSE** (angling charter vessels)

**Area coverage:** ICES VIa & VIIb; Donegal Bay.

**Period:** Between 08<sup>th</sup> September & 15<sup>th</sup> November 2018, approx. 20 days in total during this period.

**Target Species:** Bluefin Tuna (*Thunnus thynnus*)

**Scientific Staff:** Dr Niall Ó'Maoileidigh & Marine Institute staff along with colleagues from Stanford and Queens University Belfast (at least two on board at all times during trial)

Please be advised that a copy of this document should be retained onboard the vessel whilst engaged in the scientific work.

Finally I would like to wish you and your team every success with the project.

Christopher Nalty  
Sea-Fisheries Operations Manager  
cc: [Naval Service, SFPa-SMT, SFPa-Senior Port Officers, European Commission]





**Invitation to Tender for the Supply of a  
Commercial Vessel to tag Bluefin Tuna off the  
Coast of Ireland for the Marine Institute,  
Rinville, Oranmore, Co. Galway.**

**Ref: ITT18-031**

## Table of Contents

	Page
1. Introduction	3
2. Scope of Tender	4
3. Contract Terms	6
4. Tax Clearance Certificate	6
5. Notice from Marine Institute	7
6. Tenderer's Queries and Clarification Requests	7
7. Electronic Submissions	7
8. Expressions of Interest	8
9. Closing date for Tender Responses	8
Appendix 1 – Marine Institute Tender Postbox Policy	
Appendix 2 – Draft Vessel charter Agreement	
Appendix 3 – Form of Tender	

## 1. Introduction

The Marine Institute, a semi State body, wishes to invite tenders for the supply of a commercial fishing/angling vessel to conduct satellite tagging of Bluefin tuna in the general area of the South West to North West Coast of Ireland. The successful applicant(s) will be selected based on technical suitability, experience in the area, holding of current and previous experience in scientific research and surveys, as well as cost.

The Marine Institute also requires that the tender hires one suitably qualified angler who will secure the specimens for tagging. It shall be the responsibility of the successful applicants to pay the angler at their appropriate daily rate.

The value of the contract to be awarded pursuant to this tender process is below the threshold above which advertising of services contracts in the Official Journal of the European Union is obligatory. Therefore, this competition is not subject to the European Communities (Award of Public Authorities' Contracts) Regulations 2006.

The Marine Institute is the national agency responsible for Marine Research, Technology Development and Innovation (RTDI). The Marine Institute seeks to assess and realise the economic potential of Ireland's 220 million acre marine resource; promote the sustainable development of marine industry through strategic funding programmes and essential scientific services; and safeguard our marine environment through research and environmental monitoring.

The Institute was set up under the 1991 Marine Institute Act with the following general functions:

*"to undertake, to co-ordinate, to promote and to assist in marine research and development and to provide such services related to marine research and development, that in the opinion of the Institute will promote economic development and create employment and protect the environment."* - Marine Institute Act, 1991.

Fisheries Ecosystem Advisory Services (FEAS) of the Marine Institute, has its mission to "to research, assess and advise" on the sustainable exploitation of marine fisheries resources and to promote the sustainable development of the marine living resources.

### **Invitation to tender**

A requirement exists for two separate charters of a fishing/angling vessel for a period of up to 10 days each to scout areas where Bluefin tuna may be present and to capture a limited number of specimens for tagging. **Each charter represents one Lot and can be bid for independently or together.**

The project is funded by the Marine Institute. The payment will relate solely to days spent at sea.

### **Lot 1**

Vessels are invited to tender on the basis of their ability to undertake the survey schedule (10 days from the beginning of September 2018). The survey will operate on a daily basis leaving port early in the morning and returning late at night. This will be agreed with the skipper each day with the scientist in charge and will be weather dependent. The general area to be sampled will be the South West to North West Coast of Ireland.

The survey will ideally take place over a 10 day period in the general window of September depending on conditions.

Detailed information of the track and survey plan will be provided by the Marine Institute. The successful applicants will be selected based on technical suitability, cost of charter, and previous experience in scientific research and tagging surveys.

## **Lot 2**

Vessels are invited to tender on the basis of their ability to undertake the survey schedule (10 days from the beginning of October 2018). The survey will operate on a daily basis leaving port early in the morning and returning late at night. This will be agreed with the skipper each day with the scientist in charge and will be weather dependent. The general area to be sampled will be the South West to North West Coast of Ireland.

The survey will ideally take place over a 10 day period in the general window of October depending on conditions.

Detailed information of the track and survey plan will be provided by the Marine Institute. The successful applicants will be selected based on technical suitability, cost of charter, and previous experience in scientific research and tagging surveys.

The Marine Institute reserves the right not to proceed with the tagging programme and in such circumstances the tender process will be terminated and no contract will be issued.

## **2. Scope of Tender**

This is an Open Invitation to Tender for commercial fishing/angling vessels as service suppliers.

**Note:** No guarantee is made by the Marine Institute that the tender shall be awarded.

Tender respondents shall be evaluated for **each Lot in two phases**. Tenders must pass **each criterion** in Phase 1 to proceed to Phase 2. This is a pass/fail phase and no points will be awarded. If all criteria in Phase 1 are not met, tenders will be eliminated.

**Lot 1 & 2      Phase 1**

Please note tenderers for Lot 1 & 2 may only proceed to the Phase 2 if they pass all of the criteria below. Each of the criteria below are viewed as essential and if one or more of the criteria below is not met then tenders will be automatically eliminated. This is a pass/fail phase and no scoring will be attached to the results.

Criteria No.	Please note tenderers may only proceed to the Phase 2 if they pass <u>all of the criteria</u> below.	Pass/Fail
1	Confirmation that tenderers has or will be in a position to obtain Public Liability insurance of not less than €2.6 million and Employers Liability of €13 million (if applicable).	
2	Valid <b>Safety Certificate</b> for vessels	
3	Confirmation that the required <b>Safety Equipment</b> is on board, serviced and functioning properly – a statement from the vessel owner is required with submission	
4	The proposed Vessels must meet the minimum <b>Vessel Technical Specification</b> . Vessels must:	
	a. be at least 8 meters in length.	
	b. have a range of at least 20 miles offshore	
	c. space for at least two experienced anglers	
	d. space for up to 5 person scientific tagging team	
	e. be experienced in offshore angling operations	
	f. be able to stay at sea for at least 12 hours	
	g. have previous experience with catching Bluefin tuna	
5	Availability for Lot 1 – confirm availability to undertake charter in September	
6	Availability for Lot 2 – confirm availability to undertake charter in October	

Please note that when submitting a response to each of the criteria above it is sufficient for tenderers to declare that they have the relevant capacity for Criteria 1, 2 & 4. The Marine Institute will seek verification and evidence of such capacity only in the event of a tenderer being considered for the award of the contract. The declaration should clearly and unambiguously indicate the tenderers ability to meet each of the Marine Institute's requirements above.

## Lot 1 & 2 Phase 2

Tender respondents shall be evaluated on the following criteria:

Criteria		Max points
Previous experience in undertaking collaborative research and scientific work. Applicants should describe in detail previous work undertaken.	Fish tagging work	20
	Experience in undertaking marine research surveys	10
	Carriage of fisheries scientists/observers	5
	Provision of biological samples	5
	<b>Max points for this criteria</b>	<b>40</b>
Demonstrate a minimum of 5 years' experience of angling activity in the north-west. Skippers should specify number of licensed years spent angling. Points will be allocated to a max. 30 points for 10+yrs .	5 years	10
	More than 5 years but less than 10 years	20
	10 years or more	30
	<b>Max points for this criteria</b>	<b>30</b>
Cost - Complete form of Tender Appendix 3.  A rate per day for up to 10 days should be stated. This must include vessel charter and the provision of two experienced anglers.	<b>Max points for this criteria</b>	<b>30</b>
	<b>Max. Total Points</b>	<b>100</b>

### 3. Contract Terms

A Charter Agreement will be entered into with the successful tenderer. This Agreement will stipulate the details of the survey. Please see draft contract attached in Appendix 2.

## 4. Tax Clearance Certificate

Tenderers being awarded a public contract must have tax clearance. Most applications for Tax Clearance Certificates can now be made online. **To reduce the administrative burden on tenderers use of this online facility is strongly encouraged.** It can be accessed at [www.revenue.ie](http://www.revenue.ie) under “What can I do online”, “Tax Clearance”. The Institute can then verify online the tax-cleared status of applications for tenders, which eliminates the need for submission of a hard copy of a Tax Clearance Certificates.

## 5. Notice from Marine Institute

The Marine Institute may (up to five (5) working days prior to the deadline for receipt of tenders) issue a notice to all Tenderers, deleting, varying or extending any item in these documents. Tenderers shall immediately acknowledge the receipt of each such notice in writing addressed to the Marine Institute. Any such notice shall then become one of the Tender Documents and shall be treated as such by the Tenderer.

## 6. Tenderer’s Queries and Clarification Requests

Any queries arising from the Tender Documents or the Instructions to Tenderers or information provided to the Tenderers shall be raised in writing as soon as possible and in any case not later than five (5) working days before the closing date for return of Tenders through [www.etenders.gov.ie](http://www.etenders.gov.ie)

Requests for information made by telephone or to any other email address shall not be responded to.

## 7. Electronic Submissions

The Marine Institute will accept responses electronically via the e-Tenders website: <http://www.etenders.gov.ie/>

Suppliers should submit tender responses electronically when the Marine Institute has indicated in the notice that the postbox option will be used for the return of documents. This will be indicated by a small key symbol next the notice summary and it will also be stated in the Closing Date for Tender Responses.

For full comprehensive details on the e-Tenders Postbox policy, please refer to **Appendix 1**.

## 8. Expressions of Interest

The Marine Institute will accept responses electronically via the e-Tenders website: [www.etenders.gov.ie](http://www.etenders.gov.ie)

Suppliers should submit tender responses electronically when the Marine Institute has indicated in the notice that the postbox option will be used for the return of documents. This will be indicated by a small key symbol next the notice summary and it will also be stated in the Closing Date for Tender Responses.

For full comprehensive details on the e-Tenders Postbox policy, please refer to **Appendix 1**.

## 9. Closing Date for Tender Responses

### **All tenders must:**

Be submitted using the on-line <http://www.etenders.gov.ie> TENDER POSTBOX. This is an online submission facility which allows awarding authorities to receive tenders responses from suppliers

For further information please refer to **Appendix 1**

- Be received prior to **1600Hrs Wednesday 15<sup>th</sup> AUGUST 2018**

**Please note that non-conformance with these requirements will result in disqualification.**

**Please note that any information submitted may be subject to the Freedom of Information Act, 1997.**



**Appendix 1****Marine Institute Etenders Postbox Policy**

A User Guide to E-tenders and instructions on submitting a response through the e-Postbox may be found here:

<http://etenders.gov.ie/Media/Default/SiteContent/UserGuides/etenders%20Supplier%20Quick%20User%20Guide.pdf>

**Please note:**

The onus is on the applicant to ensure that the tender reaches the Marine Institute or e-tenders on time. It is not advisable to wait until the last moment to upload documents in case of internet connection difficulties or other technical problems. Neither the Marine Institute nor e-tenders take responsibility for documents which do not reach us by the deadline, for any reason.

**Appendix 2****Charter Agreement**

**See additional documents**

**Appendix 3****Form of Tender**

To: The Marine Institute

From (*Name of Tenderer*): \_\_\_\_\_

I/We have reviewed the Invitation to Tender for *Bluefin Tuna Tagging Lots 1 & 2* and do hereby offer to provide the services set out therein, as may be required by the Marine Institute, in exchange for the following fee, which is inclusive of all costs, overheads and expenses:

Lot	Fixed Cost per day (€) exc VAT, inclusive of all subsidiaries	Total Fixed Cost (x10 days) (€) exc VAT inclusive of all subsidiaries
Lot 1 September	€	€
Lot 2 October	€	€

***Fee is to be quoted in Euro (€), excluding VAT***

1. If awarded this contract, the Tenderer accepts the terms of the **Bluefin Tuna Tagging Contract**
2. The Tenderer agrees to keep this offer open for acceptance by the Marine Institute for a period of 90 days from the deadline date for receipt of Tenders.
3. The Tenderer has read and confirms its acceptance of the Instructions to Tenders.
4. The Tenderer agrees to treat the details of this offer, together with any subsequent correspondence or contract, as private and confidential.
5. The Tenderer acknowledges that the Marine Institute shall not be responsible for any costs incurred by in the preparation of its Tender or any associated work effort, howsoever arising.
6. The Tenderer acknowledges that the essence of the public procurement process is that the Marine Institute shall receive bona fide competitive tenders from all Tenderers. In recognition of this principle, the Tenderer certifies that this is a bona fide tender, intended to be competitive, and that it has not fixed or adjusted the amount of the tender by or under or in accordance with any agreement or arrangement with any other Tenderer. The Tenderer is aware of the prohibitions contained in Article 101 of the Treaty on the Functioning of the European Union (TFEU) and the Competition Act 2002.

**Dated this** \_\_\_\_\_ **day of** \_\_\_\_\_ **2018**

**Signature:**

**Print Name:** \_\_\_\_\_

**Address:** \_\_\_\_\_ **Contact No:** \_\_\_\_\_

