

## OVERVIEW OF THE ITALIAN FLEET FISHING ALBACORE (*THUNNUS ALALUNGA*)

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### SUMMARY

*Italian fishing fleet targeting albacore was investigated during 2015. The survey was carried out in the framework of an Italian Ministry Project. Fleet size, distribution and fishing strategies were investigated through specific surveys. The main features that characterize the Italian albacore fleet are a drifting surface longline fishery, mainly carried out by the Sicilian fleet, in terms of tons. Different fishing strategies were identified.*

### RÉSUMÉ

*La flottille de pêche italienne ciblant le germon a été étudiée en 2015. La prospection a été réalisée dans le cadre d'un projet ministériel italien. La taille, la distribution et les stratégies de pêche de la flottille ont été étudiées par le biais de prospections spécifiques. La flottille italienne ciblant le germon est principalement opérée dans le cadre de la pêcherie opérant à la palangre dérivante de surface et est exploitée en majeure partie par des navires siciliens, en termes de tonnes. Différentes stratégies de pêche ont été identifiées.*

### RESUMEN

*La flota de pesca italiana que se dirige al atún blanco fue estudiada durante 2015. La prospección se realizó en el marco de un proyecto del ministerio italiano. Se investigó el tamaño de la flota y su distribución y estrategias de pesca mediante prospecciones específicas. La flota italiana de atún blanco opera sobre todo una pesquería de palangre de deriva de superficie explotada por buques de la flota siciliana en términos de toneladas. Se identificaron diferentes estrategias de pesca.*

### KEYWORDS

*Albacore, Mediterranean, fishing fleet, drifting surface longlines*

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## 1. Introduction

Albacore is a traditional fishing resource for Italian fishery, and Italy represents the most important producer of the Mediterranean; on the contrary, data concerning specific fleet size and distribution, and information about fishing activities are very poor or lacking at all. Activities were carried out during 2015 and 2016 in the framework of a project funded by Italian Ministry of Agriculture, Food and Forestry Policies.

## 2. Materials and methods

A series of activities were carried out during 2015 and 2016, referred to 2015 fishing season, in the framework of a project funded by the Italian Ministry. The specific project “Description of fishing activities of albacore (*Thunnus alalunga*) to identify reference parameters for the stock management” is a sub-project of a wider project together with other scientific partners, still going on: “Scientific bases and tools to support management fishing plans in the framework of the Common Fishery Policy and of the environmental and economic policies”. The data are therefore to be considered as preliminary.

Project activities were focused to investigate about the following targets:

- Size and distribution of the fleet
- Identification of the main fishing gears
- Identification of fishing areas and strategies

“On-the-field” activities have been organized in two steps:

- a first phase of screening through the network of Unimar local technicians in all the coastal regions, to identify if and where albacore fishing activities were constantly carried out:
- a survey, through the distribution and analysis of specific forms, in the areas previously selected, to clarify aspects regarding characteristics of the fishing gear and of the fishing activities.

Official data sets, such as ICCAT database, Italian logbooks and data coming from Data Collection Framework were also investigated.

## 3. Results and discussion

### 3.1. Fleet distribution

The screening phase showed the Italian situation in 2015 (see **Figure 1**), identifying three different situations: regions with constant fishing activities, regions with only occasional fishing activities, regions without any reported activity.

With the partial exception of Sardinia, fishing fleet is concentrated in the south regions of Puglia, Calabria and Sicily, while in other regions only sporadic activities could be detected.

The following survey was focused in the south of Italy, where apparently the main fleet is based. The “on the field” investigations identified the main fishing ports (**Figure 2**) with the number of boats that declared to fish albacore, either as target or as by-catch. Considering the total of this three regions, and an estimate from the Sardinia, a total of 130-140 boats can be estimated as the Italian fishing fleet.

### 3.2. Distribution of fishing areas and catches

The second part of the survey was focused on identifying fishing gear, gear characteristics, and fishing areas and strategies.

An analysis of the Iccat database (2015), and of the Italian logbooks (2015) were also carried out. **Figure 3** shows that approximately 86 % of the catches come from the drifting surface longlines, with still a residual percent of unreported gear, possibly belonging to the longline as well.

The distribution of catches in the Italian regions as it appears from an analysis of the 2015 logbooks (**Figure 4**) shows that almost 90% of the national catches come from Sicily: Sicily therefore represents by far the most important region for albacore fishing.

As far as the fishing season is concerned, an analysis of the landings for the 2015 (ITA DCF) is shown in **Figure 5**: the bulk of the catches are concentrated in the summer months.

**Figure 6** shows the main fishing areas as reported by the local fishermen. Two groups of fishing areas can be identified; a first group is closer to the coast, with a wide area around Aeolian islands in the South Tyrrhenian and many areas in the Ionian Sea. A second area is far offshore, in the south Ionian Sea corresponding to Greek region.

### **3.3. Fishing strategy**

It was possible to identify two main fishing strategies, corresponding as well to different group of boats and fishing gear characteristics: a first strategy is carried out by boats generally up to 15 m LOA, or below. They fish albacore as seasonal, or occasional target, “shifting” their target to the swordfish anytime is possible depending on the seasonal opportunities and legal closures of fishing season. Longline can have a variety of lengths and number of hooks (from 800 to 3000), according to local traditions, fishing trips are normally short (commonly one day), the reference market is local.

A second fishing strategy is adopted by a very limited number of specialized boats (probably no more than 20), coming from Sicily, of a larger size (LOA not less than 20 m). Fishing areas are far offshore (normally southern Ionian Sea, but up to the North African waters), and fishing trips are much longer (10 days, up to 15). They are targeted specifically for albacore, and for canned product market. Longlines characteristics are much more constant, with an average of 3500 hooks and a length of around 50 Km. Despite the very small number of boats, they produce the majority of the Italian catches.

## **4. Final remarks**

The survey identified the characteristics and size of the Italian fleet. It is now clear that the majority of the Italian fleet catches albacore with drifting surface longlines in a seasonal activity, shifting as soon as possible to the swordfish fishing. Only a very limited number of Sicilian boats catches albacore as target species all along the main fishing season (around summer months) and in offshore areas, producing the bulk of the Italian catches. Unfortunately, for this same reasons, this kind of fishing is very difficult to monitor, even because landings are normally out of the Italian ports.

## **References**

ICCAT Statistical database 2016- Nominal Catch information.

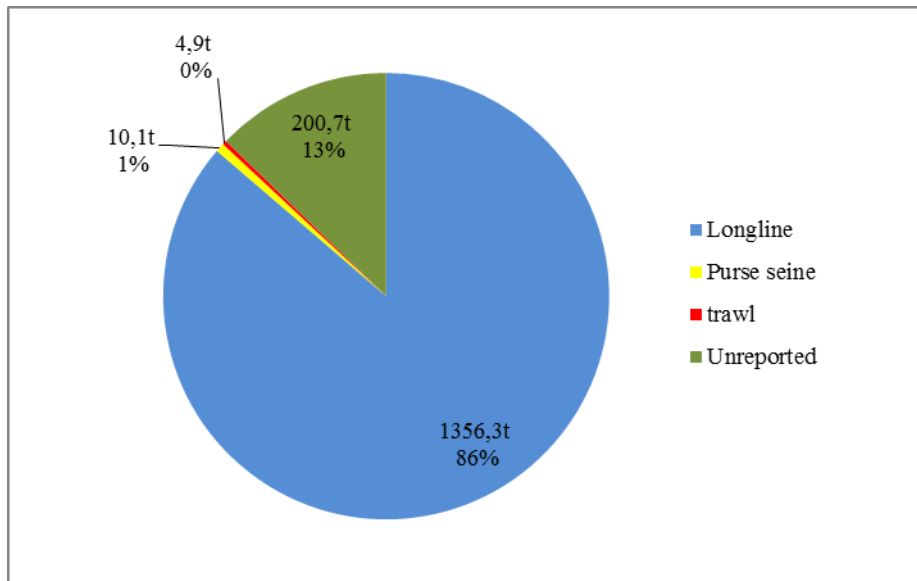
DCF (Data Collection framework) Italian data 2015



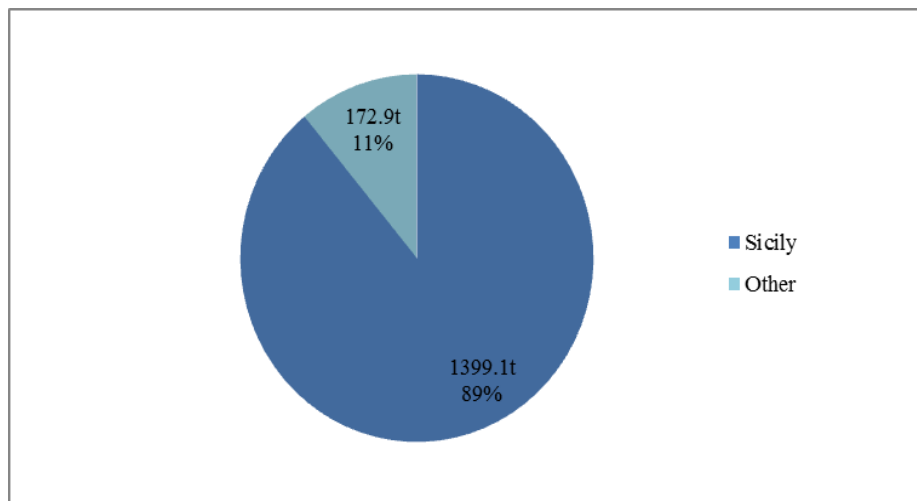
Figure 1. Fleet distribution.



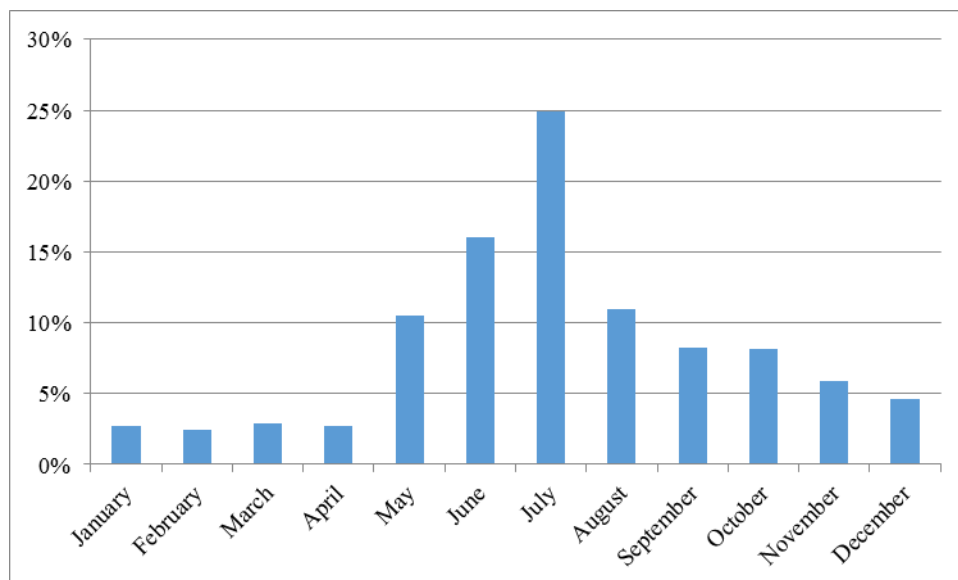
Figure 2. Distribution and number of vessels in the main fishing ports.



**Figure 3.** National nominal annual catch (tons) by gear (Source: Iccat database 2015).



**Figure 4.** Distribution of national catches (tons) divided between Sicily and all the other Italian regions (Source: Italian logbook 2015).



**Figure 5.** Percentage distribution of the number of individuals in the national catches per month (Source ITA-DCF 2015).



**Figure 6.** Main fishing areas for albacore.