

**THE FIRST CERTIFICATION OF BLUEFIN TUNA ISSUED IN THE  
MEDITERRANEAN SEA: THE ECOCREST® LABEL PROVIDED FOR  
THE 2009 PRODUCTIONS OF TWO TRADITIONAL TUNA TRAPS IN SARDINIA**

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**SUMMARY**

*The difficult situation of the recent management of the eastern Atlantic bluefin tuna (Thunnus thynnus) indirectly needs initiatives able to distinguish the best practices and the transparency of the fishing activities. The traditional tuna traps, with their long history, supported by a large amount of literature, are important from a sustainable production point of view and for cultural reasons. For the very first time, in 2009 the ECOCREST® certification was granted to a Mediterranean fishery and this was possible for two ancient tuna traps (“Tonnare”) in Sardinia, (Italy: the tuna trap of Isola Piana and the tuna trap of Portoscuso, owned by the same company. The certification and the use of the ECOCREST® label will allow the consumers to distinguish this product on the market and to have a serious guaranty regarding the respect of the fishery, environmental and labour rules and the ethics of the production.*

**RÉSUMÉ**

*La situation difficile dans laquelle s’est récemment trouvée la gestion du thon rouge de l’Atlantique Est (Thunnus thynnus) nécessite indirectement des initiatives capables de faire la distinction entre les meilleures pratiques et la transparence des activités de pêche. Les madragues thonières traditionnelles, objet d’une longue histoire étayée par une vaste documentation, sont importantes d’un point de vue de production soutenable et pour des raisons culturelles. Pour la toute première fois, en 2009, la certification ECOCREST® a été accordée à une pêcherie méditerranéenne et ceci a été possible pour deux anciennes madragues thonières (“Tonnare”) en Sardaigne (Italie) : La madrague thonière d’Isola Piana et la madrague thonière de Portoscuso, appartenant à la même compagnie. Le certificat et l’emploi de l’étiquette ECOCREST® permettront aux consommateurs de distinguer ce produit sur le marché et de disposer d’une garantie sérieuse quant au respect de la pêcherie, des règles environnementales et professionnelles et de l’éthique de la production.*

**RESUMEN**

*La difícil situación de la ordenación reciente del atún rojo del Atlántico este (Thunnus thynnus) requiere indirectamente iniciativas que permitan distinguir las mejores prácticas y la transparencia en las actividades pesqueras. Las almadrabas de atún tradicionales, con su larga historia, y respaldadas por un ingente volumen de bibliografía, son importantes tanto porque suponen un modo de producción sostenible como por razones culturales. Por primera vez, en 2009, se ha otorgado la certificación ECOCREST® a una pesquería Mediterránea, y esto ha sido posible para dos antiguas almadrabas de atún (“Tonnare”) en Cerdeña, Italia: la almadraba de atún Isola Piana y la almadraba de atún Portoscuso, propiedad de la misma empresa. La certificación ECOCREST® y la utilización de su etiqueta permitirá a los consumidores distinguir este producto en el mercado y tener una garantía firme en lo que concierne al cumplimiento de las normas laborales, medioambientales y pesqueras y a la ética en la producción.*

**KEYWORDS**

*Bluefin tuna, conservation, catch composition, traditional fishery,  
tuna trap, Mediterranean Sea, ecolabel*

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## 1. Introduction

The tuna trap fishery is a one of the most ancient fishing activity in the world, possibly the oldest among the industrial ones, going back to several centuries before Christ, till the Phoenicians times (Aubert, 1987, Doumenge, 1988). This activity is well documented in many scientific papers, with a particular attention to the tuna traps in Sardinia (Addis *et al.*, 1997, 1998, 2006; Angotzi, 1901, 1926; Belloc, 1961; Cau, 1993, 1996; Cetti, 1777; Dean *et al.*, 2003; De Cristoforo, 1970; Di Natale, 1988, 1989; Doneddu, 1983; Doumenge, 1998, 1999; Fromentin, 2009; Mariotti, 2003; Martelli, 1926; Mondardini, 1999; Parona, 1919; Pavesi, 1889; Scaccini, 1965; Scaccini and Biancalona, 1959; Secchi, 1918; Sella, 1929; Valle, 1800). The tuna traps were very numerous all around the Mediterranean coasts till the first part of the XX century (Doumenge, 1998; Parona, 1919; Pavesi, 1889; Sarà, 1983), but they decreased to less than ten in the last decade.

Independently from the general increasing effort on bluefin tuna (*Thunnus thynnus*, Linnaeus, 1758) in the most recent decades, the tuna traps decreased their impact on the stock. Their catches can be easily checked, because the fishing operations, ending with the traditional “mattanza”, are not so numerous in the short fishing season (May to the beginning of June).

The bluefin tunas which enter into the trap (“*tonnara*” in Italian) are usually adult tunas, just before or after the spawning and sometimes small tunas, at the first maturity, are found together with medium and large size specimens. Juveniles can be caught only by a different type of tuna trap, the “*tonnarella*”, having nets smaller than the traditional ones and usually set in different coastal areas, where these young size classes usually concentrate for feeding reason.

The tuna trap in Portoscuso initiated its activity in 1497 (and then restarted again, after some unknown times of inactivity, in 1587), while the tuna trap in Isola Piana-Carloforte began in 1698. The traps located in this area in SW Sardinia had several troubles in the past, caused by the negative impact of anthropic activities and sludge coming from coastal mines and industries, which heavily affected the presence of tuna and then the catches (Addis *et al.*, 2008, 2009; Di Gregorio and Massoli-Novelli, 1992; Grassi, 1913; Mazzarelli, 1917).

## 2. The ECOCREST© certification

The ECOCREST© certification is officially released by the Fondazione Acquario di Genova Onlus, a non-profit Foundation, having several public administrations among its members and under the legal control of the Ligurian Regional Government. Among the Board members of the Foundation there are also marine scientists and a high reputed international Scientific Committee is also in place.

The ECOCREST© label was officially registered in 2006 and the first certification was released in Australia in 2007.

The ECOCREST© certification procedure was developed in 2006 to identify all the aquatic products having a very high ecological and ethic level. The certification is also supported by the International Labour Organisation (ILO) of the UN. It is based on independent inspections, having the duty to check the full respect of the sustainable exploitation of the resource, the FAO code of conduct, the local environmental, fishery, labour and health rules and the guidelines of the ILO, including the protection of children. Further requirements are also included, like the provision to decrease and reuse the discards or minimise the impact on the environment. When a production is harvested in developing countries, fair trade agreements, transfer of know-how or the involvement of the local inhabitants in the process are also necessary elements. In the specific case of the bluefin tuna (*Thunnus thynnus*, L.), it is also mandatory the full respect of the ICCAT rules and the following EC and Italian regulations.

The royalties coming from the certification go back to the Nature, and they are fully used to carry out research and conservation projects or educational and awareness activities, which can be chosen by the producer requiring the certification. The philosophy of the entire system is to transparently ensure a traceability of the product and an added value to the distribution chain till the consumer. Products able to get the certification are considered top level ones on the world market.

### 3. The certification of the tuna trap production in Isola Piana and Porto Scuso

The ECOCREST® certification was initially requested by the company “Carloforte Tonnare PIAM s.r.l.”, owner of the two ancient tuna traps in Isola Piana and Portoscuso (SW Sardinia, Italy) in 2008, but it was necessary to deeply analyse the situation before establishing the preliminary feasibility of the procedure. As a matter of fact, the request was carefully examined, because the Bluefin tuna (*Thunnus thynnus* L.) stock, according to the ICCAT, is overexploited (ICCAT, 2009) and there are several serious management problems (Di Natale, 2008). Due to the fact that overexploitation was never attributed to any tuna trap or in general to the tuna traps activity, and that this gear is considered selective, with a high cultural and historical relevance, it was decided to begin the certification procedure.

In 2009 it was decided to carry out the independent inspection, that was conducted by the scientists of the Department of Animal Biology and Ecology of the University of Cagliari and by the military staff of the Capitaneria di Porto of Cagliari or by the staff of its local offices. All the fishing operations were directly monitored, checking the enforcement of all the ICCAT, EC or national rules and the respect of the national quota and the size of each specimen. All the few bluefin tunas smaller than 30 kg that entered into the traps were released alive at sea. A total of 115 tons of bluefin tunas were caught by the two traps in 2009 and landed in the tuna factory in Carloforte. The size frequency of a subset of the retained catches is shown in **Figure 6**.

The inspection reports, including those related to all permits, were transmitted by the University of Cagliari to the Foundation for the evaluation and for keeping them in the chain of custody (CoC).

The company has also a plan to better reuse the discards and, since 2009, they have been beginning the procedure to install the solar panels to provide the electric power necessary for the factory, strongly reducing its carbon footprint.

After a further check with the Ministry of Agriculture, Food and Forestry Policies, Direction General for Maritime Fishery and Aquaculture, who has the responsibility to control the respect of the ICCAT quota system in Italy, the ECOCREST® certification was finally released to “Carloforte Tonnare PIAM s.r.l.” on 13 August 2009.

The certification can be used for the tuna meat (fresh and canned) and all the tuna salty products (meat and gonads) directly sold by Carloforte Tonnare PIAM s.r.l. and it must be evident on cans and packaging. As a matter of fact, the first cans with the ECOCREST® will appear on the Italian market at the end of 2009.

This activity represents the first international certification of an aquatic product in the Mediterranean Sea<sup>3</sup> and, at the same time, the first certification of bluefin tuna in the Mediterranean Sea, a step towards a much more sustainable and responsible exploitation of this important and iconic species.

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<sup>3</sup> The Ecocrest label was previously released to other high level aquatic productions in Australia and in Europe, while procedures are closed or to be finalised in India, Madagascar and Vietnam ([www.ecocrest.org](http://www.ecocrest.org)).

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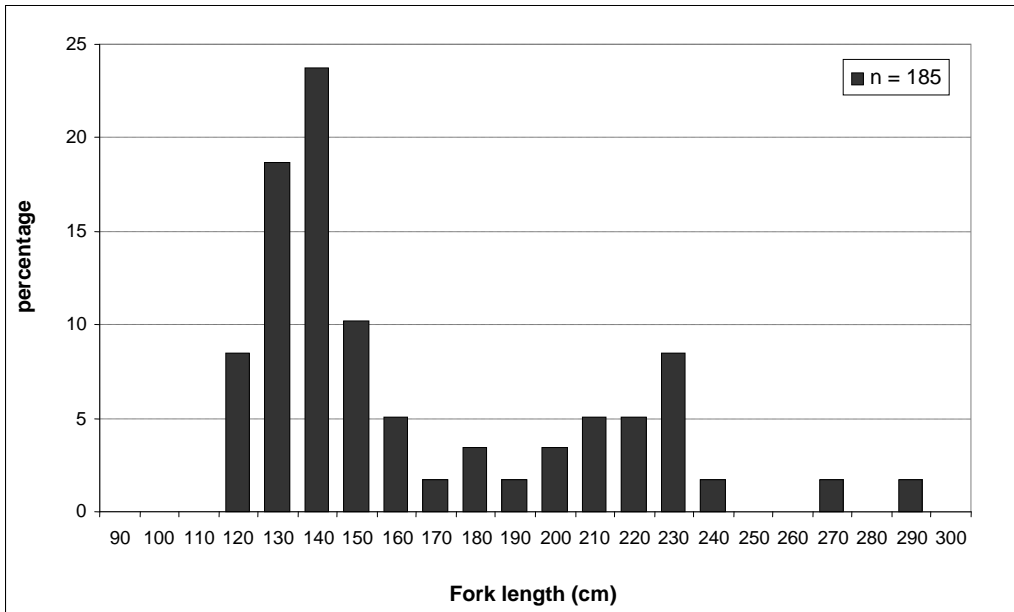
**Figure 1 (left).** The final haul of the net in the “death chamber” in the tuna trap of Isola Piana.  
**Figure 2 (right).** The traditional “*mattanza*”, the rapid killing of tunas, in the trap of Portoscuso.



**Figure 3 (left).** The ancient building of the tuna factory (tonnara) in the Isle of San Pietro.  
**Figure 4 (right).** An ancient picture of a “*mattanza*” in a tuna trap in Carloforte.



**Figure 5.** The **ECOCREST**© label, distinguishing all aquatic products that had obtained the certification.



**Figure 6.** Size distribution of a sub-sample of bluefin tuna (*Thunnus thynnus*) caught by the tuna trap of Isola Piana during the 2009 fishing season. All specimens below 30 kg were released alive at sea.