Friend of the Sea Standard

FOS - Wild Welfare Standard for Purse Seine Fisheries

www.friendofthesea.org

REV	DATE	REASON	VALIDATION	APPROVAL
1	05/02/2024	Pilot Project	Paolo Bray	

Foreword

Friend of the Sea was established in 2008. Its objective is safeguarding the marine environment and its resources, encouraging a market, and implementing specific conservation projects.

The Friend of the Sea certification program allows for the assessment of fisheries and aquaculture products according to criteria and requirements. The certification, granted following an audit by independent certification bodies, ensures that a product complies with the requirements.

This standard shall be considered a pilot project with the purpose of checking the applicability and feasibility of the requirements in fisheries.

Requirements are classified as Essential or Recommended according to their level of importance.

Essential Requirements: The unit of certification shall be 100% compliant with essential requirements to be recommended for certification by the Certification Body (CB). Failure to comply with essential requirements is a major non-conformity. To achieve certification, corrective actions shall be implemented within three months from the date of assessment of non-conformities.

Recommended: It is not compulsory for the unit of certification to comply with recommendations to achieve certification. Nonetheless, compliance with recommendations shall be verified during the audit, and any non-conformities shall be highlighted in the audit report as a "recommendation". The unit of certification shall inform the CB, during the following audit, regarding any corrective measures implemented.

Requirements that are not applicable to the audited unit of certification will be marked with "N.A."

Carefish/catch project

The welfare of wild-caught fish has been overlooked in practice, research, advocacy, and policy. The Carefish/catch project (https://carefish.net/catch/) aims to promote better fishing standards by addressing 5 main goals:

1. assess global animal welfare impacts in fisheries,
2. identify the potential of reducing animal suffering in various fishing methods and species,
3. analyse the economic and social feasibility of the improvements suggested,
4. raise problem and solution awareness in general and specific audiences,
5. implement welfare guidelines into the Friend of the Sea fisheries certification scheme.

The international consortium responsible for this project is formed by:

- Fair-fish international,
- FishEthoGroup,
- Friend of the Sea,
- Centre of Marine Sciences (CCMAR),
- DeMoS Institute.

The funding is awarded through a grant from **Open Philanthropy**.

This project is an absolutely pioneering approach to a highly complex field, integrating both animal, social, economic, and policy perspectives, and the outcomes will impact the way we look into fisheries.

Animal Welfare

Animal welfare is an emerging issue in aquaculture and fisheries, relating to ethics, animal health, and product quality. A growing number of researchers, decision-makers, and advocacy groups have been pushing for fish welfare to be thoroughly researched and integrated into the conversation about the future of seafood standards. In scientific and technical terms, welfare is defined as the state of the animal as it copes with its environment. The welfare of fish throughout the catching process can therefore be monitored.

Following these lines, the Carefish/catch project aims to promote better fishing standards by assessing animal welfare impacts in fisheries and improving fishing practices.

One important objective of the project is to identify key points of welfare hazards and suggest improvements to reduce the suffering of individuals in specific fishing methods. This would enable the establishment of welfare standards in the fisheries sector through a series of recommendations and guidelines to be implemented into the fisheries certification program Friend of the Sea.

Definitions and Abbreviations

(2) **Bycatch**: Part of a catch of a fishing unit taken incidentally in addition to the target species towards which fishing effort is directed. Some or all of it may be returned to the sea as discards, usually dead or dying.

(1) **Endangered** (threatened with extinction):
1 - Endangered Species is used as an Element within the GSSI Benchmark Tool and is explained below. The related term "Threatened" appears in the text of two Indicators as an example of bycatch species that are particularly vulnerable. The phrase "threatened…with serious risk of extinction" appears in the FAO Guidelines for the Ecolabelling of Fish and Fishery Products from Marine Capture Fisheries (paragraph 31.1).
2 - Endangered: Taxa in danger of extinction and whose survival is unlikely if causal factors continue operating. Included are taxa whose numbers have been drastically reduced to a critical level or whose habitats have been so drastically impaired that they are deemed to be in immediate danger of extinction. Also included are those that possibly are already extinct, in so far as they definitely have not been seen in the wild in the past 50 years.
3 - Threatened with extinction: A category of organisms listed in CITES Annex 1. The vulnerability of a species to threats of extinction depends on its population demographics, biological characteristics, such as body size, trophic level, life cycle, breeding structure or social structure requirements for successful reproduction, and vulnerability due to aggregating habits, natural fluctuations in population size (dimensions of time and magnitude), residency/migratory patterns. This makes it impossible to give numerical values for population size or area of distribution that are applicable to all taxa.
"Protected" refers generally to any plant or animal that a government declares by law to warrant protection; most protected species are considered either threatened or endangered. A species that is recognized by national legislation, affording it legal protection due to its population decline in the wild. The decline could be as a result of human or other causes.

(2) **Fishery:** A unit determined by an authority or other entity that is engaged in raising and/or harvesting fish. Typically, the unit is defined in terms of some or all of the following: people involved, species or type of fish, area of water or seabed, method of fishing, class of boats, and purpose of the activities.

Unit of Certification (UoC): a vessel, fleet, or individual operator using a certain gear type, fishing on a particular target stock that is undergoing audit.

References:
(1) GSSI Glossary https://www.ourgssi.org/assets/GSSI-Benchmarking-Tool/GSSI-Global-Benchmark-Tool-V.1-October-2015.pdf
(2) FAO Term Portal http://www.fao.org/faoterm/en/?defaultCollId=21

Purse Seine Fisheries

Seine and surrounding nets are fishing gears used in small-scale and industrial fisheries

around the world. A common type of seine is the purse seine, which alone is responsible for close to twenty percent of global catches, being the second most common method after trawling. Certain target species varying from small to large pelagics can bring in significant revenue for the sector (e.g., Tuna), as reported by the Food and Agriculture Organization (FAO).
A purse seine is a fishing net that is set from a boat and hangs vertically in the water with its bottom edge held down by weights and its top edge buoyed by floats.
It is deployed around an entire area or school of fish where the capture process involves encircling the fish on the sides and below, preventing them from escaping through the bottom of the net, even when operated in deep water. Often the siege is carried out with the aid of light sources to attract schools or aggregated by artificial means such as floating objects (Fish Aggregating Devices, FADs). In purse seining, echosounder, sonar, or even helicopter scanning are used to locate schools of pelagic fish many times associated with bird and mammal aggregations as well. Once a school is located, a skiff encircles the school with the net or hangs the net while the vessel encircles the school. The lead line is then pulled in, "pursing" the net closed on the bottom, preventing fish from escaping by swimming downward, and in a single event, tens of thousands of fish can be harvested. A purse seine winch is used for the pursing by hauling both sides of the purse line, and the catch is then brailed with nets mounted on cranes or sucked by large water pumps into containers onboard the main vessel. Nets are made up of panels of netting stitched to make a rectangular shape and can be from 10 up to 2000 meters long and up to 250 meters deep. Net size varies according to the vessel, mesh size, and target species and can be operated in marine coastal and high-sea waters, up to 300 m deep.
Commonly the catch operation is divided into an initial search stage, the pursing, the hauling, and the fish transfer or pumping stage.
As an active gear, purse seine nets are designed to chase and capture target species, and compared to other fishing gears like trawling, most purse seine nets are not considered to be harmful to natural resources or the environment.
In certain cases, the potential negative impact produced by a purse seine may result from its
catching performance, in terms of species and/or fish sizes. On the one hand, the gear is highly selective when targeting small pelagic fish assemblages with limited species and size diversity, but on the other, there may be important bycatch of non-targeted species, small fish, or fish in excess that is discarded or slipped afterward.
Regarding PET (Protected, Endangered, and Threatened) species and specifically for purse seine, there are considerable risks to sea turtles and marine mammals to being encircled by nets, and even quick retrieval during hauling might not avoid internal or external injuries or stress trauma from being entangled in nets for long periods of the operation. The implementation of mitigation methods comprises e.g., the reduction of the use of fish aggregating devices (FADs) in fisheries targeting tunas or the use of acoustic deterrent devices in fisheries targeting small pelagics to reduce the capture of dolphins.
This report addresses the purse seine fishery that operates in southern Portugal targeting small pelagic fish, which is representative of purse seine fisheries operating in southern European Atlantic and most western and central Mediterranean countries.

Reference: *Carefish report – Welfare assessment in Purse Seine fisheries.*
https://esszett.cloud/s/dYWmitK697RFmfW

Description of the unit of certification

This document shall only be filled out by personnel of the CB in charge of the audit.
It shall be filled out in English, if spoken fluently.

a) NAME OF THE UNIT OF CERTIFICATION TO BE AUDITED:
b) NAME OF THE UNIT OF CERTIFICATION REQUESTING THE AUDIT:
c) IS THE UNIT OF CERTIFICATION TO BE AUDITED PART OF A GROUP? IF SO, PLEASE SPECIFY THE NAME OF THE GROUP AND LIST ALL MEMBERS:
d) ADDRESS OF THE UNIT OF CERTIFICATION TO BE AUDITED:
e) NAME AND CONTACT DETAILS OF THE PERSON AT THE UNIT OF CERTIFICATION RESPONSIBLE FOR THE AUDIT AND CONTACTS WITH THE AUDITOR:

f) FLEET TO BE AUDITED:

Name of the fishing vessel	Registration number	Vessel's flag	Fishing method	Capacity (MT)	Unloading harbour	Ship owner, if different from “a)”

g) VESSELS AUDITED ON SITE (the auditor shall l list the vessels which have actually been audited on site as a sample representing the fleet)**:**

Name of the fishing vessel	Registration number	Unloading harbour

h) FISHING ZONE *(Coordinates and/or FAO area and/or subarea and/or ICES area and/or EEZ. If available, please include a map.)**:***

i) COMMON AND SCIENTIFIC NAME OF THE SPECIES TO BE AUDITED, WITH THE RESPECTIVE FISHING METHODS:

Common Name	Scientific Name	Fishing method

j) TOTAL NUMBER OF EMPLOYEES:

k) ENVIRONMENTAL CERTIFICATIONS AND AWARDS:

I) ADDITIONAL INFORMATION:
Please specify the type of audit (initial, surveillance, additional, unannounced or recertification). In the case of multi-site audits, please specify also the method for calculation of sites inspected.

☐ **The Carefish/catch project was introduced** *(If not, the auditor should provide a short description).*

☐ **The unit of certification and the ship owners were informed of the opportunity, in case of approval, of using the Friend of the Sea logo on the certified products.**

☐ **The unit of certification has a document qualifying and confirming the roles of the staff carrying out the audit.**

☐ **The duration of the audit was agreed upon.**

☐ **The information included in the Preliminary Information Form (PIF) was confirmed** (in the case of changes to the PIF, an updated version has to be promptly provided).

<table>
<tr><td>CERTIFICATION BODY:</td><td>AUDIT TEAM:</td><td>AUDIT START AND END DATE:</td></tr>
<tr><td rowspan="2">SIGNATURE OF AUDITOR:</td><td rowspan="2">NAME OF THE PERSON IN CHARGE OF THE UNIT OF CERTIFICATION AND ACCOMPANYING THE AUDITOR DURING THE AUDIT:</td><td>AUDIT CODE:</td></tr>
<tr><td>TYPE OF AUDIT:</td></tr>
</table>

NOTES TO THE AUDITOR

1) The auditor shall fill out all fields in the checklist.

2) The Auditor shall provide an explanation when requirements are not applicable.

3) The Auditor shall write YES when the unit of certification complies with a requirement and NO when it does not.

4) The Auditor shall comment and explain the positive or negative answers. Simple "YES," "NO," or "N.A." are insufficient.

5) Each relevant document shall be added to the final audit report in a separate and numbered attachment.

6) Photographic evidence added to the checklist or attached is appreciated.

7) The application process is NOT discriminatory on size, scale, management, minimum number of operators and number of vessels involved.

1 – CAPTURE

No.	Requirement	Level	Parameters and information	Y/N/ N.A.	Comments
1.1	Reduce hauling time as much as possible.	Recommended	*Hauling time:* hauling time is the length of time that is necessary to retrieve the net and haul it onboard. The auditor shall find out how does the hauling time lasts by interviewing the crew and find out if there is a margin to reduce the hauling time as much as possible. If there is space to reduce it, the UoC shall do it and the auditor is requested to verify it.		
1.2	Reduce as much as possible the noise produced by the use of engines and sonars.	Recommended	Engine and sonar devices are a potential cause of sensorial stress during long periods. The use of alternative and less intrusive devices (e.g., electrical engines) could help to reduce such stress sources.		
1.3	Avoid encircling schools that are too large for the boat capacity.	Recommended	The auditor should assess the catch capacity of UoC's fishing vessels and record each boat's catch quota.		

1.4	The UoC shall implement slipping in case of captures that exceed the quota assigned.	Recommended	Evidence of conformity.		

2 – ONBOARD HANDLING

No.	Requirement	Level	Parameters and information	Y/N/N.A.	Comments
2.1	The UoC shall create and apply a codified procedure for handling catches, which shall take into account the welfare of target catches.	Essential	There shall be a written procedure that has to take into account what is addressed in the following requirements. All the staff involved in fishing operations shall undergo training on the procedure. Appropriate refresh courses shall be organized by the UoC annually and for all new employees. A designated and identifiable person in charge of training and monitoring shall be appointed.		
2.2	During catch collection, fishers are required to handle the catch with care to minimize injuries.	Essential	When using a scooping net or pumps it is recommended to proceed with higher swiftness to reduce the occurrence of injuries, even if it takes reducing load volumes on landing nets or adjustment of intensity and flow in pumps.		
2.3	Ensure efficient and gentle handling methods to minimize stress and injuries to the catch during processing.	Essential	When pumping, adjust pumping speed so that catches are not catapulted from the pump when they arrive on deck and land outside of the storage/stunner, crushed against walls or other hard surfaces. When scooping, gently release them from scoop or brail nets and not from a great height to avoid a hard landing. Appropriate way is here intended as: calm, wet gloves, handling with 2 hands, avoiding the use of excessive force when removing fish from nets, avoiding throwing on deck and kicking of fishes.		
2.4	Minimize air exposure.	Essential	The removal of catches from their natural environment and their prolonged air exposure can produce stress and pain to catches, the UoC shall reduce to the minimum as much as possible capture's air exposure from the time when catches are hauled on board until they are dead.		
2.5	Minimize the time of sorting activities.	Essential	The sorting activity shall be conducted after getting the individuals on board as quickly as possible and leading to slaughter as quickly as possible. Leaving the catches on deck, entrapped in the fishing gear, or thrown shall be avoided. Appropriate catch boxes, in kind and number, shall be used.		

3 - STUNNING AND SLAUGHTER

No.	Requirement	Level	Parameters and information	Y/N/ N.A.	Comments
3.1	A Codified procedure for stunning and slaughtering, focused on fish welfare, must be in place, with a designated supervisor and trainer.	Essential	The procedure shall take into consideration the target species, type, and dimension of the vessel. The procedure shall include refresh courses for all crew directly involved in fishing operations. General recommendations to decrease pain or suffering are to stun and slaughter animals as soon as possible when they arrive on board.		
3.2	Use of appropriate and effective stunning tools by trained staff.	Essential	Stunning tools should be effective to ensure rendering fish unconscious or to ensure a quick demise, of the target species (e.g., the percussion method cannot be ideal for small pelagics).		
3.3	The UoC doesn't use ice as a stunning method, although it should be used if no stunning or slaughter methods are available.	Recommended	The use of ice can only be considered in cases where alternative methods cannot be made available. Use adequate amounts of ice and a slurry in the boxes where fish are stored.		

4 – BY-CATCH

No.	Requirement	Level	Parameters and information	Y/N/ N.A.	Comments
4.1	There shall be a written procedure to manage appropriately the welfare of by-catch species.	Essential	This procedure shall address the sorting and release to ensure minimal stress and damage to by-catch species. The implementation of an enhanced slipping technique is highly recommended.		
4.2	The UoC subjects its employees to a	Recommen	The course must include		

	course, taught by experts, on how to manage the release of accidental catches.	ded	general notions on the potential by-catch present in that marine area.		

4.3	The unit of certification uses some mitigation procedures in fishing activities during periods of high presence of air-breathing megafauna (cetaceans, seabirds, and sea turtles): Examples of mitigation techniques should be in line with scientific studies performed in the area of operation.	Recommended	The auditor shall assess which techniques are appropriate concerning the area and the megafauna present (e.g., crew observers to alert for the presence of cetaceans in the vicinity of the vessel before net setting, UV lights, pingers, etc.)		
4.4	The unit of certification is in contact with rescue centers or other competent entities specialized in the care of sea turtles and/or other species, on which it relies if there is a need to treat one or more injured animals. The crew must be instructed on how to manage these emergencies.	Essential	This requirement covers: Sea turtles, marine mammals (cetaceans or seals), seabirds.		
4.5	The unit of certification informs the Port Authority and the nearest rescue center in case of accidental catches.	Essential	This requirement covers: Sea turtles, marine mammals (cetaceans or seals), seabirds.		

5 – TRAINING

No.	Requirement	Level	Parameters and information	Y/N/ N.A.	Comments
5.1	UoC staff involved in fishing operations must undergo fish welfare training conducted by experts.	Essential	Evidence of conformity.		
5.2	The UoC must train one of its staff members as a fish welfare expert.	Essential	The person chosen to become a fish welfare expert must complete the course required in requirement 5.1 and will be the point of reference for all fish welfare activities in their company.		

Further comments:

CONCLUSIONS:

The Auditor shall fill out the following fields:

☐ **The unit of certification COMPLIES with Friend of the Sea Fish Welfare requirements.**

☐ **The unit of certification DOES NOT COMPLY with Friend of the Sea Fish Welfare requirements.**

MAJOR NON-CONFORMITIES (to be corrected within 3 months)

List major non-conformities.

RECOMMENDATIONS (to be communicated within the next inspection)

List recommendations