

Activity 4:

Develop an accredited European brown crab standard to convey assurance on responsible fishing, traceability and quality products.

Fisheries Development Services
Bord Iascaigh Mhara – Irish Sea Fisheries Board
Crofton Road, Dun Laoghaire,
Co Dublin, Ireland
Date: June 2015



ACTION 1: Development of Common European Quality Standard

Responsible Practices - Environmental Management

Introduction

This brown crab annex has been developed by BIM (in conjunction with ACRUNET partners) and through consultation with representatives of the fishing industry from Ireland, the United Kingdom and France. This annex details the Responsibly Sourced Standard requirements for brown crab species caught by Irish, UK and French vessels intended solely for the purpose of human consumption. The scope of this annex only covers the brown crab fishery as part of the ACRUNET project. (No other species are considered in this annex).

This technical annex is designed to be assessed in addition to the core requirements required by the following standards:

- BIM Responsibly Sourced Standard
- The Responsible Fishing Scheme
- Responsible Fisherman (Pecheur Responsable)

Fish species identified in the scope of the fishing plan and landed on the day of the audit must be available at the point of discharge or at the first point of sale to be assessed by the assessor or at an agreed time within a specified timeframe.

Applicants should refer to the following programme publication specific to the brown crab for further guidance:

- EU Quality Guide for Brown Crab

1.1 Responsible Environmental Management

Descriptor - It is prohibited to land brown crab that is not intended for human consumption.

1.1.1 Recently moulted brown crab must be returned to the sea alive.

1.1.2 Where minimum landing sizes apply, brown crab under this size must be returned alive to the sea with minimal stress (so that they can remain part of the breeding stock).

1.1.3 Brown crab missing any claws, or more than two legs, do not meet the requirements of the standard (see Brown Crab Quality Specification & Species Specific Actions).

1.1.2 Handling and Transfer

Descriptor - Brown crab shall be handled with care at all times. Brown crab must be removed carefully from pots to ensure limbs and claws entangled in the mesh are not pulled off or damaged. When transferring crabs from the pot they must never be thrown into containers where they may break their own shell or the shell of others already in the container.

1.2.1 The brown crab must be placed in a clean container and orientated appropriately to prevent damage (see Quality Specification & Species Specific Actions).

1.2.3 Grading must be according to the EU Quality Guide for Brown Crab (see Quality Specification &

Species Specific Handling Actions).

1.2.4 Procedures for packing or claw restraint must be in place to prevent damage to the crab. **Acceptable methods of claw restraint would either be nicking the crabs using the “French nick” method or banding the claws.**

1.1 Meat Yield and Grading

Descriptor - Meat yield determination is a skill best acquired through personal experience of handling brown crab. Crew responsible for grading brown crab must have regard for the EU Brown Crab Handling and Quality Guide which shows the visual cues that may be used for distinguishing brown crab that have high meat yield, from those that do not.

1.3.1 Brown crab must be assessed to ensure only **high meat yield** animals are selected. Where rejected they must be returned to the sea alive.

1.4 Nicking and Packing of Brown Crab

Descriptor - Nicking is a term which refers to the cutting of the tendon of the brown crab claw so that the pincer can no longer close. This prevents the brown crab from being able to attack and damage other brown crab or itself. However, nicking results in bleeding and causes stress to the animal so it is important to carry out the procedure correctly and ensure proper storage of animals post the nicking process to ensure brown crabs are kept alive.

1.4.1 All brown crab must be restrained and/or nicked as quickly as possible before transfer to a Vivier or holding tank.

1.4.2 **Only the French nick must be used, severing the ligament inside the hinge of the claw.**

1.4.3 The ligament must be severed using a sharp, clean knife to make as small an incision as possible in the membrane between the pincers.

1.4.4 All brown crab not stored in a Vivier tank or holding tank must be washed or hosed with clean seawater after nicking to assist the healing process.

1.4.5 Any brown crab landed by day boats for immediate processing or where purpose designed claw restraining bands or cable ties are used, need not have their claws nicked. In this circumstance it is essential that they are packed closely together with their claws and legs underneath them and the brown side up.

1.1 Storage

Descriptor - Once a crustacean is removed from the water its gills can no longer extract oxygen efficiently and excrete ammonia waste. Ammonia can deteriorate product quality which will build up in warmer and dry conditions. Gill damage is irreversible, hastening death and if it occurs brown crabs will die even if replaced in the water.

1.5.1 Brown crab must be protected from any heat sources and put in the tank in as short a timeframe as possible.

1.5.2 Where Vivier or holding tanks are present, brown crab must be stored within **as short a time frame as possible.**

1.5.3 Where crabs are stored on-deck in boxes, bongos or baskets, the crabs must be protected from any heat sources (particularly the sun), cooled and placed out of the wind and kept damp as soon as possible after capture.

1.5.4 Vivier and/or holding tanks must be purpose designed to avoid contamination and maintain brown crab in healthy, good quality conditions.

1.5.5 Where vivier or holding tanks are used, crabs must not be allowed to sit in tanks of still water for a prolonged period. When used for storage, tanks must allow changing of the water on a regular basis and where the tanks form an integral part of the vessel they must be fitted with circulatory systems.

1.5.6 Vivier vessels and holding tank operators must establish an appropriate documented tank cleaning procedure through the risk assessment process, as part of the vessel management systems.

1.5.7 The resulting findings and actions from these risk assessments must be implemented in a timely manner.

1.1 Discharge of Brown Crab

1.6.1 Brown crabs must be offloaded efficiently to avoid exposure to sunlight, wind, rain and risk of contamination. Delays between unloading the vessel and loading on to transportation must be minimised. In circumstances where delay is unavoidable, mitigation actions must be in place to maintain brown crab quality.

1.6.2 At no time during landing operations must the catch be left unattended.

1.6.3 Where brown crab has been landed for human consumption but is rejected by buyers on quality grounds, it may be legitimately used for purposes other than human consumption.

1.6.4 A record of the landed rejects and mortalities (number or percentage) from brown crab sales that do not meet this specification must be available, and the causes of excessive rejects and excessive mortalities must be investigated and measures undertaken for their reduction.

1.6.5 Measures to reduce rejects and mortalities must be undertaken, recorded and acted upon in a timely manner.

1.6.6 All weak or damaged brown crab must be separated from the catch for responsible disposal at the point of discharge.

1.6.7 As the separation of males and females occurs at the discharge stage of operations, for vivier vessels or at the point of capture for day vessels, the person undertaking this activity must be trained in accordance with the EU Brown Crab Handling and Quality Guide.

1.7 KEEP POT Specific Clauses

1.7.1 When brown crab are to be stored alive at sea in keep boxes (floating or seabed vivier tanks) they must be nicked or have their claws restrained. Only the French nick must be used.

1.7.2 Storage systems (sea based keep boxes, shore based closed systems, or vivier tanks) must be purpose designed to maintain water quality and maintain the crabs in healthy, good quality conditions.

1.7.3 Keep boxes must be designed and handled so as to minimise limb damage to stored animals

1.7.4 Keep boxes (floating keep boxes) must be located in good quality seawater with stable temperature and salinity.

1.7.5 All mortalities must be removed regularly from keep boxes.

1.7.6 Save for exceptional circumstances stored crab must be emptied from keep boxes on a regular basis.

Quality Specification & Species Specific Actions

Brown Crab

Parameter	Specificatio
Alertness Demonstrates if brown crab is in good condition	Lively response with claws and legs.
Moult status Demonstrates if brown crab is recently moulted White face brown crab have a lower meat yield	Top side of shell has dark pigmentation throughout. Under side of shell with light brown shading. Abdomen or flap is dark in colour. Shell hard when pressed. Claws brown in colour with cream undersides.
Shell appearance Shell must be undamaged with minimal fouling	Both claws undamaged. At least six walking legs. Low (10%) prevalence of fouling organisms (or black spot) to be allowed on shell. No cracks on shell.

Brown Crab Specific Actions

Issue	Action
Observe Voluntary Minimum Landing size.	Return live to sea all brown crab where carapace width is under prescribed, local, regional and national minimum landing size regulations.
Brown crab Meat Yield and Handling. Meat yield determination is a skill best acquired through personal experience of handling brown crab.	Crew responsible for grading brown crab must consult the EU Brown Crab Handling and Quality Guide which shows the visual cues that may be used for distinguishing brown crab that have high meat yield from those that do not. Grading must be according to the EU Brown Crab Quality and Handling Guide.

ACTION 2: ACRUNET Technical Annex - Assessment Checklist

Auditor:			
Date of Audit:		Job No:	
Vessel Owner(s):			
Skipper/Master:			
Address:			
Tel No:			
Fax No:			
E-mail:			
Vessel Name:		PLN:	
Length:		Weight:	
Target Species:			
Gear:			
No: Crew:		Vivier storage (Y/N):	
		Deck Storage (Y/N):	

Requirement Code:

- Yes / No Response to the requirement being satisfied
- Obs. An observation that a minor action is required in order to satisfy the requirement.
- Or:
- An observation that an improvement should be made in order to fully satisfy the requirement.
- N/A Not Applicable to this vessel/fishing method.

Scope of the Audit

Standard (version): ACRUNET Technical Annex Revision 5 March 2014

Summary of Care of the Catch Procedures

Fishing Practices

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Handling of Catch

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Processing/Packing of Catch

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Weighing/Labelling

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Storage

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Ref:	Requirement	Yes/ No	Obs.	N/A	Comments
1.1.1	Recently moulted brown crab must be returned to the sea alive.				
1.1 Responsible Environmental Management					
1.1.2	Where minimum landing sizes apply, brown crab under this size must be returned alive to the sea with minimal stress (so that they can remain part of the breeding stock).				
1.1.3	Brown crab missing any claws or more than two legs, do not meet the requirements of the Standard (see Brown Crab Quality Specification & Species Specific Actions)				
1.2 Handling and Transfer					
<p>Descriptor - Brown crab shall be handled with care at all times. Brown crab must be removed carefully from pots to ensure limbs and claws entangled in the mesh are not pulled off or damaged. When transferring crabs from the pot they must never be thrown into containers where they may break their own shell or the shell of others already in the container.</p>					
1.2.1	The brown crab must be placed in a clean container and orientated appropriately to prevent damage (see Quality Specification & Species Specific Actions).				
1.2.2	Grading must be according to the EU Quality Guide for Brown Crab (see Quality Specification & Species Specific Handling Actions).				
1.2.3	<p>Procedures for packing or claw restraining must be in place to prevent damage to the crab.</p> <p>Auditor note:</p> <p>Acceptable methods of claw restraint would either be nicking the crabs using the "French nick" method or banding the claws.</p>				

Ref:	Requirement	Yes/ No	Obs.	N/A	Comments
1.3 Meat Yield and Grading Descriptor - Meat yield determination is a skill best acquired through personal experience of handling brown crab. Crew responsible for grading brown crab must have regard for the EU Brown Crab Handling and Quality Guide which shows the visual cues that may be used for distinguishing brown crab that have high meat yield, from those that do not.					
1.3.1	Brown crab must be assessed to ensure only high meat yield animals are selected. Where rejected they must be returned to the sea alive.				
1.4 Nicking and Packing of Brown crab Descriptor - Nicking is a term which refers to the cutting of the tendon of the brown crab claw so that the pincer can no longer close. This prevents the brown crab from being able to attack and damage other brown crab or itself. However, nicking results in bleeding and causes stress to the animal so it is important to carry out the procedure correctly and ensure proper storage of animals post the nicking process to ensure brown crabs are kept alive.					
1.4.1	All brown crab must be restrained and/or nicked as quickly as possible before transfer to a vivier or holding tank.				
1.4.2	Only the French nick must be used, severing the ligament inside the hinge of the claw.				
1.4.3	The ligament must be severed using a sharp, clean knife to make as small an incision as possible in the membrane between the pincers.				
1.4.4	All brown crab not stored in a vivier tank or holding tank must be washed or hosed with clean seawater after nicking to assist the healing process.				
1.4.5	Any brown crab landed by day boats for immediate processing or where purpose designed claw restraining bands or cable ties are used, need not have their claws nicked. In this circumstance it is essential that they are packed closely together with their claws and legs underneath them and the brown side up.				
1.5 Storage Descriptor - Once a crustacean is removed from the water its gills can no longer extract oxygen efficiently and excrete ammonia waste. Ammonia can deteriorate product quality which will build up in warmer and dry conditions. Gill damage is irreversible, hastening death and if it occurs brown crabs will die even if replaced in the water.					
1.5.1	Brown crab must be protected from any heat sources and put in the tank in as short a timeframe as possible.				

Ref:	Requirement	Yes/No	Obs.	N/A	Comments
1.5.2	Where vivier or holding tanks are present brown crab must be stored within as short a time frame as possible.				
1.5.3	Where crabs are stored on deck in boxes, bongos or baskets, the crab must be protected from any heat sources (particularly the sun), cooled and placed out of the wind and kept damp as soon as possible after capture.				
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1.5.6	Vivier vessels and holding tank operators must establish an appropriate documented tank cleaning procedure through the risk assessment process, as part of the vessel management systems.				
1.5.7	The resulting findings and actions from these risk assessments must be implemented in a timely manner.				
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1.6.2	At no time during landing operations must the catch be left unattended.				
1.6.3	Where brown crab has been landed for human consumption but is rejected by buyers on quality grounds, it may be legitimately used for purposes other than human consumption. A record of the landed rejects and mortalities (number or percentage) from brown crab sales that do not meet this Specification must be available and the causes of excessive rejects and excessive mortalities must be investigated and measures undertaken for their reduction.				

Ref:	Requirement	Yes/ No	Obs.	N/A	Comments
1.6.4	Measures to reduce rejects and mortalities must be undertaken, recorded and acted upon in a timely manner.				
1.6.5	All weak or damaged brown crab must be separated from the catch for responsible disposal at the point of discharge.				
1.6.6	As the separation of males and females occurs at the discharge stage of operations; for vivier vessels or at the point of capture for day vessels, the person undertaking this activity must be trained in accordance with the EU Brown Crab Handling and Quality Guide.				
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Auditor advisory notes

Quality Specification & Species Specific Actions

Brown Crab

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Brown crab Specific Actions

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ACTION 3: Certification

List of Certified Vessels

Vessel name	Owner	Register	No:	Reg Length	Port
Heather Jane II	Hugh McBride	IRL		24 .00	Downings
Peadar Elaine II	Pete Mc Bride	IRL		24	Downings
Mary Ellen	Patrick Hannigan	UK	B988	14.84	Fanad
Annie	Patrick Hannigan	UK	B945	14.95	Fanad
Labhaoise	Ger Breslin	IRL	SO27P	7.23	Fanad
An Tusa	Manus Gallagher	IRL	SO378	11.28	Burtonport
Sanmar II	Patrick Friel	IRL	SO160	11.9	Burtonport
James Collins	Johnathan O Donnell	IRL	WT202	11.63	Mayo
Rachel Mary	Patrick O Donnell	IRL	WT179	11.95	Mayo
Padre Pio	Eamonn Dixon	IRL	G117	11.98	Mayo
Julante	James Lavelle	IRL	WD242	11.54	Mayo
Eileen's Pride	Stephen McHale	IRL	SO704	9.33	Mayo
Domhnall Noreen	Melvin Tighe	IRL	G198P	10.97	Mayo
Deirdre Brid	Sean O Donnell	IRL	G189	12.19	Mayo
Eire Og	Piaras O Donnell	IRL	SO938	11.63	Mayo
Fair Maiden	Richard Murphy	IRL	C96	11.55	Mayo
Garvin Isles	Richard Murphy	IRL	SO883	12.96	Castletownbere
Celtic Dawn	Peter O Sullivan	IRL	C315	12.08	Castletownbere
Three Brothers	Richard Murphy	IRL	S390	10.57	Castletownbere
Jam-mar	Vincert O Regan	IRL	S414	9.25	Schull
Inis Fada	Damien Cogan	IRL	S496	8.8	Schull
Jueast	Shane McIntyre	IRL	W245	10.83	Dunmore
Emma Lou	Alex Crowley	IRL	T450	9.81	Cahersiveen
Notre Dame de Kerizinen	Mr Herve Salaun	FR		24	Loctudy
Evann- Emma	Mr David Burri	FR	MX736420	23.93	Brest
Kreiz ar Mor	Mr Yannick Calvez	FR		22	Douardenez
Zuberno	Mr Daniel	FR	GY724521		Roscoff
Etoile du Berger	Mr Thierry Burlot	FR	MX905646		Roscoff
Aurora	Mr John Balls	UK	YH33	6.68	Clovelly
Robert Louise	Mr Tony Delahunty	UK	FR902	9.8	Selsey
Amadeus	Mr Trevor Bartlett	UK	TH7	24.5	Peterhead

Vessel name	Owner	Register	No:	Reg Length	Port
Euroclydon	Mr Trevor Bartlett	UK	TH77	18.2	Grimsby
Our Hazel	Mr Lachie Murray	UK	UL543		Ullapool
Heather K	Mr Heddle Costy	UK	K77		Ullapool
Calypso	Mr Jay Mackay	UK	WK15		Inverness
Noronya	Mr Benjamin Norquoy	UK	k733		Stromness
Celtic Dawn II	Mr Marcus Messenger	UK	K76		Stromness

ACRUNET - the Atlantic crab resource users network - is about the fishing, management and marketing of brown crab *Cancer pagurus L* and its impact on maritime communities along the Atlantic seaboard of north-western Europe. ACRUNET is supported by a European project of transnational cooperation approved in 2012 under Priority 1 (Promote transnational entrepreneurial and innovation networks), Objective 2 (Enhance competitiveness and innovation capacities in maritime economy niches of excellence) of the Atlantic Area Transnational Programme, co-financed by the European Regional Development Fund (ERDF).

www.acrunet.eu

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PROJECT PARTNER



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