

**The North Sea Brown Shrimp (*Crangon crangon*) fishery
Managementplan for the shrimp fishery
10 February 2011**

The Cooperative Fisheries Organisation (CVO) established the following management plan for the purpose of making the shrimp fishery sustainable:

1 AMBITION

The North Sea shrimp (*C. crangon*) fishery will

1. promote and maintain a productive and sustainably managed population of North Sea brown shrimp;
2. limit as much as possible the impact of the brown shrimp fishery on habitat and the ecosystem of the brown shrimp and associated species;
3.
 - a. establish and maintain good relationships between stakeholders in the brown shrimp fishery;
 - b. maintain a good collaboration with the managing authority; and
 - c. oversee the compliance of the regulation in this management plan.

2 OBJECTIVES

1. An ecologically responsible and sustainable fishery, with acknowledged limited effects on the target species, the North Sea brown shrimp *Crangon crangon*, as well as on the marine ecosystem of the target species;

3 DEFINITIONS

This management defines the following terms:

AID	“Algemene Inspectie Dienst”, General Inspection Service working on behalf of the management authority.
Management Authority	The Dutch department with final responsibility of fisheries management, <i>in casu</i> the Fisheries Directorate in the Ministry of Economic Affairs, Agriculture, and Innovation (Min of EL&I).
Bycatch	All living organisms in the catches other than <i>Crangon crangon</i> .
CrangonFund	Fund established for financing the running costs of the implementation of this management plan, the inspections and activities in support of this management plan, as decided by the CVO.
CVO	Co-operative Fisheries Organisation, the holder of the MSC-certificate. The Producers Organisations are the members of the CVO.
Fishing Pressure	Relationship between the annual catch and the stock size of recruited shrimp (equivalent to fisheries mortality F).
Inspector Office	Organisation that carries out inspections on behalf of the CVO. Secretariat of the CVO.

Participant	Signatory of this management plan, with a license for brown shrimp fishing, and member of a producers organisation that has been recognised by an EU member state and that has signed this management plan.
PO	Producers Organisation of shrimp fishermen, recognised by an EU member state and registered at the European Commission.
PVis	Dutch Fish Product Board.
Scientific Authority	Wageningen University- IMARES or an equivalent institution.
Stakeholders	Group of stakeholders as recognised by the CVO. The recognised stakeholders are PVis, Vebega, Ministry of Economic Affairs, Agriculture & Innovation, North Sea Foundation, Wadden Sea Foundation and the World Wide Fund for Nature. The CVO can adapt this list at any given moment.
Website	www.crangon.nl . This website is maintained by the CVO and provides background and updated information about the progress towards sustainability of the brown shrimp fishery.

4 REGULATION

Participants shall comply with all relevant national and international regulations.

5 PARTICIPATION IN THIS MANAGEMENT PLAN

Every participant signed this management plan. By signing the participant is bound to the regulations in this management and the associated rules, including the penalty regulation.

Only fishermen with a valid fishing license for shrimp (*Crangon crangon*) in the Wadden Sea and/or the North Sea on 10 February 2011 can participate in this management plan.

Membership after the initial application date of this management plan is only possible for an existing license holder. Conditions for such access are determined by the CVO.

Entry after the starting date of this management is only permitted under non-discriminatory and proportional conditions that are defined by the CVO. These conditions are only intended to prevent that any entry after the starting date would have unreasonable advantage to the current participants. See www.crangon.nl for more information on accession subsequent to the starting date to this management plan.

6 MANAGEMENT OF FISHING EFFORT

6.1 Weekend prohibition and fishing times

The shrimp fishery in Dutch waters and in the Ems area will be closed from Friday 12:00 hours until Monday 0:00 hours.

The shrimp fishery outside Dutch waters, excluding the Ems area, will only be permitted during 9 (nine) days per (14) days.

6.2 Catch control rule

The following catch control rule has been established in order to manage the catch of the species *Crangon crangon* in the continental North Sea.

The indicator for the status of the stock is Landings Per Unit Effort (LPUE). The LPUE is the landings in kilogrammes, including undersized shrimp, divided by the number of fishing hours.

Every four weeks the mean LPUE will be calculated on the basis of data from an a-select sample of 5 Danish, 30 German and 35 Dutch vessels. The fishing times will be determined for four weeks according to the system below:

For week 1 to week 24:

If mean LPUE > 25, there is no risk for the shrimp stock and there are no restrictions for the fishing hours of the shrimp fishery.

If $17 < \text{mean LPUE} \leq 25$, there is no direct danger for the shrimp stock but recovery of the shrimp stock is desired. For that reason the shrimp fishery will be limited to a maximum of 72 hours per week, measured from port departure to port arrival.

If mean LPUE ≤ 17 , there is a danger for the shrimp stock. For that purpose the shrimp fishery is limited to a maximum of 24 hours per week measured from port departure to port arrival.

For week 25 to week 52:

If mean LPUE > 40, there is no risk for the shrimp stock and there are no restrictions for the fishing hours of the shrimp fishery.

If $27 < \text{mean LPUE} \leq 40$, there is no direct danger for the shrimp stock but recovery of the shrimp stock is desired. For that reason the shrimp fishery will be limited to a maximum of 72 hours per week, measured from port departure to port arrival.

If mean LPUE ≤ 27 , there is a danger for the shrimp stock. For that purpose the shrimp fishery is limited to a maximum of 24 hours per week measured from port departure to port arrival.

For background information on the catch control rule and data collection see www.crangon.nl.

6.3 Compliance

Article 6.1 is inspected by the AID on behalf of the management authority. Article 2 is inspected by the CVO with the logbooks.

7 BYCATCH

7.1 BROWN SHRIMP

In order to reduce the bycatch volume of undersized brown shrimp, the following measures are established.

- 7.1.1 The maximum percentage of shrimp residue (sieavage) is 15% for each landing.
- 7.1.2 The sieve used in authorised landing sites shall be of the standard type as described in the directive “Code 2006: 190/57.8.1” of the Shrimp Advisory Committee, with a sieve width of at least 6.8 mm and that is equipped with an attached crusher.

7.2 Non-marketable, living organisms other than brown shrimp

In order to reduce the bycatch volume of non-marketable, living organisms other than brown shrimp, the following measures are established.

- 7.2.1 The minimum mesh size of a shrimp net is 20mm or “22 mm including the twine”, stretched mesh.
- 7.2.2 Participants will use the sieve net with a mesh size of maximum of 70 (seventy) mm, in conformity with the EU-regulation (EC) No. 254/2002 with technical measures
- 7.2.3 The CVO will make efforts to develop alternative techniques for the sieve net, in consultation with stakeholders. Fishing without sieve net can only be allowed by the CVO when an alternative technique is applied, of which a scientific authority has determined with research that the applied technique will lead to at least the same level of bycatch reduction as the sieve net. For more information about the development of alternatives see www.crangon.nl.
- 7.2.4 Dispensation for the use of the sieve net in a specific fishing area can only be provided by the CVO to participants when at least 10 participants request dispensation for a certain period. The dispensation will last two weeks maximum and will apply to all participants. The total period of dispensation cannot exceed eight weeks in the first year of the management plan coming into operation. A request form for dispensation can be downloaded from www.crangon.nl.
- 7.2.5 The dispensation rule for the use of the sieve net in Article 7.2..4 will be reduced in a period of four years. De length of the dispensation for each year is at maximum:
 - 2011: 8 weeks
 - 2012: 4 weeks
 - 2013: 4 weeks.

At the start of the fourth year dispensation for the use of the sieve net will no longer be possible.

The fishery aims to return the bycatch to the sea alive to the maximum extent feasible. In order to maximise the viability of the bycatch, the following measures will be put in place.

- 7.2.6 Participants need to sort the catch with a CVO-recognised rinsing/sorting machine in combination with a recognised description of handling. The description is documented in writing and contains details of the catch processing in terms of handling time and method. The description needs to be known during the time of vessel inspection. It is prohibited to make adjustments to the rinsing/sorting machine that may distort its operation. This prohibition includes adjustments to the machine as well as supporting materials. See www.crangon.nl for further details.
- 7.2.7 The sector installs annual incentive prices for initiatives that will lead to further bycatch reduction.

7.3 Data collection

- 7.3.1 Since 1 December 2009 a continuous registration of sieve percentage takes place of all Dutch brown shrimp vessels. For more information see www.crangon.nl.
- 7.3.2 In the context of the Data Collection Arrangement the scientific authority will collect reference data of the mean volume percentages of (non-surviving) bycatch per haul. For more information on the Data Collection Arrangement and its results see www.crangon.nl.
- 7.3.3 In addition to article 7.3.2, the bycatch levels will be registered with discards protocols that participants fill in. For more information see www.crangon.nl.

7.4 Compliance

- 7.4.1 The CVO is responsible for the weighing and the electronic registration of the sieve percentage. This will take place routinely in a standard format that is accepted by the CVO. From 31 January 2011 the inspector does inspections at the sieving locations at irregular intervals, either announced or unannounced. The rules for inspection can be accessed at www.crangon.nl.
- 7.4.2 Articles 7.2.1 – 7.2.6 are inspected from 31 January 2011 by the inspector. Reports of the inspector can be downloaded from www.crangon.nl.

8 ENDANGERED SPECIES

The fishery aims at a negligible impact on endangered species in the Wadden Sea and the North Sea. To achieve this, the participants keep to the following prescription.

Participants keep a list with endangered species in the Wadden Sea and North Sea on board. When a participant catches an endangered species, he is expected to document and report the species to his PO. In addition the participant needs to ensure that the animal is returned to the sea alive.

The inspector will audit for the compliance by the participants. For more information on article 8 see www.crangon.nl.

9 HABITAT AND ECOSYSTEM

9.1 Closed areas

There are areas that are closed for shrimp fisheries on the basis of legal regulations. These areas are notified on the website www.crangon.nl. The CVO will monitor the effective compliance of these regulations. See www.crangon.nl for more explanation.

9.2 Vessel capacity

Vessels with a shrimp fishing licence have a maximum engine capacity of 221Kw (300pk) on the propeller.

Compliance and monitoring of this regulation takes place according to the rules in the “covenant engine capacity”. See www.crangon.nl.

The ambition of the CVO is that, within two years after the certification of the shrimp fishery, a system of permanent monitoring is put in place to support the compliance of the maximum engine capacity. For updated information see www.crangon.nl.

9.3 New fishing techniques

Participants use fishing gear as described in the fishing licence. They are only allowed to use bottom trawling gear.

When a participant would like to apply a new fishing technique that according to the CVO will lead to a greater degree of impact of habitat and ecosystem and/or to a higher bycatch level than existing techniques with a given number of fishing hours, he/she can only continue to participate in this management plan when the number of fishing hours is reduced to compensate for the impact on habitat, ecosystem and bycatch.

When a participant would like to apply a new fishing technique that according to the CVO will lead to a lesser degree of impact of habitat and ecosystem and/or to a lower bycatch level than existing techniques in accordance with article 7.2.3, the CVO will endeavour to introduce this technique as soon as possible to all participants.

9.4 Data collection

In the context of the national legislation for nature conservation (NB-wet) a research plan will start in 2011 to investigate the effects of the shrimp fishery on the habitat and ecosystem. For more information see www.crangon.nl.

10 LANDING

Landing of the catch will only take place at sieving stations that allow inspection at any moment. Landings at sieving stations are subject to regular verification by the inspector. Reports of the inspector can be downloaded from www.crangon.nl.

11 WEBSITE

The Office is responsible for the processing of the data and the proper functioning and availability of the website.

The website is freely accessible to all participants and stakeholders and will be managed by the CVO.

12 COMPLIANCE AND INSPECTIONS

The CVO will appoint inspectors for the necessary inspection for an adequate execution of this management plan. Contact details of the inspectors are available on www.crangon.nl.

Participants will observe the compliance of the arrangements in this management plan. Compliance by participants of all arrangements in this management plan is confirmed by at least regular reporting by inspectors. Participants also accept additional and/or unannounced inspections for compliance by the inspectors.

Inspection reports will be assessed by the CVO within two weeks after date of receipt. Sanctions will be determined with the articles in the Penalty Regulation. The Penalty Regulation can be downloaded from www.crangon.nl.

13 EVALUATION

This management plan will be evaluated at least once a year by the CVO, in consultation with representatives of the POs and the stakeholders. The CVO can accept adjustments of this management plan, on its own initiative and as a result of the evaluation.

When there are sufficient reasons, to be judged by the CVO, it can be decided to carry out an intercessional evaluation of this management plan.

14 BOARD

This management plan will be controlled by the CVO. For a proper implementation of this management plan, there will be an appointment of a Board and an Office. The address of the CVO is:

Co-operative Fisheries Organisation
Onder de Toren 30
8303 BV Emmeloord
0031 527 698151
secretariaat@vissersbond.nl

By signing this management plan, the participant authorises the CVO and the PO to implement this management plan on behalf of him/her.

15 COSTS

The costs for participating in this management plan will be determined on a yearly basis on a *pro rata* basis of landing volumes. For the year 2011 the fee has been determined at € 0,00 per kg.

Participants who would like to participate after the full assessment has taken place will have to pay a fee to the CVO on the basis of which they will contribute a fair proportion of the costs of this management plan in a loose sense. The level of this fee shall be determined by the CVO on the basis of non-discriminatory and proportional criteria. For more information see www.crangon.nl.

16 COMMUNICATION

The office is responsible for the processing of the data and the proper functioning and availability of the website, www.crangon.nl.

The website is freely accessible to all participants and stakeholders and is managed by the CVO.