

## Seminar: Fish traps in the North Sea – a viable option?

Scheveningen, the 13<sup>th</sup> of December 2011

### Background information

In several countries fishers use fish traps. In the Netherlands not many fishers have experience in using this kind of gear. The seminar aimed to stimulate exchange of international experiences and to inform Dutch fishermen (small scale, set net and rod & line fishermen) about this kind of gear. It was supposed to give an answer to the question whether fishing with fish traps is a viable option for Dutch fishers fishing in the North Sea. Finally, ideas on how to move forward should be generated.

The seminar was an initiative of Marine Science & Communication (Marije Siemensma) and ILVO Fisheries (Dirk Verhaeghe). It was co-organised by the Fisheries Knowledge Group (Birgit de Vos), a project coordinated by LEI en IMARES (both part of Wageningen UR). The seminar was also financed by the Fisheries Knowledge Groups, which in its turn is financed by the Dutch Ministry of Economic Affairs, Innovation and Agriculture.

### Short summary of presented experiences & knowledge

Speakers from Belgium, the United Kingdom, Germany, Sweden and France presented their experience and knowledge on fishing with fish traps. Also two fish trap manufacturers from France and Sweden gave a presentation. Most PowerPoints used in these presentations, together with the invitation and programme, can be found on the website of the Fishery Knowledge Groups: [http://www.kenniskringvisserij.wur.nl/NL/welke\\_kenniskringen/Staandwantvisserij\\_op\\_tong/](http://www.kenniskringvisserij.wur.nl/NL/welke_kenniskringen/Staandwantvisserij_op_tong/).

Some highlights of these presentations:

- In Belgium trials were carried out with fish traps in a protected area off the coast of Nieuwpoort on board the vessel N95. Some cod, cuttlefish, pout and sea bass were caught. Some results were better without than with bait. The skipper prefers to go for sea bass, crab and lobster as target species. Cod can easily be caught, but the cod recovery plan has to be respected. Further trials should be done inside windmill farms areas as only these areas are protected from infringements to static gear by beam trawlers. Using fish traps combined with gill and trammel net fishing looks promising and has to be further tested in order to determine whether fishing technique is lucrative enough. (*presentation Luc Louwagie and Dirk verhaeghe*)
- In the United Kingdom traps were used for catching bass and sea bass, using whiting as live bait. Also bycatch was reported of dover sole, grey mullet, lobster and spider crab. Setting the traps on the sea bottom is most successful. Development of the entrance is required, because fish (especially sea bass) sometimes leave the trap too easily. Also traps with different grades of flexibility have been tested (foldable to rigid). There are some issues with seals entering the traps and eating the fish. Sometimes they drown. It needs to be investigated how to prevent this. (*presentation Gus Caslake, SEAFISH*)
- In the Baltic Sea studies have been done with Norwegian, Swedish and French pots. In the Baltic Sea there haven't been problems with bycatch of seals or birds. Norwegian cod pots are



used (150 euro per pot), which can be used on vessels larger than 10 m. Bait is necessary for a good catch. Here a challenge is to increase the escape of undersized cod, to reduce the manual work and to get a better price for fresh cod. A comparison between effort of gill nets versus cod pots is done. (*Norbert Schultz, Association fish and environment Mecklenburg-Vorpommern*) In Sweden the reasons to start looking for an alternative for gill nets were the conflict between fisheries and seals (depredation); The environmental factor (selectivity, low energy costs, ghostfishing and decreased bycatch of birds, marine mammals and other fish species) and to create a positive development for small coastal fisheries.

- In Sweden a 'seal safe' cod pot was developed. They use pieces of herring as bait, which is placed in the centre of the pot. They discovered that one entrance works better than two entrances (Norwegian pots have two entrances) as well as a floating two chambered pot with a rather small entrance and selection panel. The panels of the pot are degradable, to prevent ghost fishing. New traps do not catch very well the first two weeks, the catch improves when the pot gets older. No daily cleaning is required. Factors influencing catch are: season, distance to spawning ground, soak time, slope and visual stimuli (green light or white strip). When using seal exclusion devices there is no bycatch of marine mammals. (*presentation Sara Königson, Swedish University of Agricultural Sciences – Department of Aquatic Resources*)
- In France several types of pots have been tested: different types caught different species. The pots were tested in a flume tank and at sea, always using unique bait (fresh sardine). Also several baits were tested in Norwegian pots. Main species caught: Norway pout, conger eel, crab and whiting. Species caught might affect other species to enter or not enter the pot. During the trials video recordings underwater have been made. (*presentation Sonia Mehault and Fabien Moreandeu, IFREMER*)
- The fish trap manufacturer from France told that pot handling with one person is difficult (tested in coastal waters). And very often a problem is the bycatch of crab, eating the fish. Lifted traps were used to prevent crab bycatch. Next to regular bait, also the type of bait bag is important. (*presentation Jean Roullot, Le Drezen*)
- The fish trap manufacturer from Sweden works with two types of pot: the Norwegian cod pot and a cylindric model. Him and his colleagues focus on creating new fishing locations and combining mussel nets with cod pots. (*presentation John Tyrstrup, Kingfisher*)
- During lunch, attendees had the opportunity to have a close look at the fish traps brought to the meeting.

## Possibilities for use of fish traps in wind farms

Dirk Verhaeghe (ILVO) presented his views on possibilities for fishing with traps in offshore wind farms. Wind farm areas are very suitable for fishing with static gears like traps. In the United Kingdom and Denmark fishing with static gear inside of wind farms is allowed. In The Netherlands, Germany and Belgium it is not. Agreements should be made with the concession holder (offshore wind industry) and the government. The fishing gear needs to be developed in such a way that it is 'wind farm friendly'.

Paul Westerbeek (Dutch government, Rijkswaterstaat Noordzee) talked about possibilities for fishing in wind farms according to the Dutch government. Currently there are two operational small wind farms. In future, only wind farms will be built in two larger designated areas, in order to concentrate this activity. The government did not want other users than wind farm operators in the area, because of safety and liability issues. The present opinion is that the wind farms in the future should be opened for some activities, e.g. recreation and sustainable fisheries. No bottom trawling,



because the cables are not buried deep enough for that. Same counts for the use of large anchors. The government has no definite position, yet.

## Plans for the future

Most participants were in favour of developing the fishery with fish traps. Hans Polet (ILVO) made an inventory of possibilities for financial support. He also listed potential partners that should be involved in a research project on this type of gear. There is a need for an international project, in order to make sure that lessons learnt in the different countries are combined and the wheel is not invented again.

- Funding possibilities: European Committee (FP7, Life+, EFF and tenders), INTERREG (ends in 2013), collective actions in fisheries (national funding), wind farm companies that are keen to have a sustainable image.
- Interested parties: Mermaid, IMARES (NL), LEI (NL), IFREMER (FR), SLU (S), vTI (D), Association Fish and Environment Mecklenburg-Vorpommern (D), ILVO (B), Seafish (UK), Vereniging Kust & Zee (Coastal & Marine Union), (individuals, Fisheries Knowledge Groups), Marine Science & Communication.
- Other potentially interesting partners: North Sea Foundation, WWF, Zeehondencreche Lenie 't Hart, Van Hall Larenstein (students Kust & Zee management)

All interested parties are requested to summarise their questions around fishing with traps on one page and to send this to Marije Siemensma (M.siemensma@msandc.nl). Marije Siemensma, together with Hans Polet, Birgit de Vos and Floor Quirijns will take the initiative to bring this forward.

## Fish traps in the North Sea – a viable option?

View of an environmental organisation (Christien Absil, North Sea Foundation): they have been promoting passive fisheries. NSF is happy to see that there are possibilities and hopes that this type of fishery can be developed for North Sea fishers. There should be possibilities in wind farms and Natura2000 areas.

## Conclusions

Dirk Verhaeghe and Marije Siemensma conclude the meeting with a brief summary of what has been discussed. During the day, an overview of current trials with fish traps in Europe has been given, focusing on the target species for which this gear technique can be used (lobster, cuttlefish, crab, sea bass, cod, sole); The diversity of pots and traps and its on-going adjustment to the needs of the fishermen according to the location, target species and practical circumstances and the pro's and con's for this technique; Rijkswaterstaat gave a view on current and future possibilities on use of offshore wind park areas as fishing grounds and to conclude an inventory has been made to see which parties would be interested to continue working on developing this gear type and its use.

The industry indicates to be interested and curious, however there are still questions about how this gear type functions in Dutch waters. This might be a consideration for a future working group on this topic (a new Fisheries Knowledge Group or the Gill Net and Small scale groups combined?). Trials in offshore wind parks to test the practical design or the behaviour of fish (bait, stimuli, ...) could be a way forward to answer questions. Linking sustainable energy to sustainable fisheries might be a potential for future cooperation. Commitment of the offshore wind sector and the



government is essential in this, as well as a proactive approach of the industry. The commercial viability and the marketing of fresh fish need attention as well.

Apart from national knowledge exchange, there is interest and need for international cooperation. Such cooperation should include not only research institutes, but also manufacturers, NGOs, technicians and above all the fisheries industry from the beginning.



Ministerie van Economische Zaken,  
Landbouw en Innovatie



**Ondersteuning van de Kenniskringen Visserij door het LEI en Imares wordt gefinancierd door het Ministerie van Economische Zaken, Landbouw en Innovatie.**



## Appendix 1. List of Participants

<b>Name</b>	<b>organisation/ representing</b>
<b>Adri Meeldijk</b>	WR152, Fisheries Knowledge Group gill net fishing on sole
<b>André Jongejan</b>	IJM368
<b>Arjan Korving</b>	SCH61, Fisheries Knowledge Group gill net fishing on sole
<b>Ben Wensink</b>	Ymuiden Stores Holland BV
<b>Bernd Mieske</b>	Johann Heinrich von Thuenen-Institute, Insitute of Baltic Sea Fisheries
<b>Birgit de Vos</b>	LEI, part of Wageningen UR. Fisheries Knowledge Groups coordinator
<b>Bram Couperus</b>	IMARES
<b>Christien Absil</b>	North Sea Foundation
<b>Daniel Stepputis</b>	Johann Heinrich von Thuenen-Institute, Insitute of Baltic Sea Fisheries
<b>Dirk Verhaeghe</b>	ILVO fisheries
<b>Ed Reker</b>	
<b>Fabien Morandau</b>	IFREMER
<b>Fam Sluiter (2)</b>	HD16, shrimps
<b>Ferry Minnaar</b>	SCH73
<b>Floor Quirijns</b>	IMARES, part of Wageningen UR, Fisheries Knowledge Groups coordinator
<b>Frans Veenstra</b>	IMARES
<b>Ger de Ruiter</b>	Fisheries Knowledge Group small scale coastal fisheries, WSW1, professional angler
<b>Gert Lont</b>	
<b>Gijsbert van der Bent</b>	weekly journal "Visserijnieuws"
<b>Gus Caslake</b>	SEAFISH Cornwall UK
<b>Hans Polet</b>	ILVO Institute for Agricultural and Fisheries Research
<b>Hendrik</b>	UK202
<b>Henk Woord</b>	UK93
<b>Herma Klein</b>	North Sea Foundation
<b>Jan en Stefan Bakker</b>	WR220
<b>Jan Geertsema</b>	TS31, Vereniging Vaste Vistuigen vissers
<b>Jan Verschoor</b>	SCH40
<b>Jean Roullot</b>	Le Drezen
<b>Johan Bakker</b>	UK163
<b>John Tyrstrup</b>	Kingfisher Sweden
<b>Klaas de Boer</b>	UK155
<b>Klaas Kramer</b>	UK202
<b>Luc Louwagie</b>	N.95
<b>Maarten den Dulk</b>	Ymuiden Stores Holland BV
<b>Marije Siemensma</b>	Marine Science & Communication
<b>Norbert Schulz</b>	Association fish and environment Mecklenburg - Vorpommern Germany
<b>Paul Westerbeeek</b>	Rijkswaterstaat, Directie Noordzee
<b>Rems Cramer</b>	KW2, Fisheries Knowledge Group gill net fishing on sole



<b>Sara Königson</b>	Swedish Institute of Coastal Research
<b>Sjouke Steegstra</b>	Staart van Schieringhals, fishfarming and water treatment
<b>Sonia Mehault</b>	IFREMER
<b>Teun en B. Keuter</b>	UK146/ZK38
<b>Theo Wols</b>	SCH7
<b>Ton Krab</b>	IJM368
<b>Van Ste</b>	YE67/167 lobster, eel, sole gillnet fishing
<b>Vereniging Kust &amp; Zee</b>	NGO
<b>VISAKTUA (magazine Rederscentrale) and "Het Visserijblad"</b>	VISAKTUA and "Het Visserijblad"
<b>Wim Zaalmink</b>	LEI, part of Wageningen UR. Fisheries Knowledge Groups coordinator
<b>Wouter Jan Strietman</b>	LEI, part of Wageningen UR. Fisheries Knowledge Groups coordinator