



Foto: Jostein Saltvik

## Raising cod pots off the sea bottom

*For coastal fishing, fish pots have often been viewed as a potential alternative to gillnets and longlines. In order to keep the pots out of the reach of king crabs, a new pot has been developed which is raised slightly above the sea bottom.*

BY DAG M. FUREVIK

There are a number of advantages to fishing with pots, including that they can be left in the water for several days, without it affecting survival rates. They are cost-efficient to operate, do little damage to the sea bottom and can provide top quality, live fish. It is also easy to make them size-selective, and they can be left in the sea for a long time without any impact on the quality of the catch.

### BYCATCH PROBLEMS

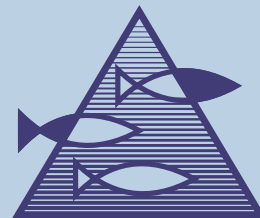
The Institute of Marine Research has already developed a two-chamber fish pot that is good at catching cod,

and may also be an alternative for tusk and ling. It is collapsible, and so takes up little deck space, making it very suitable for the coastal fleet.

The fish pots were introduced in several locations, including the Varangerfjorden area, particularly as an alternative to gillnets, which periodically produced large bycatches of king crab. This significant, unwanted catch of king crab not only created extra work for fishermen, but also caused additional wear to their equipment.

However, the fish pots also produced a significant bycatch of king crabs. Although it was generally possible to release the crabs back into the sea unharmed, once again it resulted

Upper photo: The fish pots are collapsible, and therefore take up little deck space.  
Lower photo: Floating pot in use.



INSTITUTE OF MARINE RESEARCH  
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in extra work for the fishermen and damage to their equipment.

### RAISED OFF THE SEA BOTTOM

In order to prevent the bycatch of king crab, work started on developing a floating fish pot with the same basic design as the pots that rest on the bottom.

For the floating fish pot, the steel frame at the bottom was replaced by a fibreglass frame, in order to make it lighter. The trap is buoyed by extra floats and is balanced horizontally by putting some lead core line on the fibreglass frame at the opposite end to the crow's foot. For the pot to be effective, it is very important for it to float horizontally. The height above the sea bottom was adjusted by putting sinkers weighing approximately two kilos on or by the crow's foot. There was no king crab bycatch. Furthermore, trials showed that closing the entrance by the crow's foot increased the catch significantly.

This is possible because, when the pot is floating, it lines itself up with the current, meaning that the entrance opposite the crow's foot always faces down current. Pots resting on the sea bottom must always have two entrances in order to maximise the chance of catching fish.

### NEXT STEPS

In 2009, additional trials were carried out with the support of the The Fishery and Aquaculture Industry Research Fund (FHF), with varying results. We would like to follow up and expand these trials both in terms of locations and times.

We also want to look at the importance of size, choice of materials, contrast and colour, as well as potential improvements to the design.

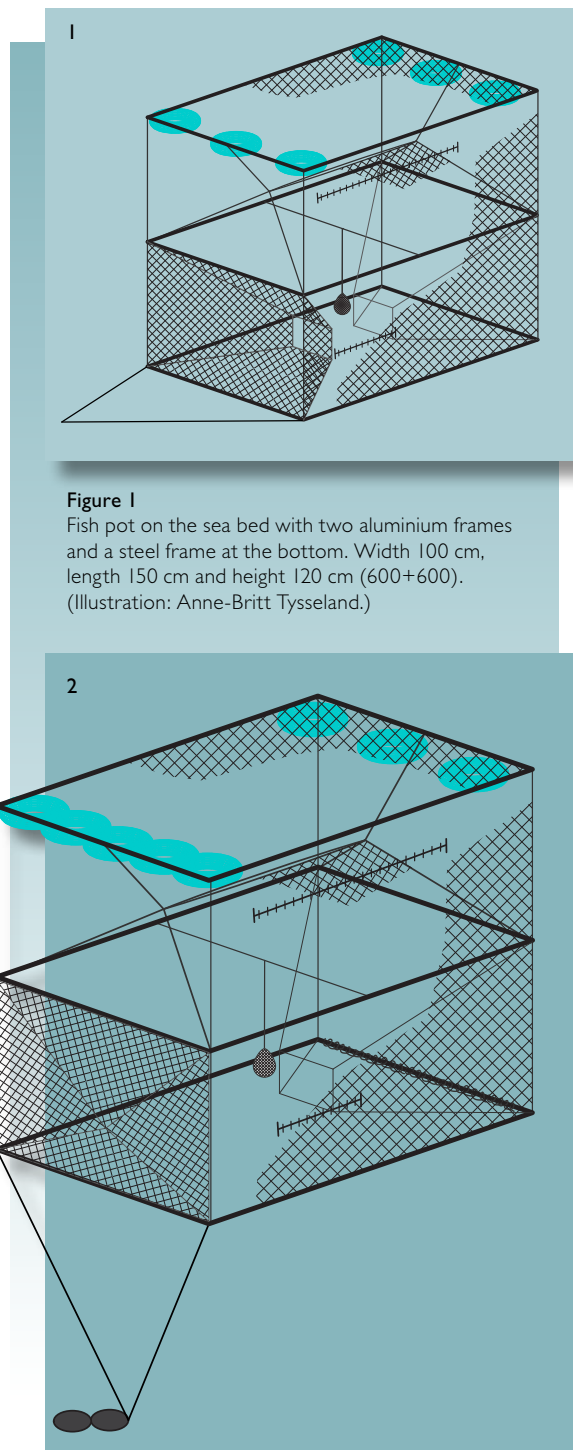


Figure 1

Fish pot on the sea bed with two aluminium frames and a steel frame at the bottom. Width 100 cm, length 150 cm and height 120 cm (600+600). (Illustration: Anne-Britt Tysseland.)

Figure 2

Figure 2

Floating fish pot with the same design as the pots that rest on the sea bed. The trap is buoyed by extra floats and is balanced horizontally by putting some lead core line on the fibreglass frame at the opposite end to the crow's foot. Floating fish pot with two aluminium frames and fibreglass frame at the bottom. Width 1000mm, length 1500mm and height 1200mm (600+600).

### INSTITUTE OF MARINE RESEARCH

Nordnesgaten 50  
P.O. Box 1870 Nordnes  
NO-5817 Bergen – Norway  
Tel.: +47 55 23 85 00  
Fax: +47 55 23 85 31

www.imr.no

### TROMSØ DEPARTMENT

Sykehusveien 23  
P.O. Box 6404  
NO-9294 Tromsø – Norway  
Tel.: +47 55 23 85 00  
Fax: +47 77 60 97 01

### FLØDEVIGEN RESEARCH STATION

NO-4817 His – Norway  
Tel.: +47 55 23 85 00  
Fax: +47 37 05 90 01

### AUSTEVOLL RESEARCH STATION

NO-5392 Storebø – Norway  
Tel.: +47 55 23 85 00  
Fax: +47 56 18 22 22

### MATRE RESEARCH STATION

NO-5984 Matredal – Norway  
Tel.: +47 55 23 85 00  
Fax: +47 56 36 75 85

### RESEARCH VESSELS DEPARTMENT

Tel.: +47 55 23 68 49  
Fax: +47 55 23 85 32

### PUBLIC RELATIONS AND COMMUNICATION

Tel.: +47 55 23 85 38  
Fax: +47 55 23 85 55  
E-mail: informasjonen@imr.no

### CONTACTS

Dag M Furevik  
Tel.: +47 55 23 68 29  
E-mail: dag.furevik@imr.no

Svein Løkkeborg  
Tel.: +47 55 23 68 26  
E-mail: svein.loekkeborg@imr.no

Jostein Saltskår  
Tel.: +47 55 23 68 05  
E-mail: jostein.saltskaar@imr.no

Terje Jørgensen  
Tel.: +47 55 23 68 25  
E-mail: terje.joergensen@imr.no

