

# ***The Effect of Set Net Soak Time on Fish Quality***

Data Sheet No.1994/24/FT/ed2

## **The Quality Factor**

Set nets are a selective fishing method but the value of the catch landed depends on its quality.

Net soak time is all important—too long and the fish become worthless through spoilage, net and predator damage.

The information given in this data sheet is mainly about cod although the same principles apply to all fish.

## **Seafish Trials in a Cod Gill Net Fishery**

This was in the summer-time off the Yorkshire Coast.

The nets were soaked for a range of times up to 48 hours.

The fish were graded at sea for - spoilage, net and predator damage.

Samples of the fish were kept ashore on ice and assessed for eating quality.

## **The Findings**

Cod died after about 9 hours of being meshed and in all respects of spoilage, net and predator damage, deteriorated rapidly after that. In addition the rate of fish capture was found to reduce with increasing soak time.

After a 24 hour soak time some cod had become unmarketable.

After a 48 hour soak time the marketable catch from the nets was **less** than that from a 24 hour soak time.

Long soak times reduced the value of the remaining marketable fish.

Cod spoilt about four times faster in the sea water at 11°C than on ice at 0°C.

The cod graded as 'spoiling' had lost about half of its useful storage life.

Fillets from the damaged fish were devalued by softening, bruising, gashing and the necessary trimming.

The fish graded as 'spoiling', together with its associated damage, fetched 30% - 60% less on the market than the best fish. However, the adoption of improved fish handling practices on the vessels, including icing and grading the fish at sea for quality raised overall earnings by 10%-20%.

Limited data from trials in other fisheries suggests that species such as rays and monkfish are more robust and survive longer in the nets but also deteriorate rapidly after death.

### **The effect of soak time on cod spoilage**



### **The effect of soak time on net damage to cod**

Picture not available

### **The effect of soak time on predator damage to cod**



## **Recommendations**

Soak times should be short to maximise the value of the fishery.

The best means of assuring fish quality is for the fish to remain alive on hauling. To achieve this in the summer time cod fishery, soak times should be restricted to about 9 hours. Beyond this some fish will have died and be deteriorating and quality will be mixed. By 24 hours some fish will be unmarketable.

For other fisheries the robustness of the fish varies and different soak times may be acceptable but the same principles apply.

Careful fish handling, icing and grading the fish at sea for quality, if necessary, further increase the value of the catch.

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