CONSUMPTION OF FISH IN EUROPE: NEW FORMS OF FOOD EDUCATION

THE ROLE OF CIVIL SOCIETY ORGANISATIONS

Dr Christine Absil – Good Fish Foundation

Christine@Goodfish.guide
What is a responsible choice?

**Sustainable stock**: within safe biological limits
- Fishing mortality below Fmsy
- Stock size above Bmsy

*Figure 1*  
Herring in Subarea 4 and divisions 3.a and 7.d, autumn spawners. Summary of the stock assessment.
What is a responsible choice?

Limited effects of **fishing technique** on environment

Pelagic trawl: low habitat impact. Bycatch usually low if fishing schools

Beamtrawl: high habitat impact. Low selectivity

Traps/pots: passive gear
Low habitat impact
What is a responsible choice?

Aquaculture:
- farming method
- Composition and origin of feed
- management

Closed recirculation: environmentally friendly

Open net pens: danger of water pollution and disease spread

Extensive ponds

Intensive ponds
Extensive aquaculture systems can be integrated with the natural environment.
Intensive aquaculture systems such as tropical shrimp farms often have multiple environmental issues in relation to disease control, water pollution, habitat damage. Also labour conditions on these farms can be a serious issue, amongst others because of the high temperatures and lack of shade.
What is a responsible choice?

<table>
<thead>
<tr>
<th>Antibiotics</th>
<th>pH&lt;sup&gt;(1)&lt;/sup&gt;</th>
<th>Stability in Aqueous Solutions</th>
<th>Develop Resist.&lt;sup&gt;(2)&lt;/sup&gt;</th>
<th>Cross Resist.&lt;sup&gt;(3)&lt;/sup&gt;</th>
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<tbody>
<tr>
<td></td>
<td>Days</td>
<td>pH</td>
<td>°C</td>
<td></td>
</tr>
<tr>
<td>1. Chlorotetracycllin</td>
<td>6.0-6.6</td>
<td>14</td>
<td>2.5-3</td>
<td>25</td>
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<tr>
<td>2. Bacitracin</td>
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<td>5-7</td>
<td>35-37</td>
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<td>3. Carbomycin</td>
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<td>5-7</td>
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<tr>
<td>4. Chloramphenicol</td>
<td>7.4-8.0</td>
<td>30</td>
<td>6-8</td>
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<tr>
<td>5. Colistin</td>
<td>7.0-8.0</td>
<td>16</td>
<td>7-7.8</td>
<td>20</td>
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<tr>
<td>6. Canticidin</td>
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<td>7</td>
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<tr>
<td>7. Erythromycin</td>
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<tr>
<td>8. Kanamycin</td>
<td>7.4-8.0</td>
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<td>9. Nystatin</td>
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<td>-</td>
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<tr>
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<td>18. Trichomycin</td>
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</table>

Management: Are effective aquaculture regulations in place, and are they sufficiently enforced? For example, chemicals and medicine regulation and use is varying widely across the world.
Responsible choices are not only about sustainability. They can also be about human rights: has slave labour been involved in the catching or processing of fish?
A responsible choice is also about legality: is the fish caught by illegal fishery? Fortunately, the EU has strong measures prevention imports of illegal (IUU) seafood: The EU-IUU regulation.
A responsible choice is also about **health**: some seafood products contain high concentrations of harmful substances such as PCBs (in fatty fish), or mercury (in species such as swordfish, at the top of the foodchain).
“Seafood from nearby” is not necessarily a responsible choice in terms of carbon footprint. Seafood can be produced in a very efficient way at the other side of the world, and transported to Europe at low emission costs by container vessels. Still, for other reasons it can make sense to buy products from nearby. For example, because communities in remote coastal areas should also be able to make a living from fisheries.
The easiest way for consumers are **ecolabels**: MSC (Marine Stewardship Council) is by far the most widely recognised ecolabel for wild capture seafood. For aquaculture products, there are the customer facing labels ASC (Aquaculture Stewardship Council) and BAP (Best Aquaculture Practice). The sustainability is guaranteed throughout the supply chain as these ecolabels have a *‘chain of custody’*. There are also less credible ecolabels, for example the label for ‘sustainable eel’. Fortunately, the Sustainable Eel Group now has decided to follow the ISEAL procedure for ecolabels to strengthen its standard.
If there is no ecolabel, consumers can still easily find out whether it is a responsible product: EU labelling requirements tell that the product has to have details on the origin and the production (catch/aquaculture) method.
How to make a responsible choice: information on the label

With the information on the label, consumers can easily identify whether the product has a sustainable origin, by checking a ratings app based on a traffic light system (WWF, Fishonline, VISwijzer, Seafood Watch US). These ratings are based on widely accepted criteria, and are updated regularly. Websites provide extensive background information.
By combining area and production method, consumers can easily check whether their seafood choice is a responsible environmental choice.
Many European retailers do carry a fairly wide selection of certified seafood products. Some also indicate the traffic light score on their products, which makes it very easy for consumers to make a responsible choice.
How to make a responsible choice: Fishmongers and restaurants

Ecolabels are lacking at the fresh counter and in restaurants. But the other information that we would like to see: the **origin and catch method**, usually is lacking. A responsible choice is difficult.
How to make a responsible choice: Fishmongers and restaurants

The EU labelling requirements are not enforced properly. Information is often incorrect. For example, this label mentions "sustainably caught" but an indication of catch method is lacking.

Civil society organisations are playing a unique role here, since they are the only ones making us aware of issues with labelling.
How to make a responsible choice: Fishmongers and restaurants

So far, only a few programs help restaurants choosing responsible seafood. To mention: **Mr Goodfish** (France), or **Fish2Fork** (UK). What we really need there is **much better information** on where the fish on the menu is coming from, and how it is caught. That is the only way consumers can make informed choices.
Europe is a net importer of seafood. European producers want to see a **Level Playing Field**: the regulations that are in place to ensure responsible seafood production, should also apply to seafood imported from elsewhere. By displaying proper consumer information on the label, we can demonstrate how European production is differentiating from other.
Seafood is the most popular food commodity traded in the world. Traceability is a major problem. That makes informed choices for consumers extra complicated.
How to make a responsible choice: traceability is essential

The lack of traceability and missing information for consumers makes it very easy to fraud with seafood. **Mislabelling or species substitution** is occurring regularly, notably in restaurants. An investigation by Oceana in Brussels restaurants using DNA tracing techniques confirmed this.
How to make a responsible choice: traceability is essential

In the ideal situation, all seafood is **traceable** from the source to the consumer. An example of a traceability initiative is **THISFISH**: the catch can be followed by a code that is with the fish throughout the supply chain.
Example of seafood promotion by NGOs:

**Invasive species (lionfish) US**: lionfish is a "Best Choice" (green). Fishery managers are proactively working to control further spreading of this invasive species, including by promoting human consumption. It is a popular ornamental aquarium fish that has been released or escaped into the Atlantic Ocean. Its spread in U.S. waters is among the most rapid and devastating invasions in history. The Ratings organisation Seafood Watch promotes this unknown species, so that it will be easier to eradicate it.
NGO’s can promote responsible seafood!

Example of seafood promotion:
**Bycatch campaign Netherlands:** the Dutch beamtrawl flatfish fishery is targeting sole. This very valuable species easily brings in 10 euro per kilo. And small soles are plentiful. The fishery uses 80mm mesh, to catch the small sole in particular. However, it is a mixed fishery, so most of the catch actually consists of other species. A considerable part is undersized (particularly plaice), and cannot be sold for human consumption. However, a lot of the bycatch species are perfectly edible, but have a low market value (less than 1 euro/kg) because they are less well known: gurnard, whiting, flounder, dab, to name a few.
To increase demand for underutilised species, Good Fish Foundation initiated a very successful awareness campaign. To do this, the rating methodology was adjusted, to enable underutilised species to be assessed on risk for overfishing.
NGOs can promote responsible seafood

Three retail chains in the Netherlands have already indicated they are going to put underutilised species in the shelves. TV Chef Yvette van Boven (middle) is very actively involved in the promotion.