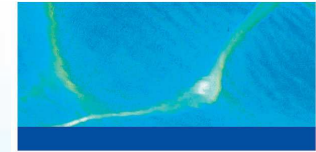


Management by Accident

Ben van de Wetering

**Executive Secretary
International Commission for the
Protection of the Rhine**



Internationale
Kommission zum
Schutz des Rheins

Commission
Internationale
pour la Protection
du Rhin

Internationale
Commissie ter
Bescherming
van de Rijn

International
Commission
for the Protection
of the Rhine

Themes



- **Accidents as a trigger for action**
- **The Sandoz accident as a turning point - the ICPR before and after the fire**
- **Prevention and Control of accidents**

Accidents as a trigger for action



Examples of striking accidents:

- **Torrey Canyon (Cornwall - 1967)**
- **Amoco Cadiz (off the coast of Brittany - 1978)**
- **Erika (off the coast of Brittany - 1999)**
- **Prestige (off the coast of northern Spain - 2002)**
-
- **Sandoz**

Sandoz



1986: Fire at Sandoz



10-30 tons of highly toxic pesticides flowed into the river



causing the death of all aquatic life downstream (e.g. eels on 400 km)

The ICPR before Sandoz



Focus on:

- **Creating confidence and trust**
- **Developing the legal and institutional basis for cooperation**
- **Getting common understanding of the problems in the Rhine**
- **Implementing "end-of-pipe" techniques, i.e. wastewater treatment, rather than on preventive measures**



The Accident triggered a wave of publicity in in the whole Rhine catchment as well as a powerful political attention (3 ministerial meetings in half a year)

Turning the negative impact of the accident into positive action

Result:

The 1987 Rhine Action Programme

The ICPR after Sandoz



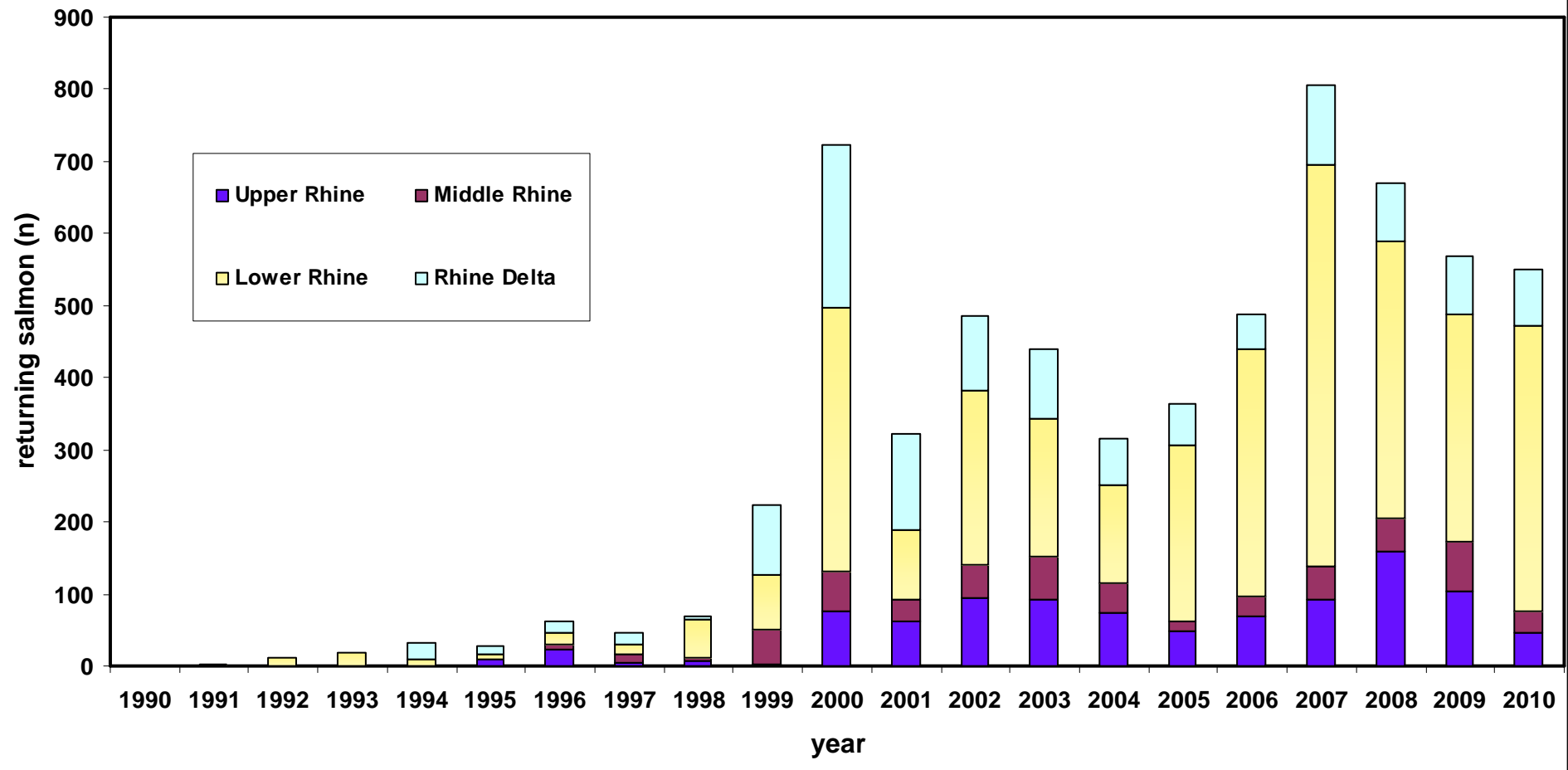
The Rhine Action Programme included some far-reaching long-term political targets:

- **the return of the salmon by the year 2000**
- **50% to 70% reduction of inputs of dangerous substances between 1985 and 1995**
- **guarantee the production of drinking water from the Rhine for the future**

Returning Salmon



6.222 returning salmon counted in the Rhine since 1990



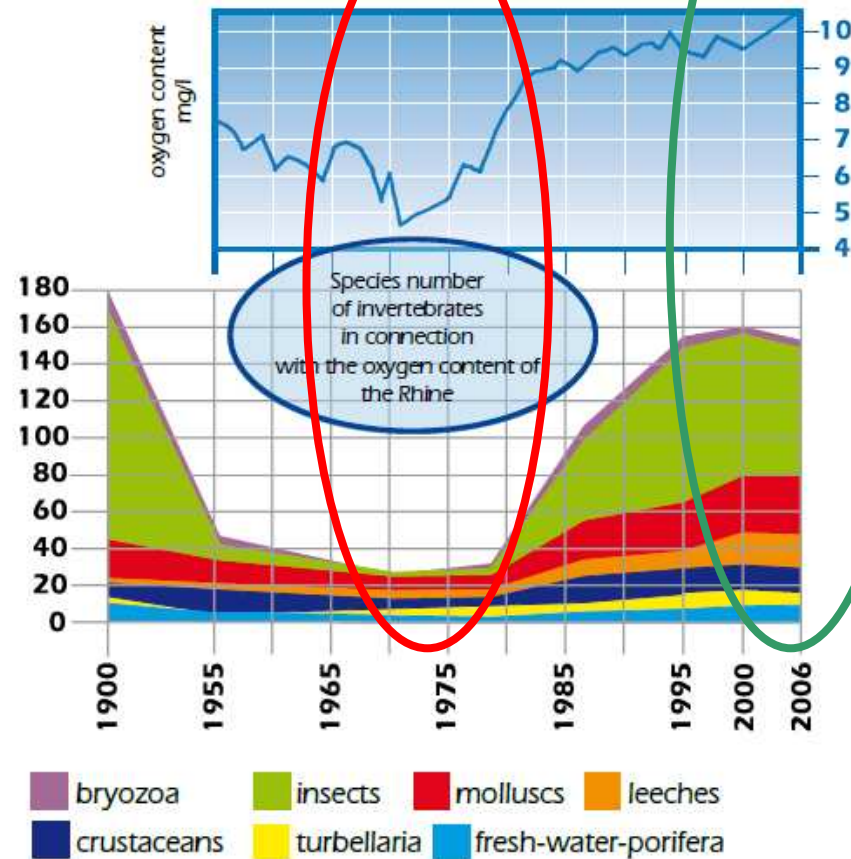
Recovery of the Rhine



560 species and taxa are back



Development of the communities of the Rhine and average oxygen content of the Rhine at Emmerich



Current topics in the ICPR



- **Micropollutants – common strategy**
- **Contamination of fish**
- **Flood Prevention**
- **Effects of climate change on the Rhine catchment**



Prevention of accidents



The ICPR also developed recommendations concern:

- **Fire prevention concepts**
- **Licensing procedures for industrial installations**
- **Technical measures (like overfill, protection of containers, marking of pipelines transporting hazardous substances)**
- **Sealing off industrial plants (to prevent leakage in case of accidents)**
- **etc.**

Control of accidents



- **the Moerdijk accident in 2011: what could go wrong went wrong ...**

**Control of accidents:
a case for further action?**

Thank you for your attention!



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