

# **ICES advice on fish stocks and ecosystem management**

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**Building marine policy on best available knowledge**

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**Stockholm, Sweden**

**ICES is an intergovernmental organisation, all coastal states around the North Atlantic including the Baltic are members**

**ICES is an instrument of its member states to**

- Coordinate and promote marine science**
- Collect and maintain marine data for shared use**
- Provide science based advice for policy support regarding marine issues**

# Advice on:

- Natural resource management - Fish stocks (~150 stocks)
- Environmental protection such as
  - Quality status
  - Impacts of human activities
  - Marine Protected Areas
  - Eutrophication
  - Chemical analytical methods

# Best available knowledge?

- Starting from best available knowledge of biological conditions in the sea - Based on international science, application of research results and international data bases
- Quality assured - peer reviewed advice
- Transparent (documented and process open to observation)
- Advice considered legitimate by governments and stakeholders

# The advice process

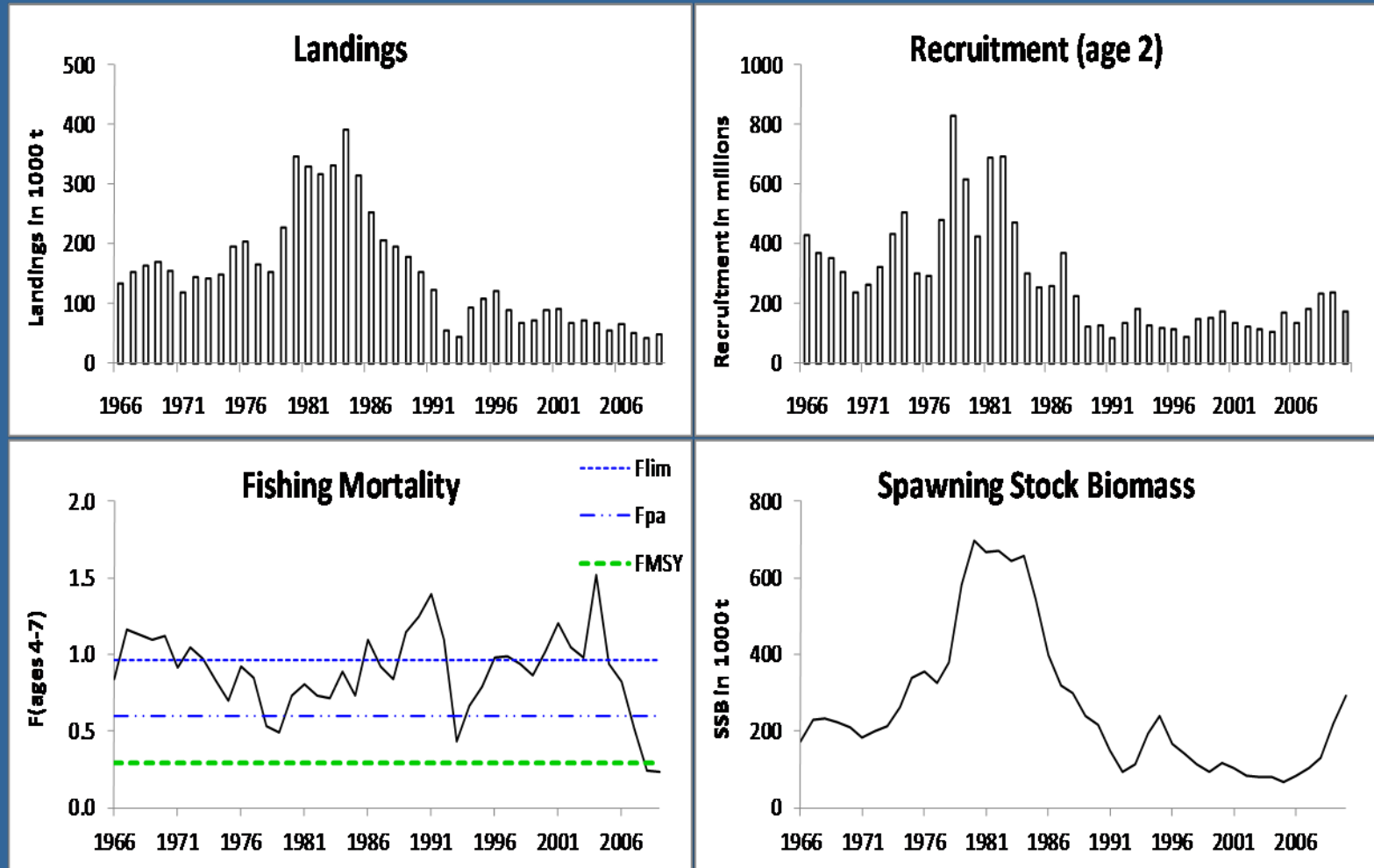


- International agreements and soft law
  - UNCLOS/fish stocks agreement
    - Precautionary approach
    - MSY
  - World Summit on Sustainable Development 2002
    - MSY by 2015
    - Ecosystem approach
- Policies of advice recipients (ICES member states, EC, agreements in RFMOs etc)

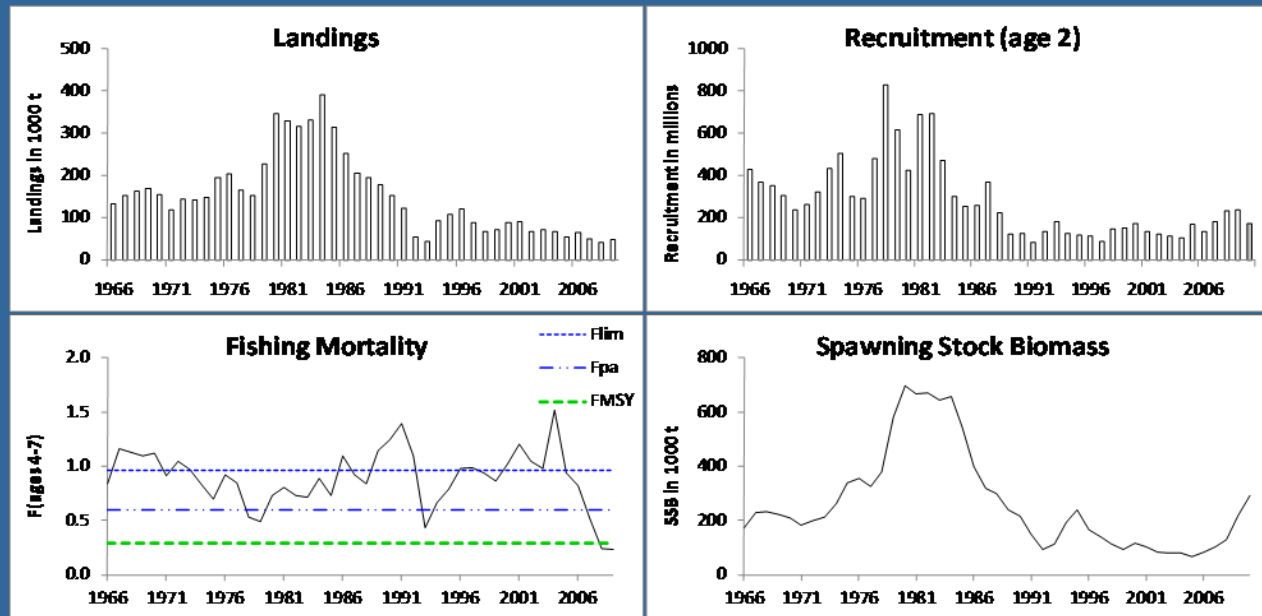
# Baltic fish stocks advice

- Baltic fish stocks are managed under the CFP - main client for fish stocks advice is the EC
- Advice is provided annually on all major stocks exploited commercially in the Baltic – cod, herring, sprat, salmon

# Stock status – Eastern Baltic cod

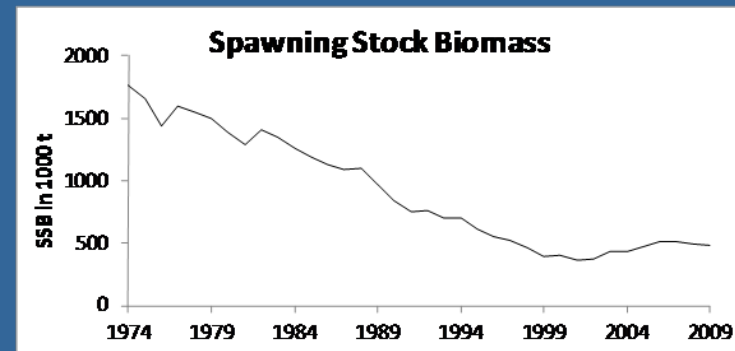
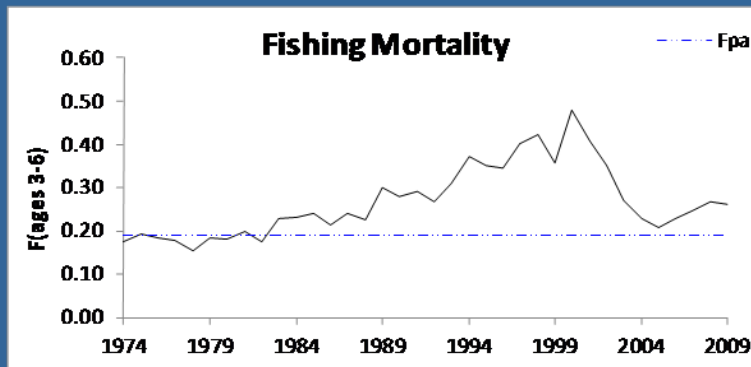
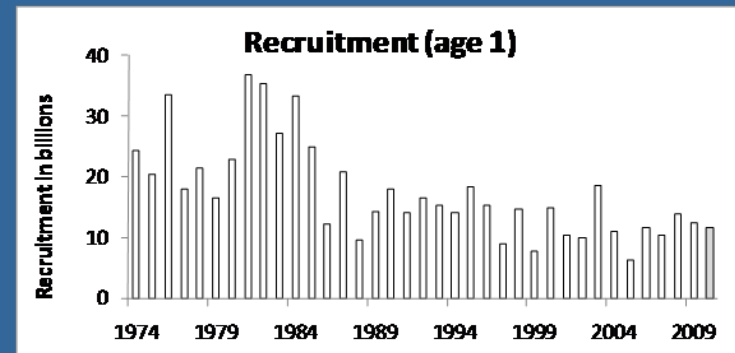
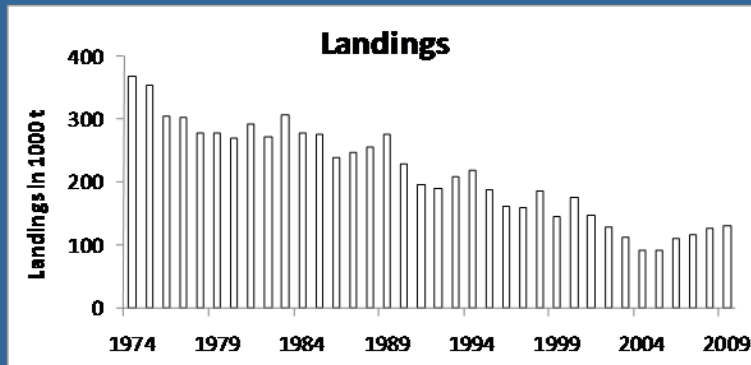


The stock is managed under a EC management plan aiming at MSY



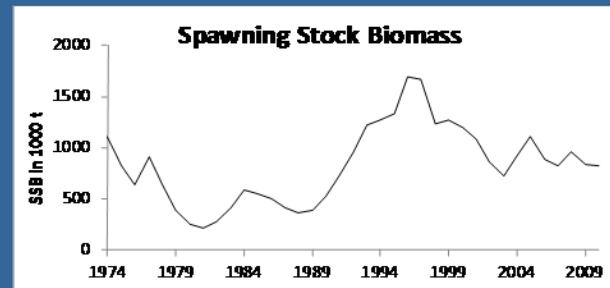
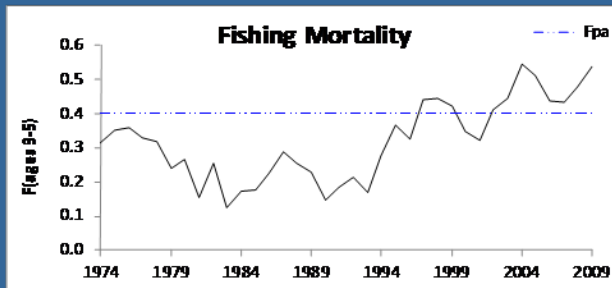
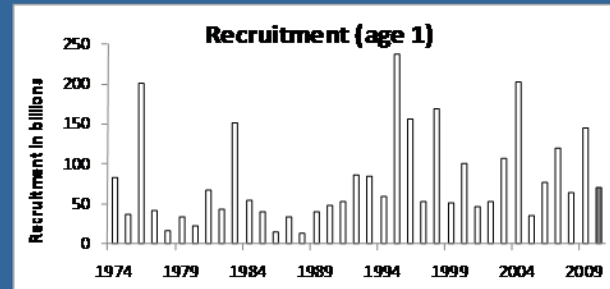
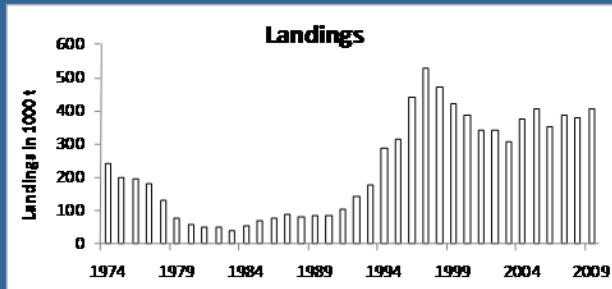
- Strong evidence for a declining trend in fishing pressure
- Fishing pressure in 2009 below reference points for sustainable fishing
- Spawning stock biomass increased rapidly in recent years
- Estimated mis-reporting has decreased to 6% in 2008 and 2009, compared to 32-40% in previous years
- Discard estimates are uncertain but not high compared to landings
- Recruitment has been low over the last 20 years
- 2006 and 2007 year-classes are estimated to be the highest since 1987

# Central Baltic herring stock



- SSB in 2009 was half the long-term average
- Last strong year-class was the 2002 year-class
- F has been above reference points since 2005

# Baltic Sprat



- Spawning stock has declined from an historic high level in the late 1990s
- 2008 year-class is estimated to be strong
- Fishing pressure in 2009 increased to the second highest value recorded for the stock

- Fishing pressure on cod stocks reduced to sustainable levels – improved management and reporting
- Main cod stock recovering
- High fishing pressure on pelagic stocks
- Salmon stocks – 11 out of 27 stocks are likely to have achieved target of 50% productivity

# An ecosystem approach

- An ecosystem approach is a cross sectoral task
  - cannot be implemented by fisheries alone
- Fisheries management contributions:
- Main task has been to reduce fishing pressure to sustainable levels
  - Restoring fish stocks
  - Reducing bycatches of sensitive species
  - Reducing impacts on habitats
- Supplementary measures
  - Reduce bycatches by specific measures
  - Protect habitats (Natura 2000)
- Future: address food web effects of fisheries, integrate knowledge on perturbations

# An evidence based policy?

- Management plans are introduced – and increasingly followed in decision making
- Decisions increasingly implemented - misreporting drastically reduced in last few years
- Improved data basis for scientific assessments due to better policy implementation
- Better quality advice to policy makers
- But
  - uncertainties remain about some data and on perturbations
  - Management plans not in place for some important stocks



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