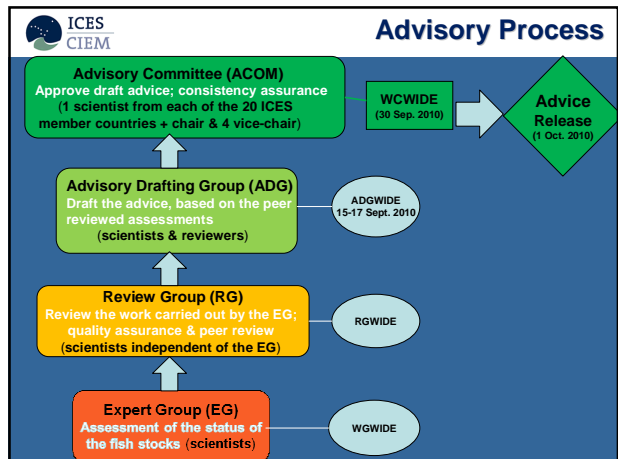


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Pelagic RAC – London, 11 October 2010

ICES Widely Distributed Stocks Advice

Reidar Toresen
ACOM Member



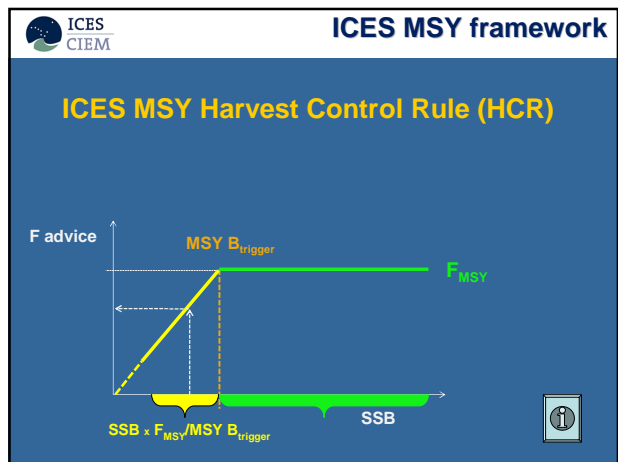
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ICES MSY framework

Based on an F_{MSY} and a biomass safeguard against low spawning stock biomass

F_{MSY} is the fishing mortality that in the long-term will maximize yield

$MSY B_{trigger}$ is a biomass reference point that triggers a cautious response: "A cautious biomass triggering action to maintain a stock within a desirable stock size range"



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ICES MSY framework

MSY Transition

Moving from Current F to MSY in 2015 in 5 steps.

$$F_{transition (2011)} = (0.8 \cdot F_{(2010)}) + (0.2 \cdot F_{MSY-HCR(2011)})$$

But no higher than F_{pa}

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ICES MSY framework

MSY Transition

$F_{MSY-HCR-transition}$ values are capped at F_{pa} to maintain consistency with the PA

Transition to MSY takes into account the general understanding that managers want a gradual transition

However,

MSY Transition – September updates

...there may be situations where a **gradual transition is not appropriate** because the stock is at a low level (e.g., below B_{lim}) and the outlook is for a further decline (e.g., as a result of recruitment failure) unless fishing mortality is reduced more rapidly.

In such cases, ICES may advise on a **more rapid transition or application of $F_{MSY-HCR}$** as soon as possible.

Management Objective (s)	Landings (2011)
• Transition to an MSY approach with caution at low stock size	Less than XX T
• Cautiously avoid impaired recruitment (Precautionary Approach)	Less than X T
• Cautiously avoid impaired recruitment and achieve other objective(s) of a management plan (e.g., catch stability)	Y t

Latest advice available:

<http://www.ices.dk/advice/icesadvice.asp>

Norwegian spring-spawning herring

Blue whiting (Combined stock)

Mackerel in the Northeast Atlantic

Horse mackerel (Western stock)

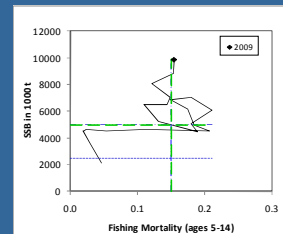
Horse mackerel (Southern stock)

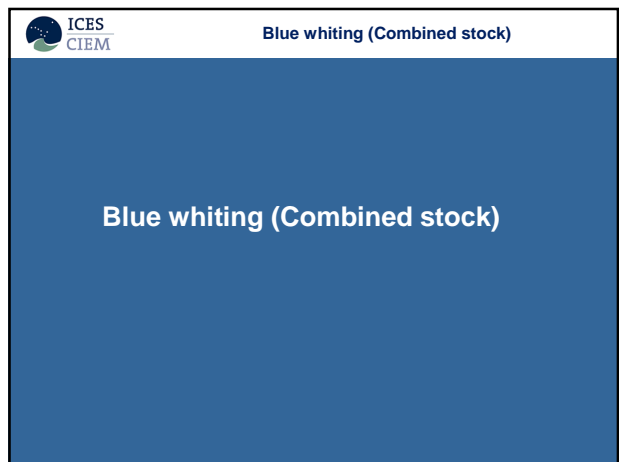
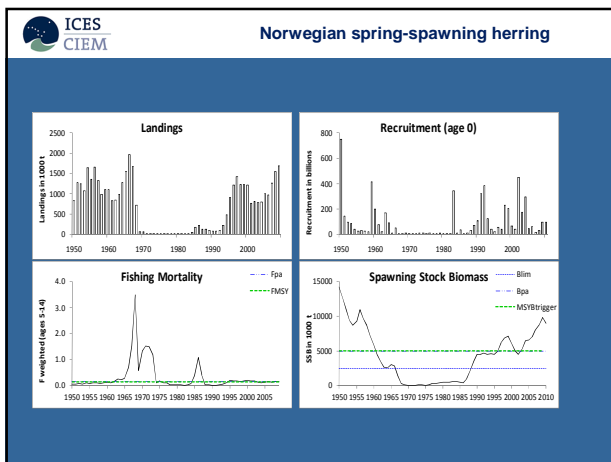
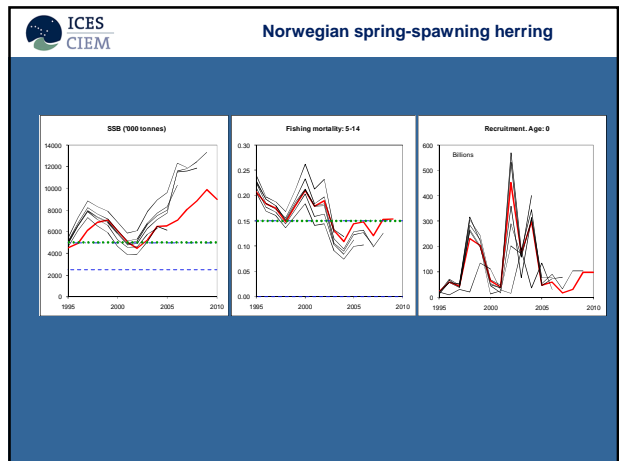
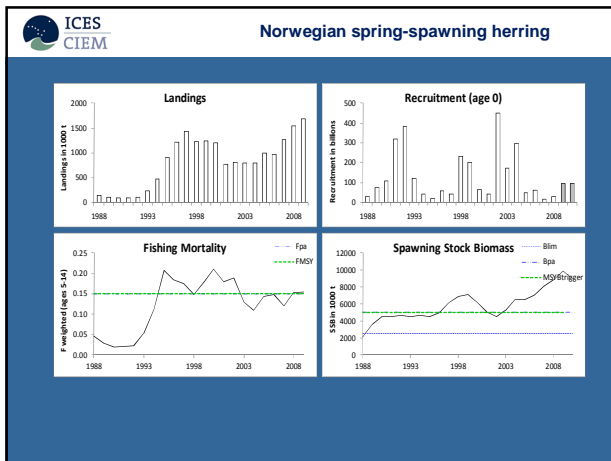
Horse mackerel (North Sea)

Norwegian spring-spawning herring

Management Objective (s)	Landings in 2011
MSY approach with caution at low stock size	Less than 1.17 million tonnes
Cautiously avoid impaired recruitment (Precautionary Approach)	Less than 1.17 million tonnes
Cautiously avoid impaired recruitment and achieve other objective(s) of a management plan (e.g., catch stability)	Less than 0.988 million tonnes

F	2007	2008	2009
F_{MSY}	below	at F_{MSY}	at F_{MSY}
F_{PA}/F_{lim}	below	at F_{pa}	at F_{pa}
SSB	2008	2009	2010
MSY $B_{trigger}$	above	above	above
B_{PA}/B_{lim}	above	above	above

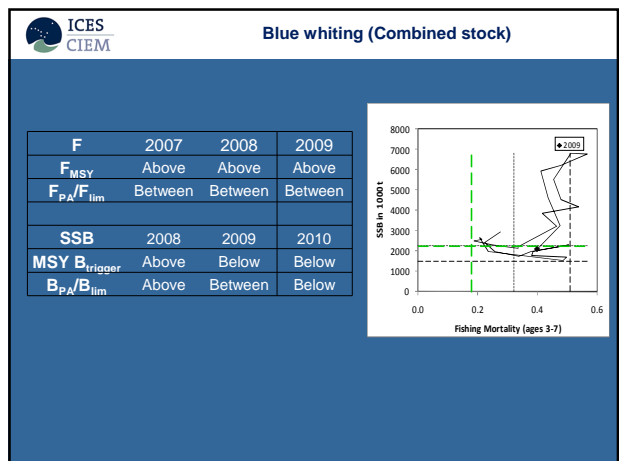


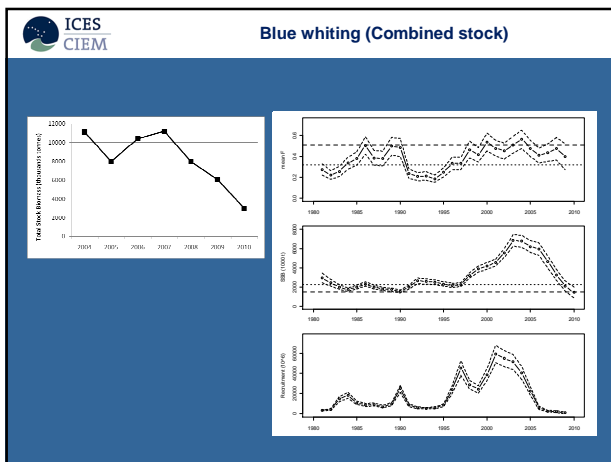
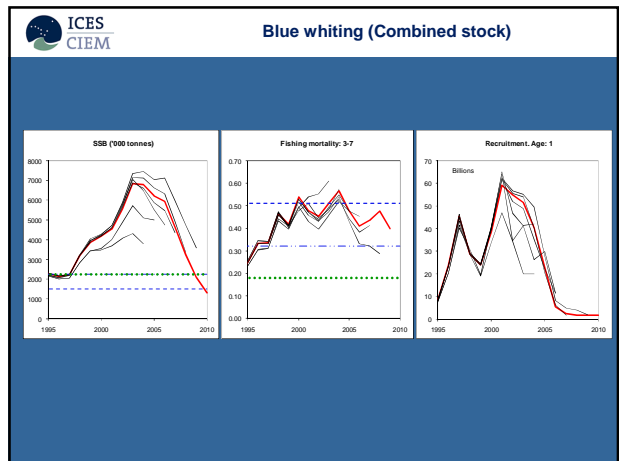
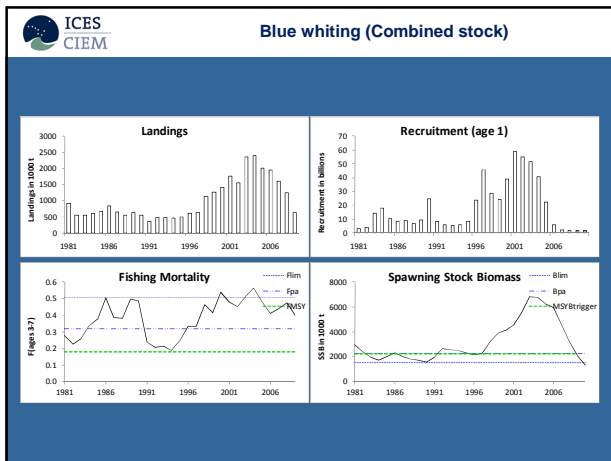


ICES CIEM Blue whiting (Combined stock)

Management Objective (s)	Landings in 2011
Transition to an MSY approach with caution at low stock size	50 700 to 223 000 for transition to the MSY framework by 2011 and 2015, respectively
Cautiously avoid impaired recruitment	Zero landings
(Precautionary Approach)	
Cautiously avoid impaired recruitment and achieve other objective(s) of a management plan (e.g., catch stability)	40 100 tonnes

For the advice related to the transition to an MSY approach, the lower end of the range reflects concerns with the current status of the stock and indications of recruitment failure.





Mackerel in the Northeast Atlantic

Mackerel in the Northeast Atlantic

Mackerel in the Northeast Atlantic

Management Objective (s)	Total catch in 2011
Transition to an MSY approach with caution at low stock size	Less than 672 000 tonnes
Cautiously avoid impaired recruitment (Precautionary Approach)	Less than 672 000 tonnes
Cautiously avoid impaired recruitment and achieve other objective(s) of a management plan (e.g., catch stability)	Between 592 000 and 646 000 tonnes

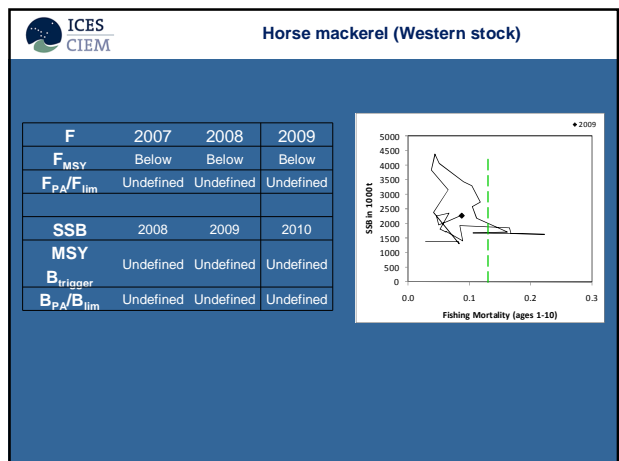
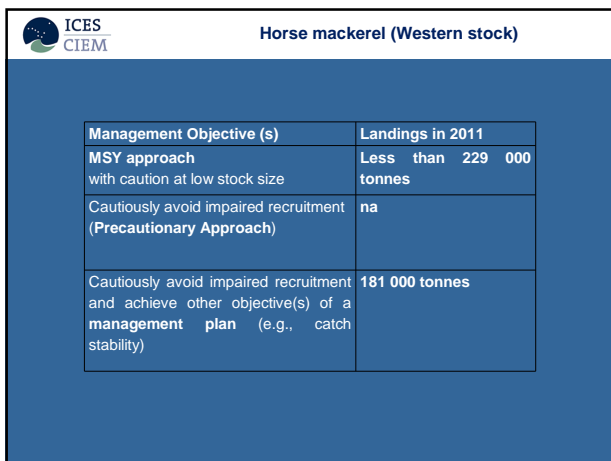
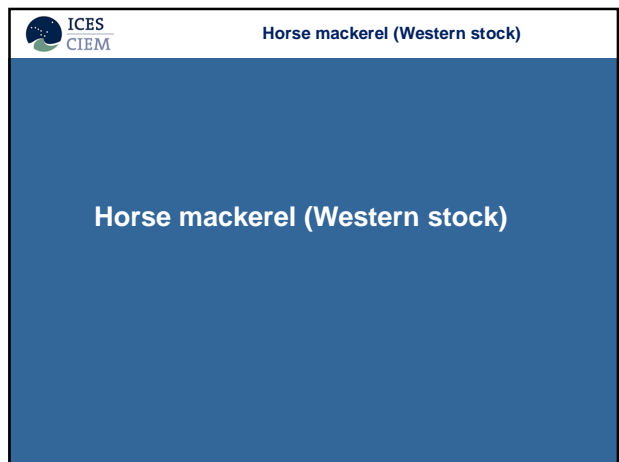
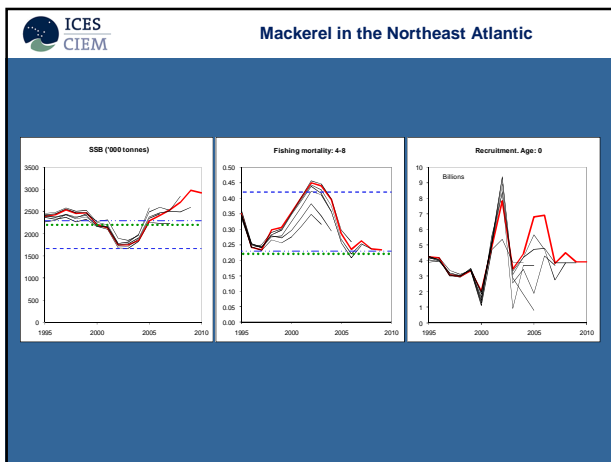
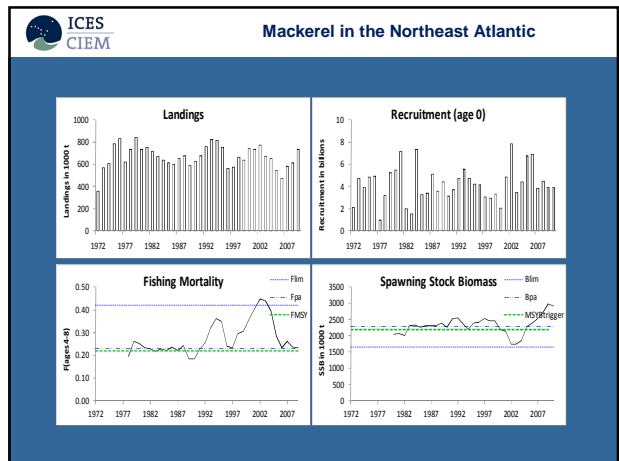
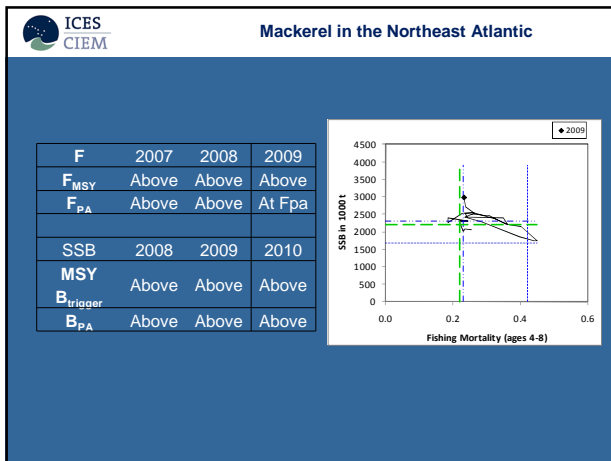
Mackerel in the Northeast Atlantic

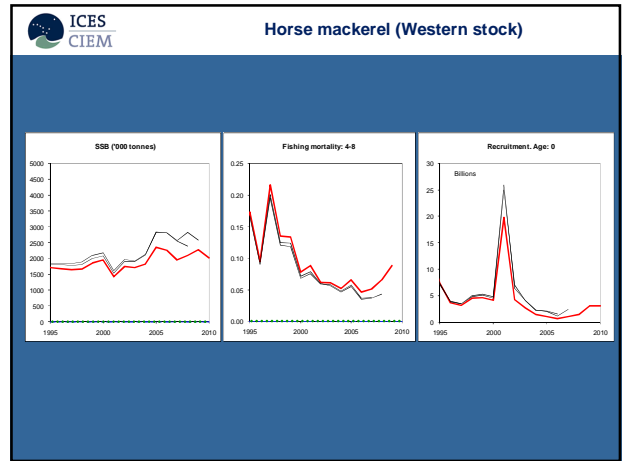
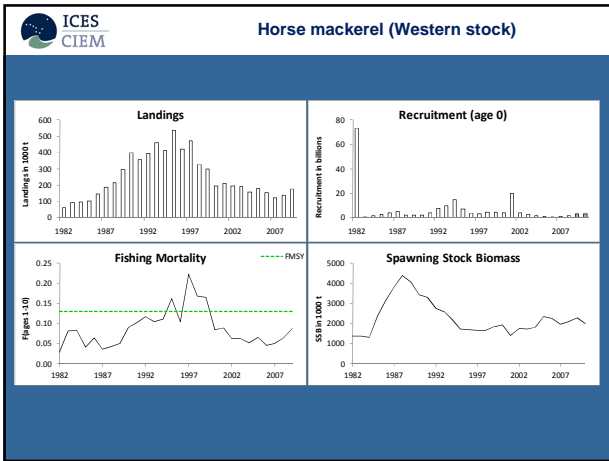
ICES advises that the existing measures to protect the North Sea spawning component should remain in place. These are:

There should be no fishing for mackerel in Divisions IIIa and IVb,c at any time of the year;

There should be no fishing for mackerel in Division IVa during the period 15 February–31 July;

The 30 cm minimum landing size at present in force in Subarea IV should be maintained.



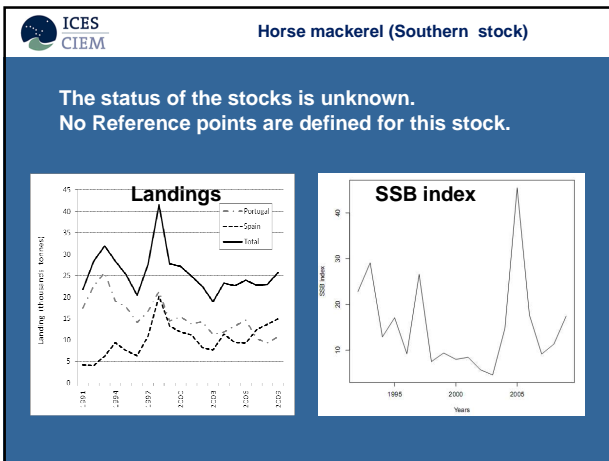


ICES CIEM Horse mackerel (Southern stock)

Horse mackerel (Southern stock)

ICES CIEM Horse mackerel (Southern stock)

Management Objective (s)	Landings in 2011
Transition to an MSY approach with caution at low stock size	na
Cautiously avoid impaired recruitment (Precautionary Approach)	Less than 25 000 tonnes
Cautiously avoid impaired recruitment and achieve other objective(s) of a management plan (e.g., catch stability)	na



ICES CIEM Horse mackerel (North Sea)

Horse mackerel (North Sea)

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Horse mackerel (North Sea)

The state of the stock is unknown and there is no basis for an advice.

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ICES North Sea Stocks Advice

June advice revised in September:

<http://www.ices.dk/advice/icesadvice27SEP2010.asp>

Western Baltic spring-spawning herring

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Western Baltic spring spawning herring

MSY Transition

Error in the transition calculation June

- No change in stock assessment
- No change in forecast results

Only change

F target for the MSY Transition

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Western Baltic spring spawning herring

MSY Transition

Calculation June

$$F_{\text{transition}} (2011) = ((0.8 \cdot F_{(2010)} + (0.2 \cdot F_{\text{MSY}})) \cdot \text{SSB}_{2011} / B_{\text{trigger}})$$

Correct calculation September

$$F_{\text{transition}} (2011) = (0.8 \cdot F_{(2010)} + (0.2 \cdot (F_{\text{MSY}} \cdot \text{SSB}_{2011} / B_{\text{trigger}})))$$

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Western Baltic spring spawning herring

Herring in IIIa and IV (Western Baltic spring spawners)

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Western Baltic spring spawning herring

Advice in June

Management Objective (s)	Catches in 2011
Transition to an MSY approach with caution at low stock size	Less than 39 500 t Additional conservation measure: catches of WBSS herring in the should not be allowed to increase
Precautionary Approach	n/a
Management plan	n/a

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Western Baltic spring spawning herring

Advice in September

Management Objective (s)	Catches in 2011
Transition to an MSY approach with caution at low stock size	26 500 t to 53 600 t for transition to the MSY framework by 2011 to 2015, respectively. Additional conservation measure: catches of WBSS herring in the should not be allowed to increase
Precautionary Approach	n/a
Management plan	n/a

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Western Baltic spring spawning herring

No change from June

Fishing mortality	2007	2008	2009
F_{MSY}	above	above	above
F_{PA}/F_{lim}	undefined	undefined	undefined
Spawning Stock Biomass (SSB)	2007	2008	2009
MSY Btrigger	above	above	below
B_{PA}/B_{lim}	undefined	undefined	undefined

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Western Baltic spring spawning herring

No change from June

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Western Baltic spring spawning herring

No change from June

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Thank you for your attention!
Comments and questions?