

WGBAST 2009 Executive Summary

Baltic Salmon and Trout Assessment Working Group [WGBAST] (Chair: Atso Romakkaniemi, Finland) met in Oulu, Finland, 24–31 March 2009. 17 persons from 8 Baltic countries attended the meeting. The group was mandated to assess the status of salmon (only for Subdivisions 24–31) and sea trout stocks in the Baltic Sea and to propose consequent management advices for fisheries in 2010.

Salmon stocks in the Main Basin and Gulf of Bothnia (Subdivision 24–31) were assessed using Bayesian methodology. A stock projection model implemented in R and conditioned on the Bayesian stock assessment was used for the computation of the impacts of different future scenarios on the stocks. New assessment of the sea trout populations, based on the work of SGBALANST, was reviewed and adopted.

Section 2 of the report covers catches and other data on salmon in the sea. Section 3 reviews data from the spawning grounds (rivers) of salmon and also stocking statistics. Section 4 summarizes information affecting currently and in the near future the fisheries, the natural survival and the management of salmon. Salmon of the Baltic Main Basin and Gulf of Bothnia is assessed in Section 5. Data on salmon in Gulf of Finland is updated in Section 6. Baltic sea trout is assessed in Section 7. There is a special Section (8) dealing with sampling protocols and data needs.

- The natural smolt production of salmon populations has continued to increase and is currently on a record level of about 2.5 million smolts. This is about 70–75% of the overall Potential Smolt Production Capacity (PSPC) of the rivers with wild salmon stocks.
- Post-smolt survival declined to a low level in 2004–06, but increased in 2007. The declined survival has negatively affected catches of salmon and has suppressed recovery of wild salmon stocks.
- A ban of driftnet fishing started from 2008 and dropped offshore salmon catches to their lowest recorded level. The ban is likely to increase number of spawners and thus may increase the subsequent smolt production, provided that effort in the prevailing fisheries will not increase excessively.
- The former IBSFC established as a management objective for wild salmon rivers reaching at least 50% of the potential smolt production by 2010. The large, northernmost stocks are likely or very likely to reach this objective, while the more southern stocks have varying and on average poorer status.
- Sea trout populations are in a precarious state in the Gulf of Bothnia and in the Gulf of Finland. Trout populations in the Main Basin area are in general in a better status.

The group recommends a TAC for salmon in Subdivision 24–32, which would cut any excessive increase of salmon fishing effort in 2010. For sea trout, group recommends strict technical measures to be taken in the Gulf of Bothnia and Gulf of Finland to decrease exploitation of the threatened wild trout populations.

The salmon assessment highlights the current, pronounced changes both in the fisheries (ban of driftnet fishing) and in natural survival (fluctuation in post-smolt survival) of salmon. Seal abundance, smolt production levels, and recruitment of 0+ and 1+ herring were found to correlate with the survival indices of post-smolts. However, more studies and stronger collaboration across different disciplines is needed to reveal causal links affecting posts-smolt survival.

