



BONUS BAMBI News December 2017

Success for BaltGene 2017



BONUS BAMBI end-user conference 'BaltGene 2017' was held in Stockholm on September 21–22. Close to 60 participants, representing managers, government authorities, NGO:s and scientists gathered to discussed

how to include genetics in Baltic Sea management. The meeting concluded that more networking is needed, and that BaltGene 2017 was a first important step.

Recommendations for management

November 2017

BONUS-BAMBI
Management recommendations

Improve adaptive potential of Baltic Sea species - include genetic diversity in management

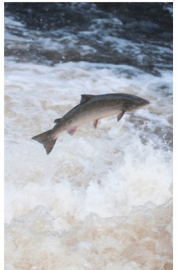
Maintaining biodiversity is a crucial goal for the Baltic Sea. But it cannot be reached without also protecting the diversity within species – the genetic diversity. Increased awareness and recognition of the role of genetic diversity is therefore needed.

Genetic diversity is the biological variation that occurs within species. It forms the basis for all biodiversity and makes it possible for species to adapt when the environment changes. Large genetic diversity within dominant species positively affects ecosystem resilience and function.

The genetic diversity of Baltic Sea species is unique and particularly vulnerable. It has been shaped over thousands of years by natural selection, resulting in local adaptation to the brackish environment.

Populations of marine species in the Baltic show lower levels of genetic diversity than elsewhere and retaining variability needs protection. The most efficient way to counteract loss of genetic diversity is to maintain large and well connected populations.

Small and isolated populations will rapidly lose genetic variation resulting in lower adaptive capacity, loss of resilience and weak potential for long term survival. Activities such as heavy fishing, stocking, or habitat fragmentation can negatively affect the genetic diversity.



The BONUS BAMBI research project
Bambi is a priority Baltic Sea Working Biodiversity project funded by the BONUS ESG under EU Horizon 2014.

The project ran 2014-2017 and was led by Professor Kerstin Johansson at University of Gothenburg.

More about BAMBI: www.bambi.gu.se
More about genetic diversity of the Baltic Sea: bambi.gu.se/baltgene

The Baltic salmon is strongly structured genetically. Historically each river harbored at least one genetically unique population. Low reproduction of separate rivers has resulted in loss of genetic diversity. Bambi research shows that such losses also affect the system of salmon populations as a whole, which separate populations are removed, the rate of loss of diversity will increase in remaining ones. Further, complementary reduction of genetic diversity in wild salmon. Photos: Ingemar Pettersson/Åke

We have produced a new pdf with information and recommendations on genetic diversity for marine managers around the Baltic Sea. The pdf was presented at a workshop organized by the HELCOM secretariat in October, where invited representatives from the BONUS projects discussed how results could influence future work in HELCOM. Kerstin, Linda and Annica participated from Bambi. The pdf was produced with help from Sofia Wikström at Baltic Eye. Please help us and distribute in your networks! Download on www.bambi.gu.se

Website-in-progress



We are adding the last research results to the new website for managers [BaltGene](#). Please take a look and send your comments to Susanne.Liljenstrom@marine.gu.se. Your input is most valuable!

Last Bambi meeting in Luleå

In October, the project partners gathered for the last project meeting. Annica and Carina arranged the meeting at Brändö Konferens just by the water front. Besides discussion on the final results we experienced good food, sauna and bath tubs – and northern lights! Thanks!

The Final Reports

We recently started the BONUS BAMBI final reporting procedures. Besides the annual report, this year we are also expected to compile a Final Report for the whole project period. WP-leaders and PIs have been asked to send their contributions to Susanne no later than **January 30th 2018**. This will give us time to prepare the reports and submit to BONUS by February 28th. The financial reporting is to be submitted on the BONUS-portal by **February 16th**.



Merry Christmas and a Happy New Year!