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## Ecological prediction of Baltic region basing on combination of static and dynamic modeling

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The work is based on long term work of Helsinki commission of Baltic sea and own field and laboratory researches. High rate of knowledge is possibility of forecast. The highest rate is possibility of control. Baltic sea has giant importance in Europe ecology, economic and policy as sea dividing and uniting many states. The growth of instability of environmental-climatic processes, an increase in the number of natural disasters, has been observed since the beginning of the XX century and requires the improvement of methods of environmental-climatic forecasts. The economic situation makes relevant low-cost and progressive forecasting methods. Of particular importance is the logical-mathematical modeling, combining two types of models - dynamic and static. Dynamic based on the analysis of trends. Static models are cheaper and more intellect. They are based on an assessment of the state of the systems (primarily ecological) at the moment, taking into account the element of anticipatory reflection characteristic of living systems. Monitoring the behavior of animals can be the basis of predictions and the creation of static prognostic models. An important and little developed direction of environmental forecasting is the phenogenetic indication. It is based on the analysis of morphologic characteristics of biological populations, quantitative and qualitative variability, sex ratio, sexual dimorphism. The level of development of population and ecological genetics makes this method a promising direction of environmental forecasting. Modeling of environmental processes in the Baltic zone requires taking into account both global processes (increase in climatic instability and the number of extreme natural events, increase in anthropogenic pressure), as well as regional processes (melting ice in the Arctic due to the "pseudo-greenhouse effect" and an increase in the concentration of methane in the atmosphere, cyclical changes in salinity with a period of 55 - 50 years, etc.). Comprehensive assessment of remote and contact monitoring data can be the basis for integrated static and dynamic modeling and a promising direction for the development of environmental safety. The expected trend in the Baltic zone for 10 to 20 years is a slight decrease in temperature, a continuing increase in the number of extreme events and an increase in the biomass and biodiversity of both desirable and undesirable species.