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THE NORWEGIAN NATURE INDEX – PROVIDING AN OVERVIEW ON THE STATE OF BIODIVERSITY

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ABSTRACT

The Nature Index (NI) is a general, integrated framework developed to synthesize and communicate the current knowledge on the state and development of biodiversity. Developed in Norway in 2010, it is designed to synthesize data from available knowledge, including monitoring data, models and expert judgements. The approach builds on the Natural Capital Index (NCI) and the Biological Intactness Index (BII). The NI combines trends of species abundances relative to a baseline. In Norway, we have chosen the baseline as intact nature, i.e. ecosystems with low impact from human activities. For semi-natural ecosystems, we define the baseline as the state of ecosystems as formed by sustainable traditional farming. Nature with low impact from human activities is also chosen as the baseline in GLOBIO and in the Water Frame Directive. Thus, the NI is consistent with other important biodiversity assessment frameworks. In the NI, the combined information from trends in abundances of species in different functional groups is supposed to represent the state of biodiversity in various major ecosystems. The results build on information from a network of ~150 expert from a range of research institutions from environment, marine, forestry and agricultural sectors. So far, we have applied the NI method to nine major marine-, freshwater- and terrestrial ecosystems, but not to strongly modified human ecosystems like urban areas and intensive farming areas. Through an online database, the experts record information on about 300 species and surrogate indicators, environmental drivers, uncertainties of estimates and other metadata. On this basis a program calculates spatial variation (maps) and time trends in selected individual species indicators and aggregated biodiversity indexes for all major ecosystems. In late October 2015, we will present updated results in the form of trend graphs, maps and text online.



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