

HEALTH STATUS OF COD (*GADUS MORHUA*) AT DUMPSITES FOR CHEMICAL WARFARE AGENTS IN THE BALTIC SEA

T. Lang^{*1}, N. Fricke¹, K. Broeg², M. Brenner³, K. Lehtonen⁴, J. Baršienė⁵

¹*Thünen Institute of Fisheries Ecology, Germany*, ²*Federal Maritime Agency, Germany*, ³*Alfred Wegener Institute Helmholtz Centre for Polar and Marine Research, Germany*, ⁴*Finnish Environment Institute, Finland*,

***Thomas.Lang@ti.bund.de**

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Abstract

In the framework of the CHEMSEA project (funded through the Baltic Sea Region Programme 2007-2013), the health status of cod sampled during 2011 and 2012 at dumpsites for chemical warfare agents (CWA) after World War II (Bornholm and Gotland Basins) and reference sites in the south-western Baltic Sea was investigated. Using data on fitness parameters, prevalence of gross diseases and parasites, liver and kidney pathology, lysosomal responses, blood cell counts, oxidative stress as well as data on neuro-, cyto- and genotoxicity biomarkers, the health status was characterised and assessed in an integrated way. The results reveal differences in health status between sampling sites, and, regarding some of the parameters measured, effects of CWA on fish health cannot be excluded. Hydrographical data obtained in the sampling areas indicate that environmental conditions affect the vertical distribution of cod and may, thus, have an impact on health risks posed by CWA.