

## Life history variation in Atlantic cod along the Norwegian coast

Mikko Heino<sup>1,2,3,\*</sup>, Torild Johannesen<sup>4</sup> and Asgeir Aglen<sup>2</sup>

<sup>1</sup>Department of Biology, University of Bergen, Bergen, Norway

<sup>2</sup>Institute of Marine Research, Bergen, Norway

<sup>3</sup>International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria

<sup>4</sup>Institute of Marine Research, Tromsø, Norway

\*mikko.heino@imr.no

**Abstract:** Atlantic cod along the Norwegian coast is managed as one unit north of 62°N (so-called Norwegian coastal cod), partly mixed with the more oceanic northeast Arctic cod stock (skrei), whereas cod further south are managed as part of the North Sea cod stock. In reality, coastal cod consists of several populations along the coast; within a certain area, there is often a stock component associated with outer banks as well as a component spawning in fjords or inner banks. If this diversity is ignored, local populations may become depleted or be lost through fishing. The Institute of Marine Research has started to systematically sample cod from known spawning grounds. The data are being analysed using both genetic and phenotypic approaches. Here we present some results on phenotypic life history variation, with particular attention on maturation patterns.