The following supplement accompanies the article

Synergistic effects of fishing-induced demographic changes and climate variation on fish population dynamics

M. Hidalgo[1,*,], T. Rouyer[1,**], J. C. Molinero[2], E. Massutí[3], J. Moranta[3], B. Guijarro[3], N. Chr. Stenseth[1,4]**

[1]Centre for Ecological and Evolutionary Synthesis (CEES), Department of Biology, University of Oslo, PO Box 1066 Blindern, 0316 Oslo, Norway

[2]Leibniz-Institut für Meereswissenschaften, IFM-GEOMAR, FB3—Marine Ecology/Experimental Ecology, Düsternbrooker Weg 20, 24105 Kiel, Germany

[3]Instituto Español de Oceanografía, Centre Oceanografic de Balears, Moll de Ponent s/n, 07015 Palma de Mallorca, Spain

[4]Institute of Marine Research, Flødevigen Marine Research Station, 4817 His, Norway

*Email: manuel.hidalgo@bio.uio.no
**M.H. and T.R. contributed equally to this paper

Marine Ecology Progress Series 426: 1–12 (2011)

CONTENTS

This supplementary material contains two additional figures.

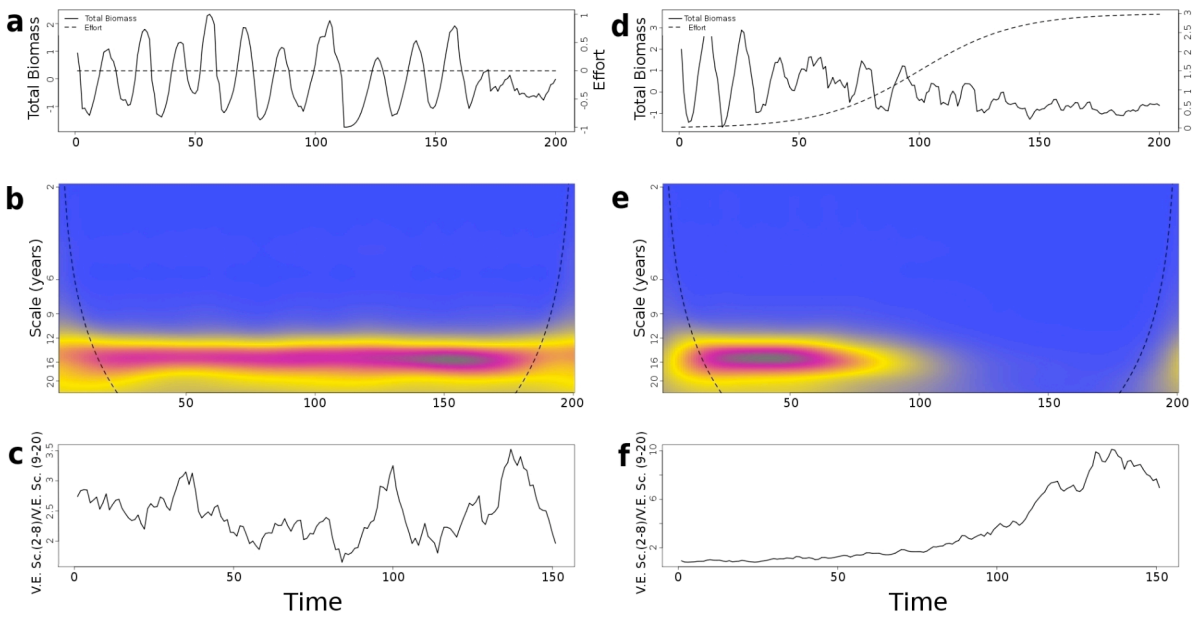

Fig. S1. Population simulations with a white noise environment in absence of fishing (left panels) and including the fishing effect (right panels). From the top to the bottom, figures represent the total biomass (straight line) and effort (dashed line) (a and d), wavelet spectra of total biomass (b and e) and the ratio between the variance explained (V.E.) by the high frequencies (2-8 years) and low frequencies (9-20 years) of the wavelet spectra (c and f).

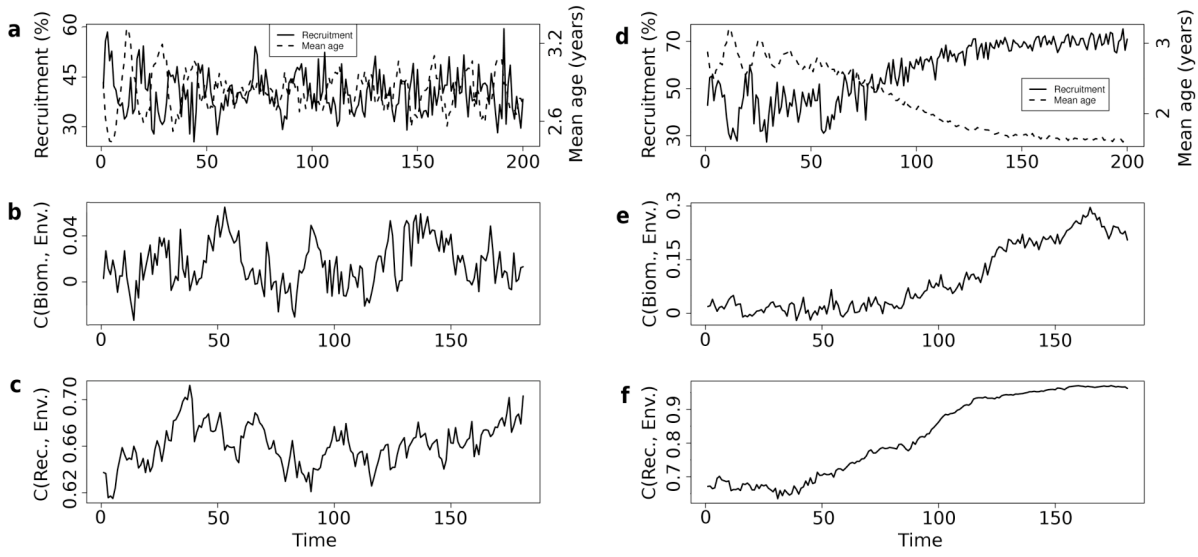

Fig. S2. Population simulations outputs and correlation with the white noise environment in absence of fishing (left panes) and including the fishing effect (right panels). From the top to the bottom, figures represent the percentage of the recruitment into the overall population (straight line) and the mean length (dashed line) (a and d), the correlation between the biomass and the environment (b and e) and the correlation between the recruitment and the environment (c and f). The correlation between time series was obtained on a moving window with a 10 years span. The correlations were then averaged over the 1000 simulations.