

## Short CV – Casper Willestofte Berg

### Degrees

- PhD (Statistical aspects of fish stock assessment), DTU Compute, Technical University of Denmark (2013).
- MSc (Eng) DTU Informatics, Technical University of Denmark (2008).

### Positions

- Researcher, DTU Aqua, Technical University of Denmark (2013-present).
- Consultant, International Council for Exploration of the Sea (ICES) (2012).
- Research Assistant, DTU Aqua (2008-2009).

### Research area

Fish stock assessment models and population dynamics, methods for analysing trawl survey data.

### Memberships of scientific committees, 2011-present

- Automatic Differentiation Model Builder (ADMB) Foundation.
- Workshop on the Implications of Stock Structure (WKISS).

### Review, 2011-present

Reviewer for ICES Journal of Marine Science, Ecological Modelling, Fisheries Research.

### Peer reviewed publications: 9. Reports: 5. International conferences: 2.

### Advisory tasks, 2011-present

- Participation in various ICES expert and advisory groups (e.g. WGSDAA, WKBALCOD, WKBALFLAT, WKNSEA, WGBFAS, WGNSSK, WKIDP, WKHAD, IBPBLW, WKPCS3).
- EU/Norway working group to address the management of herring in IIIa.
- Development of ecological sustainable fisheries practices in the Benguela Current Large Marine Ecosystem (ECOFISH)

### Educational tasks, 2011-present

- Teaching assistant in advanced data analysis and statistical modelling at DTU Compute.
- Teaching part of a statistical course for scientists.
- ICES course on using the web portal [stockassessment.org](http://stockassessment.org).

### Grants, 2011-present

Travel support for 2 developers meetings from the ADMB foundation.

### Research collaboration with stakeholders, 2011-present

- Sustainable nephrops fishery project with participation from fishermen, fishing industry, and authorities.
- ECOFISH: Development of robust trans-boundary stock-assessment methods with stakeholder participation.
- EU FP7: Bridging the gap between science, stakeholders and policy makers. Phase 2: Integration of evidence-based knowledge and its application to science and management of fisheries and the marine environment (GAP2).

### Five selected publications

Kristensen K, Nielsen A, Berg CW, Skaug HJ, Bell B. (2016). TMB: Automatic differentiation and Laplace approximation. *Journal of Statistical Software*, 70(5), 1-21.

Nielsen A, Berg CW. (2014). Estimation of time-varying selectivity in stock assessments using state-space models. *Fisheries Research*, 158, 96-101. 10.1016/j.fishres.2014.01.014

Berg CW, Nielsen A, Kristensen K. (2014). Evaluation of alternative age-based methods for estimating relative abundance from survey data in relation to assessment models. *Fisheries Research*, 151, 91-99. 10.1016/j.fishres.2013.10.005

Berg CW, Kristensen K. (2012). Spatial age-length key modelling using continuation ratio logits. *Fisheries Research*, 129-130, 119-126. 10.1016/j.fishres.2012.06.016

Berg CW, Temming A. (2011). Estimation of feeding patterns for piscivorous fish using individual prey data from stomach contents. *Canadian Journal of Fisheries and Aquatic Sciences*, 68(5), 834-841. 10.1139/F2011-020