

## **ROBIN COOK: CURRICULUM VITAE**

### **QUALIFICATIONS**

1973 BSc(hons) Zoology, Durham University  
1977 D.Phil, Oxford University. Population modelling

### **EMPLOYMENT**

- 1979-1987 Stock assessment scientist, Department of Agriculture and Fisheries for Scotland, Marine Laboratory, Demersal fish section.
- 1987-1989 Section Leader, Population Studies section, DAFS Marine Lab.
- 1989-1998 Head of Fish Resources Team, SOAEFD Marine Laboratory.
- 1998-2001 Programme Manager, Fisheries Management, FRS Marine Laboratory
- 2001-2002 Marine Fisheries Advisor, FRS Marine Laboratory
- April 2002- 2009: Chief Executive and Director, Fisheries Research Services
- April 2009 – 2011 Head of Science Marine Scotland
- 2011 – 2015, Executive Secretary of the European Fisheries and Aquaculture Organisation (EFARO).
- September 2011- Senior Research Fellow, MASTS Population Modelling Group, University of Strathclyde, Glasgow

### **HONORARY POSITIONS**

Professor in the School of Biological Sciences, University of Aberdeen  
External scientific advisor, EU- MareFrame project

### **SELECTED GOVERNMENT POSITIONS**

- Chair of the UK Co-ordinator of Fisheries R&D working group on fish stock recruitment modelling,
- Chair of the Sustainability working group of the Ministerial Sea Fisheries Strategy Advisory Group
- Scottish Government member of the UK Marine Science Coordination Committee
- Member of Marine Fisheries Science Advisory Group for the UK Department of the Environment and Rural Affairs (Defra)

### **ADVISORY WORK ON FISHERIES**

- UK Member of the Advisory Committee on Fishery Management (ACFM) 1995-1997.
- Chair of the Working group on the assessment of demersal stocks in the North Sea and Skagerrak, 1992-1994.
- Chair of the study group on the use of selectivity measurements in stock assessment.

- Member of the Scientific, Economic and Technical Committee on Fisheries (STECF), 1992-1995, the independent group of experts which advises the Commission on fisheries management
- Chair of the STECF working group on the improvement of exploitation pattern of North Sea Fisheries, 1993.
- A member of the Center for Independent Experts, University of Miami, Florida, conducting annual external reviews of United States fish stock assessments.

## **INTERNATIONAL CONFERENCES**

- Speaker at World Fisheries Conference, Edinburgh, 2012
- Keynote Speaker, OCEANS 2007 conference Aberdeen, 2007
- Host and organiser of the ICES Annual Science Conference, Aberdeen 2005
- Co-convenor, ICES symposium on the Influence of Climate Change on North Atlantic Fish Stocks, Bergen, 2004.
- Invited speaker, FAO Symposium on Responsible Fisheries in the Marine Ecosystem, Reykjavik, 2001
- Invited speaker, Integrating Ecosystem considerations into Fisheries Management, Scotland week, Brussels, 2001

## **MODELLING SOFTWARE EXPERIENCE**

FORTRAN and NAG numerical libraries

AD Model builder

WinBUGS/OpenBUGS

R

SPSS

## **STOCK ASSESSMENT MODELLING EXPERIENCE**

Bayesian age structured assessment models using survey data only (reference 6 below)

Bayesian state-space models applied to demersal stocks that include seal predation interactions. (reference 2 below)

Surplus production modelling of mixed species (reference 7 below)

Extended Survivors Analysis (XSA) as used by ICES

Time Series Analysis (TSA) - State-space modelling using time series methods on UK demersal stocks

Working knowledge of Stock Synthesis, BAM, ADAPT, SAM and related methods

## **SELECTED PUBLICATIONS**

1. **Cook, R.M.** and Trijoulet, V (in review) .The effects of grey seal predation and commercial fishing on the recovery of a depleted cod stock. Canadian Journal of fisheries and aquatic science.

2. **Cook, R.M.**, Holmes, S. and Fryer, R. J. (2015). Grey seal predation impairs recovery of an over-exploited fish stock. *Journal of Applied Ecology*, DOI: 10.1111/1365-2664.12439
3. Heath, M. R. and **Cook, R. M.** (2015) Hind-casting the quantity and composition of discards by mixed demersal fisheries in the North Sea. *PLOS ONE*, DOI: 10.1371/journal.pone.0117078.
4. Heath, Michael, **Robin Cook**, Angus Cameron, David Morris, and Douglas Speirs (2014). Cascading ecological effects of eliminating fishery discards. *Nature Communications* 5, Article number: 3893 doi:10.1038/ncomms4893.
5. Fernandes, P.G. and **Cook, R.M.** (2013). Reversal of fish stock decline in the North East Atlantic. *Current Biology*, 23:1-6.
6. **Cook, R.M.** (2013). A fish stock assessment model using survey data when estimates of catch are unreliable. *Fisheries Research* 143:1– 11
7. Henrik Sparholt and **Robin M. Cook** (2009). Sustainable exploitation of temperate fish stocks. *Biology Letters* 23:124-7
8. **Cook, R.M.** and M.R. Heath. (2005). The implications of warming climate for the management of North Sea demersal fisheries. *ICES Marine Science* 62:1322-1326.
9. **Cook, R.M.** (2003). The magnitude and impact of by-catch mortality by fishing gear. In Sinclair M and G. Valdimarsson (eds), *Responsible Fisheries in the Marine Ecosystem*, FAO and CABI publishing, Rome and Oxford.
10. Stratoudakis, Y, R.J. Fryer, **R.M. Cook**, G.J. Pierce and K.A. Coull (2001). Fish bycatch and discarding in Nephrops trawlers in the Firth of Clyde (west of Scotland). *Aquatic Living Resources*, 14: 283-291.
11. Patterson, Kenneth, **Robin Cook**, Chris Darby, Stratis Gavaris, Laurence Kell, Peter Lewy, Benoît Mesnil, André Punt, Victor Restrepo, Dankert W. Skagen & Gunnar Stefánsson, (2001) Estimating uncertainty in fish stock assessment and forecasting. *Fish and Fisheries*, 2:125–157.
12. **Cook, R. M.** 2000. A rough guide to population change in exploited fish stocks. *Ecology Letters*, 3:394-398.
13. **Cook, R.M.** 1998. A sustainability criterion for the exploitation of North Sea cod. *ICES Journal of Marine Science*, 55: 1061-1070.
14. **Cook, R.M.** 1997. Stock trends in six North Sea stocks as revealed by an analysis of research vessel surveys. *ICES Journal of Marine Science*, 54:924-933.

15. **Cook, R.M.**, A. Sinclair, G. Stefansson, 1997. Potential collapse of North Sea cod stocks. *Nature*, 385:521-522.