# Curriculum Vitae – Julian Addison

Full Name: Julian Thomas Addison

Date of Birth: 6 March 1956

**Relevant Educational History:** 



Institution	Date(s)	Degree obtained
Imperial College of Science and	1978 - 1982	Ph.D. in population ecology and
Technology, University of London		modelling
Kings College, University of London	1975 - 1978	BSc Zoology

## **Employment History**:

Date(s)	Employer	Role
2011 - present	Self-employed	Independent Fisheries Consultant
2000 - 2010	Cefas,	Senior Shellfish Advisor to UK Government policy
	Lowestoft	advisors
2007 - 2010	Cefas	Head of Coastal and Freshwater Fisheries Group
2005 - 2013	University of	Honorary Reader in the School of Environmental
	East Anglia	Sciences
1995 - 1998	Cefas	Scientific Advisor to UK Government policy advisors on
		International Whaling Commission issues
1993 - 2005	University of	Honorary Lecturer in the School of Biological Sciences
	East Anglia	
1992	(Cefas)	Visiting scientist at National Marine Fisheries Service,
		Woods Hole, Massachusetts, USA
1991	(Cefas)	Visiting scientist at Department of Fisheries and
		Oceans, Halifax, Nova Scotia, Canada
1985 - 2000	Cefas	Shellfish research and stock assessment scientist
1982 - 1985	Cefas	Shellfish stock assessment biologist
1982	MAFF	Scientific assistant on bird population biology

## **Current Employment**

## Independent fisheries consultant specialising in shellfish and inshore fisheries.

At the end of 2010, after 28 years at the Centre for Environment, Fisheries and Aquaculture Science (Cefas), which is the UK Government's marine science agency for environment, fisheries and aquatic science, I left the organisation to move to France with my family and to work as a consultant. Relevant skills and experience include 30 years' experience of stock assessment and provision of management advice on shellfish and inshore fisheries, extensive shellfish research primarily in the field of crustacean population dynamics and assessment, extensive knowledge of the UK shellfish and inshore fisheries industry and liaison with fishers and other stakeholder groups, knowledge of shellfisheries management regimes worldwide, effective oral and written communication skills and winning of contracts under competitive tender.

Recent and current contracts as a consultant include:

- A review of the stock assessment model for blue crabs in Chesapeake Bay, USA as part of the Center for Independent Experts (CIE) peer review panel.
- Marine Stewardship Council (MSC) full assessments of Ireland and Northern Ireland bottom grown mussel fisheries, Newfoundland and Labrador snow crab fishery, Estonia Barents Sea cold water prawn fishery, Faroe Islands Barents Sea cold water prawn fishery, Nephrops fishery in the Skagerrak and Kattegat, separate assessments for the Swedish, Danish and Norwegian shrimp fisheries in the Skagerrak and Norwegian Deep, Eastern Canada offshore lobster fishery, DFPO Limfjord mussel and cockle fishery, Chilean squat lobster and nylon shrimp fisheries, Normandy and Jersey lobster fishery, North Sea brown shrimp fishery and MSC pre-assessments for various fisheries.
- Peer reviews of MSC assessments of Eastern Canada offshore lobster, Maine lobster, Norway North East Arctic cold water prawn, Dutch North Sea razorfish, Waddenzee and Oosterschelde hand rake cockle, Bay of Fundy scallop, Scotian Shelf Northern Shrimp, Gulf of St. Lawrence Northern Shrimp, Chilean lobster fisheries, Spencer Gulf prawn fisheries and French slipper limpet fishery and MSC annual surveillance audits and technical reviews for various fisheries in Europe and North America.
- Assessment of three Alaskan crab fisheries under the FAO-based Responsible Fisheries Management scheme.
- Advisor to a wind farm company on shellfisheries monitoring programmes to assess any potential effect of wind farm development on shellfish stocks.
- Trialling electronic monitoring and video technology to verify self-reported catches aboard small inshore fishing vessels operating on the West coast of Scotland.

Research interests include development of methods for shellfish stock assessment, including fishery-independent methods of estimating abundance, crustacean behaviour in relation to capture in fishing gear, development of environmentally friendly fishing gear technology for both trawl and molluscan dredge fisheries and the environmental footprint of inshore fisheries.

#### Previous Roles and Responsibilities at Cefas

As Senior Shellfish Advisor to the UK Government's Department for Environment, Food and Rural Affairs (Defra) my responsibilities included:

- Management of a Government contract worth £650,000 per annum
- Provision of advice on the status, sustainable management and development of wild shellfish stocks to Government policy customers and Government Ministers
- Oversight of the monitoring, stock assessment and associated biological studies on wild shellfish stocks in England and Wales
- Assessing the potential impacts of other seabed uses, such as aggregate dredging and wind farm development, on shellfish stocks, and collaboration with the Cefas Weymouth laboratory on shellfish cultivation and aquaculture and disease issues

- Liaison with marine managers and legislators, fishers and industry bodies, other fisheries scientists and research institutions, the Government's Statutory Nature Conservation Agencies, environmental NGOs and the media
- Representing Cefas and UK Government at national and international meetings
- Project management of specific Research and Development (R&D) contracts worth approximately £600,000 per annum.

In addition, whilst Head of the Coastal and Freshwater Fisheries Group at Cefas I held responsibility for 45 staff working on shellfish and recreational fisheries, salmon and freshwater fisheries, and environmentally friendly fishing gear technology with an income for 2009/10 of £4.7 million generated from a wide range of customers.

# Other previous responsibilities and experience included:

- Chair of the Working Group on the Biology and Life History of Crabs (WGCRAB) of the International Council for the Exploration of the Sea (ICES)
- Member of the ICES Working Group on Crangon Fisheries and Life History
- Member of the ICES Steering Group on Ecosystems Function and previously UK delegate to the Living Resources Committee
- Member of the Crustacea Committee of the Shellfish Association of Great Britain, the association which represents the UK shellfish industry
- Honorary Reader in the School of Environmental Sciences at the University of East Anglia
- Appointed Buckland Professor 2004 giving a series of lectures on 'Science and the Management of UK Crab Fisheries'
- From 1995-98, member of International Whaling Commission (IWC) Scientific Committee and UK Delegation to IWC providing scientific advice to UK Commissioner to IWC, and liaising with a large range of environmental NGOs in relation to whaling science and the UK's whaling policy
- Reviewer of manuscripts for a range of scientific journals and guest editor for editions of e.g. 'Fisheries Research' and 'Crustaceana'
- Reviewer of research proposals for UK Government Departments and other organisations, e.g. Natural Environment Research Council
- Supervision of MSc and PhD students from University of East Anglia, Southampton University, Swansea University, National Oceanography Centre
- Extensive teaching experience including:
  - 13 years organising and teaching a course on Fisheries Biology in The School of Biological Sciences at University of East Anglia
  - o 15 years teaching mathematics to Open University technology students
  - o 4 years teaching population ecology and quantitative biology to undergraduates at Imperial College, London.

## Previous projects whilst at Cefas included:

Date(s)	Customer	Project
2000 - 2010	UK Government	Shellfish monitoring, assessment & management
		advice

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2007 - 2012	UK Government	Improved understanding and management of shellfish fisheries	
2008 - 2010	UK Government	Environmentally Responsible Fishing – a pilot research project to quantify the environmental footprint of inshore fisheries	
2008	UK Government	Baseline surveys of scallops in Fal & Helford SAC	
2008 - 2009	UK Government	Baseline habitat mapping in the London Array proposed wind farm site	
2007	Black and Veatch Ltd.	The effect of Ely Ouse flows on shellfish and fish in The Wash	
2007	Scottish Natural Heritage	Scallop dredging in the Firth of Lorn SAC: a review of scallop fishing activity	
2007	North Western & North Wales SFC	Status of lobster stocks in North Wales – an analysis based on CPUE data collected during 2002-05	
2006	Natural England	Impacts of cockle suction dredging in The Wash and north Norfolk EMS – Part II Analysis of existing data	
2005	Natural England	Assessment of the impacts of cockle suction dredging in The Wash and north Norfolk European Marine Site	
2005	European Commission (FIFG)	Development of a suitable razorfish dredge in The Wash	
2006	UK Government	Investigation of potential fisheries for razorfish and other bivalves in the eastern Irish Sea	
2003 - 2005	UK Government	Fishing gears with mitigating ecological impacts	
2002 - 2004	UK Government	Edible crab spawning grounds in the English Channel	
2000 - 2003	European Commission	European decapod fisheries assessment and management (EDFAM)	
2000 - 2002	European Commission	Collection and evaluation of crab assessment data	
1999 - 2003	UK Government	Development of shellfish modelling, assessment and management methods	
1999 - 2001	UK Government	Edible crab spawning grounds off the east coast of England	
1997 - 2001	Environment Agency	Impact of beach replenishment on shrimp populations	
1996 - 2000	UK Government	Estimating <i>Nephrops</i> abundance from underwater TV surveys	
1995 - 2000	RMC Marine Ltd.	Impact of dredging on shrimp populations	

# **Key Publications**

Papers currently in preparation

Elson, J.M. and **Addison, J.T.** Discard rates in trawl, net and line fisheries in the absence of catch restrictions.

Eaton, D.R., Fernand, L., Milligan, S.P. and **Addison, J.T**. A metapopulation structure for edible crab (*Cancer pagurus* L.) in the English Channel: evidence from surveys of their larvae.

Papers previously published

- Bell, M.C.; Elson, J.M.; **Addison, J.T.**; Revill, A.S.; Bevan, D. 2008. Trawl catch composition in relation to Norway lobster (*Nephrops norvegicus* L.) abundance on the Farn Deeps grounds, NE England. Fisheries Research 90 (1-3) 128-137
- Bell, E.D., Bell, M.C., Smith, M.T. and **Addison, J.T.** 2007. SpatMan: A spatial management modelling tool for shellfish stocks. ICES CM 2007 O:08.
- Bell, E. D, Elson, J.M., and **Addison, J. T.** 2007. Sources of variation in *Nephrops* burrow counting schemes. ICES CM 2007 Q:07.
- Bell, M.C., Elson, J.M. and **Addison**, **J.T**. 2005. The effects of spatial targeting of fishing effort on the distribution of the Norway lobster, *Nephrops norvegicus*, on the Farn Deeps grounds. New Zealand Journal of Marine and Freshwater Research, 39: 1023-1037.
- **Addison, J.T.,** Lawler, A.R and Nicholson, M.D. 2003. Adjusting for variable catchability of brown shrimps (*Crangon crangon*) in research surveys. Fisheries Research, 65: 285-294.
- Smith, M. T. and **Addison, J. T.** 2003. Methods for stock assessment of crustacean fisheries. Fisheries Research, 65: 231-256.
- Bell, M.C., Eaton, D.R., Bannister, R.C.A and **Addison, J. T**. 2003. A short-term mark-recapture experiment to estimate density of the edible crab *Cancer pagurus* from trap data. Fisheries Research, 65: 361-378.
- Eaton, D.R., Brown, J., **Addison, J. T.,** Milligan, S. P. and Fernand, L. 2003. Larvae surveys of edible crab (*Cancer pagurus*) off the east coast of England: implications for stock structure. Fisheries Research, 65: 191-199
- **Addison, J.T.** and Lawler, A.R. 2003. Area 107 Monitoring Programme: distribution and abundance of brown shrimps in The Wash and adjacent areas 1995-2002. Final Report for RMC Marine Ltd.
- Debuse, V. J., Reynolds, J. D., **Addison, J. T.** 2003. The effect of breeding site density on sexual selection in the European lobster. Behavioural Ecology, 14: 396-402.
- Bell, M. C., **Addison, J. T.** and Bannister, R. C. A. 2001. Estimating trapping areas from trap catch data for lobsters and crabs. Marine and Freshwater Research, 52:1233-1242.
- Debuse, V. J., **Addison, J. T.** and Reynolds, J. D. 2001. Morphometric variability in UK populations of the European lobster. J. Mar. Biol Ass. UK 81:469-474.
- Debuse, V.J., **Addison, J. T.** and Reynolds, J.D. 2000. Battle within the sexes: the response to adult sex ratios. Lobster Newsletter 13(2), 4-6.
- **Addison, J. T.** & Bell, M.C. 2000. Report of a workshop held at CEFAS, Lowestoft to consider the use of estimates of *Nephrops* abundance derived from burrow counts. Working Document, Study Group on Life History of Nephrops. ICES CM 2000/.
- Collins, K.J., Smith I. P., Jensen, A. C., **Addison, J. T.** and Bannister, R.C.A. 2000. Measuring lobster (*Homarus gammarus* (L.)) catchability using electromagnetic telemetry. Proceedings of the Conference on Telemetry, Norwich (edited by A. Moore and I Russell) pp 185-192.
- **Addison, J. T.** 2000. National and Regional Management of lobster fisheries in the UK. Management of Irish Lobster fisheries: a discussion with Industry, Galway, November 2000. pp 42-49.

- Debuse, V. J., **Addison, J. T**. and Reynolds, J. D. 1999. The effects of sex ratio on sexual competition in the European lobster. Animal Behaviour 58: 973-981.
- **Addison, J. T.** 1999. Overview of lobster stock assessment in the United Kingdom. In U.S./Canadian Lobster Summit III. Lobster stock assessment: towards greater understanding, collaboration and improvement. New England Aquarium Report 99-2. pp. 105-112.
- **Addison, J. T.** and Bannister, R. C. A. 1998. Quantifying potential impacts of behavioral factors on crustacean stock monitoring and assessment: modeling and experimental approaches. In Proceedings of the North Pacific Symposium on Invertebrate Stock Assessment and Management. Edited by G.S. Jamieson and A. Campbell. Can. Spec. Publ. Fish. Aquat. Sci. 125. pp. 167-177.
- Bannister, R. C. A. and **Addison, J. T.** 1998. Enhancing lobster stocks: a review of recent European methods, results, and future prospects. Bulletin of Marine Science. 62: 369-387.
- Fogarty, M.J. and **Addison, J.T.** 1997. Modelling capture processes in individual traps: entry, escapement, and soak time. ICES J. Mar. Sci. 54: 193-205.
- **Addison, J. T.** and Bell, M.C. 1997. Simulation modelling of capture processes in trap fisheries for clawed lobster. Marine and Freshwater Research 48: 1035-1044.
- **Addison, J. T.** 1997. Lobster stock assessment: report from a Workshop; 1. Marine and Freshwater Research. 48: 941-944
- **Addison, J.T.**, Bannister, R.C.A. and Lovewell, S.R.J. 1995. Variation and persistence of pre-recruit catch rates of *Homarus gammarus* in Bridlington Bay, England. Crustaceana 68: 267-279.
- **Addison, J.T.** 1995. Influence of behavioural interactions on lobster distribution and abundance as inferred from pot-caught samples. ICES Mar. Sci. Symp. 199: 294-300.
- Bannister, R.C.A. and **Addison, J.T.** 1995. Analysis of time and space variation in a lobster population on the east coast of England. ICES Mar. Sci. Symp. 199: 334-348.
- Miller, R.J. and **Addison, J.T.** 1995. Trapping interactions of crabs and American lobsters in laboratory tanks. Can. J. Fish. Aquat. Sci. 52: 315-324
- Bannister, R.C.A., **Addison, J.T.** and Lovewell, S.R.J. 1994. Growth, movement, recapture rate and survival of hatchery-reared lobsters (*Homarus gammarus* (Linnaeus, 1758)) released into the wild on the English east coast. Crustaceana 67: 156-172.
- **Addison, J.T.** and Bannister, R.C.A. 1994. Re-stocking and enhancement of clawed lobster stocks: a review. Crustaceana 67: 131-155.
- **Addison, J.T.** and Bennett, D.B. 1992. Assessment of minimum landing sizes of the edible crab, *Cancer pagurus* L., on the east coast of England. Fisheries Research 13: 67-88.
- **Addison, J.T.** and Fogarty, M.J. 1992. Juvenile lobster habitat limitation: what can landings tell us? Lobster Newsletter Vol. 5, no. 2, pp. 10-12.
- **Addison, J.T.** and Lovewell, S.R.J. 1991. Size composition and pot selectivity in the lobster (*Homarus gammarus* (L.)) and crab (*Cancer pagurus* L.) fisheries on the east coast of England. ICES J. Mar. Sci. 48: 79-90.

Bannister, R.C.A., **Addison, J.T.,** Howard, A.E., Thompson, B.M. and Lovewell, S.R.J. 1991. Survival to recruitment of hatchery-reared post-larvae of *Homarus gammarus* released in the wild. Revista de Investigaciones Marinas 12: 89-99.

**Addison, J.T.** 1989. Sensitivity of length cohort analysis to errors in estimates of input parameters. Report of the Working Group on *Nephrops* stocks. ICES CM 1989/Assess:18 Annex 2, 8pp.

**Addison, J.T.** 1986. Density-dependent mortality and the relationship between size composition and fishing effort in lobster populations. Can. J. Fish. Aquat. Sci. 43: 2360-2367.

Bannister, R.C.A. and **Addison, J.T.** 1986. Effect of assumptions about the stock-recruitment relationship on a lobster (*Homarus gammarus*) stock assessment. Can. J. Fish. Aquat. Sci. 43: 2353-2359.

Julian Addison July 2016