

Tim M. Daw

Lecturer in Natural Resource Management and Fisheries Consultant

School of International Development (DEV)

University of East Anglia

Norwich, NR4 7TJ, UK, Tel:+44 1603 592325, Fax:+44 1603 451999

t.daw@uea.ac.uk, www.uea.ac.uk/dev/daw

Date of Birth: 7 April 1976

Nationality: British

I am an interdisciplinary researcher studying fisheries as a model of integrated social-ecological systems. I combine multiple methods and training in ecology, fisheries science, socioeconomics and politics to understand linkages between ecological and social components of fisheries at multiple scales. My aim is to inform the sustainable and equitable governance of coastal and marine resources.

Education:

- 9/03-9/07 **PhD on Fishers' Knowledge and Fisheries Science**, School of Marine Sciences and Technology/ School of Geography, Politics and Sociology, Newcastle University
- 9/06-12/06 **Visiting Researcher**, Beijer Institute for Ecological Economics, Stockholm.
- 9/02-9/03 **MSc. Tropical Coastal Management (Distinction)**, Newcastle University
- 9/94-6/97 **BSc. (Hons.) Marine Biology (Upper 2nd class)**, Newcastle University

Skills

- Research** Experience in leading and participating in all aspects of research from successful grant application to fieldwork, data analysis and production of reports and academic papers
- Social science methods** Experienced in the collection and analysis of quantitative (household survey, questionnaire) as well as qualitative data (focus groups, in depth-interviews, participant observation).
- Ecological methods** Experienced in on-board fisheries research and data collection, underwater visual surveys, tagging.
- Data management and analysis** Competent with all office software applications. Extensive experience designing and managing large Access databases. Advanced Statistical Data analysis (GLM, GAM, GLS, mixed modelling, multivariate techniques) in R. Familiar with MapInfo GIS software, NVivo qualitative data analysis software.
- Writing** Authored and co-authored 15 peer-reviewed publications. Experienced in producing high quality technical reports.
- Teaching/ Training** Experienced in running training in underwater ecological surveys, database management; field courses in social science and fisheries data collection; and lectures, seminars and dissertation supervision at university undergraduate and postgraduate level.
- Coordination and leadership** Experienced in coordinating and leading international teams in fieldwork and in remote collaboration. Trained in facilitating stakeholder dialogue workshops.
- Languages** English (mother tongue); Good written and spoken Spanish, Basic Malay, Basic Seychellois Kreol, basic French

Consultancy and Research Experience:

Period	Employer	Job Title, Responsibilities and Achievements
01/09 – 12/10	Western Indian Ocean Marine Science Association (WIOMSA)	Principal Investigator , How do protected areas affect fishers? An assessment of fishers' spatial behaviour around protected areas. (USD 200,000 research project funded over 2 years) Responsible for funds application and scientific leadership. 2.5 months funded research time per year for 2 year study in Kenya and Seychelles, in collaboration with research institutions in Kenya, Seychelles and Australia
02/09	Baltic Nest Institute/ Stockholm Resilience Centre	Fisheries Consultant (3 week consultancy funded for £5250) Working on a synthesis of best-practise in fisheries management to inform the review of the EU Common Fisheries Policy. Responsible for case-study research and writing.
01/09 - 12/10	CORDIO East Africa / Funded by WIOMSA	Research methods and database and consultant. Migrant fishers and in the WIO: Socio-economic dynamics and implications for management Consultant on survey methods and responsible for the design and creation of data management system for international research project in Kenya, Tanzania, Madagascar and Comoros.
03/08 - 05/08	Food and Agriculture Organisation of the United Nations (FAO)	Invited expert and author Preparation of background paper and participation in 'Climate change, adaptation and mitigation and food security' and 'Climate change, fisheries and aquaculture' expert meetings to inform FAO's position on climate for the 'High-Level Conference on World Food Security and the Challenges of Climate Change and Bioenergy'.
03/08 - 07/08	Natural Environment Research Council (NERC) and Dept for International Development (DFID)	Researcher & Project Manager. Situation assessement: Marine and coastal ecosystem services and poverty alleviation (ESPA) (£250,000 funding over 6 months) ODG led 7 organisations to assess trends and knowledge gaps in coastal and marine ecosystem services and their relationship to poverty alleviation. Assessment consists of a global assessment and two regional assessments in W Indian Ocean (WIO) and SE Asia. Personally responsible for overseeing national workshops and local focus groups in WIO, coordination of consortium and writing synthesis report.
05/08 - 05/09	CORDIO East Africa / Funded by WIOMSA	Technical advisor. SocMon programme Provide supervision, training and advice on data management to an international socioeconomic monitoring program in the WIO
02/08 - 05/08	James Cook University	Database consultant. Community-based organisations study Design and create a system to manage quantitative and quantitative data from a large scale international research project on devolved fisheries management
10/07	Wildlife Conservation Society/ WIOMSA, Kenya	Data management trainer. Mombassa, Kenya Training of Kenyan staff to use the socioeconomic database from the ongoing project and to design and manipulate their own databases in Access
9/03- 9/07	Economic and Social Research Council (ESRC)/NERC (PhD research)	Postgraduate research (PhD). University of Newcastle upon Tyne, UK Interdisciplinary study based in two faculties. Research fishers' knowledge and perceptions and their interaction with fisheries science and governance. Cases ranged from tropical, artisanal (Seychelles) to industrialised, temperate (North Sea) fisheries. Combination of a wide range of methodologies from in-depth qualitative interviews to statistical analysis of large fisheries datasets.
6/07	North Sea Regional Advisory Council (NSRAC)	Rapporteur. North Sea Regional Advisory Council, Vienna. Employed to record deliberations of the Executive Committee and Demersal Working Group of the North Sea Regional Advisory Council, the first RAC to be established to provide stakeholder advice directly to the European Commission. Preparation of official meeting report

1/07	Scientific Advice for Fisheries Management at Multiple Scales (SAFMAMS) project	Social scientist observer. Pelagic Regional Advisory Committee. Edinburgh. Observed and reported on discussions between scientists and other stakeholders on the provision of scientific expertise for fisheries management in Europe. Report preparation for EU-funded SAFMAMS project
10/06	SAFMAMS project	Social scientist observer. ICES, Copenhagen. Qualitative research on the institutional basis of scientific advice for European fisheries management by observation of the 10-day meeting of the Advisory Committee on Fisheries Management (ACFM) at the International Council for the Exploration of the Seas. Report preparation for SAFMAMS project
5/05- now	Wildlife Conservation Society (WIOMSA funded)	Socioeconomic Researcher. Kenya and Seychelles Designed international study on the socioeconomic impacts of coral bleaching in 5 nations of the Indian Ocean with three other researchers. Responsible for database design and management and data collection in Seychelles. Analysis of results and writing interdisciplinary papers and reports culminating in a two week workshop with country representatives in Mombassa.
1/04- 2/04	Society for the Conservation of Reef Fish Aggregations (SCRFA)	Consultant Researcher. Sabah, Malaysia Conducted stakeholder interviews and compiled database on status and utilisation of reef fish spawning aggregations throughout Sabah in collaboration with local government and NGO staff. Uncovered information on over 100 previously undescribed spawning aggregations from fishing communities throughout Sabah.
4/03- 8/03	Funded by NERC	Postgraduate research (MSc) Spatial and economic analysis of lobster fisheries. Corn Islands, Nicaragua Used stakeholder interviews and GIS software to map the spatial distribution of artisanal fishing effort, and analyse economic consequences of changes in fishing grounds. Highlighted fishers' knowledge and recognition of ecological and spatial distinctions between two types of lobsters. Developed collaboration with two Nicaraguan universities to provide field experience and supervision for 13 students in fisher interviews, household surveys, catch sampling and use of GIS and database software. Managed £13,000 field budget for 6 separate studies.
7/02- 9/02	WWF Malaysia	Fisheries Consultant. Sabah, Malaysia Rapid assessment of the nature and status of the live reef fish trade and fishery in Northern Sabah with local WWF staff. Used semi-structured interviews, focus groups and participatory observations to document gears, species, communities, trends and perceptions about the trade amongst fishers and traders and provide recommendations.
5/02- 6/02	Scottish Waste Awareness Group	Researcher. Aberdeenshire, UK Questionnaire surveys on the public perception of waste and recycling in NE Scotland as part of a country-wide survey
2/02- 4/02	MacAlister Elliot & Partners <i>Client:</i> EU	Senior EU Fisheries Observer. NW Atlantic Supervision of 20 international observers monitoring EU fishing vessels on the Grand Banks of Newfoundland. Deployed aboard a Spanish stern trawler.
7/00- 9/01	Greenforce UK	Chief Scientist, Borneo Project. Sabah, Malaysia Planned and co-ordinated all scientific research and training and collaboration with Malaysian agencies. Organising and supervising expedition camp and activities within a team of 4 project staff. Developed methodologies, training programme, data-management system and database. Analysed and presented results in reports and at conferences. Built and nourished links with local community and regional organisations.

3/00- 5/00	Marine Resources Assessment Group (MRAG) Ltd	Fisheries Scientist. SW Atlantic Observation and analysis of a novel fishing technology, designing and conducting experiments, fish-tagging, collection and analysis of data on all species caught, sampling.
10/96 - 11/98	ARGOS Ltd, Falkland Islands	Fisheries Consultant. Falkland Islands Analysis of data from fishing trials and available literature. Produced recommendations for development of a commercially viable fishery.
3/98- 5/98	MRAG Ltd Client: South Georgia Government	Fisheries Scientist. South Georgia, SW Atlantic Scientific crew on groundfish stock assessment survey. Responsible for database management, operation of trawl sensors and representing MRAG Ltd. Sampling and processing of catch.
5/99- 1/00	MRAG Ltd Clients: FCO, EU, DfID	Fisheries Consultant. London Administration of licensing, correspondence and patrol/observer logistics for the British Indian Ocean Territories Fisheries. Research, proposal preparation, observer briefing and project administration.
2/99- 4/99	MRAG Ltd Client: EU	Fisheries Observer. NW Atlantic Onboard monitoring of fishing activities of Portuguese shrimp trawler on the Flemish Cap. Documented and monitored species and quantity of discards.
10/96 - 11/98	Reefs of Massawa Expedition 1997, Various funding sources	Expedition Leader, UK and Eritrea Initiated and co-ordinated 2-month expedition in conjunction with the Eritrean Ministry of Fisheries. Led field research into coral reef community structure, eutrophication and the structure, impacts and management of the Aquariumfish industry. Production and wide dissemination of expedition reports, website, presentations and a peer-reviewed paper £8,200 budget raised from Royal Geographical Society, British Ecological Society, Newcastle University, Institute of Biology, BP-Amoco, People's Trust for Endangered Species and other sources. Donated research equipment and training to Ministry of Fisheries counterparts.
3/98- 5/98	Coral Cay Conservation Ltd	Science Officer. Negros, Philippines Co-ordinated science programme & training teams in species ID and survey methodology. General camp supervision.

Selected peer-reviewed publications

- Galaz, V. et al. (2009) Can web crawlers revolutionize ecological monitoring? *Frontiers in Ecology and the Environment*. doi: 10.1890/070204
- Cinner, J. E. et al. (2009) Linking social and ecological systems to sustain coral reef fisheries. *Current Biology* **19**: 206-212.
- McClanahan, T. R. et al. (2009) Identifying Reefs of Hope and Hopeful Actions: Contextualizing Environmental, Ecological, and Social Parameters to Respond Effectively to Climate Change. *Conservation Biology* **23**: 662-671.
- Cinner, J., T. M. Daw and T. R. McClanahan (2009) Socioeconomic factors that affect artisanal fishers' readiness to exit a declining fishery. *Conservation biology*. **23**(1): 124-130.
- Gray, T., J. Hatchard, T. Daw and S. M. Stead (2008) New cod war of words: 'cod is God' versus 'sod the cod' - two opposed discourses on the North Sea Cod Recovery Programme. *Fisheries Research*. **93**: 1-7.
- McClanahan, T. R. et al. (2008) Conservation action in a changing climate. *Conservation letters*. **1**: 53-59
- Daw, T. M. (2008) Spatial distribution of effort by artisanal fishers: Exploring economic factors affecting the lobster fisheries of the Corn Islands, Nicaragua. *Fisheries Research* **90**(1-3): 17-25.
- Graham, N. A. J. et al. (2007) Lag effects in the impacts of mass coral bleaching on coral reef fish, fisheries and ecosystems. *Conservation biology* **21**(5): 1291-1300.

- Stead, S., T. Daw and T. Gray (2007) Uses of Fishers' Knowledge in Fisheries Management. *Anthropology in Action* **13**: 77-86.
- Daw, T. and T. Gray (2005) Fisheries science and sustainability in international policy: a study of failure in the European Union's Common Fisheries Policy. *Marine Policy* **29**(3): 189-197.
- Purves, M.G. et al. (2003) Distribution, demography, and discard mortality of crabs caught as bycatch in an experimental pot fishery for toothfish (*Dissostichus eleginoides*) in the South Atlantic. *Fishery Bulletin* **101**(4):874-888
- Xavier J.C. et al. (2002) Distribution of cephalopods recorded in the diet of the Patagonian toothfish (*Dissostichus eleginoides*) around South Georgia *Polar Biology*. 25 (5): 323-330.
- Daw**, T.M., Rogers, V.C.C., Mapson, P. & J.E. Kynoch (2001) Structure and management issues of the emerging ornamental fish trade In Eritrea. *Aquarium Sciences and Conservation*. **3**:53-64.
- Pilling, G.M., Purves, M.G., **Daw**, T.M., Agnew, D.A. and J.C. Xavier (2001).The diet of Patagonian toothfish around South Georgia (South Atlantic). *Journal of Fish Biology*. **59**(5), 1370-1384.
- Agnew D.J., **Daw**, T.M., Purves, M.G. and G.M. Pilling (2001) Fishing for toothfish using pots: results of trials undertaken around South Georgia, March-May 2000. *CCAMLR Science*. **8**:93-105

Selected reports and conference papers

- Daw**, T. M., K. Brown, N. Adger and M-C Badjeck (2008) Review of climate change and capture fisheries. Report for FAO High-Level Conference on World Food Security and the Challenges of Climate Change and Bioenergy 3-5th June 2008.
- Brown, K., T. **Daw**, S. Rosendo, M. Bunce and N. Cherrett (2008) Ecosystem Services for Poverty Alleviation: Marine & Coastal Situational Analysis. Synthesis Report. Report for NERC/DFID. November 2008
- Daw**, T. M. (2007). Using fishers' knowledge in the assessment of fish stocks: Issues around the formalisation of knowledge within a scientific framework. *People and the Sea IV: 'Who Owns the Coast?'*, 5 -7 July, 2007. MARE, Amsterdam.
- Daw**, T.M. (2006) *Preliminary report on interviews with English and Scottish fishermen about the North Sea Stocks Survey*. Distributed to Fishermen's Organisations reported by the ICES Review Group on Fisheries Surveys of North Sea Stocks (RGFS). 12pp, www.ices.dk/reports/ACFM/2006/RGFS/RGFS06.pdf.
- Daw**, T.M. (2004) *Reef Fish Aggregations in Sabah, East Malaysia. A report on stakeholder interviews conducted for the Society for the Conservation of Reef Fish Spawning Aggregations*. Society for the Conservation of Reef Fish Aggregations, Western Pacific Fisher Survey Series: Volume 5, 63pp. www.scrfa.org/scrfa/doc/Daw_E.Malaysia.pdf
- Daw**, T.M., bin Ali, M. A. and L. Jeffrey (2002) Preliminary Assessment of the Live Reef Fish Trade in the Kudat Region: Final Technical Report. WWF Malaysia project MYS 487/03: Sulu-Sulawesi Marine Ecoregion. 41pp.
- Hume, D., Gunnartz, U., **Daw**, T.M., Badjeck, M.C., Hunt, A., Velterop, R., Broadhurst, P., Zapata, Y. and A. Segura (2005) *Reefmap Nicaragua 2003. Corn Islands and Pearl Cays Project Report*. 150 pp. www.reefmap.org.uk.
- Daw**, T.M., Harding, S.P., Wesson, H. and C Lowery (2002) Pulau Banggi Project for Coral Reef Biodiversity: 2nd Annual Report (October 2000 – October 2001). Greenforce. 65pp
- Daw**, T.M., Rogers, V.C.C., Mapson, P. & J.E. Kynoch, 1998. Reefs of Massawa Expedition 1997. Final Report. 99 pages