

CURRICULUM VITAE

JOHN BROPHY B.A. (Mod), M.Sc., MCIEEM

EDUCATION

2002-2003 National University of Ireland, Cork

M.Sc. in Fisheries Management, Development and Conservation

Department of Zoology, Ecology and Plant Science. First Class Honours Thesis: The diet of the common dolphin *Delphinus delphis* in Irish waters

1996-2000 Trinity College Dublin

B.A. (Mod.) in Natural Sciences (Zoology). 2.1 Honours

CAREER HISTORY

Senior Ecologist Consultant Ecologist BEC Consultants Ltd, Dublin, Ireland 2014 - present 2012 - 2014

Since 2012, I have worked with BEC Consultant working in freshwater, marine and terrestrial environments. This has included carrying out macroinvertebrate sampling and identification, Q-value determination, otter surveys, kingfisher surveys, toxin in biota sampling (*Gammarus duebeni*), seal surveys, Ecological Impact Assessments (EcIA) and Appropriate Assessment (AA) and preparing Natura Impact Statements (NIS). In addition to this work, I contributed to the Irish Semi-natural Grasslands Survey, National Annex I Woodland Monitoring Survey and the Sand Dunes Monitoring Project, which included providing fieldwork support and digitisation of field survey data (ArcGIS). A selection of projects I have worked upon while with BEC Consultant is presented here:

Vertigo National Monitoring Survey 2014-2017

BEC Consultants was contracted by the NPWS to carry out conservation assessment monitoring of three Annex II *Vertigo* spp. (*Vertigo* geyeri, *Vertigo* moulinsiana and *Vertigo* angustior) for Article 17 reporting. *Vertigo* geyeri and *V.* moulinsiana are wetland species and the surveys include an assessment of wetland habitats for suitability for each species. *Vertigo* angustior can be found in fixed sand dunes and also marshes. Data is recorded using ruggedized portable computers (Trimble Nomad) and sites are mapped or remapped using ArcGIS. The project will run until 2017.

• Rare Mollusc Survey 2012

This NPWS-funded project was aimed at confirming the presence of four rare mollusc species (*Vertigo geyeri*, *Vertigo moulinsiana*, *Oxyloma sarsii* and *Omphiscola glabra*) at a number of sites and assessing their populations. Field surveys were carried out at wetland sites in counties Galway, Mayo, Offaly, Tipperary, Waterford and Wicklow. I carried out preparatory GIS work, which consisted of preparing field maps based on existing data, where available, assisted with all field surveys & sample processing and species identification, and completed the post-survey GIS work, which presented sample location data, habitat polygons and other associated information in maps for inclusion in the report and shapefiles for submission to the client.

- Assessment of seismic survey applications for the DCENR
- Ecological surveys (incl. habitats, mammals & birds) of Royal Canal, Cos Dublin & Kildare
- River Liffey ecological monitoring, Co. Kildare
- Appropriate Assessments for remediation of unauthorised landfills, Co. Wicklow
- Identification of marine benthic macroinvertebrates from the North Sea
- Assessment of applications for offshore oil & gas exploration surveys
- Freshwater macroinvertebrate identification, Co. Meath
- Marine mammal assessment of works on Dalkey Island, Co. Dublin

Aquatic Ecologist

2004 - 2008 and 2010 - 2012

Ecological Consultancy Services Limited (EcoServe), Dublin, Ireland

During this period I worked as an ecologist with EcoServe, covering both freshwater and marine environments. In the course of this work, I carried out numerous Environmental Impact Assessments (EIA), Appropriate Assessments (AA), desktop studies and field surveys, marine and freshwater macroinvertebrate sampling and identification, used kick sample, sediment core and grab methods, water and sediment physico-chemical sampling, mapping of marine habitats and biotopes using JNCC Marine Habitat Classification for Britain and Ireland, marine mammal surveys (land- and ship-based), Q-index determination, fisheries assessments including electro-fishing, seine netting, and trawling, and threatened and endangered species surveys, including freshwater pearl mussels (*Margaritifera margaritifera*), white-clawed crayfish (*Austropotamobius pallipes*) and otters (*Lutra lutra*).

With EcoServe I managed, and was involved in the fieldwork, laboratory work and report writing for, numerous projects, both freshwater and marine. A selection of these projects is presented here:

Freshwater projects

- Bellanaboy Gas Terminal Freshwater Survey, Co. Mayo
- Nore Freshwater Pearl Mussel (Margaritifera margaritifera), Co. Laois
- Kilbarry Bog Landfill Monitoring, Co. Waterford
- Bray Golf Course Mixed-use development, Co. Wicklow
- Dunsink Landfill Monitoring, Co. Dublin
- Harristown Car Park Development, Co. Dublin
- Lough Allen Salmon Farm Sediment Quality Assessment, Co. Leitrim
- Blessington Quarry Water Quality Assessment, Co. Wicklow
- Plassey Fisheries Assessment University of Limerick Pedestrian Bridge, Co. Limerick
- River Dargle Flood Defence, Co. Wicklow
- Garvoge Bridge, Co. Sligo
- Clashacrow Quarry, Co. Kilkenny

Marine projects

- Dublin Eastern Bypass, Co. Dublin
- S2S Sandymount Cycle Path, Co. Dublin
- Boyne Coast and Estuary Subtidal Survey, Co. Louth/Meath
- Carnsore and Saltees Intertidal Survey, Co. Wexford
- North-South Share Aquatic Resources (NS-SHARE), Co. Donegal/Antrim
- Portmarnock Residential Project
- Baldoyle Estuary Stormwater Outfall, Co. Dublin
- Cork Pipeline Survey, Co. Cork
- Aughinish Alumina Expansion, Co. Limerick
- Dungloe WWTP, Co. Donegal
- Rathmullan WWTP, Co. Donegal
- Schull Harbour Marina, Co. Cork
- Reenard Pier Redevelopment, Co. Kerry
- Dublin WtE Sediment, Co. Dublin
- Bull Island Cycle Path Feasibility Study, Co. Dublin

NPWS Conservation Ranger

Sept 2008 – June 2010

During this period I worked as a Temporary Conservation Ranger with the National Parks and Wildlife Service (NPWS), based in the Navan Office, but with primary responsibility for County Louth. The job had a wide remit including enforcement of the Wildlife Acts and Habitats Regulations, monitoring of Natura 2000 sites, reviewing planning applications, carrying out species surveys, *etc.* During my time in Louth, I prepared a GIS database of potential wetland sites based on analysis of aerial photography and carried out a number of site visits to record the habitats and species present. This database was intended to inform Louth County Council of the location and ecological value of wetlands in the county and subsequently formed the basis of the Louth Wetland Survey. I also contributed many records for County Louth to the Invasive Species Database of the National Biodiversity Data Centre and conducted an otter survey of the Boyne Catchment, Co. Meath.

Fisheries Observer June 2004 – Aug 2004

Observer with the South Western Regional Fisheries Board working on the Cork Salmon Draft Net Survey. Monitored catch for salmon numbers, size and signs of disease.

Research Assistant Nov 2003 – Dec 2003

Research assistant for Dr Emer Rogan, Department of Zoology, Ecology and Plant Science, NUI, Cork. Worked on dolphin stranding programme, assisted with post-mortems, maintained MS Access database and compiled the annual stranding list.

Student Bursar Aug 1999 – Sept 1999

Fisheries Research Centre, Abbotstown, Dublin 15. Worked with the *Nephrops norvegicus* section of the Marine Fisheries Service processing biological samples, entering data, estimation of optimal yields for a number of fish species and general office duties.

SKILLS & ADDITIONAL INFORMATION

Computer skills MS Office, SPSS, PRIMER, ArcGIS, MapInfo, Recorder 6.

Sea time Extensive research vessel experience including Celtic Voyager, Song of the Whale.

Qualifications Diploma in Environmental Impact Assessment from Portobello Institute

Freshwater Macroinvertebrate Species Identification Qualification (IdQ) from the

Natural History Museum, London.

JNCC-Approved Marine Mammal Observer (MMO)

SAFE PASS

Basic Sea Survival, Fire & Safety certificate National Powerboat Certificate -Level 2

Membership of Professional Organisations

Freshwater Biological Association (FBA), Chartered Institute of Ecology and Environmental Management (CIEEM), Irish Whale and Dolphin Group (IWDG)

PUBLICATIONS

Peer reviewed

Anderson, R., Long, M.P. & **Brophy, J.T.** (2013) Observations on the status of *Hippodamia tredecimpunctata* (Linnaeus) (Coccinellidae) in Ireland, with three new records. *The Coleopterist* **22(2)**: 75

Brophy, J.T. & Penk, M.R. (2008) A new record for *Mysis relicta* Lovén, 1862 from Lough Allen, Co. Leitrim. *Irish Naturalists' Journal* **29**(2): 122-124.

Brophy, J., Murphy, S. R. and Rogan, E. (2006) Records from the Irish Whale and Dolphin Group for 2003. *Irish Naturalists' Journal* **28**(5): 214-218.

Non-peer reviewed

Penk, M., **Brophy, J.** & Nash, R. (2009) Implications for the natural heritage of Ireland's coast and inland waterways. In (eds. Kelly, B & Stack, M) *Climate Change, Heritage and Tourism: Implications for Irelands Coast and Inland Waterways*. The Heritage Council of Ireland Series pp97 ISSN 13936808