

POSEIDON AQUATIC RESOURCE MANAGEMENT

FIONA NIMMO

Director



PROFILE

Surname: Nimmo

First name: Fiona

Year of Birth: 1978

Address:

10 Davidson Road, Edinburgh, Scotland, UK

Contacts:



+44 (0)7776251210



tnimmc



consult-poseidon.com



fiona@consult-poseidon.com

Present position

Director of the Poseidon Aquatic Resources Management Ltd, an international consultancy specialising in fisheries, aquaculture and aquatic environment.

Years within the firm: 9

Education

2000 – 2003 B.Sc. Marine Biology (First Class Hons), *University of Newcastle*

upon Tyne, UK

1996 – 2003 B.Eng. Chemical Engineering (2:1 Hons), *Edinburgh University, UK*

Key professional skills

- Thirteen years' experience, including project director, manager and technical expert;
- Environmental Assessments: project manager and lead EIA consultant for renewable energy developments, experience of regulatory impact assessments;
- Environmental and seafood sustainability: Marine Stewardship Council (MSC)
 certification (full and pre-assessments, site visits, surveillance assessments), Fishery
 Improvement Projects (FIPs) and environmental, social and economic sustainability
 assessments;
- Fisheries policy and management: development & implementation of fisheries management and industry development plans;
- Aquaculture: consenting and planning process, strategic planning, site optimisation, and interaction with marine users;
- Coastal and marine management: marine spatial planning, management of other sectors including oil and gas; and
- Marine surveys: drop down video, diving surveys & fisheries observation trips.

Professional experience record

2017 – present	Poseidon Aquatic Resources Management Ltd, UK, <i>Director</i>
2010 – 2017	Poseidon Aquatic Resources Management Ltd, UK, Associate Director
2005 – 2009	Royal Haskoning, UK, Senior Marine Environmental Consultant
2004 – 2005	Nautilus Consultants Ltd., UK, Consultant
2002	Great White Shark Research Institute, South Africa, Volunteer Scientist
1999 – 2003	Deep Sea World, UK, Educations Presenter
1998	Coral Cay Conservation, Belize, Dive Survey Volunteer

Other skills

Language skills: Reading Speaking Writing (1 - excellent; 5 - basic)
English (mother) 1 1 1

Membership of professional bodies: IEMA Associate Assessment, 2007.

Technical skills: GIS (ArcMap), Word, Excel, Access, Powerpoint

Marine Stewardship Council Training: MSC Principles and Criteria, Fisheries Certification Process, Scoring a Fishery – Fishery Team Member, Principle 2: Version 2: Jul 2016; Version 1.3: Oct 2013

Geographic experience

UK, EU-wide projects, Europe

Belgium, Denmark, Estonia, France, Germany, Iceland, Ireland, Netherlands, Norway,

Sweden.

South Africa. Africa

Indonesia, Malaysia, Myanmar, Asia

Thailand.

Previous and current clients

National and

East England Development Agency, European local Commission.

government

OECD, FAO. International

Crown Estate, Scottish Natural Heritage, Countryside Public body

Council for Wales, Seafish.

Marine Stewardship Council, WWF, Pew Charitable NGO

Trust, Scottish Aquaculture Research Forum.

Private sector

RPS, Orsted, GoBe, Acoura, Vottunarstofan Tún, Scottish Fisheries Sustainable Accreditation Group, Mainstream Renewables, DNV, Shell, Scottish Power

Scottish Government, Marine Scotland, Defra, South

Renewables, Infinergy, EMU, Airtricity, RES.

Experience record

Environmental Assessments

- Ireland: Dublin Array Offshore Wind Farm (GoBe for Innogy, 2019 present). Commercial fisheries expertise and production of Environmental Statement (ES) Chapter and associated Technical Appendix.
- UK: Hornsea Offshore Wind Farm Project Four (GoBe for Orsted, 2018 present). Commercial fisheries expertise for Scoping Report, Preliminary Environmental Report (PEIR), ES Chapter and associated Technical Appendix.
- UK: Hornsea Offshore Wind Farm Projects One, Two and Three Environmental Impact Assessments (EIAs) -Commercial Fisheries (RPS for DONG Energy, 2012 - 2017; EMU, 2010 - 2011). Production of commercial fisheries PEIR, ES Chapter and associated Technical Appendix, production of Statements of Common Ground, expert witness at hearings and production of written statements in support of the hearings; and involving consultation with international fisheries including UK, Dutch, French, Belgian and Danish fishermen and industry representatives
- UK. Fisheries socio-economic study of decommissioning options for offshore gas infrastructure (Private client, March 2016 to June 2016). Characterisation of fisheries activity in the area of an offshore gas platform and ancillary infrastructure, together with assessment of the impacts resulting from various decommissioning options.
- UK: Argyll Tidal Array Environmental Appraisal (RES, 2013). Fish and shellfish environmental appraisal to support an application for a demonstration device to be deployed off the west coast of Scotland.
- UK: Best practice guidelines for valuation of areas closed to fishing (Seafish, 2012). Combined, reviewed and built on methodology developed during a 2-day UKFEN (UK Fisheries Economists Network) workshop.
- Kenya: Environmental and Social Impact Assessment (ESIA) of seismic surveys (Citrus, 2011). Assistance with the management and review of baseline assessment of marine aspects of an ESIA for an offshore seismic programme in Kenya. Particular responsibilities to oversee consultation and commercial fisheries activity assessments.
- Europe: Seabirds Plan of Action Impact Assessment (European Commission, 2010-2011). Undertaking interviews with set net fisheries in the Netherlands, Sweden, Germany and Denmark.
- UK: West of Wight Wind Farm Commercial Fisheries Advice (Eneco, 2010 ongoing). Undertaking commercial fisheries section for Scoping Report and GIS support.
- UK: Offshore wind farm Round 3 zone appraisals for Bristol Channel, Irish Sea, Moray Firth and Firth of Forth (private client, 2009). Project lead for Bristol Channel and Irish Sea Round 3 zone appraisals and providing commercial fisheries and natural fish resource expertise for all four zones.
- UK: Sound of Islay Tidal Array Project (ScottishPower Renewables, 2009). Project manager and lead EIA consultant for EIA of ten tidal devices to be deployed within the Sound of Islay. Technical consultant for commercial fisheries and natural fish and shellfish resource chapters.
- UK: Environmental Scoping for Prototype Tidal Devices (ScottishPower Renewables, 2008). Screening and scoping potential environmental impacts of deploying, operating and decommissioning a single prototype tidal device at two locations within UK waters.
- UK: Onshore Wind Farm Environmental Impact Assessment (Infinergy Ltd, 2007-2009). Project and financial manager for EIA of Dorenell Wind Farm in Moray. Managing internal team and subcontractors to deliver ES, as well as undertaking turbine layout optimisation and consultation with the community, key stakeholders and statutory bodies.
- UK: Scoping study for offshore wind farm site (Airtricity, 2007). Commercial fisheries and natural fish resource sections for scoping phase of EIA.
- UK: Feasibility studies for three offshore wind farm sites (Airtricity, 2006). Commercial fisheries and natural fish resources sections for a feasibility of three offshore wind farm sites around Scotland.



- **UK:** Environmental Impact Assessment for Thanet Offshore Wind Farm (Warwick Energy, 2005). Assisting in undertaking the commercial fisheries and fish and shellfish natural resource Environmental Statement chapters.
- UK: Regulator Impact Assessment of the seaward extension of 31 SPAs (Scottish Government 2008-2009). Assessing
 the costs and benefits of management options for the seaward extension of Special Protected Areas around the Scottish
 coastline.
- **UK:** Scottish Biodiversity Strategy (Scottish Executive, 2004). Assisting the final drafting of the Scottish Biodiversity Strategy by combing the output of working groups into a single, consistent set of implementation plans.

Environmental and seafood sustainability

- **UK**: Project UK Fisheries Improvements (MSC, 2018 present). Leading consultant to the UK Nephrops and Scallops Fisheries Improvements Projects for North Sea, West of Scotland and Irish Sea.
- Denmark, Sweden, Estonia and Germany: MSC full assessment for Baltic Sea herring and sprat pelagic trawl and purse seine fisheries (Acoura, 2018 – present).
- **Europe**. Independent assessments of a responsible fish sourcing policy (DNV and Private client, 2015 2017). Implemented by a French seafood processing group including annual on-site audits of Scottish aquaculture farms and processing facilities in 2016 and 2017.
- Spain: Project MedFish (Acoura for MSC, 2015-2016). Principle 2 (environment/ecosystem) expert and lead data analyser for a multi-fishery Marine Stewardship Council (MSC) pre-assessment of Spanish Mediterranean fisheries.
- **UK:** Benefits of MSC to the Scottish haddock fishery (SFSAG, 2014). Value chain analysis of the Scottish haddock supply chain to determine quantitative and qualitative benefits of a fishery being MSC certified.
- **UK:** MSC 2nd surveillance audit of Shetland and Scottish mainland mussels (FCI, 2014). Principle 2 expert for rope grown mussels fishery in Shetland and mainland Scotland.
- Ireland: MSC 2nd surveillance audit of Celtic Sea herring (FCI, 2014). Principle 2 expert for pelagic pair trawl herring fishery in Celtic Sea.
- **UK:** MSC 2nd surveillance audit of Shetland inshore creel and dredge fisheries (FCI, 2014). Principle 2 expert for scallop dredge and brown crab and velvet crab creel fisheries in inshore Shetland waters.
- Russia: MSC 2nd surveillance audit of Barents Sea cod and haddock fisheries (FCI, 2013). Principle 2 expert for cod
 and haddock trawl fisheries in the Barents Sea.
- Netherlands: MSC 1st surveillance audit of hand raked cockle fishery (FCI, 2013). Principle 2 expert for Dutch cockle fishery in Waddenzee and Oosterschelde.
- Netherlands: MSC 1st surveillance audit of suction dredge razor shell fishery (FCI, 2013). Principle 2 expert for Dutch razor shell fishery in North Sea.
- UK: Project Inshore (FCI, 2012). Principle 2 (environment/ecosystem) expert and lead data analyser for a multi-fishery Marine Stewardship Council (MSC) pre-assessment of English Inshore Fisheries and Conservation Authorities (IFCA), assessing all English inshore fisheries against the MSC standard.
- Netherlands: MSC full assessment of hand raked cockle and suction dredge razor shell fisheries (Dutch Organisation
 of Cockle Fishermen and Dutch Fisheries Association, 2011-2012). Principle 2 expert for Dutch cockle fishery in
 Waddenzee and Oosterschelde and razor shell fishery in North Sea.
- Denmark: MSC surveillance audit for saithe by demersal trawl, Danish seine and set nets (Danish Fisheries Producers Organisation, 2012). Principle 2 expert for Danish saithe fishery in the North Sea and Skagerrak.
- Bay of Bengal: Assessment of small pelagic fisheries (BOBLME FAO, 2010–2011). Assessments of Indian mackerel
 and hilsa as part of the Bay of Bengal Large Marine Ecosystem Project in eight countries using MSC standard to
 benchmark fisheries.
- Global: Assessing the environmental gains achieved by Marine Stewardship Council certification (MSC, 2010) Exploring
 evidence of change in fisheries management & practices as a result of MSC certification.
- Denmark: MSC full assessment saithe by demersal trawl, Danish seine and set nets (Danish Fisheries Producers Organisation, 2010-2011). Principle 2 expert for Danish saithe fishery in the North Sea and Skagerrak.
- **Denmark:** MSC full assessment cod by demersal trawl, mid water trawl, set nets, longline and fish trap (Danish Fisheries Producers Organisation, 2010-2011). Principle 2 expert for Danish cod fishery in the Baltic Sea.
- Sweden: MSC full assessment cod by demersal trawl, mid water trawl, set nets, longline and fish trap (private client, 2010-2011). Principle 2 expert for Swedish cod fishery in the Baltic Sea.
- **Germany:** MSC full assessment cod by demersal trawl, mid water and pelagic trawl (private client, 2010-2011). Principle 2 expert for German cod fishery in the Baltic Sea.
- **UK:** MSC full assessment for Shetland brown crab, velvet crab, lobster and king scallops (private client, 2010-2011). Principle 2 expert for Shetland shellfish fisheries.
- Global: Distribution and transmission of costs and benefits in capture fisheries certification (OECD, 2010). Value chain
 analysis of the distribution of costs and benefits using a case study approach.
- Denmark: MSC Pre-assessment for 33 Danish fisheries (FCI for Danish Fisheries Producers Organisation, 2009-2010).
 Pre-assessment of 33 species landed by Danish vessels across ten different gear types.



- UK: Assessment of UK seafood consumption sustainability (Defra, 2009-2010). Identification of LCA issues of UK produced
 and imported seafood products including fish and shellfish from wild capture and aquaculture. Review of current actions and
 gap analysis to inform recommendations for supporting future actions.
- UK: MSC Pre-Assessment for Sussex inshore fisheries (Sussex Sea Fisheries Committee, 2009). Pre-assessment of 16 species across six gear types.
- **UK:** Sustainable Production and Consumption of fish and shellfish (Defra, 2007). LCA analysis of the environmental impacts of fish and shellfish products produced for consumption in the UK by commercial fisheries and aquaculture.

Fisheries policy, management and industry development plans

- **UK:** King Scallop industry review (Scallop Industry Consultation Group, SICG, 2018). Review of current status, issues and recommendations for future management of the UK king scallop fishery.
- EU: Taking Stock: Progress in CFP objectives to end overfishing in NW Europe (Pew Charitable Trust, January 2017 to March 2018) Assessing trends and current status to determine the extent to which TACs are set in consistence with scientific advice and the status of stocks in relation to maximum sustainable yield.
- **UK:** Analysis of Scottish Pelagic Landings Target (Private client May 2017 to September 2017). Analysis of landing patterns and decision making principles for Scottish vessels targeting pelagic species and landing into Scotland, Norway and other EU countries.
- EU: Management Works: Ending overfishing in NW Europe (Pew Charitable Trust, July to Dec 2016). Positive case studies for successful fisheries management demonstrating the range of benefits for fishing sustainably.
- **UK:** Wash Shrimp Fisheries Management Plan (Private client, 6 September 2016 to August 2017). Development of a Fisheries Management Plan for the Wash brown shrimp fishery.
- Global: Fish landings at the world's commercial fishing ports (Pew Charitable Trust, 2014). Developing a database of commercial fisheries catches around the world by port of landing, including deep dives into the top 20 ports globally.
- **UK:** Review of Severn Estuary area to inform Devon and Severn Inshore Fisheries Conservation Authority (IFCA) (Defra, 2011) an overview of the available information relative to the Severn Estuary area of the Devon and Severn IFCA, providing essential management insight for further research planning and development of regional fishery management plans.
- UK: Management of Brown Crab fisheries in Northern Ireland (NIFPO, 2010-2011) Review of current fisheries management, and extensive consultation with industry to explore structure and viability of a local management plan, including quality and marketing support.
- **UK:** Scottish Inshore Fisheries Groups (Scottish Government, 2009-2010). Development of Model Management Plan and Guidance for six IFGs in Scotland. Key responsibilities included industry and stakeholder consultation and development of IFG specific management measures consistent with SIFAG high level objectives.
- **UK:** Brown crab management (UK and Republic of Ireland Trans National Crab Group, 2009). Assessing the potential management measures to be implemented across brown crab fleet metiers in the UK and Ireland through review of best practise and regional consultation with commercial fishing industry.
- **UK:** South East Fishing Industry Development Plan (South East England Development Agency, 2006-2007). Development of structured interview questionnaires and extensive consultation with commercial fisheries industry and merchants at 26 ports in the South East region. SWOT analysis of port infrastructure along with assessment to enhance economic value of the South East fleet and production of an Industry Development Plan.
- **UK:** Business case for an ice plant at Kallin, North Uist (Comhairle nan Eilean Siar, 2005). Development of a business case for an ice plant at Kallin Harbour, providing advice on operational models, grant funding possibilities and risk analysis.
- **UK:** Assessment of Defra fish health regulations (Defra, 2005). Identification of the scope and associated burden of regulations administered by Defra in the fish health sector.
- **UK:** Establishing a Solway Firth Fisheries Forum (Solway Firth Partnership, 2004). Facilitating public meetings to discuss strengthening the voice of fishery interests operating within the Solway through establishment of a Fisheries Forum.

Aquaculture

- **UK:** Feasibility of a single marine licence consenting approach for Scottish aquaculture (Scottish Aquaculture Research Forum, SARF, 2018). Examining options of removing aquaculture from Town and Country Planning Act and delivering consenting through the Marine Scotland Act or a bespoke Scottish Aquaculture Act.
- **UK:** Independent Consenting Review of Scottish Aquaculture (Marine Scotland and The Crown Estate, 2015 2016). An in-depth analysis of the current consenting process for finfish and shellfish including consultation with industry and regulators across 36 organisations/companies culminating in the provision of recommendations for improvements to the current regime.
- **UK:** Scallop ranching (Private client, 2013-2014). Providing GIS support to a detailed mapping project to select nursery and ranching sites for a scallop farm.
- UK: Further assessment of whether fish farming impacts tourism in Scotland (Scottish Aquaculture Research Forum, 2011). Extending the survey described below to include Skye, Loch Carron, Fort William, Oban and Tarbert.



- UK: Assessing the impact of fish farming on tourism in Scotland (Scottish Aquaculture Research Forum, 2008-2009).
 Research undertaken at three Scottish case study locations with tourists, tourism related businesses and aquaculture companies via face-to-face questionnaires and structured telephone interviews. Data analysed to assess the cope and scale of the impact that fish farming has on Scottish tourism.
- **UK:** Blue mussel bottom cultivation (Private client, 2005-2007). An independent stock assessment of blue mussel beds in the Moray (Inverness) Firth to establish extent of ephemerality. Environmental assessment undertaken to inform Appropriate Assessment and support a Several Order application.
- **UK:** Site optimisation for aquaculture operations (Scottish Aquaculture Research Forum, 2005). Research to define objective criteria for guiding the scale, location (and relocation) of aquaculture operations, taking into account the environmental, economic, social and legal aspects of site optimisation.
- Vietnam: Coastal Aquaculture Comparative Advantage Study (DANIDA, 2005). Developing profiles of Vietnam fish production and seafood exports by main product categories in order to assess market position.
- Falkland Islands: Establishing a mussel Export Industry (Falkland Islands Government, 2004). Supporting the
 preparation of a commercial viability appraisal of establishing a Falkland Islands blue mussel export industry including
 site scoping and assessing market opportunities.

Coastal and marine management

- **UK:** Cost Benefit Analysis of Management Options for *Didemnum vexillum* (Carpet Sea Squirt) in Scotland (Scottish Government, 2011). Leading a team with Hambrey Consulting and SAMS to assess three options to manage *D. vexillum* recent occurrence in Largs and Fairlie area.
- **UK:** Scottish Sustainable Marine Environment Initiative Phase 2 (Scottish Executive, 2004-2006). Management options to improve sustainability at four pilot study locations (Clyde, Sound of Mull, Shetland and Berwickshire Coast) were explored including marine spatial planning, codes of conduct and research projects. Lead consultant for delivering Sound of Mull Marine Management Plan.
- **UK:** Offshore Decommissioning Feasibility Study (Confidential 2006). Assisted in production of decommissioning alternatives feasibility study for North Sea oil and gas production structures.
- **UK, Norway & Netherlands:** Implementation of software to model emissions (Shell, 2005-2008). European lead consultant in implementing Fountain Environment software to build and model all Shell Exploration and Development operations including offshore oil and gas platforms, drilling mobile vessels, onshore gas plants and office operations to track, manage and report on all air and water emissions.
- Turks and Caicos Islands: Economic Valuation of Environmental Resource Services (Turks and Caicos Islands Government, 2004). Contributing to the preparation of publicity materials, including a series of brochures illustrating the value of natural resources within the Turks and Caicos Islands.
- **UK:** Invest In Fish: Sea angling and the fishing industry work package (WWF/Defra, 2004). Liaison with anglers and angling stakeholder groups to establish the extent and economic benefits of angling in the South West area of the UK.
- **UK:** Feasibility of a RoRo Relay Service linking the Northern Periphery and North Sea Region (Northern Maritime Corridor, 2004). Assisting an evaluation of the potential for increased shipping links between Iceland, Faroes and Shetland with mainland UK, continental Europe and Scandinavia.

Marine surveys and observation trips

- **UK:** Countryside Council for Wales Marine Survey (2007-2009). Biotope mapping of Welsh Natura marine sites using drop video survey techniques and species, habitat and biotype identification as part of a five-year survey program.
- **UK:** Inverness Mussel Farm (Private client, 2006). Benthic grabs and drop down video survey to establish mussel year class, biogenic reef potential and extent of bed coverage.
- **UK:** Observation tips for Thanet Offshore Wind Farm (Warwick Energy, 2005). Observer trips on board under 10m vessels operating from Ramsgate and deploying pots or static / drift nets. Location and time of gear setting and hauling, as well as catch composition and discards were recorded on standard observer forms.
- South Africa: Great white shark research (White Shark Research Institute, 2002). Volunteer participating within a team of researchers studying the great white shark. Collecting and interpreting data above and below the water including dorsal fin identification, sex recognition and behaviour studies.
- Belize: Diving surveys (Coral Cay Conservation, 1998). Volunteer dive leader in a programme of work to collect and interpret data on fish species abundance, coral cover and community structure around the barrier reef systems of the coast of southern Belize.



Other relevant information

Professional training courses including:

2009 Negotiation Skills and Conflict Resolution; Quality Management Systems.

2008 Advanced EIA & Strategic Environmental Assessment; Construction, Design and Management (CDM) Training;

IEMA Associate Workshop.

2007 Project Management; Marine Drop-Down Video Survey Techniques; Financial Management; Geographic

Information Systems (ArcView); Basic Environmental Impact Assessment Workshop.

Health and safety training courses including:

2010 Advanced Security in the Field; Lone working including dealing with conflict and breakaway techniques; Driving

safety; Fire safety.

2003/2 BSAC first aid training; Sea Survival.

