**Impact case study (REF3b)**

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<th>Institution: University of the West of England (UWE), Bristol</th>
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<td><strong>Unit of Assessment:</strong> 17 – Geography, Environmental Studies and Archaeology</td>
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<td><strong>Title of case study:</strong> Reducing overfishing in the UK and its overseas territories and supporting marine communities through the use of established terrestrial property management practices</td>
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1. **Summary of the impact**

   Overfishing in the sea is a solvable environmental issue. UWE research applied established terrestrial management practice to the marine environment to investigate the problem. This approach yielded a sequential thread of impact where UWE’s research was pivotal:

   1. the formation of the Isle of Arran no-take zone, the first community-led marine reserve in the UK;
   2. the creation of the Chagos marine reserve in the British Indian Ocean Territories, the largest marine reserve in the world and one of the largest single acts of nature conservation yet undertaken;
   3. the systemic application of the EU Habitats Directive to fisheries, changing the status of EU marine protected areas from ‘paper parks’ to establishing a workable management regime;
   4. the preservation of public ownership of UK fishing rights and promotion of the fair allocation of quota to sustainable fishermen; and
   5. the change in the management regime of the Crown’s marine estate to include more emphasis on coastal communities with the establishment of the coastal communities fund.

2. **Underpinning research**

   The research at UWE was led by Tom Appleby (who joined UWE as a senior lecturer in 2007), supported by Mark Everard (Environment Agency and UWE Visiting Research Fellow since 1996; UWE Associate Professor since 2013) and Jean-Luc Solandt (Marine Conservation Society and appointed as UWE Visiting Research Fellow in 2011 in recognition of the potential for an impactful partnership between UWE and the third sector).

   Underpinning research took place against a widely acknowledged backdrop of significant failure of fisheries management at the UK and EU level. Government response was to pass Marine Acts in the UK and Scotland. Using the approach that government should seek to draw a clear line between the roles of the state as owner and regulator (as is the case on land), UWE undertook research that examined and interpreted the Marine Acts. A number of strengths and weaknesses in the process were identified (R1,4). The weaknesses included the failure to legislate for Overseas Territories, the failure to unpick the complex web of ownership for the UK marine area and the failure to deal with the actual rights and obligations of fishermen.

   UWE’s research (R6) also explored the duties of various state bodies to identify where potential operational failings may lie, and to identify those bodies which might implement successful marine conservation policy based on established good property management practice found elsewhere in government. UWE’s research findings included concerns over the management of the UK’s fishing quota. The findings identified that there was a real danger of the whole public fishery being accidentally privatised because of the weak understanding of the law of property displayed by the current practice.

   Everard and Appleby (R4) also investigated how these differing roles mapped onto an ecosystem approach and subsequently stated that government should take into consideration a greater range of interests than was the case up to that point when deciding on government fisheries policy.

   Terrestrial practice has long taken into consideration the vast suite of European environmental law so UWE’s research also looked at the application of the EU Habitats Directive to the marine area and, in particular, the anomalous exemption claimed for fisheries. The research concluded that this had no apparent basis in law (R5).
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3. References to the research


4. Details of the impact

*Appleby* and UWE colleagues have adopted an action research approach and have taken forward their research findings through direct engagement with organisations outside the institution. The first test of this approach was with the Community of Arran Seabed Trust (COAST).

The creation of Scotland’s first fully protected marine reserve

COAST based their efforts to establish Scotland’s first fully protected marine reserve in Lamlash Bay on the Isle of Arran on research conducted by *Appleby* (S1.1,2.1,3.1). Key to UWE’s research was settling who owned Scotland’s fishing rights and who should be consulted as part of the decision making process (R1.2,3). UWE indicated that the Scottish Government owed a far greater duty to coastal communities than was evident from the management practice of the time. COAST relied heavily on this legal argument and in September 2008 COAST was successful and their reserve was established (S1.2). The chair of COAST said of UWE’s research “[W]ithout it we would have got nowhere.”

COAST won the prestigious Observer Ethical Award in 2009, as a result of its efforts. The Lamlash Bay marine reserve has been widely reported in the national press. It led the Scottish Government to include a section (s71) in the Marine (Scotland) Act 2010 to permit the creation of marine protected areas (MPAs) proposed by other communities in a similar position to COAST. *Appleby* remains a trustee of COAST and UWE’s involvement continued with COAST through a joint Conference in 2010 to encourage other coastal communities to follow COAST’s lead. The Conference brought about a proposal for a marine protected area by the Sustainable Inshore Fisheries Trust (which was formed from conference delegates) and which is now under active consideration.

The creation of the world’s largest marine protected area via the formation of the Blue Marine Foundation

As a direct consequence of UWE’s involvement with the successful COAST project, *Appleby* was invited to a meeting of key knowledge leaders and funders in October 2009 at the Natural History Museum in London. *Appleby* cited the complexity inherent in setting up marine reserves in UK
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Waters resulting from the numerous stakeholders and legal processes. He pointed to UWE’s research which indicated that it would be simpler to use UK Overseas Territories (R1.2). A number of the presenters and attendees of the event believed this opportunity provided a niche to develop a new agency for marine conservation from the expertise present and it was decided to establish the Blue Marine Foundation (BLUE). Appleby was involved with BLUE from its inception and became an active trustee. In 2010 BLUE, with Appleby’s support (S2.1,3.1), successfully negotiated the huge Chagos Islands marine reserve in the UK overseas territories with the Foreign and Commonwealth Office (FCO) and with the assistance of a multimillion pound grant which BLUE obtained from the Bertarelli Foundation. BLUE’s role here was key, based on UWE’s research, they saw that the FCO could easily, as owner of the fishery, create a huge marine reserve. The Sunday Times columnist and chair of BLUE, Charles Clover, said of UWE’s involvement that it helped BLUE “plan and implement the world’s largest marine reserve in the British Indian Ocean Territories; this is one of the most important acts of marine conservation ever undertaken.” The reserve covers nearly 640,000 square kilometres.

UWE’s research did not just deal with the UK acting as owner. There was also an important role as regulator where the regulatory standard for fisheries appeared much lower than for equivalent terrestrial activities (R1.2).

The application of the EU Habitats Directive to UK fisheries

Appleby and Solandt (R5) noted that there was no exemption for the commercial fishing sector from the Habitats Directive, yet UK fisheries managers acted as if there was. The Directive gave specific protection to “Natura 2000 sites”, which cover 17% of EU waters and 23% of English inshore waters. The UK and many other member states regulated all other activities in these sites but failed to regulate fishing. Appleby and Solandt pressed for the full implementation of the Directive. This would mean that many fisheries would need an environmental impact assessment if they were to be permitted, and only benign fishing methods should be allowed following that assessment. Damaging activities could only take place in the public interest and if compensatory measures were put in place; in practice they would be banned. UWE’s research was taken up by the Marine Conservation Society, the environmental law firm Client Earth and the leading environmental QC David Hart who pressed government, and asked Appleby to assess whether their approach was legally rigorous (S3.2). This collaboration of academia, NGOs and the legal profession changed government approach. Defra have accepted that fisheries are subject to the Directive and are now using a risk-based approach to fishing in sites in UK waters protected by the Habitats Directive (S3.3). The UK approach is seen as taking the lead for the rest of the EU, and it is likely that other EU member states will follow suit. At a stroke, Natura 2000 sites have gone from being paper parks to being actively protected against harmful fishing operations. This action was described by one of the founders of the MCS and a leading marine commentator, as “the single most effective activity the Marine Conservation Society has ever undertaken in its entire history.” (S3.1)

The application of effective regulation for UK waters still did not deal with the ownership question. The Chagos island reserve had been simple because it is clear under colonial law that the Foreign and Commonwealth Office acted as owner of the fishery, but UWE’s research had found that there were real questions about the ownership of the fishery in the waters immediately adjacent to the UK.

The reallocation of fishing quota to the inshore sector

Appleby (R6) identified that the UK fishing quota was in danger of being privatised through an inadequate quota distribution mechanism, which had fundamental flaws in its design and which failed to safeguard the public interest. The New Under Ten Metre Fishermen’s Association (NUTFA), which represented smaller and more sustainable inshore fishermen, and Greenpeace were both influenced (S4.1) by this research and lobbied government for a reallocation of unused quota to the inshore sector (which had been unfairly treated in the initial allocation). In January 2012 Defra decided to reallocate quota to the inshore sector. Defra’s decision was judicially reviewed by representatives of the large quota holders who argued that it could not be redistributed because it had become their property right. UWE’s research indicated that the fishery was still
public property and this argument was used as a basis for an intervention in the legal proceedings by Greenpeace and NUTFA in support of Defra (S4.1,4.2). Officers from UWE’s research: “We relied on work conducted by UWE and Tom Appleby in that intervention, and on the 10th July 2013 the High Court found in our favour and permitted the realignment, in the process the Court confirmed that the fishery was a public resource”. The UK’s fishery was valued at approximately £1 billion in 1999 and UWE’s work helped to safeguard the public ownership of that asset.

**A greater duty on the Crown Estate Commission to inshore Communities**

The UK’s vast marine estate is not just about fishing and conservation. The marine landholding around the UK itself covers a huge area (over 100,000 square kilometres) to the 12 nautical mile limit. The vast majority is owned by the Crown and managed on its behalf by the Crown Estate Commissioners (CEC).

In 2009 the Treasury Select Committee investigated the role and function of the CEC management of inter alia its marine estate. Appleby gave evidence to the Committee outlining that CEC had wider duties than a sovereign wealth fund, and should include a greater stewardship function. His evidence was extensively quoted in the Treasury Select Committee’s report. This resulted in the creation of an annual £29 million fund from CEC profits specifically for coastal communities (S5).

**5. Sources to corroborate the impact**

S1. *The creation of Scotland’s first fully protected marine reserve* – Both available through UWE.
   1.1. Testimonial from Chair, COAST – Confirmation of impact on the development of the Arran no-take zone [1 on REF Portal]
   1.2. BBC: *Sun sets on fishing in island bay* [Link]

S2. *The creation of the world’s largest marine protected area and the formation of the Blue Marine Foundation* – Both available through UWE.
   2.1. Testimonial from Sunday Times Columnist and Chair of Blue – Confirmation of impact for the Chagos reserve with Blue Marine Foundation [2]

S3. *The application of the EU Habitats Directive to UK fisheries*
   3.1. Testimonial Chief Executive, Communications & Management for Sustainability – Available from UWE. (Confirmation of importance of UWE research.) [3]
   3.3. MMO [online] *Revised approach to managing marine sites*. [Link] (Confirmation of changed strategy following CE / MCS intervention.)

S4. *The reallocation of fishing quota to the inshore sector* – Both available through UWE.
   4.1. Testimonial from Greenpeace UK [4]
   4.2. Testimonial from Peter Aldous MP [5]

S5. *A greater duty on the Crown Estate Commission to inshore Communities* – both available through UWE

   Ditto, volume II, available at [Link]. (See Ev 68-70 for Appleby’s evidence to the Committee.)