

North Devon Skate Pilot Project Interim Report, August 2015

The North Devon Skate Pilot Project is supported by Devon and Severn IFCA, Northern Devon FLAG, the Marine Management Organisation, the European Fisheries Fund, North Devon Coast AONB and the North Devon Biosphere. The following is an update on the project which will be completed by December 2015.

Ray Management Workshop

A one day workshop was arranged and held in Barnstaple in May 2015. There was good attendance from all sectors of the industry (see Table 1). The morning session focused on the combination of complex issues surrounding the North Devon ray fishery, the knowledge of local fishermen regarding ray biology and what research could be done to support the industry's belief that the North Devon ray fishery is sustainable. The afternoon saw a series of talks about the project and other complimentary initiatives relating to ray ecology and sustainable fisheries. Participants then took part in a workshop which split attendees into groups to discuss scientific, socio-economic and management elements of a sustainable fishery. New connections were formed at the workshop and it has allowed closer working of different groups as described in the following sections.

Table 1 Composition of attendees at the North Devon workshop

Sector	Representatives
Industry	North Devon Fishermen's Association members including active fishers. Local and national producers and buyers.
Managers	Defra, IFCA
Local funders	Northern Devon FLAG, North Devon Coast AONB, North Devon Biosphere
NGOs	Shark Trust, Marine Conservation Society
Academic - fisheries	Cefas, Bangor University
Academic – socio-economic	University of Greenwich, University of Durham

Project publicity

Presentations on the aims of the project have been given to a number of other groups/ organisations. The IFCA presented to the North Devon Coast AONB committee on the project which promoted the project to local councillors and representatives. A presentation on the project was also given to the National Federation of Fishermen's Association South West Branch. A short overview of the project was given to Marks and Spencer's and New England Seafood at a meeting regarding the development of a range of South West sources seafood. Tweets from the Devon and Severn IFCA account regarding the project have been retweeted by (amongst others) the EU Commission for Maritime Affairs and Fisheries, the South Devon and Channel Shellfishermen's Association, the Marine Conservation Society, the Shark Trust and shellfish buyers for major supermarkets. Following on from earlier connections made by Mr J.Butterwith on behalf of the NDFA the IFCA was asked to develop a profile to support a recipe produced by Morrisons Ltd for the Marine Conservation Societies 'fish of the month' initiative. This will promote spotted ray from North Devon as a sustainable choice and will highlight the work of the NDFA relating to ray conservation. Regular discussions are underway between D&S IFCA and Morrisons Ltd and Young's Seafood regarding the project work being undertaken in North Devon.

Preparation for tagging work

Two Devon and Severn IFCA officers have undertaken statutory training in London and Lowestoft UK (paid for separately by the IFCA) in order to gain their personal licences to undertake fish tagging work. The boat work is now planned to commence in September.

Table 2 Summary: Progress on major targets

Target and Benefits identified in project application	Progress
Trial the deployment of 50 DST tags on 25 thornback and 25 blonde rays in North Devon, both inside and outside the existing 'Ray box'	<i>Ongoing</i>
Pilot the application of DST tags for assessing the benefits of the ray box for two commercially important species of skates.	<i>Ongoing</i>
Bring together key players in the supply and management chain for skates to discuss and plan a way forward for long-term monitoring and funding options with Northern Devon fishers engaged with the project.	<i>Completed.</i> The ray workshop has successfully been completed as described above. Additional talks and publicity have highlighted the issues the North Devon ray fishery faces and long term funding and monitoring options continue to be explored. North Devon fishers remain engaged and future meetings with Welsh Government should give direction to the concept of a Bristol Channel Ray Management Forum.
Identify potential way forward for future projects to gap-fill key evidence gaps in ray sustainability with the long-term goal of enhancing the marketability and provenance of North Devon rays.	<i>Completed and ongoing.</i> As a result of connections made at the North Devon workshop, Devon and Severn IFCA are now formal partners of Shark By-Watch UK 2, a Cefas project which aims to gain better understanding of local ray stocks to better inform management plans for the benefit of both the fishery and fishers. The IFCA is also a development partner of the RENEW COAST project which will aim to develop initiatives that add value to short supply chains and support sustainable fishing activities (commercial and recreational), building growth opportunities around conservation and local ecological knowledge of SSF.

Future work

A meeting is planned with the Welsh Government Fisheries department to discuss current management and research relating to elasmobranch fisheries in Welsh Waters. In particular the meeting will be an opportunity to gauge interest in the concept of a Bristol Channel Ray Management Forum and the involvement of Welsh Government in any research or monitoring programmes. A presentation will be given to the Institute of Fisheries Management on the work of the IFCA at their Annual Conference in October 2015 and will include the North Devon Skate Pilot Project. A major achievement of the project is the formation of a match-funding agreement between Devon and Severn IFCA and the Cefas-led Shark ByWatch UK 2 project. This project will include two major research components: i) 20 days of sea time collecting ecological data on rays on board two North Devon fishing boats and a comparison of ICES and commercial CPUE for different species ii) A habitat mapping (sidescan sonar and drop-down camera) comparison of important areas to commercial ray fisheries and ICES sampling areas including 10 days of sea time. Bringing in exactly this kind of larger-scale multi-partner research programme was one of the major goals of the North Devon Ray Pilot Project and the research questions addressed were developed directly from discussion in the workshop. The work for Shark ByWatch UK 2 will be completed by December 2015 and it is hoped that further iterations of the project will develop the North Devon case study. The IFCA is also actively working with the University of Greenwich in their development of an Intereg project called RENEW-COAST which aims to promote small-scale sustainable fisheries. An outline of the project is given in Appendix 3.

Appendix 1. *Meeting Notes from North Devon Skate Pilot Project workshop*



North Devon Pilot
morning minutes for ir



North Devon Pilot
afternoon notes for int

Appendix 2. Research questions developed following the North Devon Skate Pilot Project workshop to be addressed by Shark ByWatch UK 2 and future scientific/ monitoring work.

Should rays in the Bristol Channel be considered as a separate management unit?

- What are the home range sizes of the most commercially important ray species?
- Are populations of rays in the Bristol Channel part of widely distributed, panmictic populations with high levels of interchange or are they spatially restricted? (NB similar question to above)?
- What is the appropriate spatial scale of management for commercially important ray species in the Bristol Channel?
- Are populations of rays species in the Bristol Channel genetically distinct from populations of the same species outside the Bristol Channel and should they be considered as separate Evolutionary Management Units?

What are the habitat preferences of different ray species in the Bristol Channel & Severn Estuary?

- Do rays in the Bristol Channel show seasonal movements and are these the same across species and sexes?
- Do rays display species-specific habitat preferences in the Bristol Channel and how do these vary seasonally?
 - Could split it down based on fisher knowledge
- Do rays display aggregating behaviour within habitat types in the Bristol Channel and how does this vary seasonally?
- Do rays reproduce within the Bristol Channel and which habitats are important for key life-history stages?
- Does the ray-box protect important habitat for rays and if so, which species and during which life-history stages?

Sustainability of the fishery

- Are there large areas of the Bristol Channel which are naturally unsuitable for the operation of towed gear?
- Are these habitats suitable for rays and thus offer a natural protection from fishing activity?
- Has CPUE been relatively stable over time and what can and can't landings data tell us about the sustainability of the fishery?
- Does the towed gear closed-area in the Severn Estuary SAC provide important habitat & therefore protection for any ray species?
- Do current survey methodologies which inform stock assessments target the correct habitats at the correct time of year for the most commercially important species of ray in the Bristol Channel?

Appendix 3. *Realising the Well-being of Coastal Communities through Responsible Tourism and Small-Scale Fisheries (RENEW-COAST) project summary:*

Many coastal communities in the Channel area face socio-economic and environmental challenges, including unemployment, economic deprivation and environmental change. New economic initiatives, rooted in the conservation of natural and cultural heritage, are needed to increase prosperity in coastal places. Providing support for small-scale fishing (SSF) communities is an avenue for improving coastal well-being. There is a rich natural and cultural heritage associated with SSF that can be promoted to help achieve economic development and conservation objectives. This project aims to stimulate sustainable development (SD) in coastal places in responsible tourism (RT) linked to SSF along the Channel. This will be achieved through developing a RT brand label and marketing initiative, the “Channel Fisheries Way” (CFW)