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PE1386/C

Public Petitions Committee

TG.01

The Scottish Parliament

Edinburgh EH99 1SP

31st January 2011

Response by Professor Jim Atkinson (University Marine Biological Station Millport) to PETITION PE1386 by Torridon Nephrops Management Group, titled 'Establishment of further static gear only fisheries'

Response to Petition PE1386 including the three points in Section 5

I am fully supportive of the establishment of further static-gear-only inshore fisheries and particularly so with respect to the *Nephrops* creel fisheries. These are important fisheries in Scottish west coast inshore waters, especially NW Scotland, and provide valuable employment in fragile communities. The economic development of such fisheries, with sound sustainable management practices, is largely dependent on a zonal fisheries policy that will protect appropriate inshore grounds from trawling. The conflict between these two sectors of the industry can be resolved with appropriate legislation. Trawlermen resent creelers who block potential trawl lanes and can snag their nets: creelers resent trawlers who often snag their creel fleets resulting in expensive loss or considerable damage. Creel-only areas are needed and can be balanced with trawl-only areas as in the Torridon area.

The issue needs to be resolved nationally. Torridon is an excellent example of an innovative local initiative – the Torridon *Nephrops* Management Plan for a creel fishery operated by the Torridon *Nephrops* Management Group. This plan deserved to succeed. Its partial failure is not because of failings of the TNMG, but because their sound management practices were not supported by legislation that could ensure compliance by other fishers that those signed up to the TNMG agreement.

Each of the three points identified in the Petition is addressed below. The context of these comments is then examined in relation to the Torridon creel fishery.

Section 5 Point 1

There is a large body of scientific data (e.g. Ridgway et al. 2006. Journal of Experimental Marine Biology and Ecology 339: 135-147), to show that creel-caught *Nephrops* are of high quality and remain that way if good husbandry and transport practices are observed. They thus

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command high prices, especially for live export of large animals. A number of operators within the *Nephrops* trawl industry have also sought to reduce wastage, invest in science and increase quality, and one (Stornoway with Young's Seafood) has gained MSC accreditation thereby. The effect of capture and handling stress on quality is now well understood (e.g. Gornik et al. 2010. Marine Biology Research 6: 223-238). Research shows that creel-caught animals are unstressed, undamaged, and suitable for live export reaching markets in excellent condition, hence the high market prices.

Section 5 Point 2

Scientific work shows that creel fishing has a low environmental impact. In areas where there is no trawling few creels are lost and so there is not a problem of 'ghost fishing' where the creels continue to catch for long periods. Fortunately, research shows (Adey et al. 2008. Marine Ecology Progress Series 366: 119-127) that ghost fishing is not a problem with 'hard-eyed' *Nephrops* creels (unlike 'soft eyed' creels used in some crab and lobster fisheries): most caught catch and by-catch ultimately escapes. For creels, ground impact is minimal, the areal footprint of the gear is low and by-catch is low with most surviving capture and release. Since *Nephrops* grounds are soft bottoms there is no damage to fragile hard-ground epifauna and research has shown that damage to soft ground epifauna such as seapens is minimal. Current Scottish legislation supports clean seas, sustainable fisheries and environmentally sensitive exploitation of resources. *Nephrops* creel fisheries are entirely consistent with these objectives and the requirement for Marine Protected Areas. There is a place for both sectors of the industry (trawling and creeling) to exploit this valuable fishery, but at the moment the creel fishermen are disadvantaged in having few areas where zonal policies for gear operation are applied. Creel fishing needs to be done responsibly as does trawl fishing. A well-managed creel fishery is capable of sustainably harvesting a high value product with little wastage and minimal environmental impact. This activity supports employment of fishers and their communities in remote areas of Scotland.

Section 5 Point 3

- a) There is ample evidence that giving local communities considerably more control over the management of resources is advantageous. On-the-ground stakeholder investment in the sustainable management and utilisation of resources is the way to engage local communities in shaping their future, particularly important in remote rural areas where people can easily feel overlooked by government. The new Inshore Fisheries Groups ((IFGs) provide a mechanism for this but have very limited powers. The usefulness of the IFGs is therefore currently limited by their lack of powers to implement and enact regulations at a local level, within national guidelines.
- b) There is a need for local communities, especially in remote areas, to see economic benefits flowing to their communities from their own locally-managed efforts. Creel fishing and the processing and distribution network that it supports provides one such industry. Importantly, it provides sustainable employment in rural areas, helping to prevent depopulation.

The Torridon example

The Torridon *Nephrops* Management Group (TNMG) has striven to undertake a sustainable creel fishery using sound management practices that gained it Marine Stewardship Council (MSC) certification. I was an external assessor when this status was awarded. The commitment of the Management Group and the fishermen that signed up to the agreement was impressive. MSC accreditation reinforced and extended active conservation measures that the fishermen had already been applying to the fishery. It was apparent to me at this time that what was

subsequently needed was a thorough scientific analysis of the fishery. This was initially undertaken through a PhD programme, the comprehensive study by J.M. Adey being completed in 2007, this being jointly delivered by the University of Glasgow and the University Marine Biological Station Millport. This work set the fishery on a sound scientific basis and has been supplemented by additional research, including a second on-going PhD study, work commissioned by Scottish Natural Heritage and stock assessments carried out by Marine Scotland Science. As a result the Torrison *Nephrops* creel fishery is the most comprehensively studied creel fishery in Scotland and is thus underpinned by a considerable body of scientific knowledge. It is, in many ways, a model of how a local fishery management group should operate in seeking to understand and sustainably exploit its target resource. In doing so the fishery brings valuable employment to a remote area of Scotland, not only for fishermen but for those involved in processing and transport of a high quality food product that enhances Scotland's reputation.

The initial success of the fishery depended on several factors, including:

- Fishermen and a Management Group committed to sustainable exploitation of the resource
- The establishment of a static-gear-only zone in Loch Torrison and the Inner Sound of Raasay
- A desire to support scientific investigation of the fishery

Research showed that the spatial separation of trawl and creel zones was generally observed and this aspect has legal enforcement. The threat to the fishery is that the voluntary Torrison Management Plan (a Code of Practice) operated by the fishermen and that underpinned their MSC accreditation has no legal enforcement. Thus the fishermen have no protection from being 'asset stripped' by fishermen who are not signed up to observing the TNMG Plan. As a result the MSC accreditation of this flagship fishery has been compromised and is currently suspended. The TNMG Management Plan provides for effort limitation (both in terms of gear on the ground and days at sea), gear modifications (escape gaps) to release all but the largest animals, and return of berried females. Excellent husbandry practices maintain the catch in good condition with minimal wastage. It is to the credit of the fishers signed up to the TNMG agreement that they adhered to their conservation policy and the criteria of the MSC, even when those who had entered their area did not.

Concluding Remarks

Establishment of further static gear fisheries deserves support. The Petition calls on the Scottish Parliament to review the situation and pilot the establishment of further spatially separated static-gear-only inshore fisheries to improve fisheries management. This would help resolve current gear conflict issues, protect rural communities, and improve exploitation of the resource and protection of the environment. The piloted approach would enable the policy to be subjected to careful objective evaluation.

Professor R.J.A. Atkinson