

**Submission to Net Zero Committee: Scottish Biodiversity Strategy
from Roddie Macpherson, December 2023**

Does the draft plan appear fit for purpose to address the biodiversity crisis as it affects Scotland?

The proposals fall well short of being fit for purpose.

Personal context.

My Macpherson forebears were crofter/fishers in Sleat, Skye. They would have witnessed the depletion of local fish stocks by inroads from fishers with more capacity, often from East coast ports.

I live in Avoch, a village in the Black Isle with a renowned history of fishing and seamanship. In the 1960s, local boats took huge harvests of 'Kessock herring'. Are there any such herring out there now? We have a commodious, though tidal, harbour used for leisure craft. One or two boats fish for shellfish, such as whelks for export. Apart from those, the only commercial fishing vessels we see are those travelling to and from the Caledonian Canal.

The above evidences two issues which are relevant to the health of the marine environment. 1. **the importance of catching capacity** (engine and winch power, and technology). Unless curtailed, more capacity will always displace lesser capacity. Fishing technology is such that there are very few areas where fish can hide from a trawl. 2. **the decline of the inshore fishery**, where most commercial inshore fishers are fishing at the bottom of the food chain for shellfish, previously mainly taken for bait.

There are no adequate proposals to address either of these issues.

The state of **our inshore environment**, its fish stocks and its habitats, is an indictment of fisheries mismanagement by UK and Scottish governments. This is the area of the sea with the greatest potential for biodiversity, vital to the spawning of many commercial species and juvenile fish. Here is one example of the complacency exhibited in recent years *"Our track record of managing Scotland's fisheries is strong with robust regulatory and monitoring frameworks in place."* (Fisheries Management Strategy 2020-2030, Dec 2020). A statement that was untrue then, and likely to remain untrue in the future, based on current proposals.

Equally negligent has been the commercial fishing industry. It's not politicians that fishers should worry about, but the practices and self-interest of fellow fishers. Government Inquiries in the 19thC heard much evidence from fishermen concerned about the damage being done by the trawling fleet. Regrettably, they were ignored as voices with greater influence believed that the bounty of the seas was unlimited and endlessly renewable. Through bitter experience, we know that natural regeneration is real, but has its limits, once passed a tipping point regrowth may not be possible (eg. cod stocks around Newfoundland, not having recovered in the 30 years since fishing was banned).

I can be less diplomatic than the Panel Members and say that Scottish Ministers and their advisers are delusional if they believe that their proposals to halt the decline in marine biodiversity represent 'a step change'. A step change from the last decade of inaction will have little effect, and fails to

provide an adequate response to ‘**an emergency**’. What we need is a huge leap forward, something well beyond what government is advocating.

I refer to some important issues which highlight the inadequacy of the government’s ‘plan’.

(A) The Strategy fails to have any reference to **benchmarking**.

What is the benchmark reference being used to assess the loss of biodiversity (and its restoration) in the marine environment? Restoration means achieving a certain former condition. To what goal is restoration targeted? Is it twenty years ago, or 50-60 years ago before the axing of the 3-mile limit, pre-WWII, or pre-steam trawlers?

It would be folly to aim to restore conditions to an already deleted state, which would be the case if too recent a benchmark is used.

Without a defined condition being targeted for restoration, how can one assess the success or failure for any plan of action? We should be endeavouring to determine what is the **potential** of our seas and aim to restore to that goal. There is no attempt to do this – it’s a vacuum; we are left none the wiser.

(B) **Juvenile stocks and spawning areas remain vulnerable. Discards continue.**

The warning signals have been repeated since at least 2011 when the Marine Atlas under ‘*Significant pressures in the marine environment*’, identified one as ‘*bottom trawlers and scallop dredgers may damage the seabed*’. Two years later - ‘*Scallop dredging is recognised as having the most significant impact on sea bed habitats within Scottish waters. Fishing using mobile gear also adversely affects the sea bed, causing damage to benthic features and habitats.*’ (Living within Environmental Limits in the Marine National Plan Consultative Draft, 2013). Impacts of fishing on the seabed and species remain ‘*widespread and significant*’ (National Marine Plan 2015, 6.3).

Vital issues for the future health of our seas have been highlighted for over ten years – vulnerable stocks, discards, bycatch, seabed damage by fishing, need for proper monitoring – all relevant to the biodiversity loss. None has been adequately addressed, far less remedied in the intervening period. These were part of the ‘nature emergency’ then, and regrettably continue to be so.

(C) The lack of commitment and leadership remains evidenced in this document. There is **no proposal to restrict bottom trawling or dredging* in inshore waters** (which, of all sea areas, have the greatest potential for restoring biodiversity), or proper consideration of the merits on an ‘inshore cap’ (the latter is mentioned briefly on p33). How is this an adequate response to a nature emergency (= a serious and unexpected** situation requiring immediate action)?

*A study has concluded that ‘*the majority of damage to large benthic invertebrates during scallop dredging occurs unobserved on the seabed, rather than in the bycatch*’. (Impact of scallop dredging on benthic megafauna: - a comparison of damage levels in captured and non-captured organisms’, S. R. Jenkins et al, Marine Ecology Progress Series Vol 215: 297-301, 2001)

**the current situation is not ‘unexpected’.

(D) Measures to reduce discarding and bycatch by 2026 will be worthless unless the demersal fleet and bottom trawl/dredge gear vessels, irrespective of size, are fitted with **Remote Electronic Monitoring**. The Scottish government has no comprehensive proposal to require this form of monitoring in the future. Further, the reference to *'best available scientific advice'* (penultimate Action p33) is disingenuous in the absence of comprehensive REM for the high catch capacity sectors of the commercial fleet.

(E) The UK Joint Fisheries Statement 2022 sets a target period of 2022-24 for preparation and publication of **Fisheries Management Plans**. FMPs are relevant to biodiversity and sustainability. *"FMPs will make best use of available evidence, be subject to scientific evaluation and consider the environmental risks associated with the fishing activity managed through the FMP."* And, they should specify whether there is sufficient evidence to assess a stock's Maximum Sustainable Yield. (JFS, paras. 5.6.3 & 5.2.4) – an important issue given the adoption of MSY as a management tool. Therefore, the proposal in this paper to **develop** (ie. not complete and publish) FMPs without any timescale is a wholly inadequate response. The chance of these measures, which will require considerable consultation with stakeholders during 2024, being delivered next year, is remote.

(F) Given SEPA's new sea lice framework objective of better protection to **wild salmon smolts**, it is remarkable that it is proposed to *'Undertake research on post-smolt and adult Atlantic salmon migration routes around Scottish coastal areas'* (p.39) One might have assumed that this research would have been concluded and assessed prior to the finalisation of the new framework. It also begs the question – how many fish farm licences have been granted in problematic areas for wild salmon movements?

There are multi-faceted and on-going **challenges facing fish farming**. Most stem from the fact that the industry relies on an intensive production model which impacts on marine biodiversity and habitat integrity.

Do you have any concerns that implementation of the plan could have adverse consequences? If so, please set these out.

The adverse consequences stem from the fact that the 'plan' does not meet the challenge, and is full of delay which the environment cannot afford ie. not fit for purpose.

Habitats will continue to deteriorate and biodiversity, including fish stocks, will fail to recover.

What matters, other than those set out in the plan, would require to be addressed to ensure that the plan works?

The list includes :-

The primary foundations of marine life are plankton and, therefore fundamental to biodiversity. There is no assessment of the state of plankton in our waters, or what effects warming seas and possibly changing ocean currents, might have for the future.

Consideration of limits on fishing capacity and fishing effort as part of management measures.

Benchmarking. A clear description, with reference to examples across the globe, of the potential of the sea to provide healthy resilient habitats along with future fishing opportunities. This is the target to which restoration efforts should be aimed.

More resources. This was a common theme among Panel members. Even the limited aspirations of the government's proposals could well founder on poor funding capacity. The rather large 'elephant in the room' here is the fact that the devolved government in Scotland lacks full economic powers, and largely relies on the narrowing and increasingly reluctant shoulders of the UK government.

More support to local communities who are taking practical steps to improve marine environments (it's a pity none was represented on the Committee Panel).

A moratorium on the expansion of the caged fish industry.

Proposals to address Illegal, Unreported and Unregulated Fishing, all which can impact marine biodiversity.

Each of the above require to be addressed. However, the current 'plan' simply will not do. It needs a fundamental re-write to have any impact on the critical state of our seas. Too much space is given to high-level targets and visions, which do not equate to immediate action in face of an emergency. We need the setting out of clear practical measures by 2030 (they do not need to be 'world leading' - a vacuous phrase too prevalent in government publications). **Priority must be given to the protection of juvenile stocks and spawning habitats. In turn, this requires an immediate addressing of measures to bring robust management to inshore waters.**

Looking beyond 2030 presents opportunities for delay, which we cannot afford.

If the funding is not available, be honest and say so; only then can we endeavour to look how we can progress in light of other competing needs, and perhaps come up with innovative proposals on the basis of 'needs must'.
