

MIGRATORY FISH COMMITTEE ANNUAL REPORT

Overview of the Committee's Work

The purpose of the Migratory Fish Committee (MFC) is to represent the public policy interests of SANA members, i.e. angling clubs and individual members. For those who might imagine that there can be nothing further from game anglers' interests than "public policy", think again.

If there are no fish in the burn, river or loch, there is no fishing opportunity. If there are fish but no access arrangements for ordinary people, the same applies. Whether or not conditions are right for fish and whether fishing is available to anglers are vitally affected by public policy. Salmon and sea trout need clean water, and habitats in which they can feed and reproduce successfully. Not least for migratory fish, they need also to be able to go to sea, survive there and get back. All parts of their complex lives are subject to human influences and are affected by public policy.

First and foremost, involvement in "public policy" means telling government and its agencies what anglers want and responding to what's on offer. Our formal submissions are on the SANA website and, whenever possible, they are published beforehand in draft form - so that members have the opportunity to comment as well as members of the committee.

Open Cage Salmon Farms

SANA's approach to the vexed subject of salmon farming and its impact on wild fish has been to adopt a principled view that the industry can, and should be, reformed. This is in marked contrast to some bodies which have chosen the unrealistic path of calling for the industry to be closed down.

Slow but steady progress is being made and we were heartened during last year by the two reports of the Scottish Parliament which had the effect of saying that the industry must change and that the status quo is not a viable option. However, much depends on what changes are instigated, regulated, monitored and policed.

Our recent focus has been on Crown Estate Scotland (CES). This is the new devolved body, now responsible to Scottish Ministers, which provides all the seabed leases for marine fish farms in Scotland. SANA is a member organisation of the CES Stakeholder Advisory Group.

Both Scottish Ministers and CES itself have been considering the way forward for the organisation. For the Scottish Government, Marine Scotland consulted on the strategic direction that Ministers should oblige CES to follow. We didn't like that much and have been very critical of its cavalier attitude towards environmental protection and its lack of ambition on how the industry can clean up its act. CES published a draft corporate plan. We did like that because it recognised the environmental problems that the salmon farming industry has created and contains proposals for reforms.

However, the central issue is now radical long-term reform – changing the technology of how fish are grown on to marketable size.

The biggest change that has happened is that more and more fish in open cages in the sea are just not surviving to maturity. The industry was initially very successful in adopting floating cage systems to benefit from relatively benign marine environmental conditions in sheltered sea lochs. Now, increasing public attention has been focussed on well-publicised, large-scale fish farm deaths from sea lice proliferation, gill and other diseases and periodic blooms of toxic marine algae. Escape events are another constant threat, not only to fish farm profitability, but to wild salmon and sea trout populations. Despite these major problems, Scottish salmon farming continues its endeavours to expand its cage systems, while facing extra costs of moving its entire production to closed containment technology, using rearing units still operated at sea, or on land, while retaining its competitive edge in world markets.

The change seems inevitable. It is already happening in other parts of the world. SANA is strongly in favour of closed containment – seeing this as vital for the prevention of negative impacts on the marine environment, on wild fish and on other fauna.

As well as the environmental/wild fish benefits, there are other public interests in helping the industry to adapt. At its extreme, current open cage technology fails on animal welfare grounds alone, never mind the huge losses of end product. If farmed land animals were being killed on the same scale as caged salmon, government would have intervened a long time ago. Also, made-in-Scotland farmed salmon products are a huge part of Scottish food exports and with potential to grow. If the industry doesn't change, those exports will be wiped out in the long run.

It is our view that conversion to closed containment technology will require significant expenditure and we hope that CES will be successful in mobilising such funding as is required from both private, and if need be, from public spending also. It is everybody's interest, including CES as the monopoly supplier of sea bed leases, that this industry should move to sustainable production methods.

Predators

On behalf of SANA, both the MFC and the NMFC responded to the review being undertaken by Scottish Natural Heritage (SNH) on what birds should be generally permitted to be shot as pests. Our starting point was a difficult one because SNH hadn't even considered that birds might eat fish. We had to point out a whole new problem area, so that we could comment on it.

It should be noted that fish-eating birds don't distinguish between coarse fish and game fish, nor between migratory fish and their non-migratory cousins.

The exercise followed important new work funded by Marine Scotland, under the Wild Fisheries Reform Process. This involved relaxation of current rules to allow substantial numbers of cormorants, goosanders and mergansers to be shot for research purposes last May and their stomach contents examined and analysed. That time of year is important for smolt migrations to salt water.

It also followed smolt tagging experiments in the Dee, Deveron, Spey and other Moray Firth rivers. These showed that between 75% and 50% of smolts never even got to the sea.

We said: “Salmon is a listed species under the EU Habitats Directive and, with sea trout, is not being protected by virtue of cormorants and sawbilled ducks not being included in the general licence.”

“Research commissioned by and/or carried by Marine Scotland, Salmon Fisheries Boards and Fisheries Trusts demonstrates that juvenile fish (smolts and parr) are heavily predated by cormorants and by sawbilled ducks during the freshwater period prior to marine migration. Salmon and sea trout stocks have been much depleted, to the extent that most rivers in Scotland (categories 2 and 3) are judged to be at risk of insufficient spawning escapement to sustain populations. For its part, the angling community has alleviated pressure by introduction of catch and release of adult fish. Such efforts are felt to be negated by failure to contain the predatory impact of these birds on the juvenile component of salmon and sea trout stocks.”

Survival at Sea

The North Atlantic Salmon Conservation Organisation (NASCO) is the only international treaty organisation to be based in Scotland. As such, it is potentially the most effective route to bring pressure to bear on the Scottish Government’s reluctance to properly regulate the finfish farming business which has been so damaging to west coast wild salmon and sea trout.

SANA is an important Non-Government participant in NASCO meetings and we want to continue in this role. However, it costs at least £2,000 each year to meet the travel and accommodation costs of taking part. This year, 2020, the meeting was to have taken place in Torshaven, Faroe Islands, but has been moved to somewhere near Edinburgh. It may be the least expensive venue for some years. The MFC wants somebody to attend and there is bound to be some expense involved. Any funds left over can be put to the 2021 event.

Donations would be appreciated so that Scotland’s game anglers can continue to be represented on this vexed issue. Please send cheques or make donations by direct bank transfer to SANA at Account 00224122, sort code 83-23-47 and mark the transfer as “NASCO”.

SANA was represented by Andy Walker at the 2019 annual meeting of the North Atlantic Salmon Conservation Organisation. His report is on the SANA website and he writes:

“Scottish game anglers are widely concerned at the continuing decline of their sport. International catches of wild Atlantic salmon continue to decline against all historic measures of abundance. In the North East sector of the Atlantic catches have been most affected in the southern areas of the range of salmon spawning stocks, including many Scottish rivers. There are many pressures on salmon survival and no single cause. Climate warming continues to appear the main driving factor operating both in the marine and freshwater environments, according to ICES, the international body providing scientific advice to NASCO. For a fuller appreciation of the catches, stock assessments and trends, download the substantial ICES report to NASCO at Tromsø 2019 from the NASCO website (www.nasco.int). For an overall look at the agenda items CNL 19(00) provides a list of the many papers, including the Annual Reports from the participating Parties. These can also be downloaded individually.

NASCO has no direct powers over governments but, as a major international forum, it can exert considerable pressure on them in the interests of wild salmon conservation. Meanwhile, the general public must think salmon are in great shape as they are now seen as the product of

a multitude of salmon farms available from every fish shop, supermarket and restaurant. The IYS initiative addresses this deepening public unawareness of the true state of one of the most iconic wild species in our country. Meanwhile the popular cry is ‘Bring back the beaver, lynx, wolf etc.’ Fishery Management Scotland (FMS), the umbrella body representing Scottish fishery boards and fishery trusts, and SANA, representing anglers, are acutely aware of the urgent need for greater efforts towards the conservation and restoration of our wild salmon spawning stocks, to sustain the best possible numbers of smolts migrating to sea each year.

The NGOs at NASCO, led by Paul Knight (Salmon and Trout Conservation UK) and Dr Steve Sutton (Atlantic Salmon Federation Canada), while applauding where good progress is being achieved by some Administrations, as shown in their Annual Reports, were again very outspoken about those where there was a lack of progress towards agreed objectives. The Scottish Report, while addressing many of our concerns, failed properly and urgently to address salmon aquaculture, in its management of sea lice, disease and genetic impacts of escapes. Improvements are in the pipeline, and the pace of change has been slow. There is little to report on movement towards full closed containment technology and abandoning of mesh cages. Meanwhile mortalities due to sea lice, disease and marine plankton blooms continue to hit the industry hard. While we await closed containment, no measures are in place to ensure that all escaped farmed salmon are traceable to site origin and none to enforce that all reared salmon are sterile, and unable to breed with naturally selected wild strains. Triploidy, although not 100% effective, is one way to do this. Our anglers and trout farmers have accepted triploids without much fuss. Are triploid salmon **really** so difficult to rear and the general public still so unable to accept them? Norway and other countries are ahead of us in researching the best ways forward.

Further about Norway’s approach to mitigating aquaculture effects, in 2018 all of their wild salmon stocks were classified under a National Quality Norm, as outlined in the Norwegian APR (CNL(19)39). About half (54%) were in Good to Moderate status, and half (49%) were Poor or Very Poor, the remainder being under salmon population re-establishment after *G. salaris* eradication. Most important impacts were listed as escaped farmed salmon, sea lice, hydro-power production and other habitat alterations. Both in Norway and in Scotland, escapes appear to be less common than they were, based on required disclosures from aquaculture sites and low frequency of farmed salmon reported caught by anglers. However, these are likely to be minimum figures and the threat of large losses of reared stock due to damage from major storms, etc, always remains. Perhaps more useful than farm reports and identifications of escaped salmon made by anglers, Norway has developed a table of regional genetic introgression by farmed salmon and uses a Traffic Lights system to help in fish farm planning and enabling good conservation decisions. Scotland has not yet adopted a similar level of genetic monitoring approach, although sampling is being carried out now as part of the FMS national electro-fishing programme.

During the NASCO Annual meeting, the Scottish NGOs received current news via FMS of a statement by Fergus Ewing (Cabinet Secretary for Rural Economy) in the Scottish Parliament regarding delivery of sustainable aquaculture sector in Scotland. He acknowledged that the Salmon Interactions Working Group was making good progress, aided by a technical working group developing arrangements for improving regulation of fish farming. This was being informed by regulatory regimes elsewhere, including Norway’s. Mr Ewing stated that the

following announcements were only the first part of that programme:-

1. New legislation in 2020 will require all marine fish farms to report their sea lice numbers weekly to the Fish Health Inspectorate, one week in arrears and, for transparency, every sea lice report will be published.
2. The current reporting thresholds for adult female lice will be reduced 'from next reporting week' from 3 and 8 average adult female lice per fish to 2 and 6. This would allow earlier intervention and enforcement action.
3. Twelve months after the implementation of the new statutory reporting regime, a further reduction in lice thresholds will occur, depending on a review of the evidence.
4. Scotgov will 'explore how to introduce third party independent checks on fish farm sea lice counts.'
5. 'Taken together, these new measures signal a major shift from self to statutory regulation.'
6. Also, he announced SEPA were about to publish a new finfish regulatory framework, enabling sustainable aquaculture 'in the right places.' This meant that 'those sites which may have the potential to sustainably increase, without threatening seabed environmental standards, will be able to do so.'

The statement indicates somewhat slow progress in the right direction, although nothing on closed containment, after the critical Reports on the aquaculture status quo last year of the Environment and Climate Change and Land Reform and the Rural Economy and Connectivity Committees. SANA will await the outcomes in due course. It is a pity that Fergus Ewing's statement was not apparently available to NASCO in time for discussion at the Annual Meeting in Tromsø.

Despite our dilatory performance on salmon farming regulation, Scotland has a fine history of salmon conservation dating back for many centuries. In modern times, our anglers continue to sit at the top of the international table for C&R (93% release rate). We banned drift-netting off our coasts back in 1962. Our remaining coastal trap-netting sites were discontinued in 2017 (a small number of haaf nets can still operate in the Solway Firth). We wonder how it can be justified that 50% more salmon were killed in 2018 in our very small remaining Scottish net and coble fishery than were retained by anglers (3751 by N+C against 2475 by Rod and Line). Meanwhile, the Scottish APR (CNL (19)41) shows graphically that the overall trend in assessments for the sustainability of Scottish salmon river stocks is still downwards. And - no surprise to anglers - the national total reported salmon and sea trout rod catches in 2018 were the lowest since records began in 1952. Droughts and, in the case of salmon at least, long-term cyclic changes in return timing, meant poor fishing conditions and reduced fish availability, but the declining trend remains deeply alarming.

The 2018 APR for England and Wales (CNL (19) 36) records the closure at last of many net fisheries, including all the remaining drift net fisheries. Mandatory C&R of salmon applies in some other net fisheries where fishing for sea trout is still allowed, providing the latter exploitation does not threaten the conservation status of local sea trout. There is irony there since many of the large sea trout caught in the trap-nets set along the coasts of NE England are likely to be from Scottish rivers, especially Tweed. An earlier genetic study of salmon caught in the North East fishery indicated almost half were Scottish fish. The stock abundance

of sea trout remains difficult to estimate, not least because of their complex movements into and out of rivers other than the ones where they were born. However, Scottish research has also shown that many of the brown trout in rivers at least as far northwards as the Earn are often derived from eggs laid by female sea trout. Heavy pressure on potential egg deposition from large sea trout culled by coastal netting may well be harmful for stocks of both anadromous and resident trout many kilometres away. Coastal trap-netting of sea trout in NE England should be considered to have more than just local implications.

Incidentally, as well as legal netting there is a lot of illegal gillnetting in the fjords of Northern Norway. Many nets are confiscated up there each year. There is a heavy fine for the relatively small numbers of illegal netters that are caught, but nowadays news that an official boat is coming can be rapidly passed on by social media, and replacement gillnets are not expensive in comparison to the value of the fish they can catch. After the NASCO Meeting in Tromsø, on a visit to the lovely Lyngen Alps arranged by our hosts, we were given a fascinating presentation on inshore fishery protection, also the removal of large amounts of plastic detritus washing onto the beaches by groups of volunteers, assisted by the agency concerned (Statens-Naturoppsyn). It reminded me very much of the similar inshore gillnetting problem we used to have around the Scottish coastline. This seems to be much less commonplace now with scarcer wild stocks, but we should not be complacent.

The description of the large scale of inshore gillnetting up there in North Norway once again prompts thoughts of lack of knowledge of the northerly migration of salmon post-smolts from our Scottish east coast rivers. Western stocks are known to gain advantage from the northerly moving Shelf Edge Current to the west of the Hebrides. Could it be that at least a proportion of our post-smolts use the northerly current up the Norwegian coast and range through the long and complex fjords and around the archipelagos along the coasts of counties of Troms and Finnmark while feeding and growing. Perhaps some of our homeward-bound maturing salmon also swim through these waters. Once again, what may seem essentially localised problems of fish farming and interceptory nets up there may conceal wider concerns than simply for Norwegian river stocks. To assess these risks requires more information on salmon migratory routes, which should be available before long through larger-scale tracking and genetics studies and continuing international co-operation supported by NASCO.”

Fisheries Management in Scotland

In the summer of 2019, Marine Scotland contrived a consultation on this important topic without any mention of freshwater or migratory species. Nor did it acknowledge the Scottish Government’s obligations as a member of the North Atlantic Salmon Conservation Organisation. (see below) As with the SNH consultation on shooting birds, we had to introduce these topics.

Our principal comments were on the potential threats to migratory fish from commercial inshore fishing.

“There appear to be two aspects involved in considering potential adverse effects of trawl/seine commercial fishing. The first is that there may be a direct impact of an inadvertent by-catch. The second is that the technical methods employed could prejudice the ecosystems on which juvenile migratory fish depend on first contact with salt water.

We have suggested that the former issue may be addressed through Marine Protected Areas. The latter issue is more difficult to gauge. However, as a specific instance, it is widely accepted that the availability of sandeels is critical to both salmon and sea trout. For salmon smolts, the nutrition boost seems to be important to gaining the condition necessary for the long migration. For sea trout, inshore waters are their sole experience of the salt water environment but the range can take in coastal waters of the whole North Sea area. Wherever trawling techniques are invasive of the seabed, sandeel and other prey species will be jeopardised. Also, any commercial sandeel fishery must be prejudicial to salmon and sea trout stocks, as it is to sea bird populations.

The conclusion to be drawn from these considerations is that safeguarding the sustainability of salmon and sea trout stocks require that places where commercial fishing for sea species is undertaken and methods of fishing need to be closely regulated.”

Wild Fisheries Reform

As in 2018, the reform process – which is supposed to bring us better fisheries management and good quality public access to fishing – was on hold. Nominally, SANA is still represented on the Stakeholder Group which is supposed to drive the remaining issues to a conclusion before legislation is brought forward to enable various reforms. However, the Group has not met since May 2017. Nonetheless, there has been some modest progress.

As well as the aforementioned investigation of the stomach contents of fish-eating birds, Marine Scotland committed in July to further expenditure on juvenile fish surveys. Investment of £400,000 is being committed to fund the continuation of a project that is helping safeguard Scotland’s Atlantic Salmon.

Juvenile salmon from more than 800 sites across Scotland’s rivers were surveyed as part of the National Electrofishing Programme for Scotland (NEPS) in 2018. This was the first time Scotland’s young salmon stocks had been assessed at a national level, providing a fuller picture of Scotland’s overall wild salmon population. The announced funding will enable a second year of the programme.

MEMBERSHIP OF THE MIGRATORY FISH COMMITTEE

R C Campbell	Ch	Edinburgh	2020	4	4	*
R Picken		Irvine	2020	1+3A	4	*
F Wight		Hawick	2020	3+1A	4	*
J Pirie	Sec	Aberdeenshire	2021	4	4	
A Walker	V Ch	Pitlochry	2021	4	4	
W Balfour		Brechin	2022	3+A	4	
J McKay		Perth	2022	4	4	
O McLennan		Fortrose	2022	3+1A	4	
J Stephen		Aberdeen	2022	0+4A	4	

Above, for each member, are shown the number of meetings attended and the number which could have been attended from December 2018 to September 2019. Apologies tendered are also shown. Members who stand down from the committee at the 2020 AGM are marked with an * and are eligible for re-election

The number of committee members is below the eighteen allowed for. Although the present membership is reasonably spread over the country and several members also take an interest in rivers some distance from their homes, new members would be most welcome, especially ladies and younger members. The Committee membership is mainly of retired gentlemen who are well aware of the pathway to the present state of our fisheries but the perspective of other groups could be worthwhile.

In contrast to its early years in the late 1980s much committee work is now completed between committee meetings by e-mail with attachments and accessing online documentation. Thus members can make essential contributions to committee work although unable to attend meetings, usually four times a year in Kinross.

Craig Campbell
16/12/19