

multiplied. While the beauty of the island is as intense and startling as ever, the unseen effect on the marine environment has been devastating. Norwegian-owned companies continue to lead the way in seeking new sites for farms, but marine biologist *Dr James Merryweather* describes how one plan was defeated—while warning of future battles.

In October 2012, the people of Sleat—the southern peninsula of the Isle of Skye—discovered they had just two weeks to respond to a public consultation on a planning application to site a fish farm in the adjacent Loch Slapin. Notification had been sent to the non-existent Community Council on the far side of the loch, but not to Sleat, who at the time had no idea what the implications of a fish farm might be or what they should do about them.

At that point I was contacted by a Sleat local essentially saying: "You're a biologist.

Please advise us." I too had little idea of what salmon farming involved, other than the naïve notion that if they were farming fish, they'd be less likely to be hoovering them out of the sea, so it was probably a good idea. A few of us met and began learning about salmon farming and sharing the knowledge we gained.

Learning the facts soon changed our minds, and facts became the foundation of our case: our method. With days to go, Sleat Community Council organised the first of several briefing sessions, attended by about 40 people. At the end of the meeting a vote was taken. The motion requested the Community Council to submit a consultation response to the Highland Council's planners declaring that a fish farm in Loch Slapin was not wanted. Individuals were encouraged to write in as well, and the view of public opinion was decisive: 74:1 against.

But something was going on which we didn't understand: the applicant, Marine Harvest, did not have tenure of the seabed lease on the site, while a rival



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deal more about salmon aquaculture, the planning process, the documents an applicant had to submit, the poor quality of same and how uncritical the statutory consultees' responses were.

We began discovering irregularities the applicant's documentation, ranging from inattention to procedure, via silly errors to blatant falsehoods. A particularly satisfying early revelation resulted from a careful re-measuring of the distances declared by the company as applying between their site and various "noise receptors". These were all correct within reasonable tolerances-except for the most relevant, where the noise from the fish farm would be most audible to passersby. One was out by a hundred percent and the other by almost 300 percent. That discovery sent us off to check other figures, and we consistently found similar cheating, which-while being overlooked by statutory consulteescould be exposed by assiduous Joe Public.

This second application was refused on the grounds that its siting contravened several Local Plan policies. But by then the company involved had already applied to develop two other sites in Loch Eishort, which is next to Slapin. So our celebration was short-lived, and we got down to examining the documentation for the two new fish farm proposals which we would have to deal with separately but at the same time!

Although we had volunteers to do this, a significant problem became apparent. Many of those who had so willingly joined in with previous public consultations that—having successfully assumed opposed two fish farms-their job was done. It was going to be very difficult to persuade them to prepare and write two more letters of objection.

To fill the gaps in the available body of knowledge and to promote community engagement, I wrote a book-Holes: Scotland's Salmon Sewage Scandal-to give people the facts they would need to inform their letter writing. The holes of the title referred to the nets around the farm cages-made up of holes tied together with string through which all fish farm waste dissipates to the detriment of the marine environment.

HERE'S A SHOCKER (BACK-OF-AN-ENVELOPE ESTIMATE): fish farms in Scotland release untreated effluent equivalent to approximately four-anda-half times Scotland's human raw sewage. As the Canadian environmental campaign group, Living Oceans, put it: "One reason net cage industrial farming is profitable is due to externalised costs. At present the salmon farming industry pays nothing for waste disposal. Fish faeces and uneaten feed pellets go directly into the ocean. Our environment and wild marine species pay the price that secures the industry's profits."

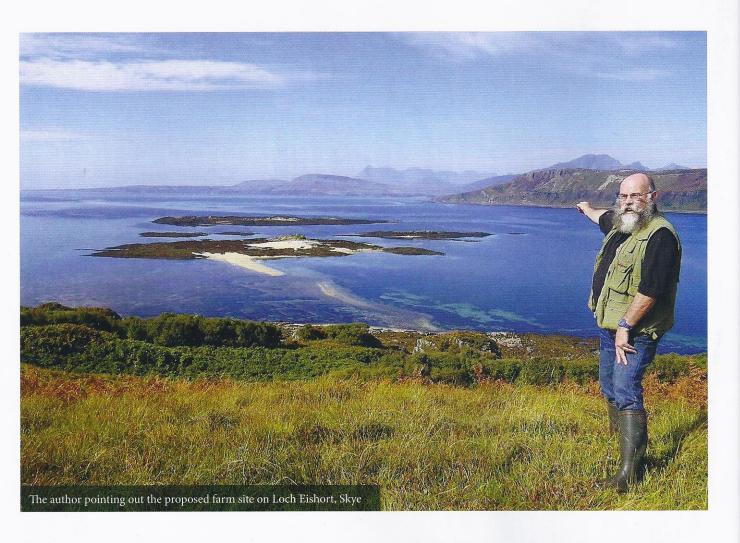
Fortunately a generous Sleat resident who had attended meetings of our ad hoc organising group had some spare funds and paid for publication of 200 copies which we delivered for free, doorto-door around the area, with an insert encouraging people to contribute to the two consultations. They did, magnificently, and with authority derived from knowing the facts and understanding the argument.

Meanwhile, we were able to divide our human resources: one would keep an eye on the Highland Council's planning website and interact with the Community Council, another would concentrate on sea mammals, another on impacts of sea lice on wild salmon, another on landscape and social impacts, another on press and internet announcements and another on pollution versus marine biology -all on the look-out for deficiencies and irregularities in the applicant's documentation.

We refined our argument down to three main headings (others apply): 1. Pollution (organic, nitrogen and phosphorus compounds, excess chemotherapeutants); 2. Detrimental impacts on wild salmonids (sea lice and genetic introgression);

company, Hjaltland Seafarms, did. If only for that reason it seemed a priori that the application was doomed to failure. The day before the decision deadline the application was withdrawn. But Hjaltland immediately launched their application to develop the same site.

We had had two weeks to prepare for the first assault, but this time there would be a whole year until the next consultation, an opportunity to get climbing the learning curve, which we did. By the time comments were required we knew a great



3. Defective Environmental Impact Assessments (EIAs).

I applied myself to seabed surveys. Video footage was available from the applicant (for an exorbitant price) and although it was tedious to watch all the way through, it had to be done—and it was entertaining to watch the submarine camera spin on its cable, lurch, bounce and undulate, speed and slow, peer up and away from the seabed, and repeatedly crash disturbing clouds of sediment that completely obscured the view.

We plotted latitude and longitude from the screen onto maps and discovered that the trajectories of the routes shown in the applicant's report had been falsified by drawing straight lines between the start and finish points. In truth the camera had wiggled its way completely off course, at one point describing inelegant spirals while travelling precisely nowhere. It was very satisfying to expose this nonsense and back it up with a full appraisal of the report that—if properly analysed (not done by the statutory consultee)—revealed an inexcusably low-quality caricature of

scientific methodology and write-up skills not much better than an idle teenager's emergency homework!

Claims that proposed fish farms were not in the vicinity of places where seals leave the water to bask were routinely inaccurate to say the least. One was out by a risible 120 miles. What was so shocking was that it seemed that nobody involved in the planning process was aware of these unforgivable deficiencies (of which these are but a few examples). The statutory consultees didn't notice, so failed to tell the planning officers whose job it is to instruct the councillors who, in planning committees, make the important decisions whether to accept or refuse applications. We had identified a cascade of misinformation which-whether by accident or design-was being used to subvert proper planning procedure. And no one noticed!

DURING THE EVOLUTION OF THE SLEAT FISH FARM CAMPAIGN, a few passionate souls had gathered to share knowledge and discuss tactics.

Eventually some of us decided we needed a name to give us the appearance of respectability. By then we had already come to the conclusion that closed-containment tank systems were the answer to most of the problems associated with net-cage salmon farming. So we decided to call ourselves the Scottish Salmon Think-Tank or SST-T ("think: tanks"). On devising our new website's domain name we were delighted to discover that we could have the highly appropriate suffix dot-net and became: www.scottishsalmonthinktank.net.

In November 2015, after the good people of Sleat had laboured for three years of annoyingly unnecessary hard work made necessary by aggressive industrialists, the two Loch Eishort applications were withdrawn, the applicant having been informed that refusal was imminent. The letters sent to Highland Council came out 131:1 against Eishort 2, and 104:0 against Eishort 1; although we are not allowed to know how much weight those objections carried. I deliberately put Eishort 2 ahead of Eishort 1 because that's the way they passed through the system—who knows why.

It was a victory of sorts. But there is every reason to assume that where the fish farm companies are faced with concerted opposition, they will shift their attention to what were referred in a leaked email as "less oppositional sites". It's a tactic that brings them dividends. Hjaltland-the same company that was refused three sites in south Skye plus three more planned for Broadford Bay-had no trouble getting permission for a salmon farm labelled Loch Snizort East, in the north-west of the island. The public was unaware, apathetic or supported the proposal; only four objections were lodged. Opposition from the statutory consultees-and regrettably this criticism must include local wild salmon protection interests was characteristically weak, and the application sailed through without a hitch. The company has now applied to occupy an adjacent site; this time 19 letters of objection have been received, with none in support.

With the fish farm threat to the south Skye lochs at least temporarily removed, our group—the SST-T—can concentrate "You show me pollution and I will show you people who are stealing from the public."

on conservation. Long before we knew that the planning applications would fail we had optimistically begun enquiring about various forms of conservation status for Loch Eishort. We have the support of local land owners who are particularly concerned to protect and improve their rivers. We have been promised help from a project officer of Fauna and Flora International. Scottish Environment Link-an amalgamation of all Scottish conservation organisations-has taken our case seriously and we have lobbied and informed MSPs and their researchers with a presentation at Holyrood. And, of course, we also have a mutually beneficial relationship with Salmon & Trout Conservation (Scotland), an excellent partnership.

AT LAST WE ARE FINDING OUR WAY AROUND THE SYSTEM, and getting to know the right people. We recently attended an event organised by the Scottish Universities Insight Institute entitled Flourishing Communities and Productive Seas, a multi-disciplinary synthesis focused on putting nature and people first while not overlooking our need to exploit resources appropriately. In effect this attempted to implement the memorable observation by Gaylord Nelson, the founding father of the modern environmental movement and creator of Earth Day: "The economy is a wholly owned subsidiary of the environment, not the other way around."

I finish with another quote, from Robert F Kennedy Jr, who contributed a foreword to Nelson's book *Beyond Earth Day*: "You show me pollution and I will show you people who are stealing from the public, people who are getting the public to pay their costs of production. All environmental pollution is a subsidy."

He could have been talking about the Scottish aquaculture industry.

