W&J Knox LTD, based in North Ayrshire are producers & Suppliers of netting & rope products to the salmon farming industry. We are one of the many downstream businesses involved in the supply chain to this vibrant industry, employing over 60 people directly with a further 60 dependent on our existence. Manufacturing of nets has continued on our site since 1778 and hopefully our contribution to the local economy will continue for many more.

We have a manufacturing partnership with one of the world’s largest producers of ropes and netting. Based in India, they have a 22-strong research and development department working on fibre technology, continually improving and developing new materials to face the future challenges of operating in more exposed locations.

Through this partnership, Knox has developed net designs that offer high resistance to predator attacks using either a combination of materials or a single layer of specially designed netting that has different textures from inside to out. The relatively smooth surface on the inside is said to be fish kind, but the rough knots on the outside are irritating to seals. The companies who have invested in this technology have seen the level of seal attacks on these nets drop to almost zero.

The larvae from sea lice on wild salmon and trout will easily find hosts at a salmon farm if they have unrestricted access to the water column within the pens. Polyester skirts have been developed that block easy access for the larvae as they tend to be in the top 5m of the water column. However, effective blocking can sometimes have a negative effect on the availability of oxygen. Our Indian partners have developed a new design of material that has no visible holes and yet provides the porosity of netting of around 160 microns. This special weave is currently on trial in Scotland is showing a great deal of promise, with oxygen levels mid-way between the ambient and previous technology. The benefit of this material will be increasingly evident as the biomass in the pen increases.

The industry is still relatively young and despite all the orchestrated negative attacks on the industry by those with vested interests in wild salmon (Riparian owners & the Alaskan salmon ranchers, funded by the likes of the Packard Foundation etc: https://www.packard.org/grants-and-investments/grants-database/wild-salmon-center-4/), the industry has grown to become one of the main producers of healthy protein and also among the most important food exports for the UK.

Salmon farms are often blamed for the demise of wild salmon, but Marine Scotland’s own figures tell another story. Official rod and line catches dating back to 1952 show a constant fluctuation from then, with the overall trend being up significantly until
2010, when there was a sharp drop in catches. With only 3-5% of the fish returning home to spawn, it can easily be imagined how over fishing in the rivers can have a dramatic effect on stocks, viewed together with the massive increase in the seal populations around the Scottish coastline, it amazes me that so many people listen to the lobby groups that are only too keen to blame salmon farming. And yet, the decreases are across the board, on both the East and West Coast. Levels of rainfall, run off from farming and forestry and disturbance of the natural gravel beds used for spawning have also had a catastrophic effect on wild salmon.

There are many technology companies springing up and basing themselves in the Highlands of Scotland due to salmon farming, bringing with them remuneration levels not normally seen in these areas. This is allowing remote communities to survive with an influx of young families, who support the local schools, shops, Post Offices, garages, engineering companies etc. The knock-on effect is massive and extremely important. We mustn’t allow Scotland to be viewed as a theme park by wealthy retirees, who have no dependence on the local economy.

Finlay Oman
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