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Survey of the disease status of saithe (*Pollachius virens* L.) in Scotland: East versus West coasts

Pollachius virens is a marine, gadoid fish commonly referred to as Saithe in the UK. Large numbers of P. virens are known to aggregate around the cages of commercial fish farms. This highlights a potential problem for commercial fish farms, as not only do the fish grow too large to escape the cages taking up space and resources, but they could act as possible vectors for disease and parasites to the farmed fish. Very little research has been done in the past to address this issue especially in Scotland. With the help of the FSBI's summer internship scheme and my supervisor Dr Alastair Lyndon, I could conduct a survey of Saithe on the East and West coast of Scotland.

Samples were collected from Anstruther, Dunbar and Crammond using rod-and-line, seine net and commercial by-catch. Samples were swabbed on site and transported back to the laboratory for dissection. Bacteria were identified using phenotypic techniques. On the West coast, samples were collected from Loch Creran, a local fish farm and Mousa in Shetland. We experimented with alternative methods of collection, such as the use of Seine net at night in Loch Creran. Contact was established with the local fish farm, who gave us permission to sample in and around the cages.

Large numbers of *Echinorynchus gadi* were identified in the East coast samples. There were very few in the West coast samples. This could possibly be due to the fish eating surplus feed from around the vicinity of the fish farm rather than Amphipods, which act as an intermediate host to *E. gadi*. *Photobacterium damselae* was identified using API-20NE kits. This is of unique importance, as virulent strains are known to cause septicaemia in fish. This pathogen is dependent upon warmer temperatures, as outbreaks seem to correlate with warm seasons.