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For the attention of:

Animal Welfare Commission
Scottish Government: Animal Health and Welfare
RSPCA Assured Science Group/Technical Advisory Group
Cross-Party Group on Animal Welfare

Your reference: 202000011487

Opinion on the use of thermal treatments to delouse Atlantic Salmon, *Salmo salar*

Dear Mr Burns,

Please note the following is my personal expert opinion and does not reflect the opinion or views of my employer.

Thank you for your letter dated 16th January 2020 stating your stance in regard to my letter providing an opinion based upon published scientific evidence that the use of thermal treatments in salmon is inhumane and should not be used. I appreciate your time and kindness in responding.

As a world leading authority in the field of fish welfare being invited to give plenary and keynotes across the globe I am well aware of the problems of salmon lice and the economic impact and benefits of salmon farming in rural areas. You also state the obvious employment opportunities and the efficiency of farmed salmon production. Further you mention that the industry has spent a vast amount of money along with the Scottish Government and EMFF on treatment strategies including thermal methods. You state thermal treatment is very efficient but fail to mention other treatments that are efficient that do not employ heat to delouse the salmon causing pain, tissue damage and high mortality.

So reading between the lines in your response you are advocating the use of thermal treatment because the industry, you and EMFF have invested heavily financially and the industry is a lucrative one. In my opinion using money to justify the use of an inhumane treatment is not ethically or morally right. You do not mention any of the scientific evidence which supports my view. So can you please confirm that you and the other organisations continue to advocate this treatment despite the negative impacts upon salmon welfare? It is a yes or no question, therefore, I gratefully expect a yes or no answer.

I do think it wonderful that you are reviewing the use of thermal treatments and are gathering evidence. This approach should be commended but why have you not suspended thermal treatments in the meantime until the information is gathered. I appreciate your point about the efficient removal of salmon lice but it should not be at the expense of welfare and indeed it's all very well removing the infestation but if the fish are injured suffering, pain or are dead then the treatment is not what I would consider successful.

I have no doubt that you, your organisations and the industry wish to safeguard the health and welfare of these animals but given there are alternative treatments and given the fact thermal treatments negatively

affect the welfare of salmon in my opinion the use of Thermolicer and Optilicer does cause unnecessary suffering so contravenes the Animal Health and Welfare Act 2006. Using financial reasons to justify this unnecessary suffering is ethically and morally questionable in my opinion.

I would be very grateful if you could please consider my opinion and questions within your respective organisations.

Yours sincerely,

A handwritten signature in black ink that reads "Lynne Sneddon". The signature is written in a cursive, flowing style.

Lynne U. Sneddon (Dr)

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