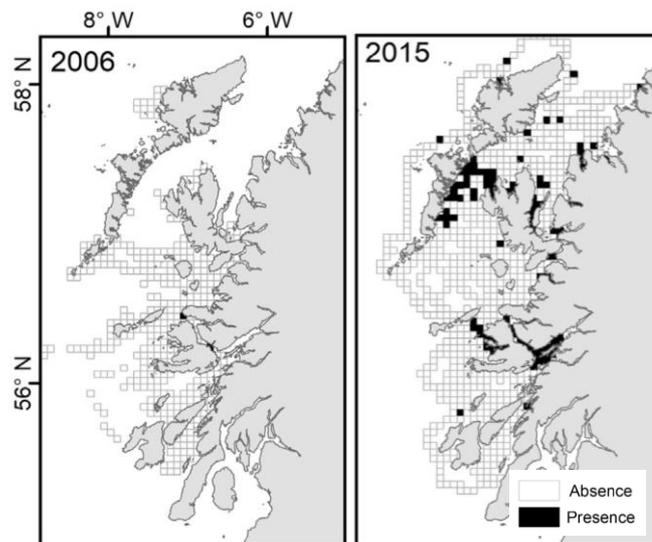


## Acoustic Deterrent Devices: The legal and scientific position David & Jean Ainsley

Pictures of Scotland's iconic wildlife are used worldwide to promote the country as a tourist destination, yet porpoises, dolphins and whales are being driven from inshore waters by acoustic deterrent devices (ADDs) which output painfully loud noises intended to scare seals away from salmon farms.

### Widespread use of ADDs

Information from SNH (attached) reveals that of 172 Scottish fish farms, 121 use ADDs. Of these nearly 70% use multiple arrays of 4 or more. In some cases, up to 20 ADDs are used at a single farm. A recent paper<sup>1</sup> analysing acoustic data (2006-16) found ADD use to be widespread and increasing.



Update: Acoustic presence (black) and absence (clear) of ADD detections, adapted from Findlay et al. (2018)<sup>1</sup>

### Scottish law

- Under Habitats Regulation 39(2) as amended in Scotland<sup>2</sup> it is an offence “to deliberately or recklessly disturb **any** dolphin, porpoise or whale (cetacean).”
- It is also an offence under the Nature Conservation (Scotland) Act 2004 to “intentionally or recklessly disturb a cetacean.”

**The law is very simple. If ADDs disturb cetaceans and if that disturbance is deliberate, reckless or intentional, offences are being committed by fish farms.**

<sup>1</sup> Findlay, C. R., Ripple, H. D., Coomber, F., Froud, K., Harries, O., van Geel, N. C. F., ... & Wilson, B. (2018). Mapping widespread and increasing underwater noise pollution from acoustic deterrent devices. *Marine pollution bulletin*, 135, 1042-1050. <https://doi.org/10.1016/j.marpolbul.2018.08.042>

<sup>2</sup> [www.legislation.gov.uk/ssi/2007/80/regulation/10/made](http://www.legislation.gov.uk/ssi/2007/80/regulation/10/made) (emphasis added)

## Disturbance:

Aquaculture ADDs output 179-196dB. Disturbance (the legal driver) to captive porpoises has been demonstrated at 100dB<sup>3</sup>, 96% exclusion of porpoises at 113dB at stations at 7km from an active ADD<sup>4</sup>, and temporary hearing damage (which becomes permanent at further exposure) recorded by Schaffeld et al. (2019)<sup>5</sup> at 142decibels:

“A harbour porpoise in human care was exposed to an artificial ADD signal with a peak frequency of 14 kHz. A significant TTS was found, measured by auditory evoked potentials, with an onset of 142dB re 1Pa<sup>2</sup>s at 20kHz and 147dB re 1Pa<sup>2</sup>s at 28 kHz.”

It has been proposed that low frequency ADDs do not disturb porpoises, however recent work on ADDs found that high and low frequency ADDs are equally disturbing to porpoises<sup>6</sup>. The low frequency GenusWave, which is still in at the experimental stage outputs 180dB, so it is a source of significant underwater noise.

There is a Planning Application in Shetland to use the newly developed Genuswave ADD (also known as an Acoustic Startle Device ASD).

Each device outputs 180-182 decibels, louder than currently used 179 dB Terecos ADD. The proposed sound duration of a single device is lower than other ADDs. But, if this device does become ineffective as has happened with other ADDs will the sound duration be increased? Genuswave is unlikely to comply with Scottish Law protecting dolphins from disturbance & injury as a simulated signal (well below the maximum output of this device) caused startle reflex (a type of disturbance) in a bottlenose dolphin (Gotz 2020). The developers claim that the low frequency ASD does not “adversely impact” porpoises, however Benjamins et al (2018) found that that both high and low frequency signals disturb porpoise. If porpoises do remain near farms, can it be proven that they will not suffer hearing injury on long term exposure as do people working in noisy environments?

The claim that Genuswave can deter one species without affecting another requires scientific scrutiny, as highlighted by Trites and Spitz (2016).

There is a need for testing of the device by scientists independent of commercial interests. The Planning Application does not mention that operating the ASDs may be an offence, it does not mention that the use of the devices would require a European Protected Species Licence where they could disturb cetaceans nor does it quote the scientific papers which cast doubt on the developers claims.

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<sup>3</sup> Kok, A.C.M., et al., Spatial avoidance to experimental increase of intermittent and continuous sound in two captive harbour porpoises. *Environmental pollution* (2017), <https://doi.org/10.1016/j.envpol.2017.10.001>

<sup>4</sup> Brandt, M. J., Höschle, C., Diederichs, K., Betke, K., Matuschek, R., Witte, S., Nehls, G. (2012c) Far-reaching effect of a seal scarer on harbor porpoises (*Phocoena phocoena*). *Aquatic Conservation: Marine and Freshwater Ecosystems:1-11*

<sup>5</sup> Schaffeld et al. (2019) The use of seal scarers as a protective mitigation measure can induce hearing impairment in harbour porpoises Acoustical Society of America. <https://doi.org/10.1121/1.5135303>

<sup>6</sup> Benjamins S., Risch D., Lepper P., Wilson B. (2018). SARF112 – Influences of lower-frequency Acoustic Deterrent Devices (ADDs) on cetaceans in Scottish coastal waters. A study commissioned by the Scottish Aquaculture Research Forum (SARF). <http://www.sarf.org.uk/>

**MS have been advised by the Head of Policy and Advice at SNH that “there is sufficient evidence, both empirical and modelled, to show that ADDs can cause disturbance and displacement of cetaceans” and “ there is sound, scientific evidence to expect that hearing damage, stress and masking may also occur”**

**“in summary, ADDs used in aquaculture are of the frequency range and level that has been shown to disturb and displace cetaceans in various scientific studies. SNH advises that the potential for these impacts are real and that the requirements for protection on these species through the Habitats Regulations need to be considered.” (Document attached).**

**However, Graham Black, Director of Marine Scotland was interviewed on BBC Countryfile (Aug 2019): Transcript;**

*Tom voiceover: whatever the industry says, doubts about acoustic deterrent devices are now being heard. The official regulator MS sought guidance from SNH, which advises the govt about environmental issues. The response from SNH could not have been clearer. They say that there is evidence that seal scarers can cause disturbance and displacement to marine mammals and a cross-party committee of members of the Scottish Parliament came to the same conclusion. One thing is clear, the net is closing in on the regulator MS.*

*What does its Director Graham Black have to say to his critics?*

*Tom: surely the key thing is that your official advisors, SNH, have said there is evidence of displacement and disturbance of marine mammals. All of that means they shouldn't be used?*

*GB: I think the evidence is not quite as clear cut as that.*

*Tom: sounds to me like you're deliberately trying to undermine the advice from your own official regulatory body, SNH. I repeat they said 'disturbance and displacement'*

*GB: Yes, and there is undoubtedly a body of evidence that we have to investigate further. But it's not that clear cut that it's all ADDs in all circumstances or the degree of impact that it's actually having. So I don't think I'm at all undermining what they are saying. What I think we need is a bit of a further stage of evidence-gathering over the next year.*

*Tom: so to be clear you are saying 'within about a year we will have some clearer guidelines on the use of these seal scarers'?*

*GB: Within a year, but we want it based on firm evidence. We don't want to be doing a knee-jerk reaction, we want it to be actually effective.*

*Tom: but there is a technique out there that keeps seals and salmon separate, and that is stronger nets or double nets, why not just go for those?*

*GB: The direction of travel is undoubtedly moving towards using those at the moment, though rather than automatically ruling out all the ADDs in all circumstances, let's get evidence.*

**The statement by Graham Black raises the obvious question as to why have MS not prosecuted those farms where disturbance clearly occurs such as BDNC. Also under what**

**circumstances do MS claim that disturbance does not occur given that the threshold for disturbance by the Banff jet skier case (below) has already been established?**

**MS are “kicking the can down the road” ignoring the Precautionary Principle and wasting public money repeating science already done and clear.**

Given that a scientific study involving the use of ADDs requires an EPS licence, will MS explain why salmon farms which do not have an EPS licence have not been prosecuted for disturbing cetaceans with ADDs?

A jet skier was prosecuted for reckless disturbance of dolphins<sup>7</sup> confirming that protection applies on the individual level and that disturbance over a small area or occasional use of ADDs would not be a defence. The law should apply to industry and individual citizen alike, however there have been no prosecutions of salmon farms for illegal disturbance of cetaceans by ADDs.

For the past year we have repeatedly asked the following questions without receiving an answer.

- ⇒ ***Do MS agree with SNH that ADDs disturb cetaceans?***
- ⇒ ***Do MS dispute that this disturbance is deliberate, reckless or intentional?***

Legal definitions of ‘deliberate’ and ‘reckless’ are appended to this document.

Jeff Gibbons (then head of Aquaculture at MS) at a meeting in March 2019 confirmed that ADDs can disturb and displace in some circumstances (HW notes to meeting) but that it was not reckless and further studies were required to clarify how they are deployed. However, the law says “deliberate or reckless” disturbance is an offence and the fish farm situation fits the definition of reckless but is also well described by the European definition of deliberate.

European Commission Guidance<sup>8</sup> gives the following definition:

*‘Deliberate’ actions are to be understood as actions by a person who knows, in light of the relevant legislation that applies to the species involved, and the general information delivered to the public, that his action will most likely lead to an offence against a species, but intends this offence or, if not, consciously accepts the foreseeable results of his action.*

SNH expressed concerns that ADD use is reckless and asked MS for their legal advice at 8.11.16 meeting (attached), have MS provided this information?

The FOI request was answered by Marine Scotland, refusing to give details of the legal advice. We do not understand why, if the advice supported MS case that the use of ADDs is *not* reckless, they would not disclose this information.

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<sup>7</sup> <https://www.banffshire-journal.co.uk/Banff/Jetskier-who-disturbed-dolphins-is-fined-500-2165.htm>

<sup>8</sup> European Commission, *Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC* (Brussels 2007) pp. 36.

In practice, it may not be important because Habitats Regulation 39(2) forbids deliberate or reckless disturbance and the European definition of *deliberate* above accurately describes the situation.

### **Precautionary Principle and the Burden of Proof**

The vast majority of scientific studies summarised by SNH clearly demonstrate that ADDs disturb cetaceans. Because the west coast of Scotland contains a cSAC designated for porpoise, appropriate assessments are required under Article 6(3) of the Habitats Directive. They must take account of the Waddenzee ECJ ruling:

*‘where doubt remains as to the absence of adverse effects on the integrity of the site linked to the plan or project being considered, the competent authority will have to refuse authorisation.’<sup>9</sup>*

A correctly implemented appropriate assessment should apply the precautionary principle and an applicant would have to provide evidence beyond all reasonable scientific doubt that ADDs do not disturb cetaceans in order to use ADDs. **Most farms do not have the legally required appropriate assessments.** In the few cases which have appropriate assessment, the assessment has not been carried out to the required standard.

### **Both Planning Consent and EPS Licences are required to operate ADDs**

Argyll and Bute planners made it very clear at the November 2018 meeting with MS and Coastal Communities Network that the local authority licences the installation of ADDs on a farm, but a European Protected Species license from MS is also required to operate ADDs where they could disturb cetaceans.

### **European Protected Species Licencing**

In certain circumstances it is legal to disturb cetaceans when a European Protected Species Licence (EPS) is held<sup>10</sup>. Because ADDs disturb cetaceans, an EPS licence is required to carry out scientific studies on ADDs<sup>11</sup>. **No fish farms hold EPS licences<sup>12</sup>.** In order to obtain an EPS licence, three tests all have to be passed and a typical fish farm could not pass any of them. The tests are covered in detail in our Complaint to Europe (attached).

One of the tests is that there must be no satisfactory alternatives. EC Guidance states ‘Where another solution exists any argument that it is not “satisfactory” will need to be strong and robust’<sup>13 14</sup>. Double-skinned anti-predator nets with mesh designed not to trap

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<sup>9</sup> *Landelijke Vereniging tot Behoud van de Waddenzee v Staatssecretaris van Landbouw, Natuurbeheer en Visserij (2004) Case C-127/02, at 57.*

<sup>10</sup> <https://www.nature.scot/professional-advice/safeguarding-protected-areas-and-species/licensing/species-licensing-z-guide/licensing-dolphins-whales-and-porpoises>

<sup>11</sup> [ORJIP Project 4, Phase 1 Use of Deterrent Devices - Carbon Trust https://www.carbontrust.com/media/.../orjip-project-4-phase-1-summary-report.pdf](https://www.carbontrust.com/media/.../orjip-project-4-phase-1-summary-report.pdf)

<sup>12</sup> Our FOI questions to MS 19/1/18 and MS response

<sup>13</sup> <http://ec.europa.eu/environment/nature/natura2000/management/docs/Aqua-N2000%20guide.pdf>

<sup>14</sup> SNH Publication, EPS Licensing Guidance – Test 2 (2011) 2.3

wildlife have been found to be the only fully effective solution, stopping the use of ADDs and shooting of seals with the added bonus of preventing fish escapes. These nets are being used successfully in Canada<sup>15</sup>, Turkey<sup>16</sup> and Tasmania<sup>17</sup>. Closed circulation also provides effective separation of seals and farmed salmon and solves most of the environmental impacts of the industry.

Seal shooting is licenced under the Marine (Scotland) 2010 Act. Guidelines to the Act, and seal shooting license conditions, state that seals can only be shot 'as a last resort'<sup>18</sup>. ADDs are not fully effective at deterring seals<sup>19 20</sup>, so farms which use single nets and ADDs rather than more efficient barriers are in breach of their licencing conditions if they shoot seals.

The salmon farm companies who shot most seals in 2015, Marine Harvest (now called MOWI) and Scottish Seafarms both use single nets and ADDs<sup>21</sup> in Scotland, Marine Harvest farms in British Columbia use double nets and do not shoot seals or harm cetaceans with ADDs.

The attached spreadsheet, obtained from SNH under FOI, states that most farms in Orkney do not use ADDs because they are "*not allowed by SNH without EPS license due to cetaceans.*"

We have further information obtained under FOI with numerous letters written by SNH to fish farms in Orkney stating that they would need an EPS licence to operate ADDs. By contrast the local office in Oban is allowing fish farms to obtain planning to install ADDs and is not informing them or the planners of the need for EPS licences or of the requirements of Habitats Regulation 39(2).

At the meeting in March 2019 we discussed the spreadsheet and Elaine Tait stated that more work was required to update it because the spreadsheet only included those farms that had a seal shooting licence. Therefore, even more farms than listed on these spreadsheets use ADDs.. **ET stated to the ECCLR committee 3<sup>rd</sup> June 2020 that this work was still ongoing, this is work into devices which cause illegal disturbance of cetaceans. Public funds are being used for this work!** We contend that MS should be telling all the farms known to be using ADDs that they are in breach of Habitats Directive 39(2). There should be no further delay in addressing the illegal disturbance of cetaceans while more work is done.

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<sup>15</sup> Marine Harvest (2011) Marine Harvest Canada Takes Immediate Action to Reduce Seal and Sea Lion Kills

<sup>16</sup> Güçlüsoy, H., Savas, Y. (2003) Interaction between Monk seals *Monachus monachus* (Hermann, 1779) and marine fish farms in the Turkish Aegean and the management of the problem. *Aquaculture Research* 34:777-783

<sup>17</sup> Pemberton, D, Shaughnessy, P. D. (1993) Interaction between seals and marine fish-farms in Tasmania, and management of the problem. *Aquatic Conservation* 3:149-158

<sup>18</sup> MS Seal Shooting Licence Application form.

<sup>19</sup> D.Pemberton and P Shaughnessy 1993 Interaction between seals and marine fish-farms in Tasmania

<sup>20</sup> Lepper, P.A., Gordon, J., Booth, C., Theobald, P., Robinson, S. P., Northridge, S. & Wang, L. (2014) Establishing the sensitivity of cetaceans and seals to acoustic deterrent devices in Scotland. *Scottish Natural Heritage Commissioned Report No. 517.*

<sup>21</sup> SMRU advice to SASWG Members.

Fifty-one Scottish farms do not use ADDs, 8 of which do so to comply with the Wholefoods accreditation scheme, demonstrating that farms can operate without ADDs. There are satisfactory alternatives to ADDs which do not harm cetaceans.

The Aquaculture Stewardship Council (ASC) requires that certified farms worldwide comply with strict requirements for responsible farming. Certified farms cannot use ADDs or kill marine mammals. In Norway, a total of 115 salmon farms are certified, including 49 Marine Harvest farms whereas in Scotland none are certified. We welcome the recommendation of the ECCLR committee that Scottish farms should be certified<sup>22</sup> and that seal shooting and ADD use should stop. An article in the Guardian (12<sup>th</sup> Aug 19) included a promise by MOWI that “by 2020 all its sites in the UK will be accredited by the ASC”. Correspondence with MOWI since then has established that the 2020 date was only an aim and will now not be met.

The industry maintains that anti-predator nets trap wildlife: this might be the case if large mesh monofilament nets were used. It is of great concern that the SNH spreadsheet shows that some farms are using monofilament nets known to have a serious bycatch of seals and cetaceans. This is not a problem in Canada where suitable mesh size and type is used. Anti-predator nets may reduce water flow a little, this is an economic issue and therefore not a consideration where a European Protected Species is concerned. These are big companies; Marine Scotland predicts net profits of over 1 billion euros in 2019.

#### **ECCLR Committee recommendations (page 50)**

*“247. The Committee considers Scotland needs to act now to ensure it does not fall foul of the **US Marine Mammal Protection Act**, which prohibits the intentional killing or serious injury of marine mammals in all fisheries. The Committee considers all fish farms in Scotland should be required, via legislative or any other appropriate means, to follow the position of the Aquaculture Stewardship Council in relation to marine mammals. **This ensures farms cannot kill marine mammals.**”*

*248... The Committee has significant concerns about the use and operation of ADDs and their cumulative impact and considers all fish farms in Scotland should be required, via legislative or any other appropriate means, to follow the position of the Aquaculture Stewardship Council in relation to ADDs. **This ensures fish farms cannot use ADDs.**”*

*249. The Committee considers the industry should manage the risk of predation through extension of the use of **double skinned predator nets.**”*

#### **REC Committee recommendations (page 79)**

*313. “The Committee notes the salmon farming industry’s action to reduce the number of seals shot and shares the aspiration **that this should be reduced to zero.**”*

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<sup>22</sup> [http://www.parliament.scot/S5\\_Environment/Inquiries/20180305\\_GD\\_to\\_Rec\\_salmon\\_farming.pdf](http://www.parliament.scot/S5_Environment/Inquiries/20180305_GD_to_Rec_salmon_farming.pdf)

314. *The Committee shares the view of the ECCLR Committee that such **physical barriers** should be used ahead of deterrents such as Acoustic Deterrent Devices which potentially have a harmful impact on cetacean species such as whales and dolphins.”*

### **Bagh Dail Nan Ceann (BDNC): An example of why the regulatory system is failing;**

In 2018 MOWI made a planning Application for an increase in biomass at their farm BDNC from 2500 to 3500 tonnes. The farm lies within a cSAC for Porpoise, MPA for Skate and close to the Firth of Lorne SAC. It will be one of the largest farms in Scotland but planners determined an EIA was not necessary.

The Appropriate Assessment says *“Disturbance- the likely disturbance is dependent upon the sound output of the model of ADD intended to be deployed and the periods of operation. The applicant’s plan provides reassurance that the model used will be lower powered than some higher output devices and that use will be periodic rather than continuous. “*

The mitigation being that 2 Terecos ADDs with 4 transducers are used, any changes are approved by SNH and planners and a log of use is kept.

However, the farm is currently operating 20 Seal Fence ADDs each outputting 196dB, (the highest powered ADDs used by the industry). We have recorded on a hydrophone these ADDs on 14 occasions between 21<sup>st</sup> April & 9<sup>th</sup> Sept. It is our belief from taking these recordings at different times and days that these ADDs are on constantly at high power. We recorded them as far away as 2.5miles from site. The only time they were off were when Countryfile came to film (19<sup>th</sup> July) having given notice to the farm that they would be filming, however by 24<sup>th</sup> July they were back on! They have also been off since Sept 13th when the farm appears to have had a major disease problem and we have filmed dead and dying fish in the cages and a large scoop emptying the cages of dead fish.

Under FOI we asked SNH for all the farms for which LOGS are supposed to be provided to SNH and the logs. SNH were unable to provide us with any logs from any farms.

This Appropriate Assessment had ignored;

- The ECCLR committee report calling for an end to ADD use and the shooting of seals and the deployment of double skinned anti-predator nets.
- Habitat regulation 39(2) that deliberate or reckless disturbance is an offence.
- The fact that planning consent only allows the installation of ADDs and that an EPS licence from MS is required to operate them anywhere they can disturb cetaceans. This is within a porpoise SAC so it is accepted that there are porpoise in this area!
- The need to apply the precautionary principle, i.e. the burden of proof must be that the ADDs cannot disturb cetaceans, yet the AA accepts that disturbance occurs.
- Advice from SNH that ADDs cause disturbance and can cause hearing damage.

On a purely economic basis, it makes no sense for a farm wishing to expand not to be made to fit double nets in order to comply with the US Marine Mammal Protection Act.

### **Double standards by same fish farm company in different locations within Scotland**

MOWI are currently applying for permission for a farm at Canna. In their application they acknowledge that ADDs are a problem for cetaceans and that they have taken SNH advice and will not deploy ADDs at that site. They do not deploy them at their other sites in the

small isles at Rum and Muck. The small isles are within the Porpoise cSAC (acknowledged within the planning application) which also covers all the MOWI fish farms in the Sound of Mull and around Shuna (including BDNC) which use ADDs, the exception being the farm at Shuna SW which has a planning condition not to use ADDs and operates successfully.

***Below is an excerpt from MOWI's planning application for Canna Farm:***

*Acoustic Deterrent Devices (ADDs)*

*ADDs are one option available at Mowi farms should other mitigation (such as tension nets, fish mortality retrieval, and seal blinds) fail to prevent seal attacks. ADDs can emit a frequency of sound which effectively deters seals from the pens and the ADD systems are switched off as soon as the significant risk is removed. During previous discussions with SNH, during the development of the Mowi farms on Muck and Rum, it was advised generally that the general use of ADDs in the Small Isles has the potential to significantly affect harbour porpoise (and other Cetaceans). Accordingly, ADDs are not used at either farm.*

***Since the proposed Canna farm is similarly located in a sensitive location for harbour porpoises and other cetaceans (within the Inner Hebrides and the Minches SAC) Mowi commits not to operate ADDs at this location.***

***Inner Hebrides and the Minches SAC***

*The Inner Hebrides and the Minches SAC comprises an area of 13,540 km<sup>2</sup> between the Point of Stoer and Tolsta Head. The area is designated exclusively for harbour porpoise (*Phocoena phocoena*) as a Qualifying Feature. The aim of the designation is to contribute towards maintaining the favourable conservation status of harbour porpoise and provide protection for habitats that support the species within the SAC. The proposed site is located within the SAC and a range of activities associated with aquaculture developments have potential to impact the conservation objective of the qualifying interest.*

*Mitigation*

*The key sensitivity associated with this site is the impact of ADDs use on harbour porpoise as a non-target species. **Since Canna farm is in a sensitive location for cetaceans Mowi commits not to use ADDs at Canna site.***

It is clear from this that MOWI consider that they can manage their farms without using ADDs and that they accept ADDs do cause disturbance

## **Enforcement**

Jeff Gibbons, previous head of Aquaculture at Marine Scotland, wrote to us saying that the responsibility for investigating any offences lies with the Police. Accordingly, Jean wrote to the Wildlife Crime Unit and submitted a complaint that ADDs were illegally disturbing cetaceans. The police replied to say that after discussion Marine Scotland confirmed that they are the body responsible for enforcement!

Scottish cetaceans are suffering illegal disturbance. The two bodies potentially responsible for enforcing the law each claim that the other body is responsible.

## Correspondence with Marine Scotland

We have extensive correspondence with Marine Scotland (MS) since January 2018

MS have repeatedly avoided answering questions as to why the law is not being enforced. In our view the advice given by MS to Ministers does not accurately reflect the science and very simple laws, or the advice MS have been given by SNH (attached). The continued reluctance of MS to enforce the law over a period of years has allowed the ongoing illegal disturbance of cetaceans by ADDs.

## Complaint to Europe, petition and media coverage

We submitted a complaint to Europe in March 2018 which is supported by 42 organisations including Coastal Community Network groups. The complaint was updated in March 2019

We also posted a petition<sup>23</sup> signed by over 24180 people calling for Ministers to:

- enforce our laws protecting dolphins, whales and porpoises by banning ADDs
- honour the pledge not to “roll back our hard-won environmental protections after Brexit”<sup>24</sup>
- insist on independent science overseen by a stakeholder committee if an ADD is claimed not to disturb cetaceans.
- refuse to issue seal shooting licences after January 2020 unless the farm has double skinned anti-predator nets or equivalent technology to prevent seal depredation. Farms not using the best technology are failing to comply with the licencing condition that seals should onl be shot “as a last resort”.

Underwater noise pollution from ADDs has been covered in the Times, the Sunday Express, the Daily Mail, the Oban Times, radio and BBC Alba. There has been recent TV coverage on Panorama and Countryfile.

## Actions requested of Scottish Government

⇒ ***Please insist that the law is enforced and ADDs are banned, allowing a short period of grace for farms to fit double skinned predator nets (with mesh which does not trap wildlife) or equally efficient technology.***

**If the ADD ban is implemented there would be no need for the actions requested below.**

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<sup>23</sup> <https://www.change.org/p/roseanna-cuninham-scottish-government-cabinet-secretary-for-the-environment-save-dolphins-porpoises-and-seals-from-scottish-salmon-farms>

<sup>24</sup> <https://news.gov.scot/speeches-and-briefings/sea-scotland-conference>

- ⇒ ***In the light of assurances given by Roseanna Cunningham that she “will not roll back our hard-won environmental protections after Brexit” will the Minister agree not to allow the 3 EPS licencing tests to be relaxed?***
- ⇒ ***If it is claimed that any Acoustic Device cannot disturb ANY porpoise, dolphin or whale will Scottish Government agree that scientific investigation should be carried by scientists independent of any commercial interest, overseen by a stakeholder committee including Coastal Communities Network, wildlife and tourism interests.***

## Appendix

### Legal definitions of ‘deliberate’ and ‘reckless’:

European Commission Guidance<sup>25</sup> gives the following definition:

*‘Deliberate’ actions are to be understood as actions by a person who knows, in light of the relevant legislation that applies to the species involved, and the general information delivered to the public, that his action will most likely lead to an offence against a species, but intends this offence or, if not, consciously accepts the foreseeable results of his action.*

The test of recklessness in Scots law comes from the case of *Allan v Patterson* 1980 JC 57 for the majority of statutory offences. It is the following:

*‘[Performing the activity in a way] which demonstrates a gross degree of carelessness in the face of evident dangers.’* (per Lord Justice-General Emslie at 59)

The legal paper “Recklessness in Scots criminal law” gives the following definition: -

*“recklessness is generally defined either subjectively or objectively. A subjective approach says a person is reckless where he takes an unjustified risk of which he was actually aware. An objective approach says a person is reckless where he takes an unjustified risk of which he either was aware or ought to have been aware. He “ought” to have been aware of the risk where the reasonable person would have been aware of it.”*

The paper concludes that Scots law has always viewed objective recklessness as the basis for criminal liability, the ignorance of the risk to cetaceans would be no excuse for disturbing cetaceans. In just one case the subjective approach was taken, thus there is a chance that on a first offence a salmon farm company might be acquitted on a charge of reckless disturbance if they could prove that they were unaware that ADDs disturb cetaceans. However, even if acquitted they would have to stop using ADDs as they would then be aware of the risk.

### Correspondence with Marine Scotland

We have asked Marine Scotland (MS) why the laws protecting cetaceans from disturbance are not being enforced, on the following occasions:

- Freedom of Information request Feb 2018 – MS refused to answer.
- “UK Dolphin and Porpoise Conservation Strategy” Workshop, April 2018, Michael MacLeod said they would deal with ADDs under EPS licensing. David pointed out that a salmon farm could not pass the three tests required to pass an EPS licence there was no further reply.

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<sup>25</sup> European Commission, *Guidance document on the strict protection of animal species of Community interest under the Habitats Directive 92/43/EEC* (Brussels 2007) pp. 36.

- At two meetings with the Coastal Communities Networks, and the correspondence before and after, MS avoided answering questions on the law. At the November meeting there was a time-limited telephone conversation with Elaine and Cathy who agreed ADDs disturb cetaceans in “certain circumstances”.
- In correspondence after these meetings, when asked why the recommendations of the ECCLR Committee that ADDs and seal shooting should stop are not yet implemented, JG provided a quote from one of the consultees which was not representative of the findings of the committee that ADD use and seal shooting should stop.
- None of the questions asked in our briefing to the meeting on 7<sup>th</sup> March have been answered.