

**Predator (Seal) Risk Assessment**  
**Clashnessie Bay (Oldany) site**

An assessment of possible control measures to prevent predator ingress to seawater aquaculture production pens at Clashnessie Bay site.

| <b>Risk factor</b>   | <b>Control Measures</b>  | <b>Feasibility of option on site</b>   |
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| Seals entering site boundary resulting in distress / harassment of fish stocks | Acoustic Deterrent Device (low frequency ADD)<br>Targeted Acoustic Startle Technology (TAST) | No Commercial EPS license has been successfully approved since MS application process was developed  |
|  | Direct tactile harassment methods  | Not appropriate; possibility of injury to mammal   |
| Seals attacking stocks through pen netting                                     | Low stocking densities to minimise predator access to stock                                  | Control always used  |
|  | Frequent removal of any fish mortalities or moribund stock                                   | Control always used  |
|  | Predator nets – curtain  | Seal can still access between nets; does not provide increased stock protection  |
|  | Predator nets – full enclosure   | Insufficient gap between pen net & predator net on circle pens to prevent seal access to pen netting   |
|  | Condition aversion – electric fish   | Company trials did not demonstrate efficacy  |
| Seals breaching pen nets below the waterline                                   | High quality net material and design   | Control always used - HDPE pen nets in use   |
|  | Adequate tensioning of pen nets  | Control always used - weighting system in place  |
|  | Predator nets – curtain  | Seal can still access between nets; does not provide increased stock protection  |
|  | Predator nets – full enclosure   | Insufficient gap between pen net & predator net on circle pens to prevent seal access to pen netting   |
|  | Seal removal - translocation   | Not currently licensed in Scotland. Feasibility has not been assessed – distress to mammal.  |
|  | Convert to semi contained production system  | Not currently licensed in Scotland   |
| Seals accessing pens between pen net & top net                                 | Top nets fully secured to enclosures   | Control always used - two netting types are stitched – but still allow necessary access for stock husbandry  |
|  | Pen nets extended above handrail   | Feasibility of modifying pen nets to be assessed for next production cycle   |
|  | Conditioned aversion – above waterline electric fencing                                      | Efficacy still to be demonstrated. May also be a H&S issue for site operatives.  |
| Seals breaching top nets   | Pen nets extended above handrail reducing risk of seal access to top nets                    | Feasibility of modifying pen nets to be assessed for next production cycle   |
|  | Stronger top net mesh  | Feasibility of alternative materials to be assessed for next production cycle; top nets must remain light enough that they can be fully supported by the pen / pole structure. |