NE Regional Fisheries Groups (RFGs) collaborative science questions, actions and MMO/Defra/Cefas responses

The NE group requested information on preventing seal predation from nets. CEFAS response is as follows:

1. ***Reports/work completed on preventing seal predation from nets.***

CEFAS Response

- MMO report: Assessing Non-Lethal Seal Deterrent Options: Literature and Data Review (MMO1131) which is based on a specification SMRU (Sea Mammal Research Unit) provided.

- The SCOS [Scientific Committee on Seals] report (2019) questions 18, 19 and 20 are specifically on depredation by seals, with responses:, available at the link:

http://www.smru.st-andrews.ac.uk/files/2020/08/SCOS-2019.pdf

In the report,

18. SCOS is not aware of any new information on the extent of the issue [of depredation] in England and Wales. There is a perceived problem and suggestions that it is getting worse. Increasing seal populations in central and southern North Sea are likely to increase levels of interactions between seals and fisheries in the region.

19. The relocation of seals [as a non-lethal method to deal with seal predation in aquaculture] from established foraging habitat is at best a temporary solution. The disturbance during capture and relocation will be substantial and likely outweigh any possible benefits to the seal. Catching seals in rivers is, in most cases, extremely difficult and poses some risk to the target animals. Relocation trials in the USA have been ineffective with seals returning to the capture sites even from distant release sites. Such activity has been abandoned and seals and sea lions are now removed and killed.

20. [about practical non-lethal options available to river fisheries and aquaculture to address seal predation] "ADDs have been successfully trialled to limit the passage of seals up salmon rivers but there are concerns related to how they are deployed and maintained. Electric field barriers have been shown to be effective in some circumstances. A method for trapping seals in rivers has been developed but is untested. New netting materials (e.g. HDPE) appear to reduce or even eliminate predation in early trials.

- *Clean Catch UK* is a Defra-funded project led by Cefas (Stuart Hetherington), which has developed a website with easily accessible information on [cetacean and] seal bycatch mitigation options [also for elasmobranchs] – aimed at reducing unintended bycatch of marine mammals and other large vulnerable species. Although primarily aimed at reducing bycatch, this website contains relevant information to reduce depredation as it has information on pingers and other deterrant devices. It is aimed to be searchable and accessible to both scientists, policy and industry representatives: https://www.cleancatchuk.com/hub/

- Further papers on avoiding seal by-catch and preventing seal depredation will be provided