British Geological Survey
NATURAL ENVIRONMENT RESEARCH COUNCIL

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HERIOT WATT UNIVERSITY

Ecological Impact of Jellyfish Blooms on Deep-Sea Ecosystems

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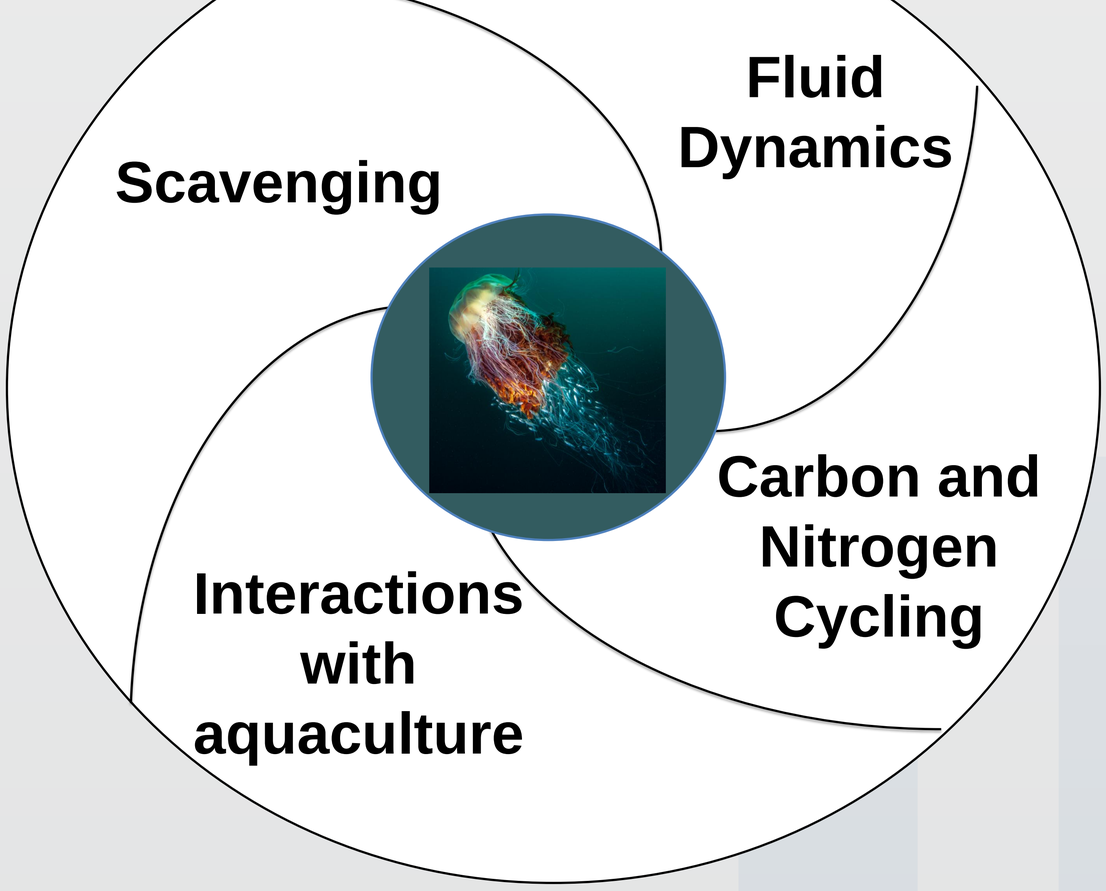
Jellyfish blooms are increasing globally and in deep coastal fjord systems.

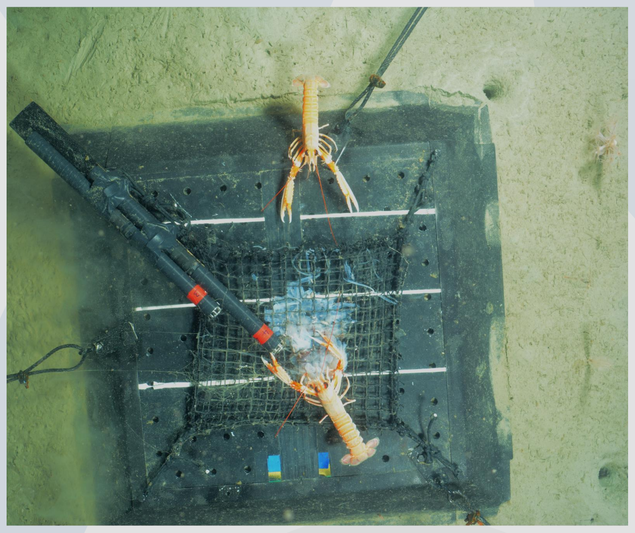

Image; Billett et al., 2006

Blooms can alter benthic systems through mass aggregations of dead jellyfish on the seafloor.

The Marine Benthic Ecology and Technology Group is co-leading a Norwegian Research Council Project examining the ecological effect of jellyfish falls and fish farming on the seafloor in the Norwegian continental margin.

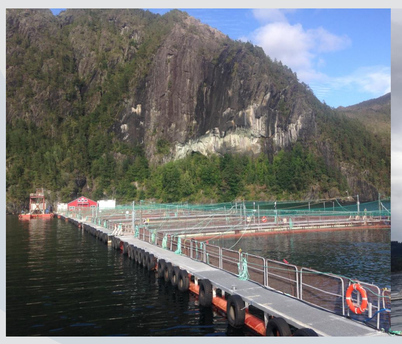


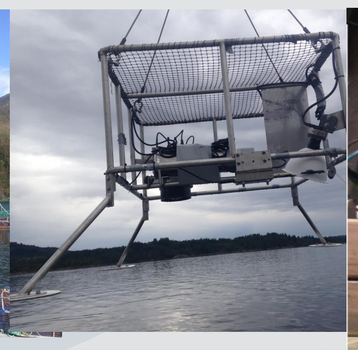
Research areas on the impacts of jellyfish falls on marine benthic biogeochemistry

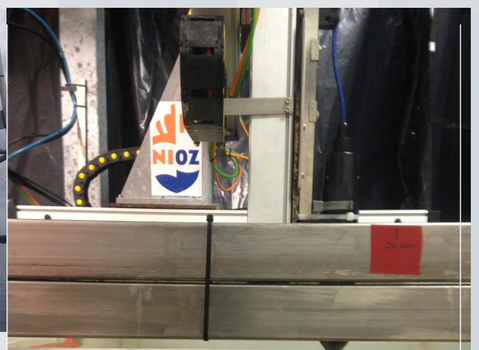


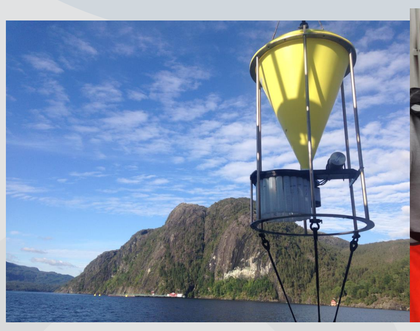
Deep-sea camera system deployed in Sognefjord, Norway, and Nephrops norvegicus, a commercially important species rapidly scavenging on a jelly-fall.

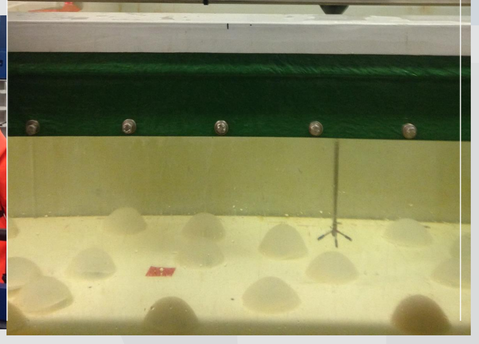
Understanding jelly-fall removal by scavengers is key to determine the ecological impact of jellyfish blooms on the seafloor.











Billett et al., 2006. Limnol. Oceanogr., 51: 2077-2083

Lebrato et al., 2009. Limnol. Oceanogr., 54, 1197-1209

Sweetman et al., 2014. Proc. R. Soc. B., 281, 20142210

Sweetman et al., 2016. Limnol. Oceanogr., 61, 1449-1461

Jellyfish photo by George Stoyle, HWU Researcher and winner of the British Wildlife Photography Award.