

Eilif Gaard

Havstovan - Faroe Marine Research Institute
Nóatún 1, FO-100 Tórshavn
Faroe Islands
Email: eilifg@hav.fo
Phone: +298 793931
Web address: www.hav.fo



Employment

Havstovan - Faroe Marine Research Institute

Pure Faroe Islands
Faroe Islands
1 Oct 1987 → present

Fróðskaparsetur Føroya - The University of the Faroe Islands

Pure Faroe Islands
Tórshavn, Faroe Islands
1 Oct 2005 → 31 Dec 2025

Náttúruvísindadeildin - Faculty of Science and Technology

Fróðskaparsetur Føroya - The University of the Faroe Islands
Faroe Islands
1 Oct 2005 → 31 Dec 2025

Peer Reviewed Publications

1. á Norði, G, Ojaver, H, Angalt, A-L, Cooper, A, Dam, R, Gaard, E, Jensen, KH, Laksáfoss, M, Laksá, U & Mørkøre, B 2023, *Workshop on the Faroese ecoregion aquaculture overview (WKFaroeseAO)*. ICES Scientific Reports, no. 28, vol. 5, no. 5. <https://doi.org/10.17895/ices.pub.21551541>
2. Jacobsen, S, Nielsen, KK, Kristiansen, R, Grønkjær, P, Gaard, E & Steingrund, P 2022, 'Influence of larval prey availability on year class strength in Faroe Plateau cod (*Gadus morhua*)', *Marine Biology / International Journal on Life in Oceans and Coastal Waters*, vol. 169, no. 153, pp. 1-13. <<https://doi.org/10.1007/s00227-022-04140-w>>
3. Matras, U, Salter, I, Larsen, KMH, Gaard, E & Steingrund, P 2022, 'Relationship between plankton dynamics and growth of the long-lived clam *Arctica islandica* on the Faroe shelf', *Frontiers in Marine Science*, vol. 9, 822343, pp. 1-19. <https://doi.org/10.3389/fmars.2022.822343>
4. Kristiansen, I, Hátún, H, Jacobsen, JA, Eliassen, SK, Petursdottir, H & Gaard, E 2022, 'Spatial Variability of the Feeding Conditions for the Norwegian Spring Spawning Herring in May', *Frontiers in Marine Science*, vol. 9, 823006, pp. 1-14. <https://doi.org/10.3389/fmars.2022.823006>
5. Jacobsen, S, Gaard, E & Hátún, H 2022, 'Declining Pre-bloom *Calanus finmarchicus* Egg Production Adjacent to Two Major Overwintering Regions in the Northeastern Atlantic', *Frontiers in Marine Science*, vol. 9, 822978, pp. 1-11. <https://doi.org/10.3389/fmars.2022.822978>
6. Kristiansen, I, Jónasdóttir, SH, Gaard, E, Eliassen, SK & Hátún, H 2021, 'Seasonal variation in *Calanus finmarchicus* in relation to environmental conditions in the south-western Norwegian Sea', *Deep sea research part 1: oceanographic research papers*, vol. 171, 103508. <https://doi.org/10.1016/j.dsr.2021.103508>
7. Jacobsen, S, Nielsen, KK, Kristiansen, R, Grønkjær, P, Gaard, E & Steingrund, P 2020, 'Diet and prey preferences of larval and pelagic juvenile Faroe Plateau cod (*Gadus morhua*)', *Marine Biology / International Journal on Life in Oceans and Coastal Waters*, vol. 167, no. 122, pp. 1-16. <https://doi.org/10.1007/s00227-020-03727-5>
8. Jacobsen, S, Gaard, E, Hátún, H, Steingrund, P, Larsen, KMH, Reinert, J, Ólafsdóttir, SR, Poulsen, M & Vang, HBM 2019, 'Environmentally Driven Ecological Fluctuations on the Faroe Shelf Revealed by Fish Juvenile Surveys', *Frontiers in Marine Science*, vol. 6, 559, pp. 1-12. <<https://www.frontiersin.org/articles/10.3389/fmars.2019.00559/full>>
9. Kristiansen, I, Hátún, H, Petursdottir, H, Gislason, A, Broms, C, Melle, W, Jacobsen, JA, Eliassen, SK & Gaard, E 2019, 'Decreased influx of *Calanus* spp. into the south-western Norwegian Sea since 2003', *Deep sea research part 1: oceanographic research papers*, vol. 149, pp. 1-10. <https://doi.org/10.1016/j.dsr.2019.05.008>

10. á Norði, G, Glud, RN, Simonsen, K & Gaard, E 2018, 'Deposition and benthic mineralization of organic carbon: A seasonal study from Faroe Islands', *Journal of Marine Systems*, vol. 177, pp. 53-61. <https://doi.org/10.1016/j.jmarsys.2016.09.005>
11. Jacobsen, S, Gaard, E, Larsen, KMH, Eliassen, SK & Hátun, H 2018, 'Temporal and spatial variability of zooplankton on the Faroe shelf in spring 1997-2016', *Journal of Marine Systems*, vol. 177, pp. 28-38. <https://doi.org/10.1016/j.jmarsys.2017.08.004>
12. Kristiansen, I, Gaard, E, Hátun, H, Jónasdóttir, S & Ferreira, SA 2016, 'Persistent shift of *Calanus* spp. in the southwestern Norwegian Sea since 2003, linked to ocean climate', *ICES Journal of Marine Science*, vol. 73, no. 5, pp. 1319–1329. <https://doi.org/10.1093/icesjms/fsv222>
13. Melle, W, Head, E, Plourde, S, Castellani, C, Licandro, P, Pierson, J, Jónasdóttir, SH, Johnson, C, Broms, C, Debes, H, Falkenhaus, T, Gaard, E, Gislason, Á, Heath, M, Niehoff, B, Nielsen, TG, Pepin, P, Stenevik, EK & Chust, G 2014, 'The North Atlantic Ocean as habitat for *Calanus finmarchicus*: Environmental factors and life history traits', *Progress in Oceanography*, vol. 129, pp. 244-284. <https://doi.org/10.1016/j.pocean.2014.04.026>
14. Eliassen, K, Reinert, J, Gaard, E, Hansen, B, Jacobsen, JA, Grønkjær, P & Christensen, JT 2011, 'Sandeel as a link between primary production and higher trophic levels on the Faroe shelf', *Marine Ecology Progress Series*, vol. 438, pp. 185-194.
15. Gaard, E, á Norði, G & Simonsen, K 2011, 'Environmental effects on phytoplankton production in a Northeast Atlantic fjord, Faroe Islands', *Journal of Plankton Research*, vol. 33, no. 6, pp. 947-959. <https://doi.org/10.1093/plankt/fbq156>
16. á Norði, G, Glud, RN, Gaard, E & Simonsen, K 2011, 'Environmental impacts of coastal fish farming: carbon and nitrogen budgets for trout farming in kaldbaksfjørour (Faroe Islands)', *Marine Ecology Progress Series*, vol. 431, pp. 223-241. <https://doi.org/10.3354/meps09113>
17. Steingrund, P, Mouritsen, R, Reinert, J, Gaard, E & Hátun, H 2010, 'Total stock size and cannibalism regulate the recruitment in cod (*Gadus morhua* L.) on the Faroe Plateau', *ICES Journal of Marine Science*, vol. 67, no. 1, pp. 111-124. <https://doi.org/10.1093/icesjms/fsp240>
18. Hansen, B, Gaard, E, Debes, H & Larsen, KMH 2010, 'Abrupt interruptions in the spring bloom on the Faroe Shelf', *Fróðskaparrit - Annales Societatis Scientiarum Færoensis*, vol. 52, pp. 21-35.
19. Hátun, H & Gaard, E 2010, 'Marine climate, squid and pilot whales in the northeastern Atlantic', *Annales Societatis Scientiarum Færoensis Supplementum*, vol. 52, pp. 50-68.
20. Lund-Hansen, LC, Gaard, E & Debes, H 2009, 'Optical properties and optical constituents of the Faroe Islands shelf and off-shelf waters, North East Atlantic', *Hydrobiologia*, vol. 636, pp. 285-293. <https://doi.org/10.1007/s10750-009-9957-8>
21. Debes, H, Gaard, E & Hansen, B 2008, 'Primary production on the Faroe shelf: Temporal variability and environmental influences', *Journal of Marine Systems*, vol. 74, no. 1-2, pp. 686-697. <https://doi.org/10.1016/j.jmarsys.2008.07.004>
22. Madsen, ML, Gaard, E & Hansen, BW 2008, 'Wax-ester mobilization by female *Calanus finmarchicus* (Gunnerus) during spring ascendance and advection to the Faroe Shelf', *ICES Journal of Marine Science*, vol. 65, no. 7, pp. 1112-1121. <https://doi.org/10.1093/icesjms/fns097>
23. Gaard, E, Gislason, Á, Falkenhaus, T, Søiland, H, Musaeva, EI, Vereshchaka, AL & Vinogradov, GM 2008, 'Horizontal and vertical distribution of copepod composition and abundance on the Mid-Atlantic Ridge in June 2004', *Deep Sea Research Part II: Topical Studies in Oceanography*, vol. 55, no. 1-2, pp. 59-71. <https://doi.org/10.1016/j.dsr2.2007.09.012>
24. Debes, H, Eliassen, K & Gaard, E 2007, 'Seasonal variability in copepod ingestion and egg production on the Faroe shelf', *Hydrobiologia*, vol. 600, pp. 247-265. <https://doi.org/10.1007/s10750-007-9238-3>
25. Gislason, Á, Gaard, E, Debes, H & Falkenhaus, T 2007, 'Abundance, feeding and reproduction of *Calanus finmarchicus* in the Irminger Sea and on the northern Mid-Atlantic Ridge in June', *Deep Sea Research Part II: Topical Studies in Oceanography*, vol. 55, no. 1-2, pp. 72-82. <https://doi.org/10.1016/j.dsr2.2007.09.008>
26. Stenevik, EK, Melle, W, Gaard, E, Gislason, Á, Broms, C, Prokopchuk, I & Ellertsen, B 2007, 'Egg production of *Calanus finmarchicus*: A basin-scale study', *Deep Sea Research Part II: Topical Studies in Oceanography*, vol. 54, no. 23-26, pp. 2672-2685. <https://doi.org/10.1016/j.dsr2.2007.08.027>
27. Gaard, E, Gislason, Á & Melle, W 2006, Iceland, Faroe and Norwegian Coasts (21,E). in AR Robinson & KH Brink (eds), *The Sea: The Coastal Ocean. Interdisciplinary regional studies and syntheses*. vol. 14 B, Harward University Press, Cambridge, MA, pp. 1077.
28. Eliassen, SK, Gaard, E, Hansen, B & Larsen, KMH 2005, 'A "horizontal Sverdrup mechanism" may control the spring bloom around small oceanic islands and over banks', *Journal of Marine Systems*, vol. 56, no. 3-4, pp. 352-362. <https://doi.org/10.1016/j.jmarsys.2005.03.005>
29. Steingrund, P & Gaard, E 2005, 'Relationship between phytoplankton production and cod production on the Faroe shelf', *ICES Journal of Marine Science*, vol. 62, no. 2, pp. 163-176. <https://doi.org/10.1016/j.icesjms.2004.08.019>
30. Hansen, B, Eliassen, SK, Gaard, E & Larsen, KMH 2005, 'Climatic effects on plankton and productivity on the Faroe Shelf', *ICES Journal of Marine Science*, vol. 62, no. 7, pp. 1224–1232. <https://doi.org/10.1016/j.icesjms.2005.04.014>

31. Gaard, E, Hansen, B, Olsen, B & Reinert, J 2002, Ecological features and recent trends in the physical environment, plankton, fish stocks, and seabirds in the Faroe Shelf ecosystem. in K Sherman & HR Skjoldal (eds), *Large Marine Ecosystems of the North Atlantic: Changing States and Sustainability*. Large Marine Ecosystem Series, Elsevier, pp. 245-265. [https://doi.org/10.1016/S1570-0461\(02\)80060-X](https://doi.org/10.1016/S1570-0461(02)80060-X)
32. Gaard, E & Reinert, J 2002, 'Pelagic cod and haddock juveniles on the Faroe Plateau: Distribution, diets and feeding habitats, 1994-1996', *Sarsia*, vol. 87, pp. 193-206.
33. Gaard, E & Steingrund, P 2001, 'Reproduction of Faroe Plateau cod: Spawning grounds, egg advection and larval feeding', *Fróðskaparrit - Faroese Scientific Journal*, vol. 48. bók, pp. 87-103.
34. Heath, MR, Astthorsson, OS, Dunn, J, Ellertsen, B, Gaard, E, Gislason, Á, Gurney, WSC, Hind, AT, Irigoien, X, Melle, W, Niehoff, B, Olsen, K, Skreslet, S & Tande, KS 2000, 'Comparative analysis of Calanus finmarchicus demography at locations around the Northeast Atlantic', *ICES Journal of Marine Science*, vol. 57, no. 6, pp. 1562-1580. <https://doi.org/10.1006/jmsc.2000.0950>
35. Gaard, E 2000, 'Seasonal abundance and development of Calanus finmarchicus in relation to phytoplankton and hydrography on the Faroe Shelf', *ICES Journal of Marine Science*, vol. 57, pp. 1605-1611. <https://doi.org/doi:10.1006/jmsc.2000.0963>
36. Gaard, E & Hansen, B 2000, 'Variations in the advection of Calanus finmarchicus onto the Faroe Shelf', *ICES Journal of Marine Science*, vol. 57, pp. 1612-1618. <https://doi.org/doi:10.1006/jmsc.2000.0962>
37. Gaard, E 1999, 'The zooplankton community structure in relation to its biological and physical environment on the Faroe Shelf, 1989-1997', *Journal of Plankton Research*, vol. 21, no. 6, pp. 1133-1152. <https://doi.org/10.1093/plankt/21.6.1133>
38. Gaard, E, Hansen, B & Heinesen, SP 1998, 'Phytoplankton variability on the Faroe Shelf', *ICES Marine Science Symposia*, vol. 55, no. 4, jm980373, pp. 688-696. <https://doi.org/10.1006/jmsc.1998.0373>
39. Gaard, E 1996, 'Phytoplankton community structure on the Faroe Shelf', *Fróðskaparrit - Faroese Scientific Journal*, vol. 44. bók, pp. 95-106. <https://doi.org/10.18602/fsj.v44i.689>
40. Gaard, E 1996, 'Life cycle, abundance and transport of Calanus finmarchicus in Faroese waters', *Ophelia*, vol. 44, no. 1-3, pp. 59-70. <https://doi.org/10.1080/00785326.1995.10429839>
41. Hansen, B, Gaard, E & Reinert, J 1994, 'Physical effects on recruitment of Faroe Plateau cod', *ICES Marine Science Symposia*, vol. 198, pp. 520-528.

Non Peer Reviewed Publications

1. Jacobsen, S, Gaard, E & Hátun, H 2022, 'Declining prebloom Calanus finmarchicus egg production: adjacent two major overwintering regions in the Northeastern Atlantic'.
2. Hátun, H, Larsen, KMH, Jacobsen, S, Salter, I & Gaard, E 2022, *Open ocean nutrient sampling in Faroese water 2013-2020*. Faroe Marine Research Institute.
3. Gaard, E & Sørensen, D 2018, *Fiskiskapur eftir reyðæti*. Faroe Marine Research Institute.
4. Gaard, E 2017, *Final report for the research programme on Changes in Marine Climatic and Oceanographic Conditions in the Waters between the Faroes and Greenland and their effects on plankton and fish 2013-2017*. Faroe Marine Research Institute.
5. Gaard, E, Holm, D, Joensen, HJ, Reinert, J, Steingrund, P & Toftum, JH 2011, *Upprit um Umsitingarættan fyri toska-, hýsu- og upsastovnarnar í føroyskum sjógvi*.
6. á Norði, G, Simonsen, K, Gaard, E & Glud, RN 2010, *Accumulation and mineralization of fish farming residuals in the benthic footprint area at two different farming locations in a Faroese fjord*. vol. CM 2010/J:02, ICES. <<https://www.ices.dk/sites/pub/CM%20Documents/CM-2010/J/J0210.pdf>>
7. Gaard, E, á Norði, G, Magnussen, E, Sørensen, J, Olsen, J, Dam, M & Hansen, MG 2007, *Frágreiðing um virksemi: Arbeidsbólkurin "Firðir og dálking" 2005 – 2006*. Tórshavn.
8. Gaard, E, Hansen, B, Jacobsen, JA, Magnussen, E, Mikkelsen, B, Steingrund, P & Sørensen, J 2006, Havið kring Føroyar. in AM Fosaa, E Gaard & J Dalsgarð (eds), *Føroya náttúra : lívfrøðiligt margfeldi*. 1 edn, Føroya skúlabókagrunnur, Tórshavn, pp. 37-69.
9. Gaard, E, Hansen, MG, Heinesen, S, Jacobsen, H & Magnussen, E 2005, *Árinskanning av Funningsfirði í sambandi við vatnorkuúbygging hjá SEV: ávegis frágreiðing*. Tórshavn.
10. Eliassen, SK, Gaard, E & Hansen, B 2002, *A Mathematical Model of the Lowest Trophical Levels on the Faroese Shelf*. Faroe Marine Research Institute, Tórshavn.

Activities

Workshop on the Faroes ecoregion Aquaculture Overview

á Norði, G. (Chair), Ojaver, H. (Chair), Angalt, A.-L. (Participant), Cooper, A. (Participant), Kvaavik, C. (Participant), Briesemeister, E. (Participant), Dam, R. (Participant), Gaard, E. (Participant), Jensen, K. H. (Participant), Laksá, U. (Participant), Laksáfoss, M. (Participant) & Mørkøre, B. (Participant)

30 May 2022 → 3 Jun 2022

Projects

COPS: Dynamics of Calanus species linked to Oceanographic processes, predators and carbon Sequestration

Gaard, E. (PI), Kristiansen, I. (Col), Jónasdóttir, S. H. (PI), Visser, A. W. (PI), Hátun, H. (PI), Jacobsen, S. (PI) & Heath, M. R. (Col)

1/01/22 → 30/09/24

Linking three decades of cross-sectional zooplankton observations to oceanographic changes around the Faroe plateau

Kristiansen, I. (PI), Gaard, E. (Col), Hátun, H. (Col), Jacobsen, S. (Col) & Salter, I. (Col)

14/06/21 → 14/06/24

The Role of Zooplankton in Mackerel Behavior and Cod Recruitment on the Faroe Plateau - Leikluturin hjá djóraæti í atferð hjá makreli og tilgongd av toski á Landgrunninum

Vang, H. B. M. (PI), Gaard, E. (PI), Hátun, H. (PI), Jacobsen, J. A. (PI), Eliassen, S. K. (PI) & Jacobsen, S. (PI)

1/01/17 → 31/12/17

WKFaroesAO: Workshop on the Faroese Ecoregion Aquaculture Overview

Ojaver, H. (PI), á Norði, G. (PI), Angalt, A.-L. (PI), Cooper, A. (PI), Briesemeister, E. (PI), Dam, R. (PI), Gaard, E. (PI), Jensen, K. H. (PI), Laksá, U. (PI), Laksáfoss, M. (PI) & Mørkøre, B. (PI)

1/01/22 → 31/03/23