

N O T I F I C A T I O N  
OF PROPOSED RESEARCH CRUISE

GENERAL

Part A

1. Name of research ship: EROS Cruise no. 1/19
2. Dates of cruise: From: *July 18* To: *Aug. 5, 2019*
3. Operating Authority: *Greenland Institute of Natural Resources  
P.O. Box 570  
DK-3900 Nuuk, Greenland*
4. Owner (if different from para 3):  
Eros AS  
Org.nr. 977390176  
6092 Fosnavåg, Norge,
5. Particulars of ship:

Name:	<b>M/V EROS</b>
Nationality:	Norway (NO)
Classification	DNV GL, +1A1, ICE-C Fishing vessel
Overall length:	77.50 M
Maximum draught:	15 M
Net tonnage:	3000 t
Gross tons:	4027
Propulsion:	<i>Diesel 4000 KW</i>
Fuel type & Capacity:	Diesel 450 m3
Call sign:	<b>LCNG</b>
Telefon:	+47 21038758/97642452
Email:	p-m-e@online.no
6. Crew: Name of master: Kjetil Remoy  
No. of crew: 10
7. Scientific Personnel: Name & address of  
*Scientist in charge:*  
Teunis Jansen  
*Greenland Institute of Natural Resources  
P.O. Box 570  
DK-3900 Nuuk, Greenland*  
No. of scientists: 6
8. Geographical area in which ship will operate (with reference in latitude and longitude): *ICES VIX and NAFO 1F and 1E - se map figure 1;*
9. Brief description of purpose of cruise: *Pelagic ecosystem survey, with particular focus on mackerel.*
10. Brief description of intended ports of call: *Reykjavik in Iceland.  
No port of call in Greenland*
11. Any special logistic requirements at ports of call: *No*

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DETAIL

Part B

1. Name of research ship: *Eros* Cruise no. 1/19
  
2. Dates of cruise: From: *July 18* To: *Aug. 5, 2019*
  
3. Purpose of research and general operational methods  
The survey adds to the assessment of the effects of commercial fishing on the mackerel stocks in this area. The information from these surveys is essential to the monitoring the populations fished and the management of the fisheries. Stratified and transect random stations within the survey area will be sampled by pelagic trawl. The survey will follow the red line on figure 1. Red points indicate trawl stations. The survey will follow the standard protocol of IESSNS (surface trawling, CTD and WP2 at each station + acoustic measurements along the E-W transects). If there is time left after that main survey, then capelin will be surveyed for up to 3 days in the area north of Denmark Strait indicated by a grey polygon.  
*The primary objectives are surveys on mackerel stock:*
  1. *Collect the data required to establish age structure, estimate population abundance and biomass of mackerel;*
  2. *Record numbers caught and collect length and weight data to allow calculation of abundance, biomass, and size structure;*
  3. *Collect additional data and biological samples as time permits (e.g., lengths for bycatch, maturity information, other special requests);*
  4. *Collect oceanographic data at each fishing station;*
  5. *Collect WPS data at each fishing station;*
  6. *Collect profiled oceanographic data at stations along previously established standard transect lines.*
  
4. Attach chart showing (on an approximate scale) the geographical Area of work, positions of intended stations, tracks of survey lines, positions of moored/seabed equipment  
*Sample locations for survey areas are located in the attached map.*
  
5. Types of samples required, e.g. Geological/Water/Plankton/Fish/Radioactivity/Isotope  
*Samples of fish and invertebrate species for length, weight, age and maturity. Oceanographic sampling (e.g. temperature, salinity, oxygen, pH and fluorescence).*  
and methods by which samples will be obtained (including dredging/coring/drilling  
*Pelagic trawl, Oceanographic sensor (Seabird CTD) mounted on the trawl gear and Seabird CTD with attached oxygen meter, pH meter and fluorometer deployed at stations using a winch.*
  
6. Details of moored equipment: *No moored equipment will be deployed.*
  
7. Explosives: **None**
  
8. Detail and reference of

- (a) Any relevant previous/future cruises  
*ICES WG WIDE Report, Section 02 Northeast Atlantic Mackerel*
- b) Any previously published research data relating to the proposed cruise (Attach separate sheet if necessary).  
*Nøttestad L, Anthony pillai V, Tangen Ø, Høines Å, Utne KR, Óskarsson GJ, Ólafsdóttir AH, Jónsson SP, Jacobsen JA, Smith L, Jansen T, Post S (2016): Cruise report from the International Ecosystem Summer Survey in the Nordic Seas (IESSNS) with M/V "M. Ytterstad", M/V "Vendla", M/V "Tróndur í Gøtu", M/V "Finnur Friði" and R/V "Árni Friðriksson", 1 - 31 July 2016.*

9. Names and addresses of scientists of the coastal state in whose waters the proposed cruise takes place with whom previous contact has been made.

*Helle Siegstad  
 Greenland Institute of Natural Resources  
 P.O. Box 570 DK-3900 Nuuk, Greenland*

10. State:

- (a) Whether visits to the ship in port by scientists of the Coastal state concerned will be acceptable.

**Yes**

- (b) Whether it will be acceptable to carry on board an observer from the coastal state for any part of the cruise and dates and ports of embarkation/disembarkation.

*Six scientists, three from Greenland and three from EU, will participate in the cruise. Observers are welcome. All arrangements should be made with the scientist in charge. Embarkation Reykjavik, Iceland July 18 - disembarkation Reykjavik, Iceland Aug. 5.*

- (c) When research data from intended cruise is likely to be made available to the coastal state and if so by what means.

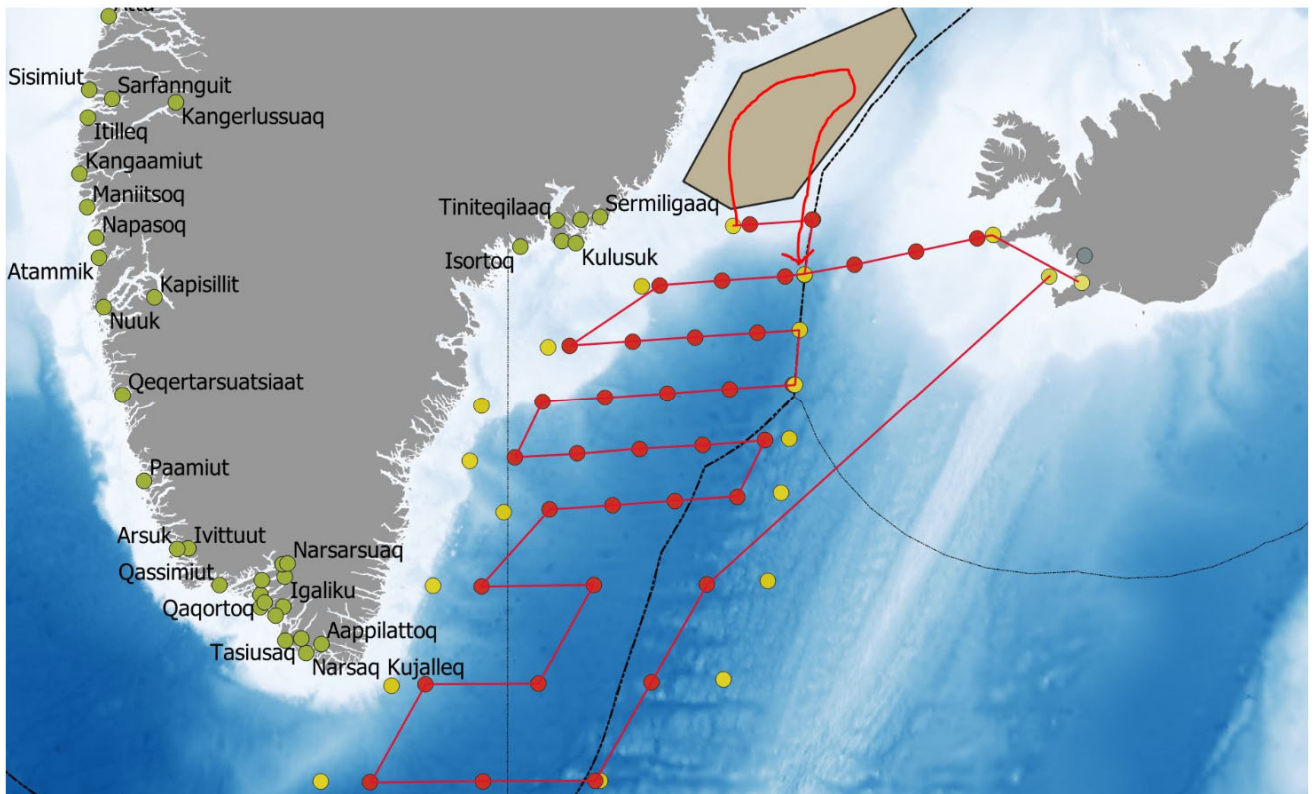
All data and material is collected by Greenlandic Scientists and will be available in Greenland. The data will be presented as a research documents at future ICES WG Wide meetings.

SCIENTIFIC EQUIPMENT

11. Complete the following table

(INDICATE 'YES' OR 'NO')

List of all major Marine Scientific Equipment it is proposed to use and indicate waters in which it will be deployed	Within fishing limits	On continental Shelf	DISTANCE FROM COAST			
			Within 3 NM	Between 3-12 NM	Between 12-50 NM	Between 50-200 NM
Pelagic trawl Mackerel	Yes	Yes	no	no	Yes	Yes
Acoustic survey Blue whiting	Yes	Yes	no	no	Yes	Yes
Seabird CTD sensor	Yes	Yes	no	no	Yes	Yes



**Figur 1.** The survey will follow the red line on figure 1. Red points indicate trawl stations. The survey will follow the standard protocol of IESSNS (surface trawling, CTD and WP2 at each station + acoustic measurements along the E-W transects). If there is time left after that main survey, then capelin will be surveyed for up to 3 days in the area north of Denmark Strait indicated by a grey polygon.