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. 1/18

2. Dates of cruise: From: Sept 4 To: Sept 27, 2018

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: M/V EROS
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: Diesel 4000 KW Fuel type & Capacity: Diesel 450 m3

Call sign: LCNG

Telefon: +47 21038758/97642452

Email: p-m-e@online.no

6. Crew: Name of master: Kjetil Remoy

No. of crew:

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: 11

- 8. Geographical area in which ship will operate (with reference in latitude and longitude): ICES VIX and V se map figure 1;
- 9. Brief description of purpose of cruise: a pelagic ecosystem survey to estimate abundance and biomass of capelin and other pelagic species.
- 10. Brief description of intended ports of call: *Isafjord or Vestmanna in Iceland.* No port of call in Greenland
- 11. Any special logistic requirements at ports of call: No

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

DETAIL Part B

 $\overline{1. \text{Name}}$ of research ship: Eros Cruise no. 1/18

2. Dates of cruise: From: Sept 4 To: Sept 27, 2018

3. Purpose of research and general operational methods
The survey is a general pelagic ecosystem survey in the East
Greenlandic Current, as well as a dedicated capelin survey. The
Capelin stock will be measured in terms of abundance, biomass
and distribution. This will be done using scientific 38 kHz
echosounders with relatively low power output (no disturbance of
marine mammals). The acoustic registrations will be verified by
pelagic trawing using a MultPelt 416 trawl. The trawl locations
are not predetermined, but will be taken when acoustic
registrations cannot be identified from the acoustic data alone.
Typically, this is 2 hauls per day. Sampling will also include
plankton nets and CTD casts to measure salinity and temperature
profiles. Finally, there will be marine mammal observers
onboard.

The survey will follow a similar path as the 2017-survey (figure 1), except that it will aim at reaching Cape Farewell.

Start with steaming from Ålesund to an Icelandic harbor (Isafjord, or alternatively Vestmanna if weather conditions are bad North of Iceland) to pick up additional scientific staff. The harbor will likely be reached on the $5^{\rm th}$ of September.

On the $7^{\rm th}$ of September (+/- 1 day). Acoustic calibration will be done in a sheltered location close to the harbor, and then the survey will begin in westwards direction in the Denmark Strait. Greenlandic EEZ will be reached on the $11^{\rm th}$ of September (+/- 3 days). From the Denmark Strait, the survey will continue with east-west transects going back and forth from close to shore to deep waters. This will continue southwards until Cape Farewell. All South East Greenlandic fjords that can be accessed safely will be surveyed.

The return to Alesund will go past Vestmanna to drop off part of the scientific crew.

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

See Figure 1.

5. Types of samples required, e.g. Geological/Water/Plankton/Fish/Radioactivity/Isotope and methods by which samples will be obtained (including dredging/coring/drilling

Samples of fish and invertebrate species for length, weight, age and maturity. Oceanographic sampling (e.g. temperature, salinity, oxygen, pH and fluorescence).

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 NWWG Report, Section on Capelin in the Iceland-East Greenland-Jan Mayen area
 - b) Any previously published research data relating to the proposed cruise (Attach separate sheet if necessary).
- 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.

Observers are welcome. All arrangements should be made with the Greenland scientist in charge.

(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 used for capelin fisheries advice and 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 con- tinental Shelf	DISTANCE FROM COAST			
			Within 3 NM	Between 3-12 NM		Between 50-200 NM
Pelagic trawl Acousticsurvey Blue whiting - Seabird CTD sensor	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes	Yes Yes Yes

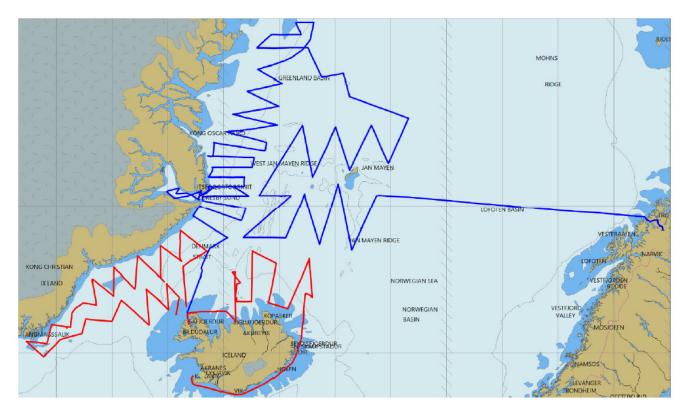


Figure 1 Routes of the research vessels; Arni Fridriksson (blue), Bjarni Saemundsson (red).

The figure shows the survey that was conducted in 2017. The 2018-survey will follow a similar approach. GINR will coordinate their efforts with the two Icelandic ships and sail the routes described in the main text of this application.