



Licence #: S-19/20-1010-NU

Brice Loose  
218 South Ferry Road  
Narragansett, RI, USA 02882

Dear Brice Loose,

Enclosed is your Licence to Fish for Scientific Purposes issued pursuant to Section 52 of the Fishery (General) Regulations.

Failure to comply with any of the conditions specified on the attached licence may result in a contravention of the Fishery (General) Regulations.

Please be advised that this licence only permits those activities stated on your licence. Any other activity may require approval under the Fisheries Act or other legislation. It is the Project Authority's responsibility to obtain any other approvals.

Please ensure that you include the licence number and project title in any future correspondence and that you complete the Summary Harvest Report upon completion of activities under this licence.

Yours truly,

June 10, 2019

for

Jenna Kayakjuak  
License Delivery Officer  
Northern Operations  
Central and Arctic Region  
Fisheries and Oceans Canada  
Enclosure

Date

## **LICENCE TO FISH FOR SCIENTIFIC PURPOSES**

### **S-19/20-1010-NU**

Pursuant to Section 52 of the Fishery (General) Regulations, the Minister of Fisheries and Oceans hereby authorizes the individual(s) listed below to fish for scientific purposes, subject to the conditions specified.

**Project Authority:** Brice Loose University of Rhode Island Graduate School of Oceanography  
218 South Ferry Road  
Narragansett, RI, USA 02882

**Other Personnel:** Shipboard Participants  
Science Team  
Dr. Brice Loose, University of Rhode Island Graduate School of Oceanography, Chief Scientist, Co-PI  
Dr. Donglai Gong, Virginia Institute of Marine Science  
Holly Morin, University of Rhode Island Graduate School of Oceanography Inner Space Center, Education Lead  
A. D'Angelo, University of Rhode Island Graduate School of Oceanography Plankton Scientist, TBD  
Zak Kerrigan, University of Rhode Island Graduate School of Oceanography  
Cristin Wright, Virginia Institute of Marine Science  
Cynthia Garcia, University of Illinois at Chicago  
Rick Ludkin, Marine Bird Specialist  
Mia Otokiak, Cambridge Bay, Nunavut  
  
Streaming Production Crew  
Producer, TBD  
Erich Gruebel, Communication Engineer  
  
Documentary Film Crew and Participants  
David Clark, Film Producer/Director, Co-PI  
Robert Elfstrom, Cameraman  
Ray Day, Soundman  
Bruce Elfstrom, Line Producer  
Juliana Hanle, Associate Producer  
Duncan Clark, Cameraman  
Dr. Hester Blum, Penn State University  
Ed Struzik, Journalist

Undergraduate Students  
15 undergraduate and 2 Nunavut students to be determined. The undergraduate students will be from the partner minority serving institutions: University of Illinois; Florida International University; City College of New York; California State University Channel Islands; Virginia Commonwealth University

**Objectives:** URI Northwest Passage Project 2019

The science activities are motivated by the overarching goal to understand how waters of the Canadian Arctic Archipelago (CAA) have changed as a consequence of the secular warming trend over the Arctic Circle. We approach this goal using an interdisciplinary ocean-based research program to explore the changes in four (4) thematic areas:

1. Water mass properties and circulation inside the CAA.
2. Microscopic communities in transition due to a changing Arctic climate.

3. At-sea distributions of marine birds and mammals in Canadian Arctic waters.
4. Greenhouse gas chemistry, and microbial activity of the melting Arctic and marginal seas

### CONDITIONS

#### Specified Conditions:

Vessel platform:

Name: IB Oden

IMO: 8700876

Country of Registration: Sweden

The NPP 2019 expedition will depart from Thule, Greenland. The ship will transit part of the Northwest Passage in the Canadian Arctic Archipelago from Lancaster Sound west through Barrow Strait into Melville Sound as far as time and the ice conditions allow. The expedition will also sample in Price Regent Inlet down to Belloit Strait and Peel Sound, conditions permitting. The ship will return to Thule, Greenland.

#### Waters:

**Water Body: MARINE AREAS OF THE NSA**

Point A: 0° 0' N, 0° 0' W

Species: Zooplankton

Gear: Photographic & Video Equipment  
Plankton Net

Total Weight	Weight Live	Weight Dead	Number Alive	Number Dead	Number Tows	Number Sets	Hours	Minutes
10.00								

**Fishing Period:** July 01, 2019 to August 31, 2019

**A copy of this licence must be available at the study site and produced at the request of a fishery officer.**

**Live fish may not be retained unless specified in the conditions of this licence.**

**The licence holder shall immediately cease fishing when the total fish killed or live sampled reaches any of the maximums set for any of the species listed.**

#### Transportation:

Other approvals/permits may be necessary to collect or transport certain species, such as Marine Mammal Transportation Permits. For marine mammal parts, products and derivatives a Marine Mammal Transportation Licence is required for domestic transport and, for international transport a Canadian CITES Export Permit is also required.



**Report on Activities:**

The Project Authority will submit to the License Delivery Officer, Department of Fisheries and Oceans, within one month of the expiry date, a report stating:

- i) whether or not the field work was conducted; and if conducted
- ii) waterbody location, fishing coordinates, gear types used at each coordinate, numbers or amount of fish (by species) collected and/or marked and the date or period of collection.

A Summary Harvest Report template is provided by the License Delivery Officer at time of issuance of this licence .

The Project Authority also will provide a copy of any published or public access documents which result from the project . Information supplied will be used for population management purposes by the Department of Fisheries and Oceans and becomes part of the public record.

All documents should be sent to:

Fisheries and Oceans Canada  
Northern Operations  
Central and Arctic Region  
P.O. Box 358  
Iqaluit, NU X0A 0H0

Attention: Licence Delivery Officer

Telephone: (867) 979-8005  
Fax: (867) 979-8039  
E-mail: XCNA-NT-NUpermit@dfo-mpo.gc.ca

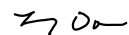
**Notification of Commencement:**

Prior to the commencement of fishing the Project Authority will contact:

Fisheries and Oceans Canada  
Northern Operations  
Central and Arctic Region  
P.O. Box 358  
Iqaluit, NU X0A 0H0

Attention: Licence Delivery Officer

Telephone: (867) 979-8005  
Fax: (867) 979-8039  
E-mail: XCNA-NT-NUpermit@dfo-mpo.gc.ca



Larry Dow  
Director, Northern Operations  
Central and Arctic Region  
Fisheries and Oceans Canada

June 10, 2019

Date

For the Minister of Fisheries and Oceans.

Pursuant to Section 52 of the Fishery (General) Regulations.