



መጀመሪያ ማጀት አስተያየት ቅጂ የሚከተሉ ሰነድ #125691

Community-based study of under-ice benthic assemblages in the Arctic (BenthArctic)

በመጀመሪያ ማጀት

New

የመጀመሪያ ማጀት

Scientific Research

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አውጥና ስም:

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៥. የጀት ስራ አገልግሎት በጀት ስራ የጀት ስራ አገልግሎት

ጀት ስራ አገልግሎት: The proposed project builds on interest expressed by Inuit communities in Nunavut to assess the status and value of their marine benthic resources and prospects for their sustainable use in the context of food security and climate change. It aims to expand our understanding of nearshore benthic assemblages, with a focus on winter-spring processes occurring at sea-ice edges and on species of relevance to commercial and subsistence fisheries. Interlinked objectives will be dedicated to fundamental research, practical knowledge transfer and community mobilization. Field work is expected to take place in the summer/fall of 2022 and the winter/spring of 2023. The approach centers on the use of a portable remotely operated vehicle (ROV) deployed through holes in the sea ice to investigate the benthic community structure and diversity in two regions (Low vs High Arctic, specifically Sanikiluaq and Grise Fiord). The ROV will have minimal environmental impact; it will capture videos of the benthos and collect a few water, sediment and biological samples for analysis. Videos will be used for scientific analyses and to create education material; they will be shared with end users in the two localities. A complementary segment will assess methods best adapted for the collection and handling of key commercial species. Benthic life occurring underneath or close to inshore polynyas and landfast ice edges in the Arctic is an understudied topic. Findings thus have the potential to yield novel information on species interactions and benthic-pelagic coupling, including how birds and mammals both depend on and fuel the underlying benthos. The project brings together academic investigators (scientists and students), the territorial government, an NGO partner, an Inuit Birthright Corporation, the local Hunters and Trappers Organizations (HTOs), and other members of the Inuit communities. Ultimately it will produce conservation and technical guidelines for species that might be targeted for premium markets (seafood, nutraceuticals, and pharmaceuticals). Moreover, the project will ground-truth the use of small-sized submersibles as a tool for research and capacity-building in areas where other methods would be too destructive or impractical (due to ice cover or shallow depth). Community leaders and youth will be the primary informants and participants in the project.

ጀት ስራ አገልግሎት: Le projet proposé s'appuie sur l'intérêt exprimé par les communautés Inuites du Nunavut pour évaluer l'état et la valeur de leurs ressources benthiques marines et les perspectives de leur utilisation durable dans le contexte de la sécurité alimentaire et des changements climatiques. Il vise à élargir notre compréhension des assemblages benthiques côtiers, en mettant l'accent sur les processus hiver-printemps se produisant près des glaces de mer et sur les espèces pertinentes pour les pêches commerciales et de subsistance. Des objectifs interdépendants seront consacrés à la recherche fondamentale, au transfert de connaissances pratiques et à la mobilisation communautaire. Les travaux sur le terrain devraient avoir lieu à l'été/automne 2022 et à l'hiver/printemps 2023. L'approche est centrée sur l'utilisation d'un submersible télécommandé (ROV) portable déployé à travers des trous dans la glace de mer pour étudier la structure de la communauté benthique et sa diversité dans deux régions principales (Bas vs Haut-Arctique, plus précisément Sanikiluaq et Grise Fiord). Le ROV aura un impact minimal sur l'environnement ; il captera des vidéos du benthos et prélèvera quelques échantillons d'eau, de sédiments et d'organismes. Des vidéos seront utilisées pour des analyses scientifiques et pour créer du matériel pédagogique ; elles seront partagées avec les partenaires dans les deux localités. Un segment complémentaire évaluera les méthodes les mieux adaptées pour la collecte et la manipulation des principales espèces commerciales. La vie benthique sous-jacente ou à proximité des polynies côtières et des glaces riveraines dans l'Arctique est un sujet sous-étudié. Les découvertes ont donc le potentiel de fournir de nouvelles informations sur les interactions entre les espèces et le couplage benthique-pélagique, y compris la façon dont les oiseaux et les mammifères dépendent et alimentent le benthos sous-jacent. Le projet

Δε-Δε-Δε-Δε-Δε

Δε-Δε-Δε-Δε-Δε	Δε-Δε-Δε-Δε-Δε	Δε-Δε-Δε-Δε-Δε	Δε-Δε-Δε-Δε-Δε	Δε-Δε-Δε-Δε-Δε	Δε-Δε-Δε-Δε-Δε
Sanikiluaq: we have had two preliminary on-site meetings and exchanges with local partners (HTA members and High School)	Camp	Inuit Owned Surface Lands	N/A	N/A	N/A
Vicinity of Sanikiluaq in Belcher islands: we have obtained information on sites of interest from partners	Sampling sites	Marine	N/A	N/A	Sanikiluaq
Grise Fiord: a visit and on-site meeting with local partners (HTA members, outfitter) occurred in 2021	Camp	Inuit Owned Surface Lands	N/A	N/A	N/A
Vicinity of Grise Fiord: that has not been explored yet	Sampling sites	Marine	N/A	N/A	Grise Fiord

Δε-Δε-Δε-Δε-Δε Δε-Δε-Δε-Δε-Δε Δε-Δε-Δε-Δε-Δε Δε-Δε-Δε-Δε-Δε

መር-ጥናኑ	አስተዳደር	እርግዣኩል	ክፍል
፪ፖርታውን	Susie Qaunaq	Aviq Hunters and Trappers Organization	2021-08-03
ሸጻዊሳውን	Lucassie Arragutainaq	Sanikiluaq Hunters and Trappers Organization	2019-03-15
ሸጻዊሳውን	Joel Heath	Arctic Eider Society	2019-03-15
፪ፖርታውን	Terry Noah	Ausuittuq Adventures	2021-08-11
ሸጻዊሳውን	Michelle Morrison	Paatsaali School	2022-02-04

ᓇΔਨੁਮਾ ਅਤੇ ਪਾਇੰ ਏਂਗ੍ਰੀਜ਼ੀ ਲੋਕਾਂ

ਪੱਟੀ ਵਿਸ਼ੇਸ਼ ਅਤੇ ਸਾਡੇ ਅਤੇ ਸਹੀ ਮਾਨਸਿਕ ਉਦੇਸ਼:

North Baffin

South Baffin

ੰਨੁਮਾ ਅਤੇ ਪਾਇੰ ਏਂਗ੍ਰੀਜ਼ੀ ਲੋਕਾਂ

ਨੁਮਾ ਅਤੇ ਪਾਇੰ ਏਂਗ੍ਰੀਜ਼ੀ ਲੋਕਾਂ	ਨੁਮਾ ਅਤੇ ਪਾਇੰ ਏਂਗ੍ਰੀਜ਼ੀ ਲੋਕਾਂ	ਨੁਮਾ ਅਤੇ ਪਾਇੰ ਏਂਗ੍ਰੀਜ਼ੀ ਲੋਕਾਂ	ਨੁਮਾ ਅਤੇ ਪਾਇੰ ਏਂਗ੍ਰੀਜ਼ੀ ਲੋਕਾਂ	ਨੁਮਾ ਅਤੇ ਪਾਇੰ ਏਂਗ੍ਰੀਜ਼ੀ ਲੋਕਾਂ
ਨੁਮਾ ਅਤੇ ਪਾਇੰ ਏਂਗ੍ਰੀਜ਼ੀ ਲੋਕਾਂ				
ਨੁਮਾ ਅਤੇ ਪਾਇੰ ਏਂਗ੍ਰੀਜ਼ੀ ਲੋਕਾਂ				

Project transportation types

Transportation Type	ਨੁਮਾ ਅਤੇ ਪਾਇੰ ਏਂਗ੍ਰੀਜ਼ੀ ਲੋਕਾਂ	Length of Use
Water	Small boats (locally owned) to reach field sites: ice-free areas	
Land	Snowmobiles and / or all-terrain vehicles (locally owned) to reach field sites : shore or ice floe	

Project accomodation types

ਨੁਮਾ ਅਤੇ ਪਾਇੰ ਏਂਗ੍ਰੀਜ਼ੀ ਲੋਕਾਂ

፳፻፲፭ ማኅበር ደንብ

ለፌር ፊዴራል ፊርማውያንናኩና ሰራተኞች ሰራተኞች በትክክል ሰራተኞች ተስፋል ተስፋል ተስፋል

ፈፌር ፊዴራል ሰራተኞች ፳፻፲፭ ማኅበር ደንብ የመስማሪያ	የቤትና ስምምነት	ፈፌር ፊዴራል - የሚከፍል የሚከፍል	የዚህ ደንብ የሚከፍል
Portable remotely operated vehicle	1	12x14x20 inches	Underwater surveys, sample collection
Nets	2	12x24x12 inches	Sample collection

በበኩል ስራውን ሰራተኞች የሚከፍል የሚከፍል የሚከፍል

የዚህ ደንብ የሚከፍል	የመስማሪያ	የቤትና ስምምነት	የሚከፍል የሚከፍል	የዚህ ደንብ	የሚከፍል የሚከፍል	የዚህ ደንብ የሚከፍል
Information is not available						

፳፻፲፭ ማኅበር ደንብ

የዚህ ደንብ የሚከፍል	የቤትና ስምምነት	የዚህ ደንብ የሚከፍል
0		

፩፻፭፻፪፲

፩፻፭፻፪፲ የ፩፻፭፻፪፲ ስራ በ፩፻፭፻፪፲

ለመስጠና አገልግሎት ስራ በ፩፻፭፻፪፲	የመስጠና ስራ በ፩፻፭፻፪፲	የመስጠና የ፩፻፭፻፪፲	የመስጠና	የመስጠና ስራ በ፩፻፭፻፪፲
Information is not available				

፩፻፭፻፪፲ የ፩፻፭፻፪፲ ስራ በ፩፻፭፻፪፲

We will be staying in the communities, either at hotel or rented house. We will hire guides and outfitters. We will also give invited presentations at HTO and/or schools. No predicted impact on the communities other than positive ones, like engagement, training, employment and use of infrastructure. At the field sites (marine / nearshore) sampling will occur using one of the following: a portable underwater ROV (camera) with very small capacity for sample collection (water, sediment, organisms) or locally owned fishing boats and gear. Minimal disturbance will therefore occur (under the supervision of local partners). In addition, local partners may contribute portions of fishing catches as samples, again with minimal disruptions typical of community activities (following their own permits as applicable).

Additional Information

SECTION A1: Project Info

SECTION A2: Allweather Road

SECTION A3: Winter Road

SECTION B1: Project Info

SECTION B2: Exploration Activity

SECTION B3: Geosciences

SECTION B4: Drilling

SECTION B5: Stripping

SECTION B6: Underground Activity

SECTION B7: Waste Rock

SECTION B8: Stockpiles

SECTION B9: Mine Development

SECTION B10: Geology

SECTION B11: Mine

SECTION B12: Mill

SECTION C1: Pits

SECTION D1: Facility

SECTION D2: Facility Construction

SECTION D3: Facility Operation

SECTION D4: Vessel Use

SECTION E1: Offshore Survey

SECTION E2: Nearshore Survey

SECTION E3: Vessel Use

SECTION F1: Site Cleanup

SECTION G1: Well Authorization

SECTION G2: Onland Exploration

SECTION G3: Offshore Exploration

SECTION G4: Rig

SECTION H1: Vessel Use

SECTION H2: Disposal At Sea

SECTION I1: Municipal Development

Л°а 48014^с 96мΔсC^сснDσ^вл: мaД^с 96мΔс^жσ^вл

Л°а 48014^с 96мΔсC^сснDσ^вл: 4L^к96C⁹σ^вл

Л°а 48014^с 96мΔсC^сснDσ^вл: Δmс-nσ^в j^вl^в-A^вc-4Rc-nσ^в j^вl^в

Miscellaneous Project Information

а.а.Δ^кC⁹σ^вр^в 4^вC⁹CD^лL^л 96мΔс^жσ^вр^в <с>Г^к4^вR^л96C⁹σ^вр^в -

Cumulative Effects

Impacts

物理影响 地质与水文影响 气候影响 生物影响 社会经济影响

PHYSICAL											
Designated environmental areas											
Ground stability											
Permafrost											
Hydrology / Limnology											
Water quality											
Climate conditions											
Eskers and other unique or fragile landscapes											
Surface and bedrock geology											
Sediment and soil quality											
Tidal processes and bathymetry											
Air quality											
Noise levels											
BIOLOGICAL											
Vegetation											
Wildlife, including habitat and migration patterns											
Birds, including habitat and migration patterns											
Aquatic species, incl. habitat and migration/spawning											
Wildlife protected areas											
SOCIO-ECONOMIC											
Archaeological and cultural historic sites											
Employment											
Community wellness											
Community infrastructure											
Human health											

物理影响

地质与水文影响

Camp

Sampling sites

气候影响

(P = 物理影响, N = 地质与水文影响, M = 气候影响, U = 社会经济影响)

M

M

P

P



List of Project Geometries

- | | |
|------------|--|
| 1 polyline | Vicinity of Sanikiluaq in Belcher islands: we have obtained information on sites of interest from partners |
| 2 polyline | Vicinity of Grise Fiord: that has not been explored yet |
| 3 point | Sanikiluaq: we have had two preliminary on-site meetings and exchanges with local partners (HTA members and High School) |
| 4 point | Grise Fiord: a visit and on-site meeting with local partners (HTA members, outfitter) occurred in 2021 |