## 

## **CONSERVATION STORIES**

News from the land





"\Poperation \Poperation \Pop

"Conservation Stories" provides a window on the conservation and education activities undertaken by Nunavik Parks.

The mission of Nunavik Parks is to protect the land for future generations while fostering the interconnection between the land, the people, cultures, and types of knowledge. To achieve its mission, Nunavik Parks relies on local, traditional, and scientific knowledge, while promoting access to the land for all.



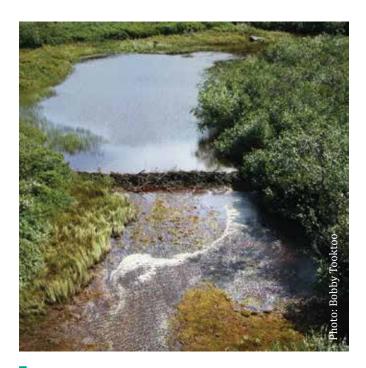
Parc national Tursujuq ۲Γ°ጋΔ ፈና,
Dam it, beavers! Page 2
Parc national des Pingualuit ႷႺႺჼႮႷჼႠႦჄႾჃႺ ለႦჄჼჇ ႶႦჼჼჼՐჂႶႮႺ Drawings of a special kind
Parc national Tursujuq ᲮL Ր J ී പ ና የ D % ? Can you handle it?
D 「 └ L & ႕ D ʿ ʾ ʾ 宀 ՝ ՝ ՝ ՝ └ ト ʔ ʿ Ͻ ʿ ʰ From umimmak to skeins of wool
Parc national Kuururjuaq ゅくうひん ひょくっこっ Napaartuit and fire
Parc national Tursujuq UANP^ CPフJピー しょっ Through the eyes of Davidee
Parc national Kuururjuaq ၁၈ ်၀၈ (၁၈ - 2.0 Archæology 2.0
Parc national des Pingualuit, Tursujuq, Kuururjuaq, Ulittaniujalik もって、 ムロマイテ い Lighting the qulliq

Cover photo: Corentin Chaillon



Climate change is impacting ecosystems and habitats. In the North, shrubs and bush-type vegetation are increasing, creating valuable habitat for southern species like beaver. In Nunavik, the impact of beavers is not well understood. It is likely that the building of dams and the subsequent creation of ponds is increasing permafrost thaw and accelerating shrubification—the expansion of shrub growth and presence.

Beaver dams affect Arctic char migration.



Moreover, a dam can act as a barrier to Arctic char migration, which is a local concern.

The Nunavik Research Centre at Makivvik is investigating the effects of beaver dams on the northern ecosystem near Kuujjuaq and Tasiujaq.

The increasing beaver population is a local concern and is linked to the effects of climate change. As a national park, it is our mandate to improve the monitoring of beavers and better understand the effects of their presence on park territory.



Incomplete beaver dam in Tursujuq park  $\Lambda + L^{-1} \cap L^{1} \cap L^{-1} \cap L^{1$ 

This summer, we surveyed 228 km of river habitat to have a better idea of beaver dam distribution in the region. We counted 13 beaver territories; a territory sometimes consisted of up to 3 dams. The data collected was shared with Makivvik and Anguvigaq<sup>1</sup>.

This first exploratory survey is the beginning of a long-term program to monitor beaver distribution, activity, and persistence in the park. We hope to continue this work to further our knowledge on the beaver's impact on northern ecosystems and species such as Arctic char.

<sup>&</sup>lt;sup>1</sup> Nunavik Hunting Fishing Trapping Association (NHFTA)

 ΥΕΝ΄ ΟΥ΄Ρ
 Τ΄ ΤΟΝ ΑΡ΄ ΤΟ ΚΕΙ

 ΦΟΝ ΠΑΝ Ε ΑΙΡΑΘ΄ ΤΟ ΕΥΓΙΑΝΙΑ
 ΦΙΑΝΟΝΑ Ε ΑΙΡΑΘ΄ ΤΟ ΕΥΓΙΑΝΙΑ

 ΛΡΟΝΑ Ε ΑΙΡΑΘ΄ ΤΟ ΕΝΙΑΝΙΑ
 Τ΄ ΤΟ ΕΝΑΝΙΑΝΙΑ

 ΚΕΝΑ Ε ΑΙΡΑΘ΄ ΤΟ ΕΝΑΝΙΑ
 ΕΝΑΝΙΑΝΙΑ

 ΤΕΝΑ Ε ΑΙΡΑΘ΄ ΤΟ ΕΝΑΝΙΑ
 ΕΝΑΝΙΑΝΙΑ

 ΤΕΝΑ ΕΝΑΝΙΑ
 ΤΕΝΑΝΙΑΝΙΑ

 ΤΕΝΑ ΕΝΑΝΙΑ
 ΤΕΝΑΝΙΑ

 ΤΕΝΑΝΙΑ
 ΤΕΝΑΝΙΑ

PΓ
 d<sup>1</sup>σ
 d<sup></sup>

 ΦΦΛΙ
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600
 600<

Part = Part =



PC4<sup>b</sup> Beaver

δΛ<sup>1</sup>%<sup>1</sup>i<sup>1</sup>, 16 δ λ λ α δ λ ι 228 β α Γ ( σ <sup>1</sup> σ <sup>1</sup> σ <sup>1</sup> α λ ι α δ ι Γ
 ρΓ δ ι σ <sup>1</sup> σ ι λ Γ ( Σ Δ ι δ ι δ ι α δ

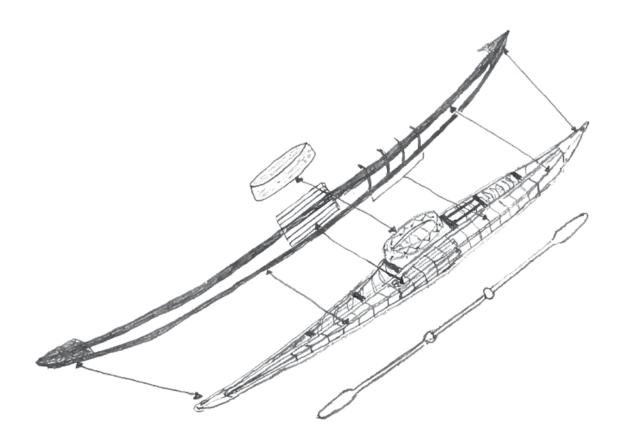


# ۵۴۵۵۵۲۲۲٬ ۱۹۲۵۵۳۵۵۱۶ مین از ۱۹۳۵۵۳۵۲۵۲۵ مین از ۱۹۳۵ کا ۱۹۳ کا ۱۹۳ کا ۱۹۳ کا ۱۹۳ کا ۱۹

### Parc national des Pingualuit

 $\sigma_c = \rho_c + \rho_c$ 

Juupi Koneak's drawing will be the highlight of the new edition of educational document "Discover Parc national des Pingualuit" to celebrate the park's 20<sup>th</sup> anniversary.



 $^{1}$   $^{1}$   $^{1}$   $^{1}$   $^{1}$   $^{1}$   $^{1}$   $^{1}$   $^{1}$   $^{1}$   $^{1}$   $^{1}$   $^{1}$   $^{1}$ 

Qajaq drawing by local Kangiqsujuaq artist Juupi Koneak

**1 አል**•: ላኈዮላኈ አል◦ ኦኑና∟ዮ ሶ፞፞፞፞ှင<sup>਼</sup>ьናፘፚ. Large knife with stone blade.



## blfj° a °PD b ? Can you handle it?

- Local artist Gilbert Inukpuk has created replicas of 6 artefacts from Tursujuq Park's collection.
   These replicas are meant to be touched and handled just as if they were being originally created.
   Visitors and school groups can now get hands-on experience with these objects to build igloos or to try cutting meat with a stone blade.

 $\frac{2}{2}$  (a. 4)  $\frac{1}{2}$   $\frac{1}{2}$ 

Snow knife used to build igloos. It can be made of bone and walrus tusk.



3 ఆంగ్రామంలో: ΔΓLD అంది అంది.

> Small lure used when fishing. Originally made of walrus tusk.





# 

የልኦ–ኦ $\sim$ ኦናአ $\sigma$ <sup>6</sup>  $\Delta$ –° $\sigma$ 4 $\Omega$ °ረ $\Omega$ <sup>6</sup> $\supset$ J  $\upsilon$ °ረ $\Omega$ <sup>6</sup> $\mathcal{I}$ <sup>6</sup> Qiviut workshop with Rachel Guindon

- Rachel Guindon visited Kuujjuaraapik and Umiujaq to share her knowledge on how to transform qiviut into yarn. The qiviut is the undercoat of Arctic mammals like the muskox. Wool made of qiviut is one of the softest and finest in the world. It can be brushed from hides, collected from branches, or gathered from the ground.



In Quebec, every part of the boreal forest has been affected by fire at one time or another. These fire events have been leaving their mark and shaping the forests we see today.

In June 2022, a forest fire burned part of the boreal forest in the Kuururjuaq River Valley in Kuururjuaq Park. This fire presented an opportunity to further study this northern forest ecosystem and its dynamics over time, as well as to address local community concerns about the mercury released by fire.

During this first year of exploratory field work, we were able to observe that the fire did not burn hard enough, thus leaving the mineral soil unexposed. A layer of burnt forest litter was still covering the ground. This may prevent black spruce seeds from germinating. Black spruce (napaartuq) must start growing on mineral soil to prevent its small baby roots from rotting.



C「ー がいっ へぐつ「 いかさいの が いっぱい Dominique Arsenault looking at a tree core sample

The absence of newly exposed mineral soil might be the reason why we only found one (1) spruce seedling during our field campaign.

Water samples were also taken to check for the presence of mercury.



ፈሩን ነገሩ ነዋ ነገል ነው - ነዋ ነገል ነው Black spruce cone - qimminguait

The absence of baby spruce would likely make the 42 km<sup>2</sup> of burnt forest look like an open meadow of thickets and brush. The first trees to recolonize the burnt area would be tamaracks (**pingiit**), but only in many years' time.

This first exploratory field work will lead to more detailed research in the years to come, and to more public outreach in the community to share what we have learned.  $dV^{L}\Gamma$ ,  $a\dot{\varsigma}^{5}\Delta^{c}$   $\Delta dA_{c}^{L}$   $Cd^{5}\Delta^{c}\Gamma^{5}$   $\Delta dA_{c}^{L}\Gamma^{5}$   $\Delta dA_{c}^{5}$   $\Delta dA_{c}^{5}$  $Cd^{5}\Delta^{c}\Gamma^{5}$   $\Delta dA_{c}^{5}\Gamma^{5}$   $\Delta dA_{c}^{5}\Gamma^{5}$   $\Delta dA_{c}^{5}\Gamma^{5}$ 

# $\Delta L^{5}\sigma^{5}$ $^{5}b^{5}L^{5}\dot{U}C.$

4'ĠJΓ τ> - ⟨Γ %ρλλλδ» υτς, %ρλονις
Δαστ» Δαστο αρκονο Γιανισο,

Δαστ» Δαστο αρκονο Γιανισο,

Δαστο Ας Αρανι

ΠΡρηγρισό αρκονο Ες Αρανι

Β' υτας Αγινις Αρανι

Δζίσο Αρανιο Αρανι

Διαστο Αρανιο Αρανιο Αρανιο Αρανισος

Διαστο Αρανισος

Διαστο Αρανισος

Διαστο Αρανισος

Διαστο Αρανισος

Διαστο Αρανισος

 $^{6}$   $^{6}$ 



 $\Delta L^{5}\Gamma^{6}$   $^{5}$  $^{5}$  $^{5}$  $^{6}$  $^{6}$  $^{8}$  $^{8}$  $^{8}$  $^{8}$  $^{8}$  $^{8}$  $^{9}$  $^$ 

CL°a ΔddccDd% d%Pa%cDdLC

42 PcFCab dbPCDc%ldFb

PdAalcDA°aDbcfD°. db°ccC

ΛPad%blfbfD° Δdd°ccDdF Λ%F° Pdda

dfda dFda ΛPfddfbfD°.



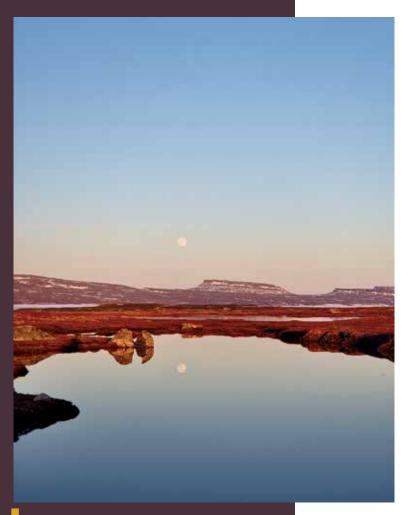


Photo: Andrew Davidee Naluktuk

# UAND' CDDJY%LJ° Through the eyes of Davidee

### Parc national Tursujuq

 Φ°C
 Θ°C
 Θ°C</t

The work of Andrew Davidee Naluktuk will be showcased in the new Tursujuq Park permanent exhibition in Kuujjuaraapik.

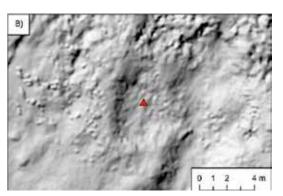


#### Parc national Kuururjuaq

 $\Lambda = \lambda^{4} + 0 \cdot 0^{4} \cdot 0^{4$ 

A team from Centre for Northern Studies (CEN), Laval University, Université du Québec à Trois-Rivières, and Avataq has launched a project to document archeological sites around Kangiqsualujjuaq using drone imagery. Their goal is to digitally preserve the sites and assess the degradation risk they face due to vegetation encroachment and erosion. Some of these sites are in the coastal area of Kuururjuaq Park. The results of the 3D images are quite surprising.





 $D \circ D' = \Delta^{c} b \circ L \dot{\sigma}^{c} D^{c} = \Delta^{c} \Delta^{c} b \circ L \dot{\sigma}^{c} D^{c} = \Delta^{c} \Delta^{c} D^{c} \Delta^{c} D^{c} = \Delta^{c} D^{c} D^{c} \Delta^{c} D^{c} D^{c} = \Delta^{c} D^{c} D^{c}$ 



[ <u>U,U¬, P,L,44,L, A,C, A,C,</u> D,4,C,2), عمد ۲ ۲۲ من کا ۱۵ من کا در این ما می می در این ما کا می در این کا می در این کا می در این کا می در این کا می در  $\Gamma^{5}$   $\Gamma^{5$  $G = \Gamma^{\flat} \Delta P^{c} + J + \Gamma^{\flat} \Gamma^{\flat}$ 

 $3^{\circ}$  $40^{\circ}$   $0^{\circ}$   $0^{\circ}$   $0^{\circ}$   $0^{\circ}$   $0^{\circ}$ 60,600,ee 40,605,916,50c 4Υίφινη ΤΙΠρίζο.

'β'-Γ' Δρ''Υσ" Δ'-ΔCDYLΓΔ'6')' ۸۵۱۸۵۱ مرک مویاد.

Mark Tertiluk from Kangigsujuag has carved a qulliq (traditional Inuit lamp) for each of Nunavik's four parks. Each park will organize an annual gathering to teach community members how to light the gullig.

Qulliit were once central to Inuit daily life, as a source of light and heat. Today, qulliit are part of ceremonial practices because of what they represent and their cultural significance.

Lighting the qulliq requires some learning and practice. It provides a meditative experience that connects you to the land.



## Id C L P C L C IP Lighting the qulliq

Mark Tertiluk, photo: Mary A Pilurtuut



Randall Morgan & Charlie Munick, Parc national Kuururjuaq

∆LD′ σ?Γ°σ%lσ bLσ% Monitoring water temperature



# ΛΡ-4'σΙ' Δε'σ4Π'τσ'ΙΔ Λατ4'bΠΓ'Ο' Conservation and Education team

Patrick Maltais Education Technician pmaltais@krg.ca



**Isabeau Pratte**Conservation and Education Specialist
ipratte@krg.ca

## ۲٬۵۵۲٬۵۵۰ کے ۲۸۵۲٬۵۵۲ Parks management



Charlie Munick
Parc national Kuururjuaq /
Ulittaniujalik



Mary A Pilurtuut
Parc national des
Pingualuit



**Bobby Tooktoo**Parc national Tursujuq

Illustrations: Isabeau Pratte



#### **Nunavik Parks/Parcs Nunavik**

P.O. Box/CP 9 Kuujjuaq QC JoM 1Co 819-964-2961

#### Parc national des Pingualuit

P.O. Box/CP 130 Kangiqsualujjuaq QC JoM 1Ko 819-338-3282

#### Parc national Kuururjuaq Parc national Ulittaniujalik

P.O. Box/CP 30 Kangiqsualujjuaq QC JoM 1No 819-337-5454

#### Parc national Tursujuq

P.O. Box/CP 2205 Umiujaq QC JoM 1Yo 819-331-5454

info@nunavikparks.ca conservation.education@krg.ca

