

2021-2022 Annual Report Highlights



Ingenium oversees three national museums
of science and innovation in Ottawa.



Canada Agriculture and Food Museum
Canada Aviation and Space Museum
Canada Science and Technology Museum



Attendance at
the three museums
in 2021-2022:

236,147



Our 2020–2025 strategic plan goals

**Collaborate
to Innovate**

Access for All

**Strengthen our
Foundations**



Mission

Ingenium is a catalyst for unlocking the curious and creative minds of a nation of innovators



Harness the power of digital to connect with Canadians

Many public events and activities held online;
connected with more Canadians farther away

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INGENIUM-NSERC
STEAM:
HORIZON AWARDS

Annual **Ingenium-NSERC STEAM Horizon Awards** online ceremony in May: five winners, including two Indigenous students

Ingenium-NSERC STEAM Horizon Award Sponsors





New exhibition Aquaculture: Farming the Waters




**CANADA AGRICULTURE
AND FOOD MUSEUM**
**MUSÉE DE L'AGRICULTURE
ET DE L'ALIMENTATION
DU CANADA**

LES MOLLUSQUES?
Parce les consommateurs en raffolent!
L'élevage de mollusques n'est pas toujours facile, mais nécessite peu de ressources. Les petites exploitations peuvent donc prospérer. Même pas besoin de nourrir les huîtres et les moules!
Les élevages de mollusques génèrent des revenus pour les collectivités côtières. En plus, cette source de protéines animales est probablement la plus durable.

LES D
Ces par
puisque les
obstacle ent
et l'océan.

UP IN THE AIR

The atmosphere is a thin gaseous envelope that protects all life on Earth. Satellites monitor this complex layer of gases, helping to understand everything from weather patterns to climate change.

L'AIR, CE N'EST PAS RIEN!

L'atmosphère est une fine couche complexe de gaz qui enveloppe la Terre. Elle protège toute vie sur Terre. Les satellites surveillent l'atmosphère, ce qui permet de comprendre notamment les conditions météorologiques et le changement climatique.

Cumulonimbus clouds. This type of cloud can rise up to the edge of the troposphere, 10 to 15 kilometres above the surface of the planet. 99% of the water vapour in the atmosphere is found in the troposphere.

Cumulonimbus. Ce type de nuage peut s'élever jusqu'à la limite de la troposphère, à 10 ou 15 kilomètres d'altitude. Environ 99 % de la vapeur d'eau dans l'atmosphère se trouve dans la troposphère.

Chris Hadfield © Canadian Space Agency, 2013
Chris Hadfield © Agence spatiale canadienne, 2013



CANADA SCIENCE AND TECHNOLOGY MUSEUM
MUSÉE DES SCIENCES ET DE LA TECHNOLOGIE DU CANADA



asc-csa.gc.ca

New exhibition Earth in Focus: Insights from Space





Canada Aviation and Space Museum and the National Research Council are founding partners of the non-profit **Centre for Advanced Research and Training in Aviation, Mobility and Space (CARTAMS)** to foster innovation, education, training, and outreach programs.



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SPACE FRONTIERS
DAWN OF MARS



Access for All
through developing
creative digital
experiences.



STEAM-oriented programming reached across the socio-economic spectrum in the community.



CANADA SCIENCE AND TECHNOLOGY MUSEUM
MUSÉE DES SCIENCES ET DE LA TECHNOLOGIE DU CANADA



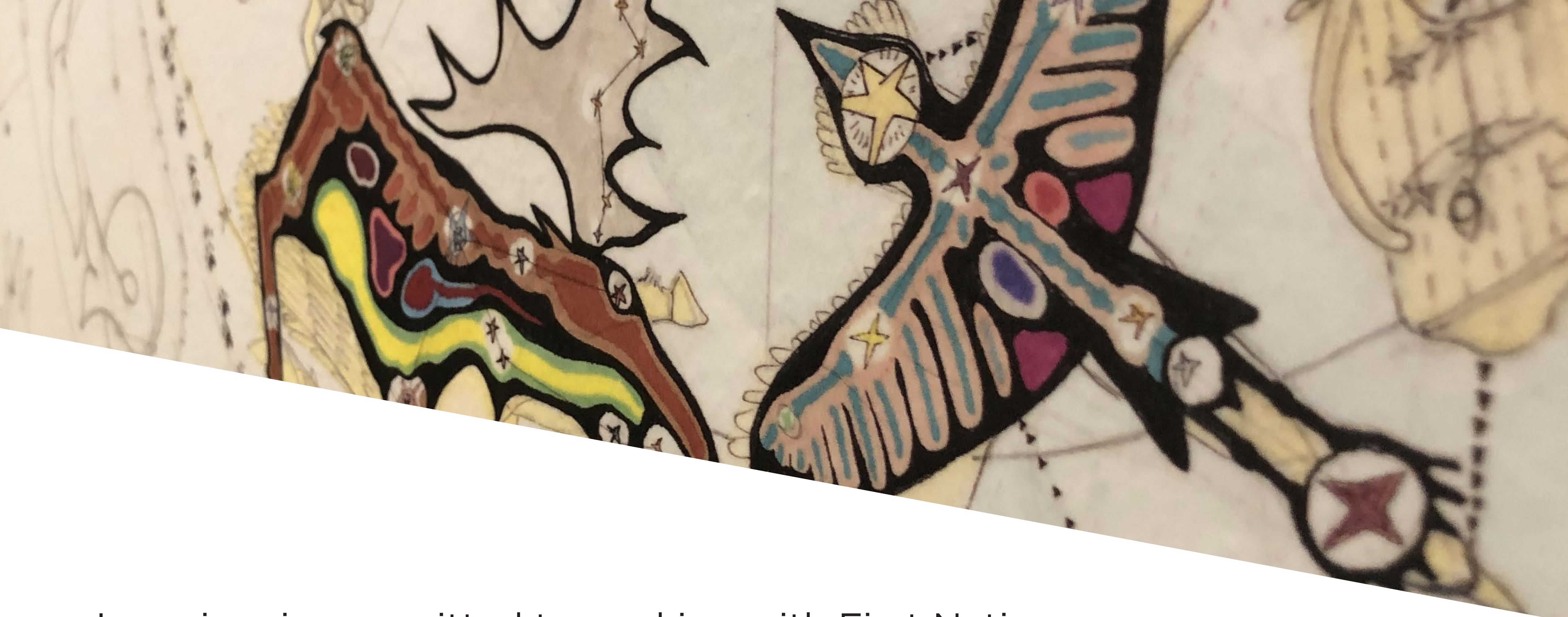
In 2021-2022,
we had 15 travelling
exhibitions on the
move across Canada.



83 Typex Rotor Cores, 1950-1959
This box contains deconstructed cipher rotor cores. Canada's national cryptologic agency made similar material for Canadian-used Typex cipher machines. From the Second World War until the 1960s, Canada and Britain encrypted messages with Typex. All rotor cipher machines work on the same principle as the Enigma.



Noyaux de rotors Typex, 1950-1959
Cette boîte contient des noyaux de rotors démontés. L'organisme national de cryptologie du Canada a fabriqué de l'équipement semblable pour le chiffrement Typex utilisé au Canada jusqu'aux années 1960. Le Canada et le Royaume-Uni ont chiffré des messages grâce à ces machines. Toutes les machines à rotors fonctionnent sur le même principe.



Ingenium is committed to working with First Nations, Inuit, and Metis peoples to further develop our national collection, our programming, and our services to the public.

Bákvliá

Ἡίχρ̄cuás tgvánḡ báxncuá. Ἡίχρ̄cuá du hixstús hiks wíwáád.
di qácuá ḡḡaq̄s hḡcimas. Gvúá̄la bágvnḡ du kus fikim̄.
gvúá̄la. Cua bágvnḡx̄n la qí dítgvánḡ. Gvúá̄la la qí dítgvánḡ.
Ἡí́kimasλḡts qáúλ̄ láchdḡ du wílaq̄n la bákvliá.
báxncuá bákvliáinuḡx̄n hámú́ciku.

Kitigān Zibi Anishinābeg

Nidòndàdizimin nidjìbikànàng

Awaso nigo pibòn minigik kada kijigābandjigāde kaye
tajindāgwadon Anishinābe inwewinān. Kidji mashkawi nāgadjitōyāng
nidinwewinān kaye nipimādjwōwinān ni nāskānān weskad
āyānkād̄j wendābikising nidjìbikānān kidji ondinamāng
kije kikenindāmāwin kaye kikinōwizwin. Wenishinābewiyāng aking
nidòndādizimin kakina kego wendinamāng ābadjitōwinān, mashkikiwan
kaye kemidjyāng. Misawād̄j k̄a-bi-ijwebag, niwidji anishinābeminānig
kiyābad̄j nidandānizimin ashid̄j kiyābad̄j mashkawi pimādizimāg
nidinwewinān. Kichi inenindāgwad kidji māmindōnenindameng
mashkawizwin onzikā odjibikāng, mi wendji mashkawi mindjimikamāng
nidinwewinān ondje ogog nongom kaye pādjimosedjig nigān.



Fish Poisson

Indigenous Aquaculture: Farming for Future Generations

Sustainability lies at the heart of Indigenous cultures, languages, and practices. It reflects the idea that all living things are connected.

Indigenous farmers are practicing aquaculture in ways that respect their traditions, help their communities, and provide for the next seven generations – and beyond.

Aquaculture autochtone : penser aux générations futures

La durabilité est au cœur des cultures, des langues et des pratiques autochtones.





Our 2020–2025 strategic plan goals

**Collaborate
to Innovate**

Access for All

**Strengthen our
Foundations**

The three museums delivered more public and school programs online and virtually.



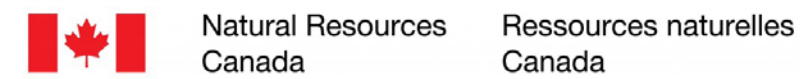
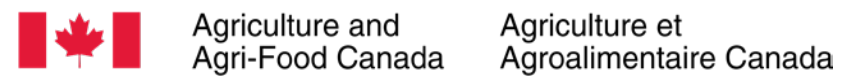


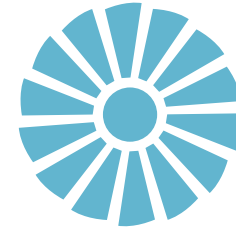
Despite setbacks caused by the COVID pandemic, we worked behind the scenes to improve our museums to enhance visitor enjoyment. We also launched several new exhibitions in fiscal 2021-2022.



**CANADA AGRICULTURE
AND FOOD MUSEUM**
**MUSÉE DE L'AGRICULTURE
ET DE L'ALIMENTATION
DU CANADA**

New exhibition
Soil Superheroes





CANADA AVIATION
AND SPACE MUSEUM
MUSÉE DE L'AVIATION
ET DE L'ESPACE
DU CANADA

New exhibition

Eyes on the Skies: Managing Air Traffic in Canada

LE
GREATEST ASSET
GENS
GRANDE RICHESSE
ION

ens jouent un rôle crucial
la sécurité de notre espace
en. Un personnel divers
chaque jour des situations
particulières, de l'entretien
l'infrastructure technologique
la gestion de la circulation
dans l'espace aérien intérieur
du Sud, la région transatlantique,
et le Nord. Leur travail a évolué
pour répondre à l'augmentation
constante de la circulation
aérienne au Canada.



Eyes on the Skies / Regard sur le ciel



Air traffic management
keeps Canada's skies safe,
thanks to a network
of complex systems,
highly trained people, and
cutting-edge technologies.

La gestion de la circulation
aérienne assure la sécurité
de l'espace aérien canadien
grâce à un réseau de systèmes
complexes, de personnes
hautement qualifiées et
de technologies de pointe.

ingenuity **NAV CANADA**
Eyes on the Skies / Regard sur le ciel
Managing Air Traffic in Canada / Gérer la circulation aérienne au Canada
Exhibition developed and produced by the Canada Aviation and Space Museum in collaboration with NAV CANADA / Exposition conçue et réalisée par le Musée de l'aviation et de l'espace du Canada en collaboration avec NAV CANADA
TKN
Canada

THE FUTURE IS NOW / L'AVENIR C'EST MAINTENANT



Canada's air traffic continues
to grow, putting pressure on our air
navigation system. Different types
of aircraft, such as drones and air
taxi, could complicate things
even more. New technologies
and surveillance systems will aim
to make air traffic management
even more efficient—keeping
Canada's skies safe.

Le vol
continu
et notre
aérienne
divers typ
les drones
pourraient
les choses.
et systèmes
viseront à ren
la circulation a
efficace en vue
de l'espace aérie



New exhibition

Earth in Focus:
Insights from
Space



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asc-csa.gc.ca

DEALING WITH
DISASTERS
DE L'AIDE EN CAS
DE CATASTROPHE

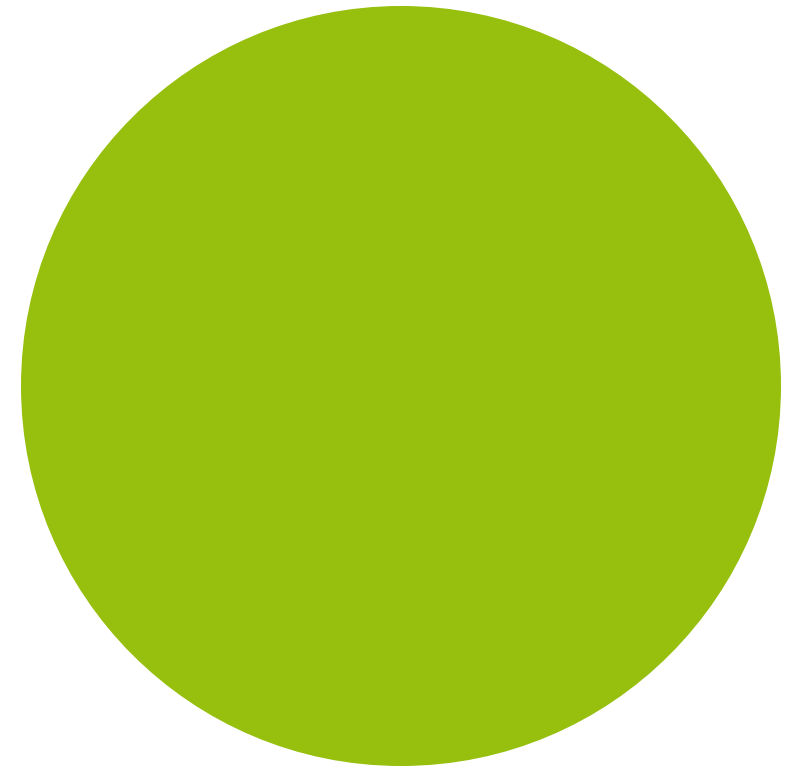
RING
WATER

QUAND LE
MONTRE... ET MOINS...

ERSON
PRE-SCAN

LES VENTRERQUES
SUR LA TERRE





3,358 memberships
were sold in fiscal 2021-2022.

By fiscal year end:
6,932 active Ingenium members.





Ingenium Centre is home to the national collection, and is a hub of excellence for collections care, research, and access for staff, adjunct curators, fellows, visiting scholars, and Indigenous Elders in residence.



Image of
General
Sheila Hell-
strom.

Our national collection was strengthened with high-profile acquisitions, including a Delta Test Vehicle-3, ejection seats, and drafting table for our Avro Arrow Collection, as well as the General Sheila Hellstrom Collection, which represents her outstanding career as Canada's first female General.

Full details about
Ingenium's fiscal year
2021-2022 can be
found in Ingenium's
Annual Report.



Annual Report 2021-2022


Ingenium
Canada's Museums of Science and Innovation
Musées des sciences et de l'innovation du Canada


Canada