

Why the ROM is creating a climate-change curator

Canada's largest museum is integrating environmental programming in order to educate the public and influence decision makers, **Kathryn Blaze Baum** writes



Allan Shiff, 83, has donated \$1.5-million to the Royal Ontario Museum for the creation of the Allan and Helaine Shiff Curatorship of Climate Change. MELISSA TAIT/THE GLOBE AND MAIL

Allan Shiff grew up on a farm and occasionally hiked the Bruce Trail in Southern Ontario, but he had no firm connection to environmental causes – until 2006. That's when the British government released the Stern Review on the Economics of Climate Change, a massive report by noted economist Nicholas Stern that quantified the impact of climate change on the global economy.

Now 83, Shiff is thinking about his children's and grandchildren's inheritance. But not of his money. Of the planet. To that end, Shiff donated \$1.5-million to the Royal Ontario Museum for the creation of the Allan and Helaine Shiff Curatorship of Climate Change – an endowed role the ROM believes is a world first among major museums. The donation was matched by the Louise Hawley Stone Charitable Trust.

In his lifetime, Shiff has seen the issue of climate change go from "zero to an exist-

ential threat."

"Sadly, we're getting free advertising: the fires that are going on today in the western United States, the smoke drifting up to British Columbia, the typhoons, the Arctic ice shelves in Canada that are disappearing," he said. "To sit back and do nothing is a very dangerous thing."

The international search for the inaugural curator began in earnest earlier this month, after being put on pause at the outset of the pandemic. The chosen candidate will not only be charged with ensuring that the ROM's collections contain items that reflect environmental issues, but also that the museum's programming – from symposiums to exhibitions and children's classes – engages visitors on key matters related to climate change.

Already, the ROM is integrating environment-related programming into its calendar. The Cloth that Changed the World, which opened earlier this month, takes a

look at Indian chintz and its relationship with water crises. Opening in November, Wildlife Photographer of the Year features insights from ROM biodiversity experts. Elias Sime: Tightrope, which opens in the spring, uses repurposed electronic components to comment on the urgency of ecological sustainability. And next summer's Into the Deep: A Tale of Three Whales explores the impacts of climate change on endangered whale species.

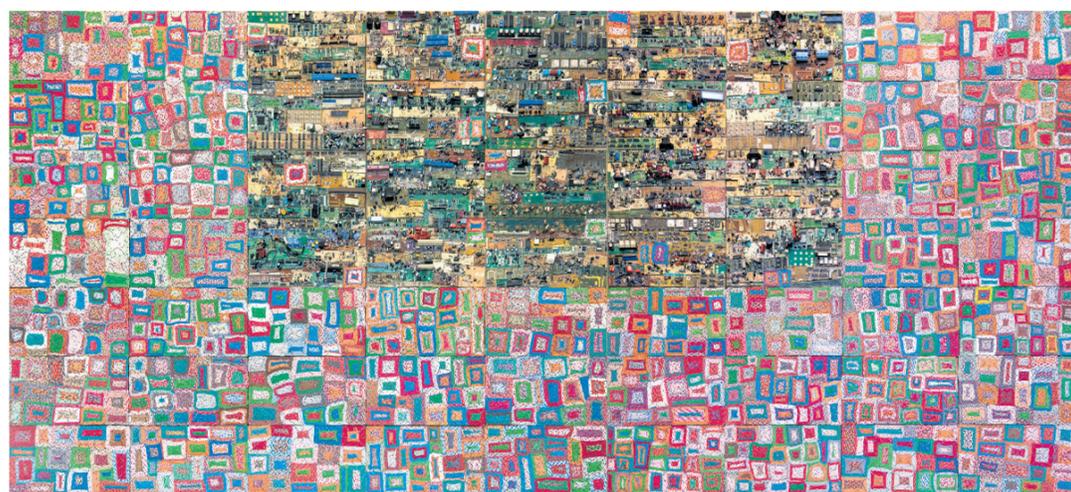
Shiff, though, wants his contribution to do more than fund shows that come and go. "I was not interested in seeing an exhibition where people come and say, 'Wasn't that fascinating?' and then go home and forget about it," he said. "The project must involve citizen engagement."

The ROM is Canada's largest museum, with 270,000 square feet of gallery space and upward of 1.5 million visitors in a typical fiscal year. ROM director and CEO Josh Basseches said the institution is projecting

that attendance will be cut in half this year due to the pandemic. Still, he is optimistic that the inaugural curator will be able to leverage the museum's "bully pulpit" in order to educate the public and influence decision makers.

"We're one of the few great museums in the world that cut across art, culture and nature," he said. "Given that the climate crisis is really about the interrelationship between human actions and the natural world, we're uniquely situated to address it."

The museum's 35 curators manage a total of 13 million objects, artifacts and specimens. Here, ROM staff highlight items in their collections that speak to the climate crisis



Tightrope: In Boxes, 2017 by Elias Sime

Reclaimed electronic components on panels, Addis Ababa, Ethiopia

Elias Sime sources the materials for his works in the heaps of electronic waste found at the central market of his hometown, Addis Ababa. His work is mesmerizing and poetic, layered and thought provoking. Playing masterfully with the brilliant greens of the motherboards and the hues of telephone wires, Sime invites us to think about the global flow of electronics and their debris, as well as the environmental impact of our so-called progress. To Mr. Sime, humans are "the bridge between the natural and built environment." – *Silvia Forni, senior curator, Global Africa*



Rusty-Patched Bumble Bee, 1985 (*Bombus affinis*)

Toronto, Ontario, Canada

As recently as 30 years ago, the rusty-patched bumble bee was one of the most common bumble bees in Toronto. In the past 15 years, it has become exceedingly rare and is listed as endangered in Ontario and Canada. Suspected causes of the species' decline include climate change, pesticide use, spread of disease and loss of habitat. The rusty-patched bumble bee was once an important pollinator of wildflowers. – *Chris Darling, senior curator, Entomology*



Manuscript painting from the Anvar-i Suhayli, 1500-1550

Opaque watercolour on ink and gold on paper, Uzbekistan or Afghanistan

This page comes from an illustrated Persian manuscript of the *Anvar-i Suhayli*, a book of animal fables composed by Husayn b. Ali al-Wa'iz al-Kashifi in the late 1400s in Herat, present-day Afghanistan. The *Anvar-i Suhayli* belongs to a genre of literature called "mirrors for princes" – books that provide guidance on the art of governance and the ethical and moral qualities that a king should possess. This page, produced in Bukhara or Herat, illustrates the tale of the hunter and the pigeons. Trapped in the hunter's net, a flock of pigeons struggle to free themselves by flapping their wings in a panic. Their leader, a ring-necked dove, urges them to flap in unison in the same direction, allowing them to fly upward and escape the clutches of the greedy hunter. The fable exemplifies the power and resilience of nature. – *Fahmida Suleman, curator, Islamic Art & Culture*



Painting from the Mewar Gita Govinda (page 197 of 272), ca. 1741

Unknown artist, under the supervision of Rupaji Bhatt

Opaque watercolour and gold on paper; Udaipur, Rajasthan, India

This painting, completed under the supervision of Rupaji Bhatt, recounts the relationship between Hindu god Krishna and female cow herders known as gopis. The image represents Braj, the pastoral region in north central India believed to be inhabited by Krishna. Recent scholarship by Sugata Ray argues that Braj is often represented in art as a lush terrain not because it was actually that way, but because it was not; the Little Ice Age of roughly 1550 to 1850 instigated a plant-based theology that considered each stone, river and tree as sacred. Braj, then, is reimagined here as a space of possibilities. – *Deepali Dewan, Dan Mishra senior curator, South Asian Art & Culture*



Kamarens Ware Cup, 1750-1700 BCE

Minoan pottery, Crete, Greece

The Minoan civilization flourished on the island of Crete during the Bronze Age from about 3000 to 1000 BC. It was a highly advanced and prosperous culture that featured several important cities, the most famous being Knossos. This sophisticated civilization endured until about 1500 BC, when the volcanic island of Thera (present-day Santorini) exploded, unleashing an environmental catastrophe that overwhelmed most of Crete with flooding and devastating earthquakes. This Kamarens Ware cup survived the environmental disaster because it was likely buried in a grave. – *Paul Denis, assistant curator, Greek, Etruscan, Roman & Byzantine*

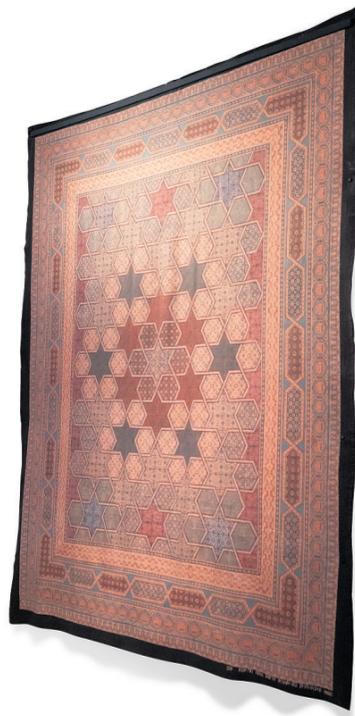


Red Knot Bird, 1986

Arctic

Red Knots, which breed in the Arctic, have been shown to be producing young with reduced body size and bill length, which is affecting their survival. It is believed that unrivalled warming in their Arctic breeding grounds may be causing a body-size reduction in early life, possibly due to malnutrition. These birds are long-distance migrants, flying every year from the Southern hemisphere to the Arctic. The reduced bill size can negatively impact their ability to feed on their preferred food, mollusks, when they reach their southern wintering grounds.

– Oliver Haddrath, technician, Ornithology



Textile Hanging: Ajrakh Masterwork, 2019
designed and printed by Abduljabbar Khatri

Chintz: cotton tabby, block-printed mordants and resist, Dhamadka, Gujarat, India

A delight to the eye, this block-printed masterwork of Islamic design reveals stories of overconsumption of one of the planet's most precious resources: water. The textile, coloured with natural dyes in indigo blue and madder red, required weeks of printing, dyeing and washing. It speaks to the challenges that climate change is bringing to India's textile artisans, particularly those who handcraft Indian chintz, which traditionally relies on large quantities of water. Farmers and artisans in Kutch, Gujarat, have recently undertaken environmentally conscious innovations, including the creation of communal washing tanks and the reintroduction of native rain-fed cotton species that require no irrigation.

– Sarah Fee, senior curator, Global Fashion & Textiles (Asia and Africa)



Varve Clay, 1932

Bayview Avenue, Toronto, Ontario, Canada

Past climates are preserved in the rocks and minerals that make up ancient aqueous sediments. This particular specimen, collected in 1932, is called a varve – a Swedish word that means circular. This varve clay is from the Toronto area and was formed in a glacial lake fed by meltwater at the end of the last glaciation in Ontario, approximately 14,000 years ago. Varves have repeating layers of coarse sand or silt capped with a fine-grained clay layer. The patterns tell us how much sediment and meltwater come off a glacier in a “summer” and “winter,” and are an important tool in environmental reconstruction. They are also a predictor of future behaviour of ice sheets and their response to a warming climate.

– Katherine Dunnell, technician, Earth Sciences



Ice Crawler, 1913
(*Grylloblatta campodeiformis*)

Sulphur Mountain, Banff, Alberta, Canada

Ice crawlers are wingless insects that live in extremely cold environments, such as mountain tops and the margins of glaciers. They were first discovered in 1913 by ROM scientists collecting insects on the summit of Sulphur Mountain in Banff National Park. The fossil record reveals that ice crawlers have been around since the Permian period – a span of more than 250 million years. Present-day ice crawlers dwell in leaf litter or under stones, where the temperature remains within their optimal range of 1 to 4 degrees Celsius. The dependence of ice crawlers on such a very narrow spectrum of low temperatures, combined with their inability to fly (which compromises their ability to quickly colonize new habitats), makes them particularly susceptible to environmental change. With glaciers melting at an unprecedented rate, their preferred habitat is beginning to disappear. According to specialists, some populations in the Sierra Nevada mountains of California – perhaps even entire species – may already be extinct.

Doug Currie, senior curator, Entomology



Dark Fruit-eating Bat, 2014
(*Artibeus obscurus*)

Guyana

Best known for sleeping upside-down and populating caves, bats play a significant role in mitigating climate change. Hundreds of plant species rely on bats to disperse their seeds for natural forest succession. This bat was collected in 2014 as part of a long-term biodiversity monitoring study in Guyana. The research objective is to establish a baseline reference of species diversity and abundance, in order to track changes in the tropical rain-forest environment. The rain forest acts as a carbon sink to offset global climate change.

– Burton Lim, assistant curator, Mammalogy

Nature's Lament, 1976
by Francis Kagige

Silkscreen print, Woodland Studios, Serpent River First Nation, Ontario, Canada

Francis Kagige was an Anishinaabe (Odawa) artist, born in 1929 on Wiikwemkoong Unceded Territory, Manitoulin Island. He was one of the founding members of the Woodland School of painters and went on to influence a younger generation of Anishinaabe painters. Early on, he participated in the exhibition of the Canadian Indigenous artists at Expo '67 in Montreal. For the most part, Kagige's paintings interpreted legends of his people and expressed his love for the creatures of nature. In *Nature's Lament*, it may well be that the artist has depicted himself with a bleeding heart and tears of despair in response to the suffering of the surrounding elements of nature that appear headed for the same fate as the bison skeleton in the lower left corner.

– Arni Brownstone, assistant curator, Plains Indian Culture



Mastodont Subadult Tusks, 1947
(*Mammuth americanum*)

Rodney, Elgin County, Ontario, Canada

The end of the last Ice Age was a time of great climate change. The glaciers that covered the northern part of North America were receding. As land was exposed, first in Southern Ontario around 14,500 years ago and later further north, plants and insects were probably the first recolonizers, with many animals soon to follow. Among the animals to recolonize Ontario was the American mastodont. There was also a new predator on the scene: humans. The combination of the warming climate, fragmentation of habitats and the presence of humans meant that this Ice Age species of elephant went extinct around 10,000 years ago, or possibly a little later. The ROM's specimen of the American mastodont was found by a farmer in October, 1911, in Ontario's Wainfleet Township.

– David Evans, Temerty Chair, Vertebrate Palaeontology; Kevin Seymour, assistant curator, Vertebrate Palaeontology



Nature's cone snail, 1991
(*Conus hirasei*)

Philippines

One of the major consequences of elevated carbon-dioxide levels is the acidification of the ocean waters. When carbon dioxide dissolves in sea water, carbonic acid is formed as a first step. Animals that form shells, notably mollusks (mussels and snails), rely on calcium carbonate to create their shells; this molecule is weakened by the presence of carbonic acid. As a result, the shells of mollusks become fragile in acidic waters and the animals become more vulnerable to predation. This is particularly alarming because so many humans rely on mollusks as a primary food source. Although much more research needs to be carried out to fully appreciate the effects of ocean acidification, it has already been demonstrated that an absence of mollusks in the ocean will lead to cascading impacts on most other marine animals.

– Sebastian Kvist, curator, Invertebrate Zoology



Deity Vessel, Middle Sican Period (900-1100 AD)

Clay, north coast of Peru

Near the end of the first millennium AD, a new religion arose on the north coast of present-day Peru. The region had just endured several intense El Nino episodes that brought torrential rains and warmer coastal waters, ravaging the economy. The new religion offered up a god – the all-powerful Sican Deity, who could control land, sea and sky. Despite worship and sacrifices, a powerful El Nino circa 1100 AD buried the Sican ceremonial centre in mud. Today, global warming threatens to increase the intensity and frequency of these El Nino events. The rise and fall of the Sican Deity is a stark reminder of what happens when hubris collides with nature's might.

– Justin Jennings, senior curator, Latin American Archaeology