*- what would be the most challenging part of conserving an artifact like this? // how to best preserve an artifact like this? (whichever question is easier for them)*  
 *- powershovel - what is this material (on the back hoe area) and what does it tell us about the artifact's use?  
- pointer boat, rail car - what does the material of the artifact tell us about the time or the people who created the artifact?*

1986.0119.001 Cockburn - (Boat)

The most challenging part of conserving an object like the Cockburn is working with the mix of organic and inorganic materials present. The organic material - wood, changes shape and size depending on the humidity and temperature of the room. the inorganic material – metal sheathing does not. The plan you create when working to stabilise such an object for display or storage must accommodate all possible states of both materials.

The materials present tell us a lot about the history of the object. The Cockburn was used in logging operations. The galvanized metal plates would have been easy to find in an industrial setting, and were likely a utilitarian addition to the boat to prevent or repair damage.

1984.1168.001 Bucyrus-Erie (power shovel)

One of the challenges of working with an object like the power shovel is managing the hazards present. The power shovel, like so objects related to industrial technology contains asbestos parts. Conservators must remediate the hazard to render the object safe, but not change the object so much that it loses meaning and connection to its original intention.

NEED TO LOOK AT OBJECT to see material on backhoe

1973.0534.001 Carmichael Brown (Car, combination)

This Carmichael Brown combination car has had a mysterious past. Working without a lot of information about the history of the object presents challenges when making decisions about long term preservation. What if a mark made in the wood is not damage, but an indication of past use. We must consider each preservation problem carefully to not damage evidence.

The condition of the materials from which an object is made can tell us a lot about its life before it was collected and placed in a museum. The wood of this Carmichael brown car is very dry and rotted in several areas, this can confirm the idea that the rail car sat static outside for quite some time after it’s original service life ended.

Helen Sawyer Hogg Observatory telescope base (maybe 1974.0488.001)

After it’s long service life in the dominion observatory, this telescope and its base were in active use in the Ingenium collection as a public education tool for 41 years. Objects that play such an active role in education and narratives require very comprehensive preservation plans. This object has had over 30 conservation interventions since acquisition! It is a challenge for conservators to balance use over such a long period without altering the originality of the object. It requires complex decision making, detailed record keeping, creativity, and a passion for public access.

The materials of this object really speak to the era in manufacturing in which it was created. Before plastics and other modern materials really took hold, brass, wood, and iron, were worked into very beautiful, functional, and durable components of scientific and technological equipment. Innovative components were created from what we would today consider to be very standard materials. And that is one of the wonderful parts of being a conservator, we get to examine the past through the lens of today.

1970.0391.001 Massey (thresher)

The size of this Massey thresher is a challenge for conservators. To assess, clean, or treat the object, a conservator must have access to the upper sections. The materials and condition of this object mean it cannot be climbed safely as it would have during use on a farm. To access the upper thresher a conservator must use a scaffold or lift and reach out with a long tool.

The materials present on this thresher tell us that it was well used during it’s service life. Repairs have been made to the roof using shingle paper, which was likely a cheap and quick repair for a tool that could not be out of service for long when it was needed at harvest time. The shingle paper is also relatively modern compared to the wooden construction, telling us that this machine was probably used for a long time.

bale/hay elevator turned tree elevator, from Lunenburg, NS (no number found yet)

objects such as this elevator are challenging to conserve as they have deteriorated during their use life. Having been used and stored outside in industrial environments, they are often corroded and contain much debris in crevices and openings. While debris can be removed without affecting the object greatly, some methods used to treat corrosion of this kind would permanently alter the objects appearance. Conservators must find other ways to preserve the object, such as modifying the environment in storage so that corrosion is stopped. This is challenging when working in collections which such a vast array of materials like this one. The environment that suits the long term preservation of one material, may be detrimental to another.

1983.0439.001 Canadian Car (trolley car)

There are so many materials present in this trolley car. Which take precedence when it comes to preservation? What materials are present in areas that are inaccessible? What hazards are present? In a large composite object like this one the conservator must survey the condition of all visible materials, then carry out research and investigations to determine what materials may be present in areas we cannot see. Once all of that information has been compiled they must create a preservation plan that balances the needs of all materials present.

Ontario Hydro (alternating current generator) no. 401202/OH 0980

The size and weight of this object are a major challenge for conservators. Its weight is such that it cannot be moved to the lab for treatment, however hydro electric equipment is quite often full of hazardous materials and require significant intervention to make them safe and accessible. Conservators must create treatment plans for objects such as this one, that sometimes involve outside specialists in hazardous material removal, that will be possible to carry out in the storage areas without a lot of tools and equipment.

Many objects related to power generation contain materials that we now know to be very hazardous, like asbestos and pcbs. At the time of use, these materials were innovative and pushed forward advancements in power use and delivery. Today, we recognize and acknowledge the dangers to human health and the environment. The materials present in objects such as this one remind us that museums are not static spaces, but spaces full of change and progress.