Legacy of the Machault
A Collection of 18th-century Artifacts

Catherine Sullivan
Machault
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Le port de Bordeaux. (Courtesy of Stephen R. Davis.)
Research on the *Machault's* artifacts was undertaken by a number of Parks Canada's material culture specialists over many years, and was one of our earliest experiences of relating domestic and military objects to a marine site. Historic documentation about the ship had not prepared anyone for the quantities of virtually identical goods that were to appear in the excavation. Which objects, we asked ourselves, had France supplied to save the colony; what had the soldiers, sailors, naval and military officers carried aboard for their personal comfort during the crossing; would some of the obviously domestic artifacts have been considered ship's accessories; what portion of the men's possessions would have been standard issue; how did quantities of British-made merchandise get loaded onto this French ship in Bordeaux when France and England were actively at war with one another?

Furthermore, the *Machault* was by no means an undisturbed deposit. Rather than lying in successive occupation layers as it usually does on land sites, later material dropped into the sea over the wreck was subject to the same forces, and assumed the same distribution pattern, as the 18th-century material. This intermixing of 18th-century and later material initiated some debate about introduction dates of specific advances in manufacturing technology and about the origins of some artifacts.

This book presents a portion of the *Machault* artifacts, selected because they were very typical or very unusual. I could not have written it but for information generously supplied by my colleagues. Charles Bradley, Douglas Bryce, Stephen Davis, Gérard Gusset, Virginia Myles, Ron Whate, Eileen Woodhead, and Walter Zacharchuk contributed research material summarized here, and much encouragement in preparing it.

The photographic work that enhances the manuscript was done by Rock Chan except only pp. 14, 28, and 47 (far right), by George Vandervlugt. Drawings of objects, sometimes based on little more than small pieces of unique items, were created by Dorothy Kappler Larsen (pp. 15, 34, 35, 73, 88), Susan Laurie-Bourque (pp. 25, 28, 36, 59, 64, 82), Carol Piper (pp. 14, 18, 41), Ron Whate (p. 72), and Derek Ford (p. 19).

Cleaning deposits of various types from delicate surfaces, recovering tiny artifacts from large amorphous concretions, advising on handling and displaying the objects, and preserving and stabilizing the ship's massive hull components all required a great deal of imagination, persistence, and straight hard work by Parks Canada's Conservation Division in Ottawa. Many deserve acknowledgements for their efforts, but those of Lorne Murdock, Thomas Daley, Robert Marion, and Victoria Jenssen are particularly noteworthy.

Walter Zacharchuk directed archaeology on the *Machault*. The project as a whole owes much to him, and I am grateful for his assistance with this manuscript.
By the autumn of 1759, while the Seven Years’ War raged on in Europe, France’s future in Canada was in jeopardy. Believing that the British, who had taken Quebec in September, could be driven out of the city and out of the colony, the governor of New France sent his king urgent requests for men, munitions, and provisions to rally the citizens and retake the capital. In April 1760 a small fleet left Bordeaux for Canada. In the Gulf of St. Lawrence the French learned that a British fleet had preceded them up the St. Lawrence and secured the city. Because they needed to put ashore to bake bread and take on fresh water and meat, the French harboured in Chaleur Bay, near the mission at Restigouche. They sent messengers overland to report to the governor in Montreal.

In the meantime, the French unloaded supplies to feed and clothe their Micmac allies and refugee Acadians at Restigouche, established shore batteries for defence, and were joined by others loyal to the French king. They were finally found in late June by a powerful British squadron, and the battle that followed was inevitably a British victory.

Parks Canada excavated the *Machault*, flagship of the little French fleet, two centuries after it sank. The amount of material recovered was enormous; the types of material recovered were not expected. We had expected to find remnants of the supplies destined for the colony, and little else. However, researchers studying the artifacts believe that the French had cleared from the *Machault* most of the food, munitions, tools, and other supplies that France had sent for the Canadian cause, most of the personal belongings of the sailors, soldiers and officers, and most of the items related to everyday living. Material left behind included the *Machault*'s weaponry, things that had been lost, broken or discarded, spare parts and tools, mess supplies for those who stayed on board up to the ship’s last moments, and — in completely unexpected quantities — cargo that the French could not have used in the land camp or that was privately owned. The greatest portion of this cargo was private venture merchandise, mainly tablewares, much of which appears to have been hastily assembled in Bordeaux and stowed in the lowest part of the *Machault*’s hold.

On the pages that follow, the artifacts from the *Machault* reveal aspects of 18th-century maritime travel, defence at sea, and a variety of daily human activities. Some are specifically maritime related. Others echo objects found on land sites from the French period in Canada and in 18th-century French still-life paintings. Still others are not often recovered from land sites.
although we know that they were commonly used at the time. They show that 18th-century Canadians who could afford to pay were supplied with consumer goods from every part of the globe. They also confirm the greed of some government employees in Canada during the final years of the French regime. These men used public funds to amass private fortunes. The cargo of consumer goods was transported at the king's expense to a colony battered by years of war.

Yet because of the disaster that befell the Machault, we can now present a rich and diverse collection of material goods from one of France's last shipments to its North American colony.
A frigate hove to, drifting slightly in the wind. (Daniel Lescallier, Traité pratique du gréement des vaisseaux et autres bâtiments de mer..., [Paris: Clousier, 1791], Pl. 34.)
The Ship

A 26-gun, three-masted frigate from the 18th century. (Daniel Lescallier, Traité pratique du gréement des vaisseaux et autres bâtiments de mer.... [Paris: Clousier, 1791], Pl. 18.)
The frigate Machault was launched in Bayonne in 1758 as a privateer, and later refitted as a convoy vessel. No plans of the ship survive, and only portions of the ship remain. There is some controversy about the Machault's size, said to have been between 500 and 550 tons, and about the number of guns it carried. However, the Machault would have resembled the vessel illustrated here. Reconstruction of the Machault's midsection suggests that the ship was about 34 metres long at the keel and 39 to 41 metres long on the main deck, 11 metres wide inside the hull, and 5.5 metres high from the bilges to the deck. Below the main deck appears to have been a lower deck located aft and probably a rope deck located forward. The Machault's ribs, floor timbers, and inner and outer planking were made of red oak. Outer planking from the main deck to below the water line averaged nine centimetres thick to reinforce the hull and protect it from enemy cannonballs.
Working the Ship

Pas-Caert van Terra Nova...
Amsterdam, [1670-1705]. (Public Archives Canada, National Map Collection, NMC 24907.)
Standing rigging — stays and shrouds — hold masts upright on sailing vessels. Stays are large-gauge ropes running forward of each mast. The shrouds, networks of ropes that secure the masts from the sides, are arranged in vertical sections. Upper shrouds are connected by deadeyes and lanyards to futtock plates that attach one set of shrouds to a lower set through wooden platforms on the masts. The lowest sets of shrouds are linked by deadeyes and lanyards to massive chains anchored in the vessel’s hull. Taking up the lanyards between pairs of deadeyes tightens the shrouds.
A three-hole elm deadeye and iron chain sections anchored a shroud to the hull. This one measures 21 metres long.
A running block has one or more moveable sheaves (grooved wheels) rotating on axle pins inside a shell made of a single piece of wood. Used much as block and tackle is today — to move heavy objects and work sails and rigging — and to manoeuvre cannon, hundreds of running blocks, set up in pulley systems, were needed to operate the Machault. Most shells have deeply scored troughs at their bases and up their sides to accommodate the rope rings that held the blocks in position.

Running blocks used in the top tackle were tightly bound with iron strapping; a hook on the strap anchored the block to a mast cap. Top tackle blocks raised and lowered the upper sections of masts.

Two views of a single-sheave running block in the shape most commonly found on the Machault
Running Blocks

Double block

Single-sheave top tackle block and its iron binding strap with hook

Machault
Each of these running blocks was designed for a special purpose. The cheek block would have been lashed top and bottom to an upper mast and used to work one of the auxiliary stay sails. The mast truck, originally with two sheaves, encircled an upper mast; its sheaves were threaded with signal halyards to raise and lower signalling pennants for ship-to-ship or ship-to-shore communication. The single-shelled long tackle block with two different-sized sheaves lies flatter than conventional double blocks, and minimizes the risk of ropes tangling. Working sails and moving cargo were typical uses for long tackle blocks. Kevels are large stationary cleats located along a ship's rails or around the mainmast to secure or tie off large-gauge ropes.
Kevel block, 59.9 cm long

Long tackle block, sometimes called a fiddle block, set up as a pulley
On ships, cleats are used mainly as belaying points to tie off ropes, or as fairleads to keep ropes from tangling and on their proper courses. However, the triangular stop cleat was probably one of several nailed around a mast or bowsprit to hold wrapped rope in place. The four deck cleats were probably bolted to the deck as fairleads, although the metal deck cleat could have been used instead for tying off ropes. The hollow base of the one-piece shroud cleat fitted over a shroud and was lashed to it, providing a belaying point for the lines working the sails. The range cleat could be fixed horizontally or vertically to a mast, deck, or yard as a belaying point.

Metal deck cleat

Three wooden deck cleats
Cleats

Wooden stop cleat

Wooden range cleat

Wooden shroud cleat
An 18th-century navigator plotting a course across open seas without landmarks for reference points relied on a variety of instruments and charts. However, navigation was not a precise science in 1760. The navigator determined latitude by measuring the angle between the horizon and a particular point in the heavens and then converting that reading into degrees of latitude. From such bearings and careful records of direction and speed he calculated — as accurately as his equipment and clear skies permitted — the ship's position and the distance it had travelled. Navigational instruments recovered from the Machault were part of a back staff (for taking an indirect reading of the angle between the horizon and the sun), a pair of draughting dividers, what may be a compass box, a slate pencil, and a slate tablet fragment.

A turned wooden circular box, possibly a compass box, missing its screw-on lid

A pair of cast-brass divider arms; their steel pointers have rusted away
Sailmakers' Tools. Pumps

A wooden ship under sail needed constant repair and maintenance to keep it seaworthy. Sailmakers, caulkers, and carpenters were responsible for inspecting and restoring the sails and rigging, and the ship's hull and other wooden components, including its wooden provision casks. A sailmaker might have used these awl-like tools, now missing their points, to pierce holes around a sail so he could stitch a reinforcing cord to the sail's edges. He wore the flat brass disc, attached by its three ears to a strip of leather around his hand, as a thimble for pushing large needles through heavy fabric.

The main pumps on a wooden frigate were stationary features located beside the mainmast, extending the full height of the hull, and giving onto a deck where the water could escape into the sea. Wooden ships could not stay afloat without being pumped out several times a day. Water constantly leaked in through the hull even in fair weather, and in heavy seas, waves breaking over the decks would keep the hold awash.

The Machault originally had four pumps around its mainmast, but only three complete main pumps were found, as well as numerous extra foot valves and plungers to replace worn-out parts. The pumps operated on a suction system, raising water out of the hold in two stages; such pumps were in very common use at that period in ships and water wells.

Sailmaker's palm

Wooden awl handles: one octagonal-sided, the other "English-style"

Wooden piston with its leather gasket
Large gaps left between a wooden ship's planking allowed for swelling as the wood slowly soaked up sea water. These spaces were filled with a soft, sticky caulking material (animal hair or vegetable fibres mixed with pitch), driven deeply into the seam by a sharp caulking iron hit with a mallet; a single- or multiple-crease caulking iron compacted the material and gave a finished edge to the outer face of the seam.

Caulking irons

Wooden caulking mallet

These hardwood caulking-mallet heads were reinforced by metal bands at their ends and by metal bolts on both sides of each handle.

Machault
Cleaning

Keeping the ship clean and ready for action required frequent sweeping, washing, and scrubbing. Painting wood, metal, and leather with a preserving fluid, such as blacking, helped to keep materials exposed to the elements from deteriorating.

*Staved wooden bucket. (After Jean Boudriot, *Le vaisseau de 74 canons* [Grenoble: Editions des Quatre Seigneurs, 1974-77], Vol. 2, Pl. 33.)*

*The head of a hair-bristle blacking brush with a woven cord tie*

*Myrtle broom bound with split willow*
Le port de Bordeaux. (Courtesy of Stephen R. Davis.)
Food, ammunition, pitch and nails were found on the Machault in oak barrels of different sizes. A cask that once held musket shot has been drawn to show its staved construction, with two sets of seven willow-bound wooden hoops fixed to the barrel with iron nails. When the tiny keg shown in pieces here was full of small lead shot, one man would not have been able to carry it.

Another container type, a rectangular crate, was massive, judging by the size of the remaining piece, either its top or its bottom. The crate had been nailed shut and further secured with two iron straps.

Some types of merchandise were not shipped in wooden containers, but were wrapped as bales, soft packages bound with cord or metal hoops. The lead baling seal was folded over a binding, and its edges then crimped together. Its presence on a bale guaranteed that the package had not been tampered with. This seal has been impressed with the name of the company Joseph Rouffio Freres. The Huguenot merchant family who guaranteed the package was based in Montauban, in southwestern France, and had a working branch of their family in Canada during the French regime.
Shipping Containers

Detail from Le port de Bordeaux. (Courtesy of Stephen R. Davis.)

One-piece oak crate lid, 130.6 cm by 53.5 cm by 2.2 cm

Lead baling seal consisting of two discs joined by a narrow lead strip, disc diameters 2.5 cm

Machault
Not reliable for the exacting measurements required for coins or raw drugs, these weights were most likely used to determine bulk measurements of provisions or trade goods. Size markings are impressed on their tops, and impressed on their bases are what may be trade control marks for the harbours in which these weights were considered legal.

Encyclopédie ... Recueil de planches... Sect. 2, Pt. 1, "Balancier," Pl. 1.

A selection of solid cast-lead merchant or common weights measuring between two onces and ten livres
Made of very thin, sheet-copper alloy, this jetton was one of a set of counters that would have been used on a counting board for doing simple tallies or such complex calculations as converting foreign currency. It was made for the French market probably by Johann Jacob Dietzel, a prominent Nuremberg medallist.

Jetton, circa 2 cm in diameter, stamped on one side with the mature bust of Louis XV of France and Navarre. The other side bears a heraldic lion, the maker's initials, JJD, and the words RE-CHE PFENNIG, signifying that the piece is not a coin.
Private in the French marines, 1755. (Jean Boudriot collection.)
Ships crossing the Atlantic carried large mounted guns for protecting their cargos and for signalling when visibility was poor. When the *Machault* was built it was pierced for 26 guns, but may have been carrying as many as 32 guns when it set sail for Canada in 1760. Three 12-livre cast-iron cannons excavated from the ship measure approximately three metres in length and weigh about 1364 kilograms each. In a battle at sea, cannons were used for bombarding enemy ships' hulls with solid iron cannonballs, or for firing anti-personnel projectiles or those designed to destroy enemy ships' sails and rigging.

All of the *Machault's* cannons would have been mounted at gun positions on wooden carriages of the type shown here. Iron rings and hooks, running blocks, and rope cables were necessary to minimize the recoil caused by firing the guns. Two cannon carriage parts were recovered from the *Machault*: one of the iron capsquares that fit over a cannon's trunnions to secure it to its carriage, and an iron reinforcing band for a carriage truck, or wheel.
Ship's ordnance on the *Machault* included swivel guns set in the forecastle railings on yoke-like swivels. Swivel guns look like miniature cannons. They could be swung about to fire small iron or lead balls on enemies attempting to board the ship or even on those who had gained the decks. Both of the identical cast-iron swivel guns recovered from the ship are 92 centimetres long.

A swivel gun could be mounted on a stand so that gun and stand were portable and could be installed at different locations around a ship, including fighting platforms partway up the masts. The drawing shows a swivel gun mounted on a portable stand.

*Swivel gun and portable stand. (After Jean Boudriot, *Le vaisseau de 74 canons* [Grenoble: Editions des Quatre Seigneurs, 1974-77], Vol. 2, Fig. 203.)*

*Swivel gun from the Machault*
Each of Machault's cannons was maintained, loaded, and fired by its own crew of men. Cannons, like muskets and other smooth-bore guns of the day, were loaded from the muzzle. A measured amount of black powder was fed into the cannon barrel either with a scoop or in a canvas bag and rammed into place in the breech. Wadding was rammed on top of the powder, followed by the projectile. If a cannonball was used, more wadding kept it from rolling out of the barrel. Priming powder poured into the cannon's touchhole and into an open channel on the back of the cannon guided the flame into the touchhole to set off the main powder charge in the breech.

Extremely unreliable, black powder had to be stored and handled with materials that would not easily spark. Powder magazines were usually reinforced, and scoops, ramrods, and powder barrels were made of wood and copper because iron was liable to spark and set the powder off accidentally.

Canvas bag
Wood and copper powder ladle

Pouched powder bucket, leather and wood with copper nails. (After Jean Boudriot, Le vaisseau de 74 canons [Grenoble: Editions des Quatre Seigneurs, 1974-77], Vol. 2, Fig. 203.)
At sea, solid cast-iron cannonballs were used chiefly to blast holes in the hulls of enemy ships. Sometimes they were heated red-hot in the hope that they would set fire to wooden decks or blow up powder magazines. More than 500 cannonballs were recovered from the Machault. Most are French, and several are marked with fleur-de-lys; two cannonballs bear broad arrows, indicating British government ownership, and may have struck the Machault before it sank. Another type of round-shot ammunition from the Machault is small, solid iron or lead balls. When groups of these balls were packed together in canvas bags or tin cannisters and fired from a cannon, they fell on the enemy in a deadly shower.

The hand grenade is a hollow iron ball filled with gunpowder, and ignited by a wooden fuse. Grenades could be tossed from the decks, rigging, or platforms partway up the masts.

Iron hand grenade with a wooden fuse

French 12-livre cannonball

English 12-pound cannonball

Ammunition

Machault

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Ammunition

These strangely shaped iron projectiles were designed to be fired from cannons and bring down the rigging and sails of enemy ships. Bar shot is a solid iron bar with solid cylindrical ends, loaded and fired as cannonballs were. Star and link shot were bound with twine and packed in canvas bags that burned away when the cannon was fired, freeing the heavy pieces to open and rotate in flight. Spinning metal slashed through a ship's rigging, breaking spars, ripping sails, and tearing ropes from their fastenings.
Hollow cast-iron mortar bombs were filled with gunpowder that exploded when ignited by a wooden fuse. The bombs were fired on high trajectories from short, large-bore weapons known as mortars. A three-masted vessel like the Machault could not fire mortars, and thus the 58 bombs recovered from the ship had to be part of the munitions shipment bound for Canada.
In addition to large mounted guns, ships carried arsenals of hand-held or portable weapons for sailors to use when capturing another vessel or when their own vessel was attacked. Firearms in the Machault's arsenal include two varieties of muskets, a blunderbuss (not shown), and the first standard pistols used by the French cavalry and obviously used on French ships as well: two examples have LE MACHAULT engraved in their stocks.

Edged weapons were also an important part of the arsenal — swords for hand-to-hand combat and axes for tearing down rigging and smashing holes in planking when sailors stormed another ship. The arsenal sword here, one of several similar weapons found on the ship, has an octagonal bone grip and a cast-brass knuckle guard with wreathed-head decoration, and once had a sabre blade. Except for the iron blade, the sturdy sword was made in non-corrosive materials well-suited for marine use. It was probably carried thrust through a sailor's sash or belt since its scabbard has no fittings to attach it to his belt. The boarding axe is made of wrought iron.

French small arms from the Machault's arsenal (top to bottom): musket, model 1733-34 cavalry pistol, boarding axe, and boarding sabre.

Machault
Several examples of this type of smooth-bore musket found on the Machault belonged to the arsenal: the only surviving butt stock is incised with the ship's name. It was originally about 149 centimetres long and of the same 69 calibre as French military muskets of the day although it was not a military model. A leather strap on the gun permitted a sailor to sling it over his shoulder and use both hands when climbing into firing position on a mast. This gun's furniture — its brass fittings — have survived underwater rather well, but the iron gun barrel, which would have sat in a channel on the top of the walnut stock, and the iron flintlock mechanism have rusted away.
The Long Land Pattern musket, known familiarly as the “Brown Bess,” was the standard British infantry firearm of the 18th century. This view shows the wooden butt stock fitted with its cast-brass butt plate, wrist escutcheon, and trigger guard. Markings on the wrist escutcheon tell us that this particular weapon originally belonged to Colonel William Shirley’s 50th Regiment of Foot. The musket may have been taken when the American colonial regiment was defeated at Fort Oswego on the south shore of Lake Ontario in 1756, and then re-issued by the French for use on board the *Machault*.
The à la mousquetaire sword was standard issue for various branches of the French military from the late 17th through the mid-18th century, although by that time the sword was not the soldier's primary fighting weapon. Both the knuckle guard and pommel are made of cast brass, and the grip is a wooden core wrapped with twisted brass wire. The missing blade would have been made of steel. Not as durable as the arsenal sabre, the few à la mousquetaire swords found on the ship had probably been discarded by the troops being transported to Canada.
Tools and Equipment

Encyclopédie ... Recueil de planches...., Sect. 2, Pt. 1, "Charpenterie," Pl. 1.

Machault
Woodworking tools recovered from the Machault ranged from splitting wedges, axes, and saws for rough woodworking through shaping tools such as carpenter’s drawknives, turning chisels, drills, and hammers to planes for finishing work and a ruler/bevel for measuring.

Top of a forged-iron cooper’s adze with a secondary working face

Forged iron or steel saw set, without its handle, used for setting the angles of saw blade teeth

Forged strap-iron single-bitted axe head with a broken wooden handle

Carved one-piece wooden mallet
Two centuries in the Restigouche estuary have decomposed most of the iron parts of woodworking tools, but a variety of wooden handles has survived in good condition. A good range of wood-shaping tools is represented: drawknives, turning chisels, augers, and gimlets, and a selection of unidentified pushing or pulling tools. Additionally, wooden handles from hammers, an iron auger bit, an iron gouge blade, some fragmentary iron maws with wooden handles, and some unidentified tool blades were recovered from the Machault.

Wooden handle grip and handle plate from single-handed saws

Wood and copper-alloy carpenter's ruler/bevel marked in 1/4 pouce, 1/2 pouce, pouce, and pied

Wooden handles from shaping tools

Encyclopédie ... Recueil de planches..., Sect. 3, "Ébénisterie...", Pl. 1.
In smoothing a rough board, a carpenter might start with a jack plane. He used compass planes for smoothing concave surfaces; this one may have been used for both general carpentry and for coopering. With the moulding plane he could make quarter-round or quarter-oval grooves. With the tongue plane and a matching groove plane he could make joints that held one board flush with another. Unnailed, unglued tongue-and-groove joints allow wood to expand and contract without splitting.
Strap iron and bars of wrought iron found in quantity on the Machault may have been part of the ship’s stores, but were more likely intended for the colony. A blacksmith cannot operate without a good stock of refined iron, and the St Maurice foundry near Trois-Rivieres produced less iron than the colony needed. Refining of all types of base metals — copper and its alloys, all the grey metals, and iron — was practically non-existent in North America during the 18th century, the colonies relying on imported European metals. Plates, cooking pots, utensils, candleholders, strapping, tools, and other metal objects, even toys, were recycled when they broke or wore out. As a result, such objects are not often recovered in land excavations.

The knife grinder, Les Cris de Paris. (Fortress of Louisbourg National Historic Park, Parks Canada.)

This sandstone disc, with a slightly convex grinding surface, is a sharpening stone pre-form. It would have been finished by its owner to fit the type of trough in which he wanted to mount it.
All these metalworking tools were used to hold and manipulate hot metal, and except for the vice that was mounted against a bench, all were held in the hand. On board the Machault a sailor with some blacksmithing skills would have been responsible for emergency repairs to the ship's metal fittings, firearms and heavy ordnance. He could also have repaired objects like the brass candleholder found on the ship.

Wrought-iron or steel leg vice; its bench bridle, spring, and foot are missing

Chisel made of iron

Iron tongs, badly corroded

Self-handled punch for making square holes
Encyclopédie ... Recueil de planches....., Sect. 8, "Serrurier," Pl. 1.
This is the most complete of four spearheads recovered from the *Machault*. It once had a long handle and was used like a harpoon to take small whales, dolphins, eels, and large fish. A long coil of rope attached to its handle could be played out or pulled in to retrieve both harpoon and catch.

Fishing with nets required lead weights to sink the net, and floats, possibly cork, small watertight casks, or animal bladders, to hold up its edges. A woven rope bag filled with corks was found on the ship and may have been used as a float.

*Lead net weight, 12.3 cm long*

*Seven-pronged iron spearhead*
Fishing

Encyclopédie ... Recueil de planches..., Sect. 7, "Pêches...,"
Pl. 4.
Food and Drink

Bricks recovered from the *Machault*, several still mortared together, were likely from a box-like galley structure located in the bow just aft of the foremast. In most galleys of the period, a large cauldron set over a firebox was an integral part of the ship's structure. Some billets of wood found on the ship may have been fuel for the galley.

Cooking pots made of coarse earthenware were commonplace in the 18th century. There were several dozen in the *Machault*'s cargo. Coarse earthenware pots did not leak, conducted heat well, and were cheap. However, the pots became brittle with use and easily broken, and fragments are often found on French colonial sites dating from the first half of the 17th century through the 18th century.

Round-bottomed cooking pots can be set on iron tripods in the coals of fireplaces or placed directly into stovetop openings to stew or fricassee salted meats — beef or pork, usually — with vegetables. They were designed to be covered, but we did not find any corresponding lids. This style is only one of several shapes of earthenware cooking pots that French colonial consumers could buy in the 18th century. At least two other types were recovered from the *Machault*: a green-glazed cooking pot with three legs, and a single-handled round-bottomed undecorated pot.

![Large and small two-handled cooking pots in undecorated, partly glazed coarse earthenware, made in France](image-url)
Sheet-metal cooking pots were lightweight, durable, and efficient, which made them highly desirable even though they were considerably more expensive than ceramic cooking vessels. They were very popular trade items with the North American Indians and have been found on Indian burial sites. The pots from the Machault are of two types: large and small brass pots in sizes that stack into each other, and large copper pots with heavy covers tinned on the inside. On both types bail handles permitted them to be suspended over a fire.

Cooking utensils such as these were typical of the equipment in 18th-century galleys. A cook would strain foods with the colander, use the skewer to hold meat together while it cooked, and remove fats congealing on soups and stews with the skimmer. These utensils have not changed much even to the present day although modern ones are more likely to be aluminum or stainless steel, metals unknown in the 18th century.
Storing and Serving Liquids

French-made green-glazed coarse earthenware jugs were probably among the cheapest ceramic storage and serving vessels available to 18th-century French colonials. The group of five shows the form's typical mid-century profile and a selection of the sizes in which they were made. While they probably had many uses, the largest might have served as pails to carry liquids to and from laundries, dairies, bedrooms, or elsewhere in homes. The smallest are about the size of small mugs, and the middle sizes are very close to the standard beer and wine measures used in taverns in New France for serving the popular alcoholic beverages of the time: wine, beer, and rum.

More elegant than the coarse earthenware jugs is a tin-glazed earthenware pitcher, possibly used aboard the Machault. Its monochrome yellow-orange decoration is quite exceptional on tin-glazed earthenwares from North American sites.

Green-glazed coarse earthenware pitchers made in Saintonge
The two English bottles may have been part of the officers' mess supplies or of a venture cargo. Dark green glass “wine” bottles were commonly used in Europe and North America by wine, spirits, and mineral-water merchants as commercial containers, and by private individuals as containers for decanting, storing, and serving beverages bought in barrels or made at home. The dark green colour was popularly thought to protect the contents from harmful effects of light. A few examples of the French version of the dark green glass “wine” bottle were also found.

Two bidons from the Machault were serving vessels for the sailors. *Bidons* have capacities of about five litres each and were used to deliver daily wine rations to mess crews of between four and seven men.

*Staved wooden bidon with rope handles. (After Jean Boudriet, *Le vaisseau de 74 canons [Grenoble: Editions des Quatre Seigneurs, 1974-77], Vol. 2, Fig. 154.)*

*English dark green glass “wine” bottles*

*French-made tin-glazed earthenware pitcher, 23 cm tall, possibly made in Montauban*
Unglazed coarse earthenware storage jars in many sizes have been widely manufactured for centuries in Mediterranean countries. This one could have been used as an alternative to a wooden keg of comparable size for storing and transporting all sorts of foods and liquids. Its opening is large enough for a person to scoop out its contents by hand or with a cup, but at only 49 centimetres tall, it is probably smaller than jars used on 18th-century ships to hold supplies of drinking water.

The corked bottle neck is from one of almost 200 English “wine” bottles that appear to have been filled and sealed in England. The cork stopper swells slightly over the bottle lip and has been secured with a strand of copper-alloy wire.

Several French-made glass bottles and jars suitable for foods, beverages, and a variety of other products were also found on the Machault. An oak barrel recovered intact still contained salt pork; traces of a knife in the pork suggest that the barrel had been opened. Barrels that contained liquids were tapped or drained with spigots.
Cups and Drinking Glasses

Only the stemmed glasses and the pewter beaker are drinking vessels; loving cups were used mainly as ornaments, sometimes inscribed to commemorate happy events. Although the Nottingham stoneware it is made of is appropriate for the period of the Machault, loving cups are not commonly found on 18th-century North American sites.

Eighteenth-century pewter beakers are also rare today although some survive as communion cups. Metal beakers, cups without handles, are a very ancient form of drinking vessel. This example's plain, simple lines are pleasing, and when the cup was new, its surface would have had a polished, silvery sheen.

The hollow-stemmed Continental bouton carré wineglass on the left is one of several hundred from the Machault, obviously cargo items. The other wineglass, an English lead-glass piece with a long stem and graceful, flaring bowl, was a British style in great demand on both sides of the Atlantic during the Seven Years' War.

Not illustrated are an English-made opaque-twist stemware glass and a Continental crizzled-glass tumbler of a type very commonly found on Canadian sites from the French period.
Decorated Coarse Earthenware

Utilitarian coarse earthenware vessels are often plain, but the Machault cargo also contained a variety of decorated pieces that were probably intended for serving food as well as for preparing it. These examples have zigzags, circles, dots, and stylized animals and plants — all popular elements — painted on white slip backgrounds. Similar embellishments appear on coarse earthenware bowls and plates alike in the Machault collection. Other coarse earthenware vessels also feature incised decoration. Almost 500 decorated French coarse earthenware bowls and plates were found on the Machault, many still stacked in piles in the hold.
Decorated Coarse Earthenware
Small bowls with brims and porringer with lugs, or handles, were commonly used individual eating vessels for the broths and gruels that made up a good part of everyday diet; bowls without brims could be used for mixing or serving.

The Machault's cargo included several types of bowls; other types of bowls were probably used on the ship. The selection is amazingly varied: Continental, French, English, and Chinese, some very sturdy and practical, others more decorative and refined.

Five sizes of tin-glazed earthenware bowls suggest various uses: the smallest as handleless drinking cups; mid-range sizes as individual eating bowls or slop bowls on tea tables; and the largest as tureens or punch bowls. The wooden gamelle, on the other hand, had a specialized use on the ship as a communal mess tub from which four to seven men would have served themselves.

Also found on the site but not shown here are a cargo of English soft-paste porcelain bowls, a coarse earthenware porringer with moulded lugs, and a small dark blue glass bowl with gilded lines encircling its flaring rim.

*Staved wooden mess tub, or gamelle. (After Jean Boudriot, Le vaisseau de 74 canons [Grenoble: Editions des Quatre Seigneurs, 1974-77], Vol. 2, Fig. 154.)*

*Small English mixing bowl of plain white salt-glazed stoneware*

*Cast-pewter porringer with two handles*
Chinese export porcelain bowl, suitable for punches, with raised, moulded plum blossoms alternating with cartouches of painted floral sprays in the famille rose palette.

Plain French green-glazed coarse earthenware eating bowl.

Four of the five sizes of tin-glazed earthenware bowls made in England in a Chinese shape and decorated with a blue and red dragon pattern.
Bowls

Chinese export porcelain bowls with blue-painted floral landscapes

Chinese export porcelain bowl, possibly for salads, with alternating blue-painted floral bouquets and clumps of lettuce
These items could be used as individual eating dishes or as serving pieces. Most are good quality tablewares although rather subdued for the rococo period. A dot-pattern Saintonge plate from southwestern France, sherds of a manganese-brown-glazed Ligurian piece from northwestern Italy, a cargo of lower quality coarse earthenware plates, and some fragments of wooden plates were also recovered from the Machault.

Chinese export porcelain dinner plate in famille rose colours, circa 1755-58

French faience plate with a mono-chrome blue border and centre motif

Chinese export porcelain soup plate with a blue landscape and border

Fragment from a French faience oval platter with a blue lambrequin border
The European fashion for taking tea was gradually spreading to all social classes during the second half of the 18th century, and tea drinkers aspired to having their tables graced with porcelain and silver. However, tea was still a costly item, kept under lock and key, and made and served in small vessels. A basic tea service of the period required a teapot, a hot water or milk pitcher, a sugar bowl, a slop bowl, tea bowls, and saucers. Slop bowls received the cold dregs of tea from cups and teapots, and the water used to rinse them. It was customary for guests to place their cups upside down in the saucers with the teaspoons balanced across the bases to signal that they had had enough tea.

Although matching tea services were available in the middle of the 18th century, the Machault’s cargo of blue-painted Chinese export porcelain shows that buyers sometimes would have had to make up services from individual items with different patterns.

The cargo also included English soft-paste porcelain teawares made at the Bow factory. Unfortunately, they were badly damaged and could not be photographed. Also present were a small number of exquisitely delicate Chinese eggshell porcelain tea bowls and saucers, some painted with famille rose colours, some with gold.

Coffee and hot chocolate were drunk from handled cups, larger and more cylindrical than tea bowls, and with larger saucers too. The Chinese export porcelain coffee cups and saucers shown here differ from each other only in their painted decorations.

Two coffee or chocolate cups and saucers, one set with blue-painted decoration and the other set with a brown glaze (Batavian) decoration and famille rose reserves
Chinese eggshell-porcelain tea bowl and saucer with painted decoration

Blue-painted Chinese porcelain teawares and a cast- pewter spoon with a rococo pattern
Chinese export porcelains in the Machault collection are decorated with underglaze blue and overglaze Imari-style and famille rose colours. Decorations in all three colour palettes reflect the French partiality at the time for floral and landscape themes; only one scene includes human figures. Chinese porcelain factories operated on an assembly-line system in which several hands painted different elements of the same pattern, which accounts for the variations in colour and in pattern details in the grape-and-trellis bowls. Overglaze decorations were more carefully executed than underglaze decorations, and hence overglaze-decorated porcelains were more expensive.
Painted Porcelain

Detail of a figure from a blue-painted garden

Bowls with blue grape-and-trellis patterns

Blue-painted landscape on a large Chinese porcelain bowl
Painted Porcelain

Decoration in famille rose colours on a fluted bowl

Landscape in the famille rose palette

Floral pattern in the famille rose palette

Floral landscape in the famille rose palette
When English potters began to make porcelains in the mid-18th century, they often decorated them with patterns copied from Chinese prototypes, patterns like the blue-painted dragons found on two sizes of small bowls made at the Bow factory in about 1755. The dragon motif was also reproduced on English tin-glazed earthenware bowls found on the Machault. The English also copied Continental European porcelain patterns. The Immortelle pattern on teapots in the Machault's cargo was produced at the Bow factory between 1755 and 1759; two versions of this long-lived pattern are still produced today by the Royal Copenhagen porcelain factory of Denmark.
Venison & Claret, or Sr Hump' Hauoch Bar' of Glutton Hall ... 1772. (Courtesy of the Colonial Williamsburg Foundation, Williamsburg, Virginia.)
Buckles were common clothing fasteners in the 18th century. Shoe, knee, and garter buckles were found on the Machault, most represented by buckle frames. The buckles once had backpieces that attached them to garments. Buckles usually outlived the garments they fastened, and the backpieces permitted them to be easily transferred to other garments.

Shoe buckles were worn by both men and women; a variety of decorative motifs can be seen here, although those in the second row were probably the most fashionable. In most cases only the shoe buckle frame has survived, but two are complete with the backpieces that attached them to the shoes.

Knee buckles, used to fasten men's breeches below the knee, are smaller than shoe buckles. Smaller still is the garter buckle used to fasten the strap that held up a man's or woman's stocking. Its T-shaped flange hooked into a buttonhole on the garter, and a tongue, which is missing, kept the strap tight on the leg.

Seven pewter or brass shoe buckles

Knee buckle frames, two in brass, one in pewter
Clothing Fasteners

All of these practical types of clothing fasteners are still in use today although the 18th-century examples here display decorative elements fashionable in their day. For example, the stamped sheet-brass clasp has a serrated edge and cut-out, heart-shaped centre. Its two prongs grasped one side of a heavy outer coat or cloak and the hook caught a corresponding loop on the other side of the garment.

Sleeve links served the same purpose as modern-day cufflinks, but in the 18th century were more likely used only by men of means. These examples are made of silver, gilt brass, and facetted glass.

French silver garter buckle, stamped with a fleur-de-lys and the name ACHARD, 2.7 cm by 2.5 cm

Wooden toggle

Brass clasp

Sleeve links
Clothing Fasteners

Punched leather discs, extremely simple and crudely made, contrast sharply with decorative buttons made by crimping the edges of stamped sheet-brass shells over plain wooden button moulds. Alternatively, wooden button moulds could be the bases of intricately wrapped thread buttons. A fourth variety of button shown here is made of brass or pewter, cast in two pieces, and soldered together. These 13 buttons are fairly typical of the variety available at the period to fasten men's, rather than women's, clothing.

Encyclopédie ... Recueil de planches..., Sect. 8, "Tailleur...,” Pl. 1.
Clothing Fasteners

Plain leather and cast-metal buttons

Stamped metal buttons
Almost 500 unworn, virtually identical men's shoes were part of the Machault's cargo. They may have been intended for military use, but similar shoes were the everyday footwear of most of the civilian population as well. Fashioned to be closed with buckles, they are well-made, sturdy shoes, hand stitched with welted soles, their leather heels attached with wooden pegs. In welted construction the shoe's upper is sewn to a narrow leather welt and the welt is then stitched to an outer sole. This makes a neat, sturdy attachment, common on 18th-century footwear and still used on better quality shoes today.

These shoes were made to be worn on either foot, and the owner could switch his left and right shoes to make the pair last longer.

Another way to prolong a shoe's life was to nail a metal plate to its heel. This heel plate, decorated with a cut-out heart, was probably from a high-heeled gentleman's or lady's shoe.

Examples of men's turnshoes were also found. Turnshoe pieces are sewn together without a welt to produce a lightweight shoe worn mainly indoors for dancing, fencing, and other leisure activities.
Footwear

Leather components of a welted shoe: (top row) two shoe quarters, toe and heel reinforcements; (bottom row) the vamp, an inner sole, an outer sole with attached heel, the welt.
Its characteristic warmth and water resistance have traditionally made wool popular for both woven and knitted clothing. Many fragments of hand-knit woollens were found on the Machault; however, only four could be identified. These three have all been knit in stocking stitch using two-ply yarn on four needles, and all have been darned rather crudely, possibly by the men who owned them. Although they are not a pair, both stockings were made to reach almost to the wearers' knees and both have double bands of garter stitch at their tops.

The tuque, knit in a long, seamless tube closed at both ends, was folded back on itself for a double layer of warmth on the wearer's head. By increasing the number of stitches in the middle of the tube, the knitter created ear pockets in the finished hat. Also recovered was a hand-knit mitten.
Textiles recovered from the Machault represent a variety of woven fabrics available during the 18th century, but these three alone are complete enough to reveal their original shapes. Wool, silk, cotton, and linen have lost their colours, and all look various shades of mottled brown. The silk ribbon had been wound and secured with a brass pin. The twill tape was wound around a flat wooden card and held with a brass pin similar to the one that secured the ribbon. The bow, a folded silk ribbon tied in the centre with a smaller piece of silk, might have adorned a man’s three-cornered hat. Other textiles from the Machault are as varied as coarsely woven burlap and fancy silk dress fabric.
The pin seller, Les Cris de Paris.
(Fortress of Louisbourg National Historic Park, Parks Canada.)
Grooming and Health

Fashionable ladies and gentlemen had worn wigs since the early 17th century, but at this period the hairdos were particularly elaborate. Abundant curls and ringlets on wigs were made with heated iron tongs and held in place with combs. These bone and horn combs were treated to resemble tortoiseshell, a more expensive material than bone or horn.

Horn and bone hair combs

Encyclopédie ... Recueil de planches..., Sect. 7, “Perruquier,” Pl. 1.

Wrought-iron curling tongs
This very small collection hints at some of the complexities of keeping clean and healthy in the 18th century. The mortar and pestle might have been used to pulverize ingredients for ointments, powders, and syrups. Several fragments of glass vials in which medicines were dispensed were also found. The syringe was used for irrigating a patient’s bladder, part of the treatment then for such illnesses as venereal diseases.

Few personal grooming items were found on the Machault: fine-toothed double-edged combs useful for removing lice from human hair; a barber’s basin with a wide brim and a semi-circular opening that tucked under the shaver’s chin; and several boxwood sprinklers, probably stoppers for bottles of cologne or other toilet requisites.
Grooming and Health

Encyclopédie ... Recueil de planches..., Sect. 7, "Perruquier, Barbier...," Pl. 1.

Boxwood comb

Wooden sprinklers or squirt tops

Green-glazed coarse earthenware barber's basin of French manufacture

Machault
Gaming, Drinking and Smoking

The wooden disc is a counter or marker that could have been used in a number of different games. Sailors were as notorious for gambling during long sea voyages as they were for gambling during brief furloughs ashore.

A glass pocket flask for carrying a small supply of liquor is not illustrated. Similar small bottles are found on other French colonial sites in North America.

Small metal tobacco boxes were popular in the 18th century when smoking had become a common habit. Many tobacco boxes originated in the Netherlands, as this one did. It is covered with engravings and biblical texts (Luke 2: 44-46 and Luke 7: 2-4) in Dutch; the top depicts Christ in the temple and the bottom, a supplicant approaching Jesus. On the sides of the box someone has added a cryptic message loosely translated as "I will hold fast to my resolution to stop indulging in sweets, if not today, tomorrow."

Wooden gaming piece

Engraved brass and copper tobacco box
In North America and northern Europe, people commonly smoked their tobacco in pipes, following the practice of native North Americans. Two types of moulded, unglazed clay smoking pipes are shown here, both very typical of the late 18th century.

Long, thin-stemmed one-piece pipes with upright cylindrical bowls are very often found on our sites. Tippet pipes from the Machault confirm how easily one-piece pipes were broken: the illustrated example, missing a large portion of its stem, is nevertheless the most complete of a cargo of pipes.

Teeth marks on the TD pipe show that it was used even after the stem had become so short that smoking would have been uncomfortably hot. Its owner may have thrown it away when the bowl broke, or lost it when it fell from his hat, the safest place for an active man to carry so fragile an item. The effigy pipes in the lower rows are component pipes to which a buyer added his (or her) own reed or other type of stem. Component pipes are not often found on 18th-century Canadian sites although they were commonly made in the American colonies.
Nearly everyone in the 18th century carried his or her own personal knife for eating with although it had any number of other general uses as well. Wood, bone, and horn handles from folding knives show the varieties of handle styles and materials that were available.

Neither the medallion nor the ring are carefully crafted or expensive items. The medallion is stamped with Christian symbols and was once attached to a chain, perhaps a rosary.

Rings like this one are thought to have been trade goods because they are most often found on early French contact sites. They are frequently referred to as Jesuit rings and are quite individual in their decoration: this one is engraved with a wrigglework pattern and the letters FI.
Sewing and Mending

Pins and thimbles are humble reminders that clothing had to last a long time. In 18th-century Europe pin making was a well-developed factory operation, and these pins with coiled wire heads are typical of the period.

The thimbles do not differ much from those we have today. The larger one, open at the top, is often called a tailor's thimble.

The needlecase, which had a slip-on top, probably held large, blunt needles called bodkins. Drawstrings and lacings so commonly used to fasten 18th-century clothing were threaded through loops and bands with bodkins.
Candles, the most common form of artificial lighting in the 18th century, would not burn without frequent attention: someone had to snuff the wick — trim its charred end — two or three times an hour to keep a burning candle from sputtering out. Snuffers, resembling scissors with a box on one blade and the box lid on the other, could be plain or fancy, but had to be kept close at hand, either in an upright snuffer holder like the one shown here, or on an oblong tray.

Holders for candles were made in many different styles and materials, and two very different types are shown here. The elegant table candlestick, cast in a style fashionable in the 1750s, was one of a pair found on the ship. The candleholder with a handle and its own drip pan was designed to be carried wherever light was needed. The handle rivets on this example from the Machault had been hastily mended to keep it in use. Several tallow candles were also recovered in the excavation of the ship.
Colour Illustrations
Massive elm deadeye
Brass buttons

Dutch tobacco box
Fine-toothed wooden comb

Brass knee buckle

Saintonge coarse earthenware
milk pan
À la mousquetaire sword

Knuckle-guard decoration on an arsenal sword

Rope handle or grip
Coarse earthenware plates
Brass and copper pot lid

Small brass nesting pot

Fancy brass handle from a tea kettle

Chinese export porcelain tea service
English tin-glazed earthenware bowls

Brass candlestick
Imari-style Chinese export porcelain bowl
Many of the artifacts shown here can be seen at Parks Canada's visitor reception centre at Pointe-à-la-Croix, Quebec, where the Battle of the Restigouche is being commemorated. Further information on the objects, the site, and the battle can be found in the following sources, or by contacting Parks Canada.
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The loss of the *Machault* at the Battle of the Restigouche in July 1760 signalled the end of French sovereignty in Canada. Munitions, men, and supplies that might have recaptured Quebec City for France never reached their destination, and Canada became a British colony. Archaeological investigations of the *Machault* recovered material remains that included portions of the ship and its fittings, everyday household items, weaponry, clothing, and luxury goods — a rich and varied collection of 18th-century artifacts.