



A 400 Year History:

Exporting Forest Products to the UK

Shifting Power on the Seas toward Power to the People

Welcome to the first Issue of the Atlantic Coastal Biomass Export Journal, established to showcase a remarkable history of interrelatedness Maine has had with its foreign neighbors across the Atlantic Ocean over the past 400 plus years, and to celebrate the continual progression of those early relationships through wars, conflict and peace, economic turmoil, prosperity and the building of durable strategic alliances. This Journal is appropriately situated in Searsport, Maine at the focal point of early ship building, trade and international commerce - not only the gateway to the EU and UK but, for what is has always been – the welcoming shores of a robust and generous people.

Searsport was established and incorporated February 13th, 1845 and named after Captain David Sears of Boston. Captain Sears owned Sears' Island which is at the mouth of the Penobscot River and the location of the Port of Searsport today. Searsport was spun off of Belfast, immediately adjacent to the west and Prospect to the north. Prospect was incorporated February 24th, 1794 and became a part of Waldo County, Maine in 1827. Among these coastal communities is Stockton settled in 1750 and incorporated March 13, 1857. Stockton and Searsport were then as they still are today, heavily involved in ship building, shipping, fishing and open water enterprises.

Each Issue will focus on a slice of Maine's early history and seek to weave the content of that history into the fabric of those professionals, industry leaders and new technologies representing the nature of ongoing ties across the pond. The primary concerns to be examined in this Publication are related to Renewable Energy, Biomass Processing and Consumption, Forest Management and Sustainability issues related to Climate Change and alternative forms of Heat & Power Production in global markets. Second, but not of least importance will be the genesis of Maine's forest and transportation industries from their beginnings through decades of oscillation and market cycles and to the emergence of their industries in Maine to this day.

Long before the Bureau of Forestry, Department of Agriculture, Department of the Interior and certainly sooner than a Maine Forest Service or a Maine Department of Agriculture, Conservation and Forestry (DACF) were established, there were laws enacted for the purpose of managing and monitoring forest harvesting in Maine. The first regulatory action placed upon Maine's forest was implemented by the King of England in the 17th century when forests of Great Britain were rapidly being depleted and our brothers and sisters from Great Britain and the European continents began to look to the west for their timber needs.



In 1639 the 'Province of Maine' was chartered to Sir Ferdinando Georges and later in 1652 the County of York was established, which was in essence, the entire State of Maine as we know it today. Subsequently, by Britain's Crown authority, in 1656, King Charles I granted the province of Maine to the Duke of York, James Stuart. Even to this day the title of Duke of York encompasses the responsibilities of trade between nations. Today, the Duke of York's role is that of the UK's Special Representative for International Trade and Investment.

The tall white pines of Maine were considered to be the most suitable for mast building – therefore, the King declared Maine's pine trees to be property of the Crown. Around 1691, the King sent surveyor-generals to the woods to mark each suitable tree to protect them from harvest by the citizenry and designate them for use in building masts for the Royal Navy and British ship builders. This marking became known as the "Broad Arrow" law. The trees were the property of the King but, the harvesting and shaping of masts were left to local tradesman. While mast building was a part of the forestry craft at the time, it was a small part. Other uses of the forest harvest were geared toward lumber for homes, heating wood and the construction of boats. However, the ole' golden rule applied: "He who owns the gold – rules." The King declared the masts a priority commodity and orders for masts were issued for the Royal Navy and Ship Builders alike.

Great Britain's focus on supplying materials for the Royal Navy had to take into consideration many of the strategic decision making concerns that exist today. With expanding wars came a need to enhance warship capabilities. Advances in technology in the 17th and 18th centuries were primarily centered on armaments. Ship cannons were being built larger, heavier and more powerful. That required larger ships that could carry heavier payloads and yet be more agile and maneuverable on the water. During rapid expansion in the demand for British warships came a dwindling availability of wood from the Baltic forests from where the masts were coming. Maine was the only place that large mast trees were able to be found.

Not only were they plentiful but, also they were larger, more supple, lighter and they had a durability that extended their useful life. To comprehend the volume of materials required and the sheer magnitude of ship building operations, to build one Navy Vessel it took approximately 50 acres of standing wood to supply the basic timber. Depending on the size or design of the ship there would be at least three tall pine masts of 54" diameter and over 110 feet tall. During the Broad Arrow law period, roughly from 1691 to the Revolution in 1776, just short of 5,000 of these tall pine masts were delivered to the Royal Navy.

Great Britain was involved in the "Seven Year War", which essentially was a period of antagonism in Europe, by and between primarily Great Britain, Spain and France as to who would control trade commerce with the Colonies. Geographically speaking, the wars were known as the



“French and Indian Wars” by the English-speaking Canadians and Colonies and alternatively, in French-speaking Canada the period was called the “War of the Conquest”. During this period of conflict, which covered a time frame of 1756-1763, the British had approximately 131 total Navy Ships of which only 39 were battle ready and available for use entering the Revolutionary War era. According to historians, most Royal Navy ships were hastily constructed and were of poor quality. During most of the early years of the revolution the British ships were mostly engaged in running supplies up and down the east coast of the colonies to support their troops.

The first casualty of the British fleet was the loss of one of their supply ships to the colonists in Machias, Maine on June 12, 1775 during one of their supply missions. Eventually, as the war wound down in June 1776 the Royal Navy amassed their tall ships, new and old, along the shores of Long Island, carrying 12,000 British and 9,000 German auxiliary soldiers for one of their last ocean engagement in the conflict. It has been written that those who witnessed the fleet had claimed it looked like “all of London was afloat” and that the masts were so many that they appeared to be a “forest” standing on the sea.

Subsequent to Royal Navy needs, the function of foreign trade between the New World and Great Britain began. Then and still to this day; the underlying narrative of a 400 year history of buying and selling to Great Britain – the UK – is the management and manipulation of a trade balance or imbalance at times. The nature of trade and its storied commodities can be traced back to the “Triangular Trade” period from the 16th to early 19th centuries. During that time there were three primary commodity types being shipped throughout the Atlantic – labor, agricultural products and manufactured goods. No matter what the cargo or carriage was, the need for speed and bulk volume was of paramount importance then as they are today. Back in Maine, the extraordinary use of wood was geared toward lumber and building of wooden homes and commercial structures, fishing and commercial vessels, horse drawn carriages and wagons or covered vehicles, boxes and shipping containers, locomotive and heating fuel and even most basic machinery and tools were made of wood.

Pine masts were extremely sturdy and light. This made ships able to be constructed with lower weight but, increased stowage capacity. Lighter ships could travel the oceans faster thus, shortening a journey and its return time and increasing revenue. Ship building became a significant contributor to New England and specifically the Maine economies over time. The first ship to be built in Maine was named “Virginia”, which was built around 1607 to 1608 in the Kennebec River area of Popham Colony. Later in the 17th century the focus was on building “Mast Ships”, which were designed to carry the tall pine masts back to England for construction of Royal Navy vessels and “Schooners” and “Sloops” for deep water fishing off of New England shores and for



international trade usually going in or out of Boston. As the wars ended, Maine became the origin of significant exports for construction of housing, city centers and major landmarks. Rock quarries and lumber yards flourished in Maine, sending their merchandise up and down the east coast to the Virginias and to Southern States in the form of quarry stone, building timber and fish for markets. The concept of back-hauls is not new to transportation today. Many ships returned to Maine with spices, Rums and cotton from the south.

The Penobscot Bay region back in the 17th and 18th centuries was a bustling area where most of the smaller sloops and schooners were built to accommodate local fishing and coastal movement of marketable goods. After the American Revolution, larger ships began to be built in the Penobscot Bay area. The newer types of ships were more often used for deepwater fishing and later for sea going transport across the Atlantic to markets in Europe, the United Kingdom and to far-away places as the Caribbean and beyond.

Looking forward, Maine and its forests will play a significant role in the EU renewable energy picture, with bioenergy expected to remain a key strategy for both the near and long term. With the EU implementing aggressive standards to reduce the global carbon footprint associated with Climate Change, the demand for woody biomass fuel energy sourced materials from Maine will increase exponentially over the next 5 – 10 years by more than 50%.

Given that the momentum toward renewable fuels to lower levels of atmospheric carbon, it is essential that efforts to reduce fossil fuel use in the EU lead to lower levels of atmospheric carbon and do not result in increased carbon emissions. It is also important that forest sustainability in biomass supply regions not be threatened. Maine has very sound and aggressive guidelines and oversight in place to ensure the long-term sustainability of our forests – and future articles in this Journal will include a constant and vigilant oversight of all activities pursuant to the export of our natural resources to our neighbors across the pond.

By: Arthur T. House, President

Maine Biomass Exports, Inc.

www.MaineBiomassExports.com

www.BiomassEastportMaine.com

www.ArthurHouse.com

Tel: 207-338-5285

FAX: 207-338-3205

E: drathous@gate.net

E: mainecmi@gmail.com

SKYPE: [art.house69](https://www.skype.com/user/art.house69)

LinkedIn: www.linkedin.com/pub/arthur-house/5/17/922/