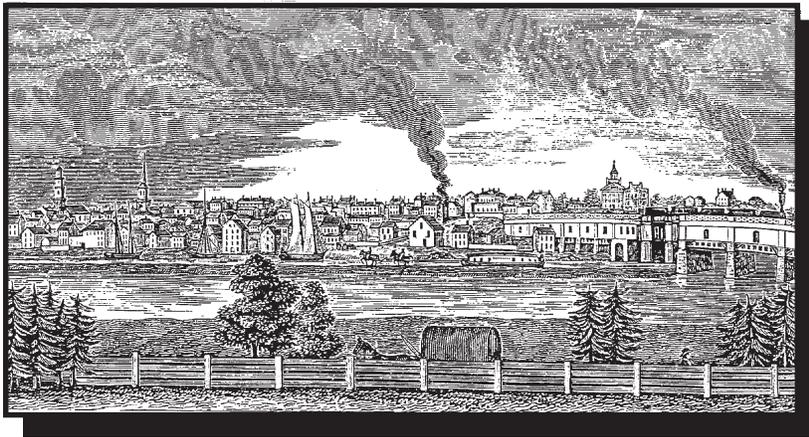
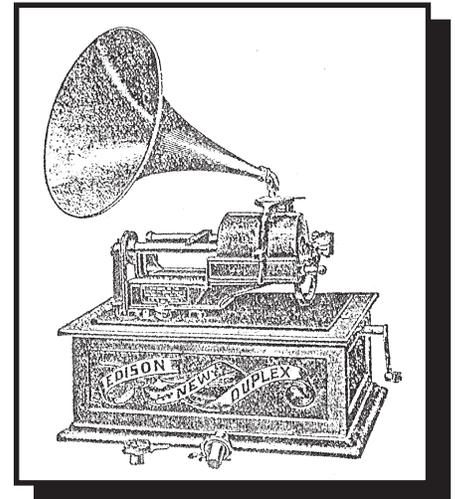


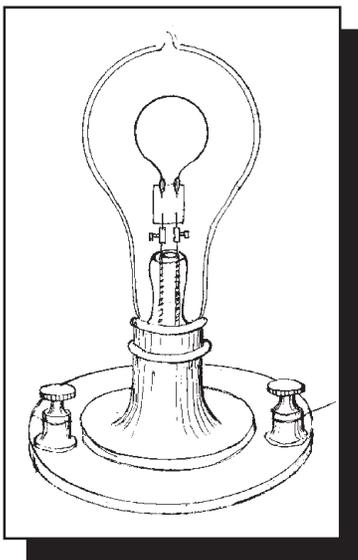
HISTORY BUFF'S
THE HITCHHIKER'S GUIDE
TO
MIDDLESEX COUNTY



"N.E. View of New Brunswick, N.J." by John W. Barber and Henry Howe, showing the Delaware and Raritan Canal, Raritan River, and railroads in the county seat in 1844.

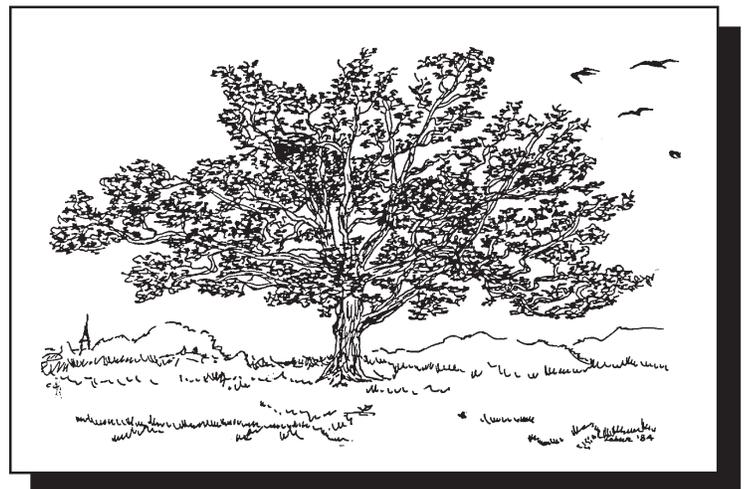


Thomas A. Edison invented the Phonograph at Menlo Park (part of Edison) in 1877.



Thomas Edison invented the incandescent light bulb at Menlo Park (part of Edison) in 1879.

Carbon Filament Lamp, November 1879, drawn by Samuel D. Mott



Drawing of the Kilmer oak tree by Joan Labun, New Brunswick, 1984. Tree, which inspired the Joyce Kilmer poem "Trees" was located near the Rutgers Labor Education Center, just south of Douglass College.

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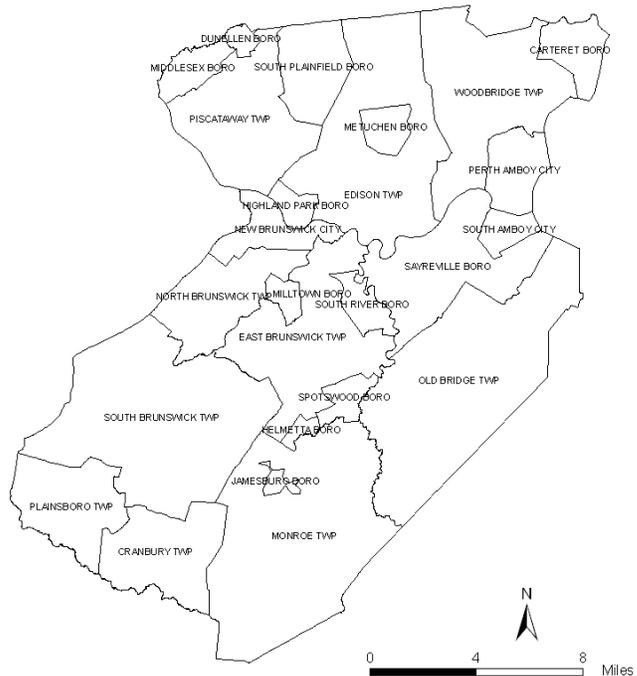
Introduction

Middlesex County, New Jersey is located midway between Boston and Washington D.C. (also midway between New York City and Philadelphia). It is in the center of the State of New Jersey, stretching from the Rahway River south to the Mercer and Monmouth County lines, and from the Raritan Bay west to the Somerset County line.

The predominant geographic feature of the County is the Raritan River, which flows the entire width of the County from west to east (actually forming part of the Middlesex/Somerset County line), and is navigable from its mouth at the Raritan Bay to New Brunswick. The central location of the County and the presence of the Raritan River, within its boundaries, have been key factors in the original settlement and subsequent growth of Middlesex County.

Today, Middlesex County encompasses 318 square miles; is divided into 25 municipalities; and, at the beginning of the 21st century, has a population of over 785,000 residents, making it the second most populous County in the State of New Jersey. The City of New Brunswick is the county seat.

The County is governed by a seven-member Board of Chosen Freeholders (New Jersey is the only State that uses the title “Freeholder” for elected county legislators). The Board of Chosen Freeholders acts as the Governing Body of the County, and is vested with the sole power to manage the affairs, property and contractual or financial interests of the County.



Some of the seven Freeholders (all of whom are elected, at large, to staggered three-year terms by the registered voters of the County) are elected in the November General Election each year. Every January the Board reorganizes and the Members of the Board elect one Freeholder to serve as Freeholder Director for a one-year term. Each member of the Board is also the Chairperson of a Freeholder Committee, and each Freeholder Committee provides executive-level management for a number of County operating departments. These operating departments provide a wide range of services to County residents.

Since the 1950s, Middlesex has been one of New Jersey's fastest growing counties in population, property valuation and ratable construction. Despite this rapid growth, the County has managed to acquire an extensive park system (offering a wealth of recreational opportunities), preserve several thousand acres of unspoiled open-space and purchase the development rights to thousands of acres of working farmland. Middlesex County also boasts a world-class health-care system, the campuses of three universities, an exceptional County College and a very successful County Vocational and Technical High School System (which has the second largest enrollment in the State of New Jersey).

Nearly every major north/south rail and roadway on the East Coast passes through Middlesex County. Two major airports are located within 30 minutes of the Middlesex County line, and a number of Fortune 500 companies have chosen to establish corporate headquarters and/or other corporate facilities within the County. Clearly, Middlesex County has been a real success story.

Let's take a look at some of the things which have contributed to that success.

The Name

Middlesex County, New Jersey was named after the original Middlesex County located in southeast England. The first recorded reference to “Middlesex” as place-name occurred as early as 714 A.D. The name was used to designate the land of the Middle Saxons, and to distinguish that land from Essex (the land of the East Saxons), Sussex (the land of the South Saxons) and Wessex (the land of the West Saxons).

The present-day English Middlesex County is surrounded by Buckinghamshire, Surrey, Kent, Essex and Hertfordshire. The City of London, which is an independent county borough, is located within Middlesex County, and takes up most of the County’s land area. While Middlesex County still exists in England, its governmental functions were subsumed by Greater London in 1965.

The Land

Between 600 million and 540 million years ago, present-day Middlesex County, and all of the North American continent east of the Appalachian Mountains, are thought to have been a part of the theoretical (its existence is believed but not proven) super-continent *Pannotia*. When *Pannotia* disintegrated into four smaller continents (*Laurentia*, *Baltica*, *Siberia* and *Gondwana*), eastern North America was probably part of the smaller continent called *Baltica*.

Between 350 and 260 million years ago, these four smaller continents drifted back together to form *Pangaea*, which was the first verifiable super-continent. From the formation of *Pangaea*, until about 200 million years ago, the area that comprises present-day Middlesex County is believed to have been located close to the center of this new super-continent, attached to, what is today, the northwest coast of Africa. The Appalachian Mountains in the Eastern United States and the Atlas Mountains in modern Morocco were once part of a single chain of mountains. This mountain chain was formed as a result of the continental plate collision (between the continents of *Baltica* and *Laurentia*) that formed part of *Pangaea*.



Pangaea

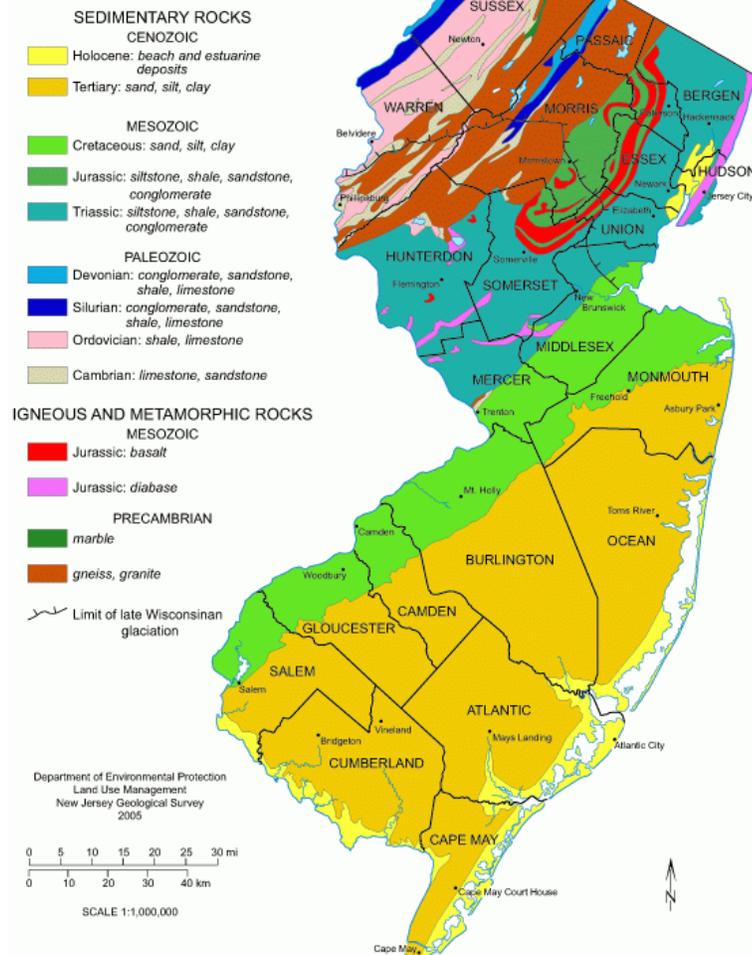
Between 200 million and 180 million years ago, during the Jurassic Period, *Pangaea*, in its turn, began to break up. It split into two minor supercontinents, *Laurasia* in the north and *Gondwana* in the south. *Laurasia* was made up of the modern continents of North America (including Greenland), Europe and Asia. While it was part of *Laurasia*, eastern North America, including what is now Middlesex County, was attached to northern Europe. Vast coal deposits were formed during this period, parts of those same deposits can now be found spread over the eastern United States, England and Germany.

Approximately 135 million years ago, *Laurasia* began to break up as North America drifted away from the Eurasian Plate (Europe and Asia) to form a separate continent. The Atlantic Ocean formed in the widening gap that developed as the two land masses drifted farther apart.

Today, Middlesex County is on the Atlantic Coast of North America, astride the geological boundary between the Piedmont Province (in the north and west) and the Great Coastal Plain (in the east and south) of New Jersey.

The soils to the north and west of the County are primarily shale consisting of siltstone, shale, sandstone and conglomerate dating back to the Triassic and early Jurassic Periods (from 230 million to 190 million years ago), while to the south and east the soils are sandy, consisting of sand, silt and clay dating from the period beginning with the lower Cretaceous Period and ending with the Miocene Epoch (90 million to 10 million years ago).

GEOLOGIC MAP OF NEW JERSEY



206 million to 144 million years old. Diabase is a rock formed by the cooling of magma from volcanic activity below the surface of the Earth's crust. Diabase is

more resistant to erosion than the surrounding siltstone, shale and sandstone and, over time, has formed this hard ridge or high point.

The northeastern portion of Middlesex County, including all or parts of Woodbridge, Edison, Metuchen, Carteret, South Plainfield and Perth Amboy was covered with ice during three distinct glacial periods beginning about 800,000 years ago and ending only 18,000 to 20,000 years ago when the last ice sheet receded. At the point in each glacial period when the ice had reached its maximum southern expansion, ice sheets in northern New Jersey may have been up to 10,000 feet thick.

The coastline of Middlesex County hasn't always been located where it is today. During the Jurassic and Cretaceous periods, portions of the southern and eastern parts of the County were, intermittently, on the ocean bottom, depending upon how sea levels rose and fell. This is clear from the fossil remains of marine animals discovered in parts of the County that have been dry land for thousands of years.

Conversely, there is fossil evidence indicating that, during the later ice-age of the Pleistocene Epoch, the sea level had dropped 70 to 150 meters below its present level. This drop in sea level was the result of vast quantities of water being trapped in the massive glacial ice sheets. During this period, the seacoast of Middlesex County actually would have been many miles east of where it is today, well into what is now the Atlantic Ocean.

The Raritan River and Raritan Bay have helped to make Middlesex County such a desirable place for human habitation over the last several thousand years. The Raritan River Valley began to take shape during the Wisconsin Glacier, the last of the three glacial periods of the Pleistocene Epoch. At that time, the Raritan River captured drainage from the Newark Basin. Judging by the width of the Raritan River Valley, it is likely that the Raritan was the major run-off channel along the entire ice front throughout the Wisconsin glaciation (from about 70,000 years ago to about 10,000 years ago).

Pre-Historic Middlesex County

There is substantial fossil evidence indicating that dinosaurs, together with a multitude of smaller pre-historic creatures, lived in or, at least, passed through Middlesex County.

In his book, When Dinosaurs Roamed New Jersey, William B. Gallagher states that: "For genuine Mesozoic amber containing prehistoric insects, New Jersey is one of the best spots in the world." He adds: "Not only are the New Jersey amber deposits extremely productive and informative, they are also among the very oldest fossiliferous amber beds known."

The amber deposits to which Mr. Gallagher refers were originally discovered in the Sayre-Fisher Clay Pit in the present-day Borough of Sayreville. They contain a huge variety of pre-historic plant and insect fossils including beetles (some still displaying their original green pigmentation), cockroaches, ants, mites, midges, lacewings, leafhoppers and stingless wasps.

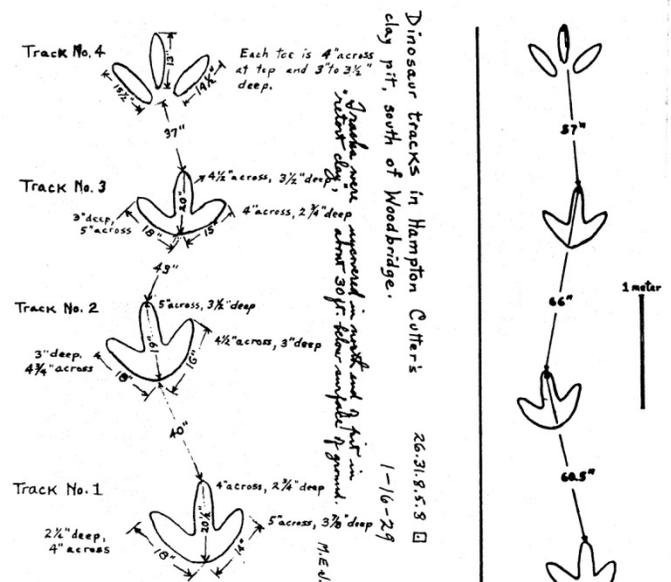
The world's oldest known fossils of Cretaceous mosquitoes (old enough to have fed on dinosaurs), moths (trapped in the amber at the point in evolution when moths were changing from biting insects into nectar-feeding insects), biting black flies, bees, mushrooms, miniature flowers, and oak trees have all been found in the Sayreville amber deposits. A partial feather, constituting the oldest known fossil-record of a terrestrial bird in North America, was also discovered in Middlesex County amber.

In the 1990s, amateur paleontologists discovered another large, fossil-rich layer of amber at the White Oaks Sand Pit, also located in Sayreville. Fossil remains of more than 100, previously unknown, species of insects and plants have been found in the amber at that site. Some of these insect species have not, as yet, been classified.

Among these fossils are the oldest known remains of several insect types, including: 1) the spider family *Araneidae*, 2) the spider genus *Orchestina* and 3) the previously undiscovered spider genus *Palaeogegestrina*. Thanks to the Sayreville fossils, the evolutionary history of these spiders has been extended by 50 million years. Additionally, in 1967, the fossil remains of a primitive ant were discovered in Middlesex County amber. This ant fossil may establish the ancestral link between taphiid wasps and the most primitive known living ants.

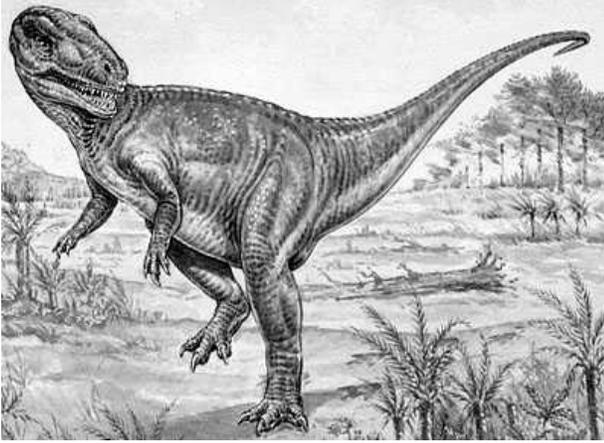
Larger creatures also roamed pre-historic Middlesex County. In January 1929, a track-way, consisting of four footprints, made millions of years ago by a large, three-toed, bi-pedal dinosaur, was discovered by workmen at the Hampton Cutter Clay Works in Woodbridge Township. Even though these tracks were subsequently destroyed, they had first been photographed and sketched in the field.

In January 1930, a second track-way, also consisting of four footprints, was discovered in the same clay pit. Three of these footprints were destroyed, but one footprint was successfully preserved and can be seen at the Rutgers University Geological Museum in the City of New Brunswick.



The First Woodbridge Trackway

In March 1930, a third track-way, this time made up of five footprints, was discovered at the Hampton Cutter Clay Works. One of the footprints was destroyed but four were successfully removed. Unfortunately, before being copied for other museums or placed on display, the four preserved footprints disappeared and were never seen again. To the present time, the Woodbridge track-ways represent the only known Cretaceous dinosaur footprints found east of the Mississippi River, although a number of Jurassic dinosaur footprints have been found elsewhere in New Jersey.



Megalosaurus

Researchers believe that all of the Woodbridge footprints were once part of a single track-way made by a single large carnivorous dinosaur of the Cretaceous Period. Dr. Donald Baird compared these footprints to others found around the world and believed that they were: “Early Cretaceous carnosaur tracks of a ‘megalosaurian’ type.” The tracks were approximately 90 million years old, and were about 4 feet apart,

“...with the midline of the track-way passing through the base of the inner toe print; this indicates a dinosaur walking upright with its legs tucked in directly beneath the body. There was no trace of a tail drag mark between the footprints, so the dinosaur must have walked with its tail held up off the ground. The footprints themselves were 20 inches long from the middle toe-tip to the base of the heel. The toes end in pointed claws; there is even evidence.....of a backward-pointing ‘spur’ or hallux, the impression of the vestigial first (or ‘big’) toe.”¹

While no herbivorous dinosaur fossils have, so far, been discovered within Middlesex County, it is certain that a sizeable number of herbivorous animals would have had to be present in this area to support the presence of a large carnisaur. It is likely that some of the herbivores upon which the Middlesex County carnisaur preyed would have been *Hadrosaurs*. *Hadrosaurs* were duckbilled dinosaurs, known to have inhabited New Jersey. Their remains are the most frequently found dinosaur fossils in New Jersey and, in fact, along the entire East Coast of the United States.

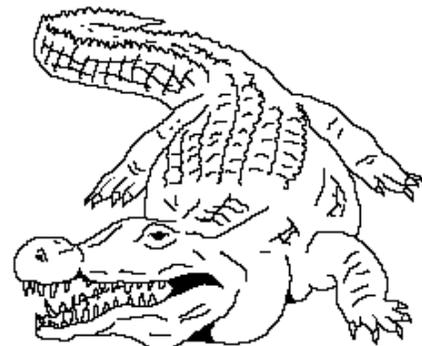
In 1980, one of the most important sites, in the eastern United States, for Late Cretaceous fossils was discovered at Ellisdale, New Jersey. Ellisdale is located 15 to 20 miles south of Middlesex County along the Crosswicks Creek. Today, the site is high and dry in the center of New Jersey, but, given the varied

¹ Gallagher, William B. “When Dinosaurs Roamed New Jersey “ pg.69

types of fossils found at the site (both terrestrial and marine), during the Cretaceous Period Ellisdale was probably either an off-shore barrier island or right on the coast.

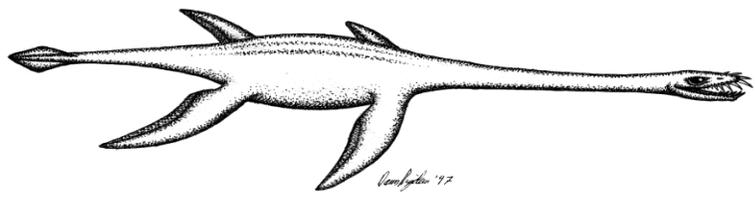
Fossils found at Ellisdale include the remains of various dinosaurs (both carnivorous and herbivorous), amphibians, turtles, squamates, mammals, marsupials, large rays, sharks, boney fish as well as previously unknown groups of teiid lizards (*Prototeius stageri*) and salamanders (*Parrisia neocesariensis* – a legless, sharp-toothed, predatory salamander). Since the Ellisdale fossil deposits are so nearby, it is highly likely that many or all of these pre-historic land and sea creatures were once present in Middlesex County, its rivers, lakes or coastal waters.

As previously indicated, the Cretaceous sedimentary formations in the southern and eastern portions of Middlesex County, located in the Great Coastal Plain, indicate a repeated sequence of sea level changes. Marine fossils, including pre-historic shellfish and sharks' teeth, have been found in this part of the County, no doubt deposited there when the area was on the sea bottom.



Deinosuchus

One of the more interesting fossil finds at Ellisdale is *Deinosuchus*, an extinct, 33 to 40 foot crocodylian that lived in the seas, rivers and lakes of North America during the late Cretaceous Period. *Deinosuchus* may have preyed on dinosaurs that ventured too close to the water, which, at the time, covered much of the southeastern part of the County. Another late Cretaceous marine predator that hunted in the waters around Middlesex County was *Cimoliasaurus magnus*, believed to have been a smallish, short-necked plesiosaur that was a fish-eating



Cimoliasaurus Magnus

pursuit-predator, (long-necked plesiosaurs were ambush-predators). Several of its fossilized vertebrae have been discovered, not far from Middlesex County, in the late Cretaceous Greensand deposits of Monmouth and Burlington Counties.

Climate & Wildlife

Approximately 65 million years ago, after the extinction of the dinosaurs, during the Paleocene Epoch, Middlesex County was covered by sub-tropical forest. Flowering plants and insects flourished. Lizards, birds, marsupial

opossums, and smaller mammals such as rodents, primates, bats, fox-like carnivores and hoofed animals, would probably have been present. The dominant predator was most likely *Diatryma Gigantea*, a 7-foot-long flightless bird with a huge beak, powerful legs and formidable claws. *Diatryma Gigantea* was the larger, North American cousin of the better known *Gastornis geiselensis* - the dominant predator in Europe during the same period.



Diatryma Gigantea

Fifty million years ago, during the Eocene Epoch, the Earth had grown warmer. Then, Middlesex County would have been covered by a tropical rainforest. This rainforest would have contained small animals such as rodents (which looked like squirrels), lemurs or bush babies. Early forms of horse, tapir, camel, insectivorous bat, primitive rhinoceros and the ancestors of deer and cattle (which then had toes rather than hooves) were present. By this time, the “dog” branch of carnivorous mammals had evolved in North America (the “cat” branch developed elsewhere) and hunted in the tropical forests. Large herds of rhinoceros-like *Brontotheres* roamed the continent.

Thirty million years ago, in the Oligocene Epoch, the Earth had cooled considerably. Middlesex County would then have been covered by deciduous forests. During the transition from the Eocene Epoch to the Oligocene Epoch approximately 20 percent of North American animal species became extinct. Opossums would have been the only marsupials left in North America, but there were still large herds of *Brontotheres*. Some rodents, like rabbits and hares, began to adapt as grass eaters during this period.

At the beginning of the Miocene Epoch, 20 million years ago, the closed deciduous forest would have changed to open woodland and spreading grassland. Deer, antelope, camel and early horses were present in North America in large numbers. They and other herbivores were hunted by carnivorous cats (which had, by this time, migrated over a land bridge from Eurasia to North America), running bears, bear dogs and Mustelids (the ancestors of wolverines, otters, weasels and ferrets).



Gomphotheres

Primates or pro-simians would, by then, have become extinct in North America, but Mastodons and elephant-like *Gomphotheres* had begun to appear on the continent. There is little doubt that large *Mastodons* roamed in what is now Middlesex County. This conclusion is supported by the giant *Mastodon* tooth recovered by fishermen from the ocean floor just off the coast of New Jersey.

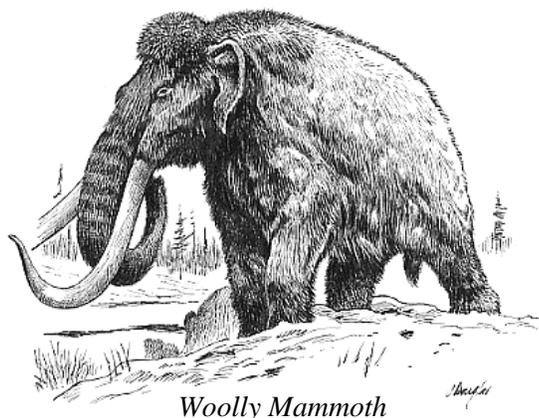


©John A. Maisano

Mastodon

As indicated earlier, during the Great Ice Age, water was trapped in the glacial ice-sheet and sea levels were much lower than they are today. During that time, the coastline of Middlesex County would have been at least 80 miles farther east; well into what is now the Atlantic Ocean. The *Mastodon*, whose tooth was found by the fishermen, died about 11,000 years ago about the same time the last great ice sheet was beginning to recede. At that point, the present-day seabed from which the tooth was recovered would have been dry land.

During the Pleistocene Epoch, which lasted from 1.6 million years ago to approximately 10,000 years ago, Middlesex County and much of the Northern Hemisphere endured the Great Ice Age. *Woolly Mammoth*, *Woolly Rhinoceros*, Musk Ox, Moose, Reindeer, Elephant, *Mastodon* and Bison were all common sights in North America, and some of these creatures, particularly Moose and *Mastodon* likely roamed the area that is now Middlesex County. By the end of the Pleistocene Epoch, camels, horses, saber-toothed cats and many of the dog and bear species had become extinct in North America, but, more importantly for this history of Middlesex County, at about that same time, modern humans began to populate North America.



Woolly Mammoth

The First Human Inhabitants

Depending on whether one subscribes to the “Land Bridge” theory, or the “Pacific/Atlantic Watercraft Migration” theory of human migration to and through the North and South American continents, humans took up residence along the East Coast of North America sometime between 10,000 and 50,000 years ago. Bones and implements found in quaternary gravels near Trenton, New Jersey indicate the presence of Paleolithic Man in central New Jersey. Archaeological evidence has also been discovered at the “Plenge Site,” located along the lower Musconetcong River in Warren County, suggesting continuous human habitation in that area for as long as 12,000 years. Further, considerable evidence of Native-American habitation, dating back about 10,000 years, has been unearthed at the “Black Creek Site” in Sussex County.

The latter two sites are located in areas which would have been covered by the ice-sheet during the last glacier of the Pleistocene Epoch, and, if correctly interpreted, the artifacts discovered suggest that human settlement occurred when, or shortly after, the last ice sheet receded from northern New Jersey - about 12,000 to 13,000 years ago. Since much of Middlesex County was located beyond the furthest point of glacial advance and, consequently, not

covered by the last ice sheet, it is likely that human inhabitants had begun to settle in Middlesex County at least as early, and probably earlier, than at the “Plenge” or “Black Creek” sites. The Paleolithic artifacts and bones found near Trenton would tend to substantiate this belief.

In any case, some archaeological evidence exists to indicate habitation of the Piscatawaytown section of modern Edison Township by Stone Age humans. There is further archaeological evidence of a prehistoric, organized, tool-and-shelter-making society inhabiting parts of present-day Plainsboro Township approximately 3,700 years ago.

The Lenape

At present, there is no way to determine with certainty who the first human inhabitants of the Middlesex County area were. The first known human inhabitants of Middlesex County were Native Americans known as the Lenape. Some oral traditions of the Lenape suggest that they themselves believed they were the original human inhabitants of the area. There is reliable archaeological evidence to indicate that the Lenape, after migrating from the far west of North America, settled in Middlesex County at least 3,000 years ago.



Lenape Territory

The Lenape were part of the Algonquin language group. The tribal name, Lenape, can be translated, from the Algonquin language, to mean “Original People or True People”². The nations of the Algonquin language group, as a whole, referred to the Lenape as “grandfathers,” a term of respect indicating a belief that the Lenape were the original tribe of all Algonquin-speaking peoples. The Lenape themselves believed that the Creator caused a giant turtle to rise from the depths of the ocean. The turtle grew until it became North America. The first Lenape man and the first Lenape woman sprouted from a tree which grew on the turtle’s back. This creation myth is consistent with the Lenape’s belief that they were “the original people” inhabiting their lands.

As a result of their status as the acknowledged “original people,” the Lenape were often called upon to serve as intermediaries in disputes between rival tribes and to help resolve difficulties within the Algonquin Nation. Later, the Lenape also served as peacemakers between European settlers and Native

² Karasik, Gary; Aschkenes, Anna M. *Middlesex County Crossroads of History*, pg 19

Americans. The Iroquois tribes derisively referred to the Lenape as “the old women” because of their peaceful ways. The Lenape were farmers, fishermen and hunters. The tribe was divided into three clans.

In the north lived the Minci (the people of the stony country), who were the most numerous and most warlike of the Lenape clans (probably because of their proximity to other warlike tribes, such as the Iroquois). The Minci totem was the Wolf. The Unami (the people down the river) lived in central New Jersey and eastern Pennsylvania. The Unami were viewed as the senior or most respected clan, and their totem was the Turtle. Finally, the Unilachtigo (the people who lived near the ocean) lived in southern New Jersey and Delaware. Their totem was the Turkey. Modern Middlesex County would have been part of the Unami lands. Some sources place the boundary between the Unami and the Minci along the Raritan River. In that case, Middlesex County north of the Raritan River would have been in Minci territory.



Lenape Clan Territories

The Lenape have been described as tall (5’7” to 5’10”), broad shouldered, strong people with dark eyes and straight black hair. In 1524, Giovanni da Verrazano, probably the first European to enter the Raritan Bay and the first to report contact with the Lenape, said that the Lenape “...are most beautiful and have the most civil of customs...women are shapely and beautiful...well built men.” He also said that the Lenape language was “characterized by beauty, strength, flexibility and rhythm.” During the period of European settlement, Lenape gentleness and hospitality were widely recognized and frequently documented.

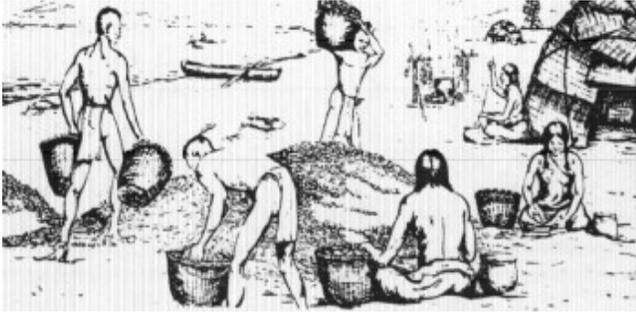
The Lenape practiced picture-writing, and accurately computed time. They had a word for “year.” The Lenape year was made up of twelve (rather than the more common thirteen) moons. They counted ages and recorded sequences of events in years. The Lenape used polished shells called “wampum” as money.



Lenape Women Planting Corn

The family was the basic unit of Lenape society. Husbands and wives divided the labor, but Lenape society was matriarchal. Men performed tasks requiring greater physical strength. They cleared the land, protected their families, hunted and fished. Women planted crops, harvested, tanned, sewed hides, carried supplies and performed many domestic duties such as cooking.

The Lenape diet included meat, fish, shellfish and fowl. The primary tool of Lenape hunters was a simple bow with flint, deer antler or bone-tipped arrows. Animals which were only wounded by the arrow were dispatched with a heavy stone topped club. Lenape fishermen used nets, baskets, or hooked lines to catch fish. They also would build weirs or dams, in river shallows, to trap fish, which were then speared, netted or caught with bare hands.



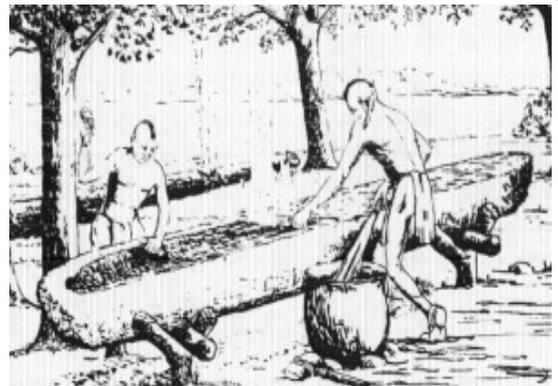
Lenape Men Smoking Oysters

Wild plants, roots, berries, fruits, acorns, mushrooms, potatoes and nuts were gathered by women and children and were either eaten or stored. The Lenape were very competent farmers and planted corn or maize (their principal crop) beside pumpkins, beans, squash, sunflowers, herbs and tobacco. They made cooking oil from nuts, gathered wild honey and extracted maple sugar from the sap of maple trees. The Lenape displayed considerable talent in successfully drying/preserving and storing food for the future, and could survive several years of drought, sustained by their stores. European settlers also found the Lenape to be skilled healers and herbalists. They would sometimes use Lenape cures when their own treatments had failed to produce desired results.

Lenape men often shaved their heads leaving a “Mohawk” style scalp-lock two inches wide, front to back, down the center of the head. The scalp lock was stiffened with bear grease and sometimes decorated with a feather. The men shaved their heads and faces with a sharpened flint or clamshell. The women wore their hair in long braids.

Clothing was made of soft, pliable deer skin tanned by the women and sewn with sinew, grass or hair. Men wore moccasins and breech-cloths, held up by a belt. When the weather was cooler, men also would wear buckskin or beaver skin leggings. Women wore animal hide skirts and moccasins. In cooler weather, they also wore animal hide shirts, leggings and shawls made of animal skins or turkey feathers. In cold weather, both sexes would wear hide shirts, animal skin robes, warm cloaks of turkey feathers and, sometimes, mittens and fur caps.

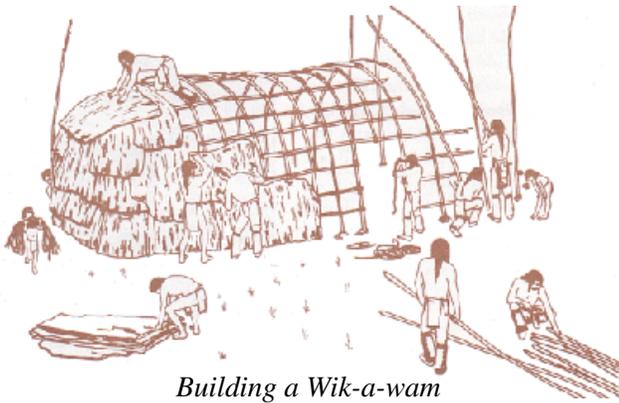
Both sexes wore earrings and jewelry (made from stones, shells or the teeth and claws of animals) around their necks and ankles. Both men and women wore tattoos, painted their faces on occasion, and ornamented their clothing with beads, shells and quills.



Making a Dugout Canoe

The Lenape traveled on foot, using snowshoes in winter. When they traveled by water, they used dugout canoes, not the lightweight, birch-bark canoes that are so often depicted in films and books. These dugout canoes were 12 to 40 feet in length. They consisted of a tree trunk which had been hollowed-out by burning or scraping away the inside. The bark was removed from the outside of the tree trunk and the bow and stern were shaped into points.

The Lenape did not live in portable teepees, but, instead, constructed wik-a-wams or longhouses from saplings shingled with either woven stalks of Indian corn or large pieces of elm, chestnut, or cedar bark. Mud and clay was used to make the structures weatherproof. Inside the dwelling, along the walls, platforms were built that served as seats, beds or tables, and under which belongings were stored. Dried foods and family belongings were hung from poles fastened to the ceiling. Mats of skins and evergreen boughs were used for flooring and bedding.



Fires were built inside the wik-a-wam or longhouse and smoke holes were left in the roof above the fires to allow the smoke to escape. The ends of wik-a-wams or longhouses were either arched or flat. Hides covered the doorways and a bark cover was placed over the smoke hole when no fire was burning.

The Lenape grouped a number of dwellings together to form a permanent village, usually of several hundred people.

Although loosely bonded by the common totem or dialect of the clan to which it belonged, each Lenape village was autonomous. Villages were generally located in areas with good soil near the bank of a river or one of its tributaries. Each village exercised authority over a defined territory. The land belonging to a village was for the communal use of the clan or village. The Lenape had no concept of individual ownership of land.

Lenape villages generally included two sweat-lodges (one for men and one for women), as well as a council house. In the council house clan tribal matters were discussed by the tribal council and the chief, all of whom were chosen by the women of the tribe, although females did not participate in daily governance.

Villages often were surrounded by a perimeter fence of sharpened sticks 10 to 12 feet high reinforced by timber. During the late woodland period (500 A.D. to 1635 A.D.), permanent Lenape towns and villages were established. In fact, the City of New Brunswick now stands near the site of the Lenape village of Ahandewamock, located along the Raritan River during the early European settlement of the area.

Although they lived in permanent villages, the Lenape probably moved with the seasons. In the spring they would plant crops near their permanent village, but, during the heat of the summer, would travel to cooler shore areas around the Raritan Bay, where they would eat fish, clams, oysters and mussels and live in more temporary shelters. In the autumn, the Lenape would travel back to their permanent villages to harvest their crops.

Prior to the arrival of the first European explorers and settlers, the Lenape had developed an extensive trail system across the wilderness of New Jersey. Originally, the trails were only wide enough for travelers to walk in single file, but these trails would eventually establish the routes for many later European wagon roads and thoroughfares.

One such trail became the first Dutch road across New Jersey. When the English had taken New Jersey from the Dutch, this road became the King's Highway between New York City and Philadelphia. This Lenape trail, and the later road, passed through present day Woodbridge and Piscataway Townships, to cross the Raritan River at the ford later known as Inian's Ferry, which eventually developed into the City of New Brunswick.

The 2,000 or so scattered Lenape living in this area during the early 17th century had no real need of improved roads or ferries. The transformation of Middlesex County from the undisturbed, natural setting enjoyed by the Lenape into the thriving, populous, commercial, agricultural and transportation hub it was destined to become would have to wait until the arrival of the European settlers - but they would be coming soon. The Lenape in Middlesex County were about to have new neighbors.

European Exploration and Settlement

A. The Dutch



Giovanni Cabato

The first European explorer to see New Jersey was probably the Italian navigator Giovanni Cabato (unless, as some believe, the Vikings were here before him), better known to most Americans as John Cabot. He sailed to North America aboard the 50-ton *Matthew* in 1497 for King Henry VII of England. It was upon Cabato's early explorations that later English claims to North America were based.

The first European explorer to enter the Raritan Bay and report on his contact with the native Lenape was another Italian, Giovanni da Verrazzano. In 1524, Verrazzano sailed to North America, aboard the *Dauphine*, for King Francois I of France.



Giovanni da Verrazzano



Henry Hudson

In 1609, an Englishman, Henry Hudson, sailing for the Dutch East India Company on the 80-ton yacht (or Vlie-boat) *Halve Maen* (Half Moon), reached North America in search of a “northwest passage” to the Spice Islands and India. On Sept. 2, 1609, he anchored in the Raritan Bay near Sandy Hook. On Sept. 3, Hudson raised anchor and reached the

mouth of the river which now bears his name, claiming the lands along that river for the Dutch. On September 6, Hudson sent John Coleman and four others to reconnoiter and take soundings in another river (probably the Raritan River or the Arthur Kill), about 12 miles away.



The Half Moon on the Hudson River

As a result of Hudson’s explorations, by 1613, the Dutch had established the Colony of *Nieuw Nederland* (New Netherland), which, at its height, extended from *Schenectady* (Schenectady, NY) in the north to *Swaanendael* (Lewes, Del.) in the south and from *Fort Goede Hoop* (Hartford, Conn.) in the east to *Fort Casimir* (New Castle, Del.) in the west. There were significant settlements at *Fort Nassau* (Gloucester, NJ), *Heemstede* (Hempstead, NY), *Fort Orange/Beverwyck* (Albany, NY) and *New Amsterdam* (Manhattan), and a military settlement, on the present site of the City of South Amboy, which was established to provide additional security for New Amsterdam, located just across the bay.



New Netherland

The Dutch were the first Europeans to thoroughly explore the Raritan Valley. At first, although expeditions were sent from New Amsterdam to explore and acquire meat, hides and fur, no attempt was made to settle the “howling wilderness” of New Jersey. That began to change, in 1651, when Cornelius Van Werckhoven, of Utrecht, was granted title to a large tract of land in northern New Jersey.

Van Werckhoven commissioned Augustine Heermans to purchase this fertile land from its Lenape inhabitants. Heermans eventually purchased a tract of land beginning at the Arthur Kill in the east, and extending from the Raritan River in the south to the Passaic River in the north, including all of present-day Middlesex County, north of the Raritan River. This

purchase by Heermans was the first real effort by the Dutch to establish settlements in New Jersey. As luck would have it, Van Werckhoven also owned most of Long Island, and he was eventually forced to choose between his holdings there and his land in New Jersey. He decided to keep Long Island, and his New Jersey lands reverted to the Colony of New Netherland.

Although it was unwilling to give Van Werckhoven such a large monopoly, the Dutch government was still anxious to establish settlements throughout New Jersey to solidify its claim to this territory, which it believed to be of great value. Cornelis Van Tienhoven, an important official of the New Netherland Colony (whose high-handed depredations provoked three wars between the Dutch and various Native-American tribes), once described the Raritan Valley as: "... the handsomest and pleasantest country that man can behold...with abundance of maize (corn), beans, pumpkins and other fruits."³

In 1661 the Dutch Government, in an effort to entice new settlers into the New Jersey wilderness, described the area in glowing terms.

It is under the best clymate in the whole world; seed may be thrown into the ground, except six weekes, all the yere long; there are five sorts of grapes which are very good and grow here naturally, with diverse other fruits...the land very fertile...here groweth tobacco very good...furs of all sorts been had of the natives very reasonable; stores of saltpeter, marvelous plenty in all kinds of food, excellent venison, elkes very great and large; all kinds of land and sea foule that are naturally in Europe are here in great plenty with severall other sorte yet Europe doth not enjoy; the sea and rivers abounding with excellent fat and wholesome fish which are here in great plenty. The mountenous part of the country stored with severall sorts of minerals; great profit to bee derived from traffique with the natives (who are naturally a mild people...)⁴

It appears that a number of Dutch homesteads were established on the north bank of the Raritan River. These homesteads eventually formed a settlement known as *Hollander Dorp* or Dutch Village directly across the river from the site of present-day New Brunswick. From their New Netherland Colony, which included all of modern Middlesex County, the Dutch carried on a lucrative fur trade, competing with the English in New England and the Swedes in New Sweden.

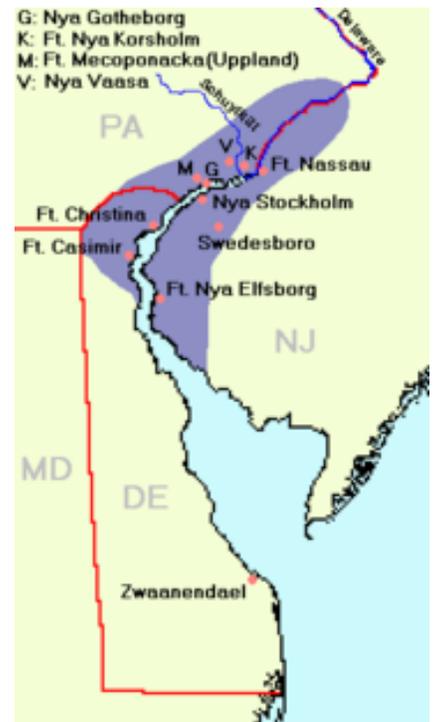
Nya Sveriga or New Sweden was a small Swedish settlement along the Delaware River, centered on *Fort Christina* (Wilmington, Del.). It included parts of northern Delaware, southwestern New Jersey and southeastern Pennsylvania. Eventually, friction developed between New Netherland and New Sweden, and the Swedes, at one point, seized *Fort Nassau* (Gloucester, NJ).

³ Karasik, Gary; Aschkenes, Anna M. *Middlesex County Crossroads of History* pg. 19

⁴ <http://www.millburn.lib.nj.us/ebook/III.htm>

The Dutch, in their turn, sent a small army to the Delaware River and forced the Swedish Colony to surrender. New Sweden was then absorbed into New Netherland, leaving the Dutch, at least for the time being, as the sole colonial power in New Jersey.

English settlers from New England eventually began to expand into New Netherland, and, in 1650, the boundary of New Netherland was moved back to a point 50 miles west of the mouth of the Connecticut River. In 1664 an English naval force captured New Amsterdam, the capital of New Netherland. A Dutch fleet managed to recapture New Amsterdam (including New Jersey) in 1673, but the re-conquest was short-lived (July 1673 to November 1674), and, in 1674, at the conclusion of the Third Anglo-Dutch War, the Dutch permanently ceded all of New Netherland to the English under the terms of the Treaty of Westminster.



New Sweden

B. The English

The English changed the name of New Netherland to New York in honor of James, the Duke of York, who received the royal charter for the former Dutch colony from his brother, King Charles II. The Duke of York, in turn, conveyed the lands between the Hudson and Delaware Rivers to two staunch supporters of the House of Stuart, John Berkeley, 1st Baron Berkeley of Stratton, and Sir George Carteret, 1st Baronet. Berkeley and Carteret named the colony, created by this conveyance, New Jersey, after Jersey, the English Channel Island where Carteret lived.



John Berkeley



George Carteret

These two men served as Co-Proprietors of the colony from 1664 to 1674, although, after the short-lived Dutch recapture of New Amsterdam, the proprietary grant had to be renewed by the Crown. “Neither Proprietor had any intention of coming to New Jersey. Since Carteret was anxious to establish a settlement, while Berkeley was indifferent, Sir George bore the expense of the first expedition. His cousin, Captain Philip Carteret, then twenty-six years of age, was appointed governor.”⁵ In 1665, in order to attract new settlers, Berkeley

⁵ Pomfret, John E., “Colonial New Jersey”, pg. 24

and Carteret offered farms, free for five years, to anyone “having a good musket...and six months’ provisions” that would either sail to the Colony with the new Governor or meet him there.

At the end of the five years, the original settlers, and all subsequent settlers were expected to pay the Proprietors a quit-rent of one half-penny per acre. In 1670, when the first quit-rents came due, there was a minor rebellion (finally resolved in 1672) when many of the settlers refused to pay them. These settlers claimed that they had purchased their land from the Native Americans who were its true owners, or had been given title to the land by the Royal Governor of New York.

The underlying basis of this claim is interesting. In 1664, immediately after the initial English capture of New Amsterdam, some English settlers from Long Island approached the Lenape and purchased the same tract of land (including northern Middlesex County) which Augustine Heermans had purchased several years before. This purchase was confirmed by the Deputy Governor of New York, who, of course, had no legal right to confirm it, the land having already been chartered to the Duke of York and conveyed to Berkeley and Carteret.

To make matters worse, the Long Island settlers subsequently found themselves in a boundary dispute with the Lenape and were forced to purchase a second tract of land, which the Long Islanders believed had been included in their original acquisition. What makes this story interesting is that the Lenape had been able (and willing) to sell the same land to the European settlers two



East/West Jersey Provincial Boundary

and perhaps three times, making the acquisition of northern Middlesex County one of the very few instances where Native Americans were able to get the better of European settlers in a land transaction.

To encourage still more settlement in their colony, Berkeley and Carteret drafted the *Concession and Agreement of the Lords Proprietors of the Province of Nova Caesarea*, which established the governmental structure of the Colony, including a Governor, appointed by the Proprietors, a Governor’s Council and a Colonial Assembly. The Colonial Assembly was to be chosen by the people of the Colony and had the power to enact laws and the sole power to impose taxation. *The Concession and Agreement* also guaranteed freedom of religion in New Jersey, a freedom that was not often found in the Royal Colonies or in England.

Berkeley and Carteret ultimately divided New Jersey into two smaller provinces. The Province of West Jersey was the property of Berkeley, while East Jersey was the property of Carteret. Carteret’s grant included “all of New

Jersey lying north of a line connecting Barnegat Bay with the mouth of Pennsauken Creek on the Delaware.”⁶ Present-day Middlesex County was located entirely in Carteret’s Province of East Jersey. Berkeley eventually sold his interests to two English Quakers, John Fenwick and Edward Byllynge and, when West Jersey later became bankrupt, the West Jersey Province was conveyed back to the English Crown.

East Jersey and West Jersey were quite different. For example, East Jersey tended to have larger plantations (often slave-holding), while West Jersey was made up of smaller family farms grouped together in small democratic farming communities. Further, a sizable number of Puritans from both Scotland and New England had settled in East Jersey, and the laws of that Province tended to reflect their sterner views on morality (13 crimes could result in the death penalty in East Jersey). The East Jersey legal code can be said to be the southernmost advance of the Puritanical New England philosophy of criminal law. The laws of West Jersey, on the other hand, reflected more of a Quaker philosophy and were very mild by comparison (with no provision for a death penalty).

The Middlesex County townships of Woodbridge and Piscataway were first settled in the 1660s. Woodbridge was founded in 1666 by Daniel Pierce, John Pike and Abraham Tappen, all of whom were originally from Newbury, Massachusetts (the settlement was named in honor of Newbury Minister John Woodbridge). Woodbridge received a town charter from Governor Carteret in 1669. Piscataway was founded as Piscataqua in 1666 by four New Hampshire men who collectively purchased one third of Daniel Pierce’s holdings in the Woodbridge Patent. In 1674, of New Jersey’s total population of about 2,500, 63 settlers lived in Woodbridge and 43 lived in Piscataway.

The Borough of Highland Park also was settled in the late 17th Century. Highland Park is located on the high ground north of the Raritan River (across from the site that would later become New Brunswick). Numerous Lenape trails (including the Assunpink Trail leading to a ford on the Raritan River) intersected in the area of Highland Park. Its earliest settlers included Henry Greenland (who owned an inn and 384 acres of land), George Drake, Reverend John Drake and Captain Francis Drake (related to Sir Francis Drake).

In 1680, one of the two original Proprietors, Sir George Carteret, died. Upon his death, his interest in the Province of East Jersey was sold to 12 men, one of whom was William Penn. Each of these 12 men split his interest with another man, so East Jersey, at that time, had 24 Proprietors. These Proprietors appointed the Scottish Quaker Robert Barclay to be Governor-for-Life.

On March 7, 1683, the Assembly of East Jersey established four counties, Middlesex, Bergen, Essex and Monmouth. Middlesex County’s original

⁶ Pomfret, John E., “Colonial New Jersey”, pg. 36

boundaries ran from the Essex County line eastward as far as Cheesequake Harbour, then southwest to the boundary between the provinces of East and West Jersey, and then northwest to the provincial boundary of East Jersey. The County included Woodbridge and Piscataway, and all the plantations on both sides of the Raritan River that were within those boundaries. The original boundaries encompass an area somewhat larger than present-day Middlesex County, and included parts of modern Somerset and Mercer counties.

The City of Perth Amboy (originally known as Scottish Colony) was founded by Robert Barclay in 1683 (Perth Amboy received a Royal City Charter in 1718). The city was settled by English merchants; Scottish Calvinists from Edinburgh, Montrose, Aberdeen and Kelso; and French Protestants, all seeking the religious freedom available in New Jersey. It was believed, at one time, that Perth Amboy's harbor could rival New York's, and that Perth Amboy would grow into a city that would, one day, become the equal of London.



Proprietary House

Those expectations may have been somewhat optimistic, but Perth Amboy did become a successful port, and from 1684 to 1702 served as the capital of East Jersey. It also served, jointly with Burlington, as the Colonial Capital of New Jersey from 1702 to 1776. In 1762, the Proprietary House was erected in Perth Amboy to serve as the Royal Governor's Residence. Proprietary House, which still stands in Perth Amboy, is the last Royal Governor's residence remaining, intact, in the United States.

When James II became King of England, he revoked the charters for the two New Jersey provinces and joined both East and West Jersey to New York and New England as a single colony under a Royal Governor. When James II was deposed in 1688, New Jersey was, once again, separated from New York, but was left without any legally constituted government for 10 years. During this period, the Royal Governor of New York, the heirs of Carteret and the Quakers each claimed the right to govern New Jersey. Eventually, the entire colony was surrendered to the Crown, and in 1702, New Jersey became a Royal Colony.

That same year, Queen Anne appointed Edward Hyde, Lord Cornbury, as Royal Governor of the Colony, but, when he proved to be both inept and corrupt, he was recalled. The Queen, once again, gave the Governor of New York authority to govern New Jersey, and the two colonies were joined together until 1738. In that year, Lewis Morris was appointed Royal Governor of New

Jersey by King George II. Lewis Morris was the first American-born Colonial Governor of New Jersey.

Even during this early Colonial period, New Jersey enjoyed the advantages of an extremely favorable central location, situated as it was between Pennsylvania and New York. Its frontiers were secured by other colonies, and its population enjoyed mostly friendly and profitable relations with its Native American population. This sheltered environment allowed both New Jersey and Middlesex County to enjoy rapid growth in commerce and population.

By 1760, the population of New Jersey had grown to about 75,000. The political and religious freedom, originally offered by the Proprietors, made the population of New Jersey somewhat more ethnically and religiously diverse than many of the other colonies. Most of the residents of Middlesex County, at the time, were from England, Scotland, the New England colonies, France (Huguenots) or one of the southern colonies, but some Dutch influence remained.

Unfortunately, this diversity included indentured servants and slaves of African descent. There were slave barracks in Perth Amboy, and, very often, the labor used by Middlesex County colonists, on their farms and in their homes, consisted of indentured servants or slaves. Although a petition, protesting “the evils arising from human slavery” was sent from Middlesex County to the New Jersey General Assembly as early as 1733, by the census of 1790 “people in bondage” still made up one-twelfth of the County’s population. Even though the New Jersey State Legislature enacted laws that granted freedom to every child born to slave parents after July 4, 1804, slavery did not officially disappear from Middlesex County until the 1850 census.

Although a large majority of Middlesex County’s population was farmers, and towns were simply the centers of farming communities, by the early 18th century, Middlesex County was beginning to become a transportation and commercial center. Its strategic location, astride the Raritan River mid-way between New York and Philadelphia, resulted in substantial pressure for an improved transportation infrastructure. This soon was to develop. The narrow, wilderness paths that had been used by the Lenape were improved and became roads. Between 1705 and 1713, 35 roads were built or improved throughout Middlesex County.

The Post Road ran from Perth Amboy, through Woodbridge and Piscataway, to New Brunswick and beyond. Lorrie’s Road ran from what is now South Amboy through Cranbury and on to the southwest. The King’s Highway ran from New York through Middlesex County to Philadelphia, passing through Woodbridge and Piscataway before crossing the Raritan River at Inian’s Ferry, through what is now New Brunswick. In 1728, a stagecoach was already running twice a week between New Brunswick and Trenton, the fare being two shillings and sixpence, per passenger. In 1734, a “stage-boat” service began shipping freight from New York across New Jersey, by stagecoach and boat.

County residents sold the goods they produced (grain, flour, beef, pork, fish, copper, iron, lumber and wood products) and purchased the goods they needed at one or both of the two port settlements which developed along the Raritan River. These trading centers were Raritan Landing (now part of Piscataway), which was located at the furthest point of navigation on the River at high tide, and yet-to-be-named New Brunswick, located about one and a half miles farther downstream, where the Raritan River was navigable during both high and low tides. Merchants along the river built large warehouses in which goods were stored until they could be loaded on rafts and flatboats for shipment up or downriver. Export goods were sent by river to Perth Amboy for shipment by sea to Europe or other colonies.

Cornelius Low was a very prosperous merchant and resident of Raritan Landing. When his home there was destroyed by a flood, he built a new stone house (Ivy Hall) in Piscataway, high on a bluff, overlooking the Raritan River across from present-day New Brunswick. The house was considered, at the time, to be one of the finest homes in New Jersey. The Low House has been fully restored on its original site, and is now owned and operated, as a museum, by the Middlesex County Cultural and Heritage Commission.

The settlement, which eventually became New Brunswick, had several prior names. At times it was known as Raritan Ford, Pridmore's (or Prigmore's) Swamp and then Inian's Ferry. In 1681, John Inian had come to the area with 10 associates from Long Island. He purchased 10,000 acres straddling the Raritan River and, in 1686, established an important ferry service, for which he received exclusive rights in 1697. This ferry operated near the site of the present-day Albany Street Bridge between New Brunswick and Highland Park.

John Inian helped the settlements on both sides of the Raritan River to develop by establishing his ferry service, building new roads and improving a number of Lenape trails (including the Assunpink Trail which had originally led to the Raritan ford, but which he rerouted directly to his ferry site). One of the new roads constructed by Inian connected his ferry-site on the Raritan River to Delaware Falls (Trenton, NJ). Inian's new roads made travel through the area more efficient, improved his own ferry business and encouraged the growth of commerce in the region.

In 1724, the town which had grown around Inian's ferry was finally named Brunswick (later New Brunswick), in honor of King George I of England, who was also the Duke of Brunswick. In 1730, a visitor remarked, "When I came to this place in 1715, there were but four or five houses in the thirty miles between Inian's Falls and the Falls of the Delaware, but now the whole way it is almost a continued lane of fences and good farmer houses."⁷

New Brunswick enjoyed an ideal location; it was situated on a crossing point of a navigable river in the heart of the New Jersey's most important grain

⁷ New Brunswick History Raritan River a Vital Connecting Link between Settlements, www.city-data.com

producing region. “New Brunswick soon became one of the great agricultural depots of the Colony. Every stream that could turn a wheel had its mill. Warehouses and inns were erected, and the river front was lined with vessels.”⁸ Farmers, from throughout the area, would come to the city to mill, store, sell and ship their goods. By 1730, there were at least six gristmills operating in New Brunswick.

That same year, New Brunswick was granted a Royal City Charter from King George II, making it the second royally chartered city in Middlesex County (Perth Amboy had been granted a royal charter in 1718). At the time New Brunswick received its charter, Middlesex County was the only county in the American Colonies to have two royally chartered cities within its boundaries. Notwithstanding its status as a successful, royally chartered, commercial port-city, New Brunswick was still sufficiently picturesque to charm visitors:

New Brunswick, wrote traveler Peter Kalm, was “a pretty little town in the province of New Jersey, in a valley on the west side of the river Rareton.” The houses had small front porches with benches, “on which the people sat in the evening, in order to enjoy the fresh air, and to have the pleasure of viewing those who passed by.” Another visitor described New Brunswick as “a small trading town, situated on the Rareton River, which is navigable to the town for small craft.” Yet another thought that the town, along with Philadelphia, had “the handsomest women that I saw in America.” John Adams passed through New Brunswick in 1774 and said the town had about one hundred fifty houses, three churches and several paved streets. The beauty of the Raritan River impressed him, as did the number of boats there, in front of the town.⁹

Eventually, because it enjoyed deeper water at low tide, New Brunswick began to attract river trade away from Raritan Landing. Also, as merchants began to realize that smaller fully loaded ships could sail directly to New Brunswick, without unloading cargo at Perth Amboy for shipment upriver, New Brunswick began to attract transoceanic shipping trade away from Perth Amboy.

New Jersey supplied men, money and munitions to the English during their various wars with the French for control of North America. The Jersey Blues, the provincial Regiment of New Jersey, fought with the British at Oswego, Ticonderoga and Lake George. The Colony also provisioned and quartered large numbers of English troops arriving from Europe. In 1758, the New Jersey Colonial Legislature authorized the construction of five 300-man-barracks, across the Colony, to house British troops. One of these barracks was located at Perth Amboy and another at New Brunswick.

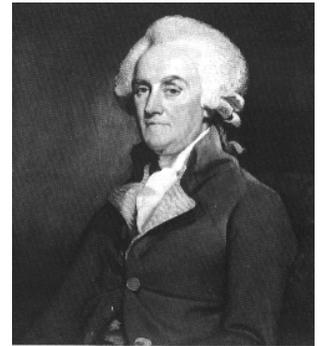
⁸ New Jersey –The American Guide Series, <http://www.getnj.com>

⁹ Lefkowitz, Arthur S. “The Long Retreat” , pg. 85

In 1755, during the French and Indian War, the Lenape, like the rest of the Algonquin Nation, sided with the French in an effort to regain their land from the ever-encroaching English. It was a bad decision, and, eventually they were forced to make peace as a defeated nation. In 1758, the Lenape Leader, Teedyuscung, made peace with the Royal Governor of New Jersey, Francis Bernard, by exchanging apologies.

In that same year, the New Jersey Assembly established the first Indian Reservation, in Burlington County, as a permanent home for the few Lenape remaining in New Jersey. The Lenape had given up all of their rights to the land and maintained only hunting and fishing privileges in New Jersey. A chapter in the history of Middlesex County ended as the County's original settlers were permanently displaced by the European newcomers.

In 1762, William Franklin, the illegitimate son of Benjamin Franklin, was appointed Royal Governor of New Jersey. In 1774, he and his wife took up residence at the newly completed Proprietary House in Perth Amboy.



William Franklin

As population, trade and the transportation infrastructure expanded, Middlesex County grew more cosmopolitan and more prosperous. In 1751, James Parker established the first permanent printing press in Woodbridge. He became the official printer for the Colony in 1758. In that same year, Parker Press produced the first magazine to be printed in the American colonies. The number of municipalities in Middlesex County continued to expand, and, in 1761, North Brunswick was founded when Dutch and French settlers purchased the land from the Lenape.

Queens College (renamed Rutgers College in 1825) was chartered in 1766, making the College the eighth oldest college/university in America. Named for Queen Charlotte of Mecklenburg Strelitz, who was the consort of King George III, Queens College was the sister school to King's College (now Columbia University) in New York. Classes at Queens College were first held, in 1771, at *The Sign of the Red Lion*, a New Brunswick tavern.

Middlesex County was, undeniably, quite prosperous during the last half of the 18th Century, but, dating back to the refusal of the original colonists to pay quit-rents to the Proprietors in 1670, its residents had a long tradition of resisting taxes. As luck would have it, after the French and Indian War (1754-1763), Great Britain, heavily in debt, wanted the help of its prosperous American colonists to pay for the cost of the war as well as the ongoing cost of defending and administering the colonies. The colonists were, understandably, not terribly receptive to this idea. Consequently, when Parliament began to impose regulations and taxes on colonial trade and commerce, it caused a new tension to develop between Great Britain and her American colonies.

The American Revolution

In 1764, Parliament modified the Molasses Act of 1733 by passing the Sugar Act of 1764. Although the Sugar Act actually reduced the amount of the tax imposed by the Molasses Act (from sixpence per gallon of imported, non-British sugar and molasses to three pence per gallon), the list of taxable items was expanded. What was worse, from the point of view of the colonists, the British government actually intended to collect this reduced tax. This had never been attempted, in earnest, with the Molasses Act. Colonial boycotts and protests were widespread. Colonists still believed that England had the right to regulate trade within the Empire, but the Sugar Act was designed to raise revenue, not to regulate trade.

Colonial unrest escalated when, on March 22, 1765, Parliament passed the *Stamp Act*. This Act, which imposed a tax on every piece of printed paper used in the colonies, was enacted for the purpose of financing the defense of the colonies, and to pay for the recent French and Indian War. Although the actual cost of the Stamp Act was small, it was viewed as a direct attempt by Great Britain to tax the colonies without the prior approval of the colonial legislatures. The colonists balked at the idea of “taxation without representation.”

The protests of New Jerseyans against parliamentary taxation were relatively mild and intended to be constructive. In response to the *Stamp Act*, the New Jersey Assembly called upon New Jerseyans to “preserve the peace, quiet, harmony and good order of government; that no heats, disorders, or animosities may in the least obstruct the united endeavors.”¹⁰ Notwithstanding this legislative restraint, on September 2, 1765, William Coxe, the Stamp Distributor for New Jersey, resigned, and on October 29, the effigy of this “vile traitor” was hanged and then burned in New Brunswick, and on November 30, the New Jersey Assembly passed the Stamp Act Resolve officially opposing the tax.

Sons of Liberty chapters formed in New Jersey during February and March, 1766, the most popular and effective New Jersey chapters were those in the Middlesex County communities of New Brunswick and Woodbridge. The New Jersey *Sons of Liberty* were resolute, but not as radical in their actions as chapters in other colonies. This difference reflected the more moderate temperament of the Colony as a whole.

In February 1766, Parliament repealed the *Stamp Act*. When word of the repeal finally reached Philadelphia, on May 19, 1766, celebrations were held throughout the colonies. In Woodbridge, on June 5, the *Sons of Liberty* celebrated the repeal in the “company of many hundreds” at the Liberty Oak. Toasts were drunk to those who were thought to have had a role in the Stamp Act repeal, including the King and Parliament of Great Britain.

¹⁰ http://www.njstatelib.org/NJ_Information/Digital_Collections/NJInTheAmericanRevolution1763-1783/StampAct.pdf

Notwithstanding the colonial jubilation, Parliament wanted the American Colonists to understand that it had not abandoned its power to tax the colonies. First, it passed a *Declaratory Act* clearly restating Parliament's right to pass laws and statutes "in all cases whatsoever." Next, believing that the Colonists would not object to external taxes collected at ports of entry, Parliament passed the *Trade and Navigation Acts*, which imposed new customs duties on imported glass, red and white lead, painters' colours, paper and tea.

New Jersey's was the third Colonial Legislature, after Massachusetts and Virginia, to petition the King (bypassing normal imperial channels which should have included Governor Franklin and Parliament) to repeal this legislation. The New Jersey Petition was resolute in stating the Colony's grievances, but was equally firm in professing loyalty to the Crown. New Jersey was ready to oppose specific acts of Parliament, but was not ready to advocate any separation from the British Empire.

Governor Franklin was reprimanded by Parliament for not having prevented the petition being considered by the Colonial Legislature. Franklin, who personally disapproved of many imperial measures and who genuinely cared about the welfare of New Jersey, pointed out that a) his instructions to prevent the petition had arrived only after it had already been approved; b) he had had no prior knowledge of the petition; and c) New Jersey's action was consistent with actions of all the other colonies.

Although New Jersey had relatively little direct trade with England, when the colonies called for a boycott of English goods, it had a serious effect on trading centers like New Brunswick and Perth Amboy. Notwithstanding the impact, merchants did observe the boycott, and on October 18, 1769, the Colonial Legislature passed a resolution commending the merchants of the Colony for their patriotic support of the boycott. Conversely, in May 1770, when the 26th Royal Infantry Regiment, which had been stationed in New Jersey for three years, was ordered out of the Colony, the Freeholders, magistrates and inhabitants of New Brunswick bid a very cordial farewell to the officers and men who had been barracked in that city.

On February 8, 1774, New Jersey became the last Colony to establish a Committee of Correspondence as requested by Virginia almost a year earlier. The first meeting of the Committee took place, in New Brunswick, on May 31, 1774, for the purpose of responding to an emergency message from the Boston Committee of Correspondence, about the Port Act which had closed Boston Harbor in retribution for the Boston Tea Party.

From July 21 to 24, 1774, delegates from eleven New Jersey counties, 72 in all, convened in New Brunswick to consider the Colony's grievances against the government of Great Britain. This first meeting of the New Jersey Provincial Congress ended with the election of five New Jersey representatives to the first Continental Congress, scheduled to meet in Philadelphia in September of that same year.

Governor William Franklin, who had by this time irreconcilably split with his father over Colonial relations with Great Britain, sent newspaper accounts and reports on revolutionary activities in New Jersey, to England, urging concessions by the government, and offering to mediate between the two sides. One of these packets was intercepted, and used as proof of the Royal Governor's treason!

On January 8, 1776, Governor Franklin was arrested, in the middle of the night, at his residence in Perth Amboy by a number of armed men. He remained under house-arrest for five months, all the while, insisting that he had the legal authority to govern New Jersey in the name of the King. In June, 1776, Franklin called the old Provincial Assembly into session to propose a plan for reconciliation with England. This act was viewed as willful defiance of the new Provincial Congress, and Franklin was ordered imprisoned in Connecticut. His wife died while he was in prison, and, following his release, he moved to England without ever returning to his residence in Perth Amboy.

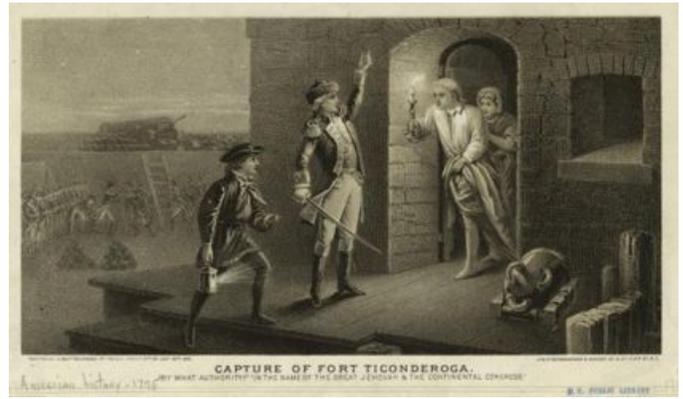
On July 2, 1776, the Provincial Congress passed the *New Jersey Constitution of 1776*. This Constitution included a proviso that, if "a reconciliation between Great Britain and these Colonies should take place, and the latter be taken again under the protection and government of the crown of Britain, this Charter shall be null and void – otherwise to remain firm and inviolable." New Jersey was still not fully committed to a final separation from Great Britain.

On July 4, 1776, New Jersey joined eleven other Colonies to approve the *Declaration of Independence* (New York abstained, and did not vote to approve the *Declaration* until July 9, 1776), declaring the United Colonies to be a free and independent nation. The third public reading of the *Declaration of Independence* took place in New Brunswick on July 8, 1776.

Actual fighting between Colonists and British troops had broken out more than a year before the adoption of the *Declaration of Independence*. On April 19, 1775, American Minutemen had skirmished with British regulars at Lexington and Concord, Massachusetts. The Redcoats had been forced into a hurried and confused retreat, relentlessly pursued by bands of Americans harassing their withdrawal, guerilla-style, from behind trees and stone walls. By the time the British reached the safety of Charlestown, Massachusetts and the relief force that had been sent to support them, they had been badly beaten, having lost nearly 300 men killed, wounded or missing.

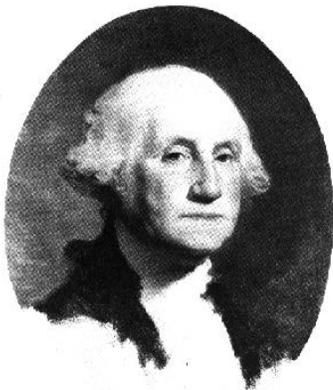
Three weeks later, on May 10, Ethan Allen and Benedict Arnold surprised the small British garrisons and captured both Fort Ticonderoga and Crown Point on the Hudson River.

On June 17, at the Battle of Bunker Hill, 1,400 assorted militiamen inflicted 1,144 casualties (including 90 officers), on an attacking force of 2,500 British regulars, while suffering about 450 casualties of their own. After Bunker Hill, the British withdrew into Boston, and, throughout the winter of 1775-76, the Americans blockaded the city on the landward side.



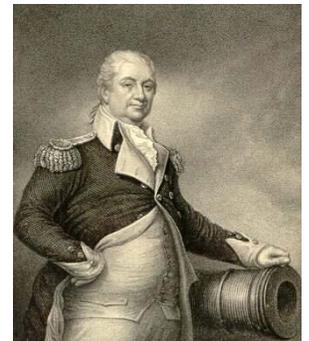
The Capture of Fort Ticonderoga

On June 15, 1775, the Continental Congress appointed George Washington as Commander of the Continental Army. Later in June, he passed through Middlesex County on his way north to take command of the army, arriving at Cambridge, Massachusetts on July 3, 1775.



George Washington

While the landward siege tightened around Boston, American Colonel Henry Knox moved 59 pieces of artillery (43 cannon and 16 mortars), from Fort Ticonderoga, across 350 miles of frozen, inhospitable terrain, arriving at Cambridge, Massachusetts on January 25, 1776. This artillery was positioned around Boston, and the guns emplaced on Dorchester Heights commanded Boston Harbor. These guns threatened to close the harbor to British shipping, and cut the British army in the city off from reinforcements, resupply and naval support. This danger made Boston untenable, so the British evacuated the city, by sea, on March 17, 1776.

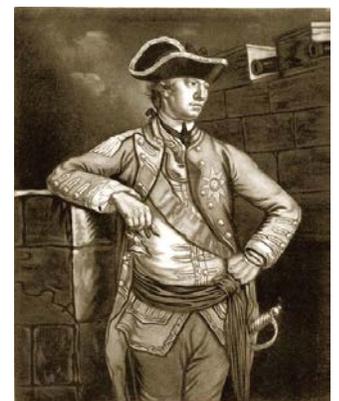


Henry Knox

On June 25, 1776, the British army and fleet, which had last been seen evacuating Boston, reappeared, heavily reinforced, off the coast of New York City. General Sir William Howe commanded the army (replacing General Thomas Gage, who had been in overall command of the failures at Lexington/Concord and Bunker Hill), and Howe's brother, Admiral Lord Richard Howe, commanded the fleet (replacing Admiral Samuel Graves, who had been in command of the naval forces at Boston).

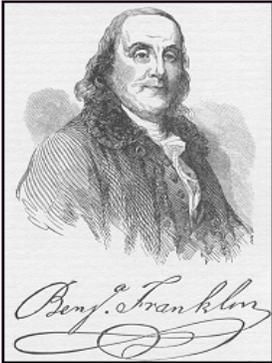


Richard Howe



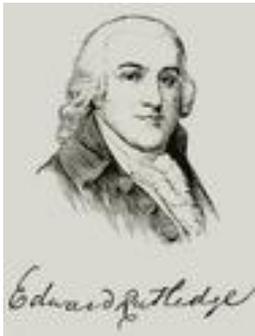
William Howe

As the *Declaration of Independence* was being signed in Philadelphia, the Howe brothers were disembarking an army of 32,000 professional soldiers with artillery and supplies, supported by 30 large warships and hundreds of transports, onto Staten Island. In addition to commanding the greatest expeditionary force Great Britain had ever assembled, the Howe brothers also were designated to act as peace negotiators between Great Britain and the Colonies.



George Washington, with a combined force of about 16,000 continental regulars and militia, intended to defend Long Island and Manhattan against the British forces on Staten Island. The Americans were badly beaten and forced to retreat from Long Island. Washington was fortunate that his army was able to escape by boat to Manhattan. After the Battle of Long Island, Admiral Howe sent a letter to Benjamin Franklin, expressing his hope that a peaceful reconciliation between England and the Colonies could be achieved. He also sent an American General, captured on Long Island, to inform Congress of Howe's willingness to negotiate.

Congress appointed three Peace Commissioners, Benjamin Franklin, John Adams and Edward Rutledge, to meet with Howe on Staten Island to hear his proposal. Nothing much was expected of or accomplished by the meeting, but, on their way to Staten Island, in September 1776, the three Peace Commissioners



spent the night prior to the parlay, at the Indian Queen Tavern in New Brunswick, at the intersection of Albany and Water Streets. The Indian Queen Tavern was disassembled in 1970 to make way for road and bridge improvements. It was reassembled at East Jersey Olde Towne Village in Piscataway. East Jersey Olde Towne Village is operated by the Middlesex County Cultural and Heritage Commission and is open to the public.

Following the defeat on Long Island, Washington was defeated and/or forced to retreat from Kip's Bay, the Harlem Heights, Pell's Point, White Plains and Fort Washington in fairly rapid succession. After evacuating the New York City area, Washington split his army into three separate forces in order to simultaneously defend New Jersey, the upper Hudson River and New England from possible British attack. In November, believing that a British invasion of New Jersey was the most critical threat, Washington personally lead 5,000 troops, whose homes were south of the Hudson River, into New Jersey, to defend the State.

The British made a sudden landing in New Jersey and quickly captured Fort Lee, together with the large quantities of supplies, ammunition and equipment, including nearly all of the American artillery that were stored there. Washington began a desperate retreat across New Jersey with a large British column (including a force of New Jersey loyalists), under General Lord Charles Cornwallis, in hot pursuit. As the Continental Army retreated south through Newark, Lieutenant (later President) James Monroe estimated that Washington's command had shrunk to between 3,000 and 3,500 men.



James Monroe



Charles Cornwallis

The New Jersey Militia failed to join the army in significant numbers despite Washington's frantic appeals (In fact, as we shall see, a number of New Jersey troops, who were already with the army, decided to go home). Washington later wrote: "In short, the conduct of the jerseys has been most infamous. Instead of turning out to defend their country, and affording aid to our army, they are making their submissions (to the king) as fast as they can. If the jerseys had given us any support we might have made a good stand at Hackensac (sic) and after that at Brunswick..."¹¹

Hurrying southwest across New Jersey, Washington had not only to outdistance Cornwallis, he also had to cross the Raritan River at New Brunswick (known in those days simply as Brunswick), lest General Howe send additional troops, by water, from Staten Island to Woodbridge or Perth Amboy, to cut off the Continental Army's retreat. While this British landing never actually took place, General Sir Henry Clinton repeatedly urged General Howe to allow him to move his 6,000 troops to Perth Amboy, so that Washington's army could be trapped between the two British forces. Instead, Howe ordered Clinton to take his men, by sea, to capture Rhode Island.

At Elizabethtown, Washington met a delegation from the Continental Congress. He told the delegation that he believed the British might march all the way to Philadelphia, but that he would try to stop them by defending the Raritan River at New Brunswick. Still concerned about a British landing at Perth Amboy, Washington hurried his troops south, down the Upper Road, through Woodbridge and Piscataway, toward the Raritan River crossings. During the march, Washington was joined by a force of 1,000 men under the command of General William Alexander, better known as Lord Stirling.

On November 29, 1776, after a march of twenty-five miles through continuous rain, the first American soldiers crossed the Raritan River and entered New Brunswick. Washington had hopes of holding New Brunswick, not

¹¹ New Jersey –The American Guide Series, <http://www.getnj.com>

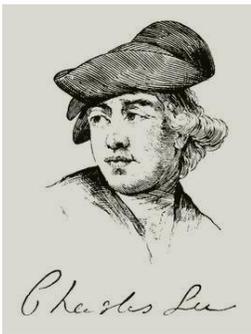
only to stop Cornwallis from marching on to Philadelphia, but also because New Brunswick, a city of about 150 homes, was a valuable center of agriculture and trade. As one author (a resident of Middlesex County) describes it:

On the eve of the Revolution, New Brunswick carried on a brisk trade with New York City. Warehouses and storehouses lined the waterfront. Every day sloops loaded corn, flour, bread, linseed, meat, and timber for sale in New York. Occasionally, a ship would sail from New Brunswick for the West Indies or England. The town was a popular stop on the Upper Road, and profited from the many travelers who stopped at its numerous taverns and inns. The three best-known taverns were the *White Hart*, *Sign of the Ship* and *Indian Queen*. New Brunswick's days of peace were numbered, however, for it was about to become a seat of war.¹²

On November 30, the advance guard of Cornwallis's army occupied Woodbridge and Perth Amboy. On that same day, the Howe brothers issued a proclamation which offered a pardon to anyone who would, within 60 days, take an oath of allegiance to the King and pledge peaceable obedience to him. In New Jersey, thousands of residents eventually declared their loyalty to the Crown (300 flocked to New Brunswick during the month of December to swear loyalty). In fact, not counting part-time militia, New Jersey probably contributed more full-time soldiers to the Loyalist cause than to the Continental Army during the Revolution. During the war, Loyalist and Patriot factions engaged in internecine warfare in New Jersey, dividing communities and causing considerable destruction.

November 30 is believed by some to be the "worst day of the American Revolution." On that day, George Washington, whose New Brunswick headquarters was in Cochrane's Tavern, had four problems, besides the advancing army of Cornwallis, with which he had to deal. First, on December 1, the next day, the enlistments of 2,000 of his soldiers, about half the army, would expire. In fact, 2,000 New Jersey and Maryland militiamen left the army that day and headed home, with the approaching British only two hours away.

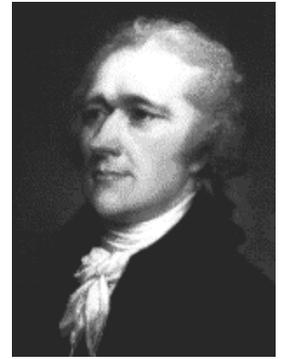
Second, General Charles Lee, Washington's insubordinate and disloyal second-in-command, who had been sent to guard New England with 7,500 desperately needed troops, was ignoring Washington's repeated orders to join forces. Third, Washington mistakenly opened a letter from Lee to Joseph Reed, Washington's most trusted friend and confidant, indicating that Reed was corresponding with Lee about Washington's "fatal indecision of mind," and was part of a movement in favor of giving Washington's command to Lee. Fourth, and finally, Washington learned that a second enemy column, made up of



¹²Lefkowitz, Arthur S. "The Long Retreat" , pg. 85

Hessians, was moving toward his right flank, and that the British were landing fresh troops at Perth Amboy.

On Sunday morning December 1, the first British artillery arrived on the north bank of the Raritan River. By noon that day, an artillery duel had commenced back and forth across the river, between the two British artillery pieces and a battery of five American guns in New Brunswick. This American battery was commanded by Captain Alexander Hamilton.



Alexander Hamilton

Washington ordered the only bridge over the Raritan, located at Raritan Landing, to be destroyed, but the Raritan River was fordable (only knee deep) in several places, and Washington's forces (only about 3,000 men) were not strong enough to hold the entire river line against a British attack. Washington, nevertheless, made it appear that he was going to defend New Brunswick. After dark, however, the Americans quietly retreated toward Princeton. To deceive the British and cover the retreat of his army, Washington left a small rear-guard at the river.

Realizing that the Americans had abandoned their positions opposite Raritan Landing, Hessian troops crossed the river and occupied the south bank of the Raritan, but fearful of American riflemen, they would not advance toward New Brunswick in the dark. Cornwallis occupied New Brunswick the next morning only to find that the Americans had escaped. Although Washington did not know it, Howe had directed Cornwallis not to advance beyond New Brunswick, without further orders.

The exhausted and hungry British and Hessian troops remained in the New Brunswick area as the American Army retreated. Cornwallis posted his light infantry south of New Brunswick, on the road to Princeton. The Hessians occupied homes on the Piscataway side of the river, and the main British force occupied farms further to the north. As a result of Cornwallis' unexpected stop-over in New Brunswick, Washington's army had six precious days to escape over the Delaware River into the relative safety of Pennsylvania.

December 1776 turned out, on the whole, to be a good month for George Washington. On Friday, December 13, 1776, General Charles Lee, who, as Washington's second-in-command, had been a constant thorn in his side, was captured by British cavalry at Basking Ridge. Also on Friday the 13th, General Howe decided to suspend any further military action until spring, and ordered the British army into winter quarters in northern New Jersey and New York.

To protect British gains in New Jersey, Howe established an 80 mile line of garrisoned outposts across the State. These were located at Perth Amboy, New Brunswick, Princeton (the Headquarters), Trenton, Bordentown and Burlington.



Washington Crossing the Delaware

On Christmas Eve 1776, Washington, with about 2,400 men, re-crossed the Delaware River, and, on Christmas Day, surprised the 1,400-man Hessian garrison at Trenton. A few of the Hessians were killed and most of the rest were captured. Their commander, Colonel Johann Gottlieb Rall, was mortally wounded. This small American victory at Trenton breathed new life into what had appeared to be a dying cause.

General Howe, in New York, was stunned. General Cornwallis, who had been on his way home to England, was immediately ordered back to New Jersey with orders to “bag the fox.” He landed his men at Perth Amboy and quickly marched 50 miles to Princeton with some of the finest troops in the British army. The British arrived at Princeton on January 1, 1777, and the next day, before dawn, Cornwallis marched toward Trenton with 7,000 men, leaving a force of 1,000 men as a rearguard in Princeton.

Cornwallis reached Trenton after dark, on January 2, following a long march, interspersed with periods of sharp skirmishing. Washington’s army was caught, so it appeared, with its back to the Delaware River. The Delaware was frozen and impassable for boats, but not frozen hard enough for the Americans to march across. Although General William Erskin urged him to attack immediately, Cornwallis, believing that there was no way for Washington to escape, decided to delay the attack until daylight. “We’ve got the old fox safe now,” he said, “we’ll go over (across the Assunpink Creek) and bag him in the morning.”

Washington did manage to slip away during the night of January 2-3, but not across the river to Pennsylvania. Without being detected, Washington marched, under cover of darkness, toward Princeton. There, on January 3, he soundly defeated the three regiments of the British rearguard.

Washington now headed north, with Cornwallis, once again, in hot pursuit. Three miles northeast of Princeton, Washington crossed Millstone Creek and arrived at Kingston. Here, Washington came to a fork in the road. The left fork would take him through Somerset Court House to Morristown where he knew his ragged, battered army could safely spend the winter. The main road, to the right, led straight to New Brunswick.

As British troops were being gathered for Cornwallis’ attack on Washington at Trenton, only 600 men were left to garrison New Brunswick. This small force was expected to guard all the supplies, munitions and equipment for Cornwallis’ army, the army’s pay-chest of 70,000 pounds sterling

and a captured American General - Charles Lee. The British Commander in New Brunswick, Brigadier General Edward Mathew, became increasingly nervous, as British fugitives from the Battle of Princeton arrived with rumors that the victorious Americans were marching up the Brunswick Road.

All Mathew had available to defend the city was his own small garrison and the 46th Infantry Regiment, which had arrived the previous day on its way to reinforce Cornwallis at Trenton. He posted what troops he had on high ground outside the city in a show of force. As a precaution, he loaded all the stores, the pay-chest and Charles Lee onto wagons, under heavy guard, and sent the wagons to the rebuilt bridge at Raritan Landing. In the event he was unable to keep Washington from reaching New Brunswick, he planned to get everything across the river and destroy the bridge before the Americans could follow. Fortunately for General Mathew, the Americans were not heading his way.



James Wilkinson

According to American Major James Wilkinson, Washington and several of his generals halted for quite a while at the crossroads gazing longingly in the direction of New Brunswick. New Brunswick was 18 miles away, the weather was getting worse, and the men had already marched from Trenton and fought a battle at Princeton. American General Henry Knox reported that the troops had had no “rest, rum or provisions for two nights and days.”¹³ Washington knew that, by now, Cornwallis would be hot on his heels, and was unwilling to take additional risks or ask anything more of his exhausted men. Reluctantly, he started the army on its way toward Somerset Court House.

Henry Knox “thought that 1,000 additional soldiers could have ‘struck one of the most brilliant strokes in all history’ ”¹⁴ at New Brunswick. Washington said later that he was convinced that a successful attack on New Brunswick, with its stores and pay-chest, could have ended the war. His army, instead, went into winter quarters at Morristown until the spring of 1777.

In the spring of 1777 General Howe, the British commander in New York, had an army of 27,000 men. Although Howe should have supported General John Burgoyne’s army marching south from Canada, he was committed to capturing Philadelphia instead. Howe argued that a threat to Philadelphia, the American capital, would pin down Washington’s army and prevent it from moving against Burgoyne. Recognizing Howe’s intentions, in May 1777, Washington moved his own army of 8,000 men to a strong position near Bound Brook, to be nearer the probable British route from New York to Philadelphia. At Bound Brook he was only eight miles from



John Burgoyne

¹³ Ketchum, Richard M. “The Winter Soldiers”, pg.317

¹⁴ Ketchum, Richard M. “The Winter Soldiers”, pg.317

the British base at New Brunswick.

The British believed that Washington's position was too strong to attack, so they made a feint from New Brunswick toward an American detachment at Princeton, in the hope of luring Washington down from the Watchung Mountains onto the plains north of New Brunswick. The American detachment at Princeton escaped without a fight and Washington refused to take the British bait. Washington knew that there was no real danger of Howe continuing his feint beyond Princeton toward Philadelphia because the heavy baggage and bridging-train of the British army was still in Perth Amboy.

On June 19, Howe attempted, once again, to lure Washington into a battle. He suddenly broke camp and fell back quickly, in what appeared to be a disorderly retreat, toward Perth Amboy. There was a possibility that Howe could load his army on ships, at Perth Amboy, and sail to Philadelphia. Washington, this time, took the bait. He followed Howe's army, ready to harass any British embarkation.

On June 26, Howe turned suddenly, attempting to cut Washington's line of retreat. Although one of Washington's divisions was battered, he successfully escaped back to the Watchung Mountains before Howe could spring the trap. Believing that Washington would never accept battle in New Jersey, and convinced that Burgoyne, who was approaching Saratoga, was in no danger, Howe loaded his army on ships and sailed for Philadelphia.

After landing near Philadelphia and defeating the Americans at the Battles of Brandywine Creek and Paoli, and after capturing the large quantities of American supplies that had been stored at Valley Forge, the British occupied Philadelphia, on September 26, 1777. Following an unsuccessful attack on the British at Germantown, Washington's army went into winter quarters at Valley Forge. The British settled down for the winter in Philadelphia.

On March 13, 1778, as a direct result of the decisive American victory over General John Burgoyne's army at Saratoga, France declared War on Great Britain and joined the Colonies in their struggle for independence. On May 24, General Sir Henry Clinton replaced Howe as the Commander-in-Chief of British forces in North America. Clinton was ordered, almost immediately, to send 5,000 of his men to the West Indies for an attack on the French in St. Lucia, to send an additional 3,000 men to St. Augustine in Florida, and to move the remainder of his command, by sea, back to New York City.



Henry Clinton

Clinton was unwilling to leave behind the thousands of loyalist supporters who had joined him in Philadelphia, but the available shipping was inadequate to move both the army and the civilians, at the same time. He was afraid to ship the soldiers and civilians in a series of long, time-consuming convoys since a French naval squadron might appear between New York and Philadelphia at

any time. Clinton, instead, decided to send the civilians, sick or wounded soldiers and as much heavy equipment as would fit, by ship, to New York. The rest of the army, heavily encumbered by 1,500 wagons, and outnumbered by the Americans at Valley Forge, would have to march across New Jersey to Sandy Hook for transport, by ship, to New York.

By 10:00 a.m., on June 18, 1778, after a risky seven-hour crossing of the Delaware River, which had been undisturbed by the Americans, the British army was back in New Jersey. The long, strung-out, overloaded and slow-moving British column was an irresistible target for Washington. Although he knew of the British plan as early as June 1, he was unable to move from Valley Forge until June 23, because one of his own generals was “passionately opposed” to attacking the enemy column.

Unfortunately for Washington, his old second-in-command, the self-proclaimed “expert on the art of war,” General Charles Lee had been exchanged for a captured British general (who had been kidnapped for the express purpose of making the exchange), and was back with the American Army. Lee was convinced that American soldiers could not stand up to British or German regulars, and his pessimism swayed other American officers during Washington’s councils of war.



Philemon Dickenson

The weather in New Jersey, at the time, was extremely hot and the British column was forced to endure several severe rainstorms. The New Jersey militia had demolished or damaged numerous bridges along the British route, and these had to be repaired to hold the heavy wagons. Clinton’s hot, tired troops crossed New Jersey averaging only about six miles per day. Major General Philemon Dickenson’s 1,000 New Jersey militiamen, to the west of the British column, and Colonel Daniel Morgan’s 600 riflemen, to the east, shadowed the British army. Fortunately for Clinton, the main American army was still at Valley Forge, thanks to Charles Lee.

On June 23, Washington had finally had enough. He could no longer stand to see such a great opportunity slip away. He decided to intercept Clinton’s march in New Jersey, despite Lee’s opposition. After crossing the Delaware and passing through parts of modern Hunterdon, Mercer and Somerset Counties, Washington’s army marched through Dayton (now part of South Brunswick Township), Monroe Township and Jamesburg, on its way to intercept the British column. Washington had dispatched an advance guard of 6,000 men to attack the rear of the escaping British column in an effort to hold up Clinton’s march long enough for the main American Army to attack and destroy the entire British force.

Washington needed a General to lead the advance guard. General Lee, who was unalterably opposed to fighting any battle with the British regulars,

originally refused the job. Later, after Washington had appointed young Major General the Marquis de Lafayette to lead the force, Lee changed his mind and demanded that he be given the command. Lafayette unselfishly agreed to Lee's request and turned command over to Lee on the evening of June 27.

Lee, who, on the night of June 27, was close enough to the British column to hear its wagons leaving Monmouth Courthouse, gave no orders. The next day, when Dickenson's New Jersey militia reported that it was in contact with the rear of the British column, and that the column seemed to be withdrawing, Lee did nothing. In fact, Lee might have done nothing at all, had he not received specific orders from Washington to attack immediately.



Lee was confused by conflicting reports that the British were withdrawing and, at the same time, preparing to fight. Both reports were correct. The baggage train and part of Clinton's army were marching away, toward Middletown. The rear guard was preparing to fight a delaying action, so that the slow-moving baggage train would have time to get safely away.

Lee posted his units around the battlefield in a fairly haphazard and uncoordinated manner. He had no plan, gave no orders and quickly lost control of the battle. Once, when Lafayette urged a general attack, Lee, the commanding American general, responded, "Sir, you do not know the British soldiers. We cannot stand against them."

Initially Lee had faced only 2,000 troops of the enemy rear guard, but the confused American attack had alerted Clinton to the danger his army was in, and had given him time to bring back substantial reinforcements. The forces Clinton eventually committed to the battle included some of the toughest soldiers in the world, including the British and Hessian grenadiers, two battalions of light infantry, the Coldstream Guards, three brigades of British infantry, a regiment of dragoons, and the excellent Tory light-cavalry known as the Queens Rangers. Lee had no intention of "standing" against this force and ordered the units in his immediate vicinity to retreat. Lee did not bother to communicate the order to retreat to the rest of his army.

The Americans were generally falling back, in some disorder, when George Washington and the main body of the American Army reached the field. Washington immediately relieved Lee of his command and sent him to the rear. Washington then halted the retreat and took personal command of the battle. He had arrived just in time to prevent an American disaster, but too late to win a decisive American victory.

Throughout the rest of that sweltering, 100-degree day, the British and Americans fought each other to a standstill. There was no quarter given and none asked for. The fighting was so desperate and intense that it gave rise to



Molly Pitcher Loads Her Husband's Cannon

the legend of Molly Pitcher, who is said to have given up carrying water for the troops to help load her wounded husband's cannon. Throughout the battle, the New Jersey militia held its own against the British, and the American Regulars (including the four New Jersey regiments of Brigadier General William Maxwell's Brigade, totaling about 1,000 men), not only "stood against" the British and German Regulars, but gave as good as they got.

At the end of the day, the Americans held the field, but the British were able to withdraw during the night, to continue their march in good order. Their heavy baggage train was well on its way toward Sandy Hook and safety. Monmouth Courthouse was the last time the two main armies would meet, and was the last great battle of the American Revolution in the North.

After the battle, Clinton's army reached Sandy Hook and sailed to New York. Washington moved his army to Piscataway and made camp along the Raritan River, near the present site of Johnson Park. On July 4, 1778, Washington and the army observed America's second birthday, in New Brunswick, with a formal salute and a double ration of rum.

The final postscript to the Battle of Monmouth Courthouse was the Court Martial of General Charles Lee, which was held in New Brunswick from July 4 to August 12, 1778. On June 30, Washington had issued an order congratulating the army, but omitted any reference to Lee. Lee took offense and sent Washington a letter demanding an explanation. Instead of explaining himself, Washington charged Lee with three counts of misconduct: "disobedience of orders in not attacking the enemy on the 28th of June, agreeable to repeated instructions; misbehavior before the enemy on the same day, by making an unnecessary, disorderly and shameful retreat; and disrespect to the Commander-in-Chief."

The Court found Lee guilty of all three charges but removed the word "shameful" from the second charge. Lee was suspended from Continental Army service for one year. The verdict was later reviewed and upheld by Congress, and General Charles Lee's military service in America was over.

A Tory, by the name of John Rattoone, owned a tavern in South Amboy that catered to both Patriots and Loyalists. In 1780, the American traitor Benedict Arnold used this tavern to pass written messages to the British. In these messages, Arnold offered to turn the American fortifications at West Point, New York over to the British, in exchange for a large sum of money and the rank of Brigadier General in the British Army. The fortifications at West Point were the key to



continued American control of the upper Hudson River. Had the British taken West Point, their navy would have been able to control the Hudson River from Staten Island to Albany, effectively cutting New England off from the rest of the Colonies. Fortunately, one of these letters, in the possession of British Major John Andre, was intercepted, and Arnold's plot was foiled. Benedict Arnold escaped, but Major Andre was hanged as a spy.

The Hyler family had moved to New Brunswick from Baden, Germany in 1752. At the time of his family's immigration, Adam Hyler was about 17 years old. Adam Hyler later became a seaman, possibly having spent time in the British Royal Navy. Beginning in November 1780, as the leader of a band of privateers, Captain Hyler embarked on a series of daring whaleboat raids against the British on Staten Island, occasionally bringing back prisoners to New Brunswick.



18th Century Whaleboat

Hyler also raided British shipping. He captured the sloop *Susannah*, at anchor off Staten Island. In October 1781, towing two whaleboats, he sailed his small sloop, *Revenge*, down the Raritan River from New Brunswick to South Amboy. There, his little flotilla waited until nightfall. After dark, he sailed across the Raritan Bay to Sandy Hook, where a large British warship and a log fort, manned by Loyalists, protected five small vessels anchored near the lighthouse.

Three of the smaller vessels were unarmed merchantmen, but the other two ships were armed privateers, either one being more than a match for Hyler's entire flotilla. As he approached the British ships, Hyler sent some of his men, in one of the whaleboats, to reconnoiter. They found that all of the ships were either deserted or carelessly guarded. Hyler divided his men. One whaleboat would capture the three merchantmen; the other would capture the smaller privateer, while the *Revenge* would capture the larger privateer. All five ships were quickly captured and plundered, with everything worth taking being loaded aboard the *Revenge* or the two whaleboats.

Some British crewmen, meanwhile, had escaped from the captured vessels and alerted the Tories in the log fort. The fort fired at Hyler's flotilla with some small canon, but did no damage. Hyler's men then burned four of the captured ships. The fifth ship was spared because the whaleboat men had found a woman and her four children on board. The *Revenge*, once again towing the whaleboats, made good its escape just as the large British warship opened fire.

Hyler returned to a hero's welcome in New Brunswick. "The New Jersey Gazette's correspondent reported gleefully that his (Hyler's) small ships had come back laden with prisoners, with sails and cordage stripped from the

captured vessels and with other booty that included ‘250 bushels of wheat, a quantity of cheese, several swivels (small canon), a number of fazes, one cask of powder and some dry goods.’ ”¹⁵ Adam Hyler had a short but very successful career as a privateer until his death (the result of an accidental injury), in September 1782.

In December 1783, when the war was over, George Washington passed through Middlesex County once again. He had previously passed through the County on his way to take command of the Continental Army outside Boston, and now Washington was traveling, with Baron Friedrich von Steuben, on his way home to Mount Vernon, having just bid farewell to his officers, at Fraunces’ Tavern in New York City. During Washington’s stopover, a party was held in his honor at the Indian Queen Tavern in New Brunswick. Washington was toasted thirteen times during the party.



Friedrich von Steuben

Even in the 18th century, those traveling by land from New York to Philadelphia or anywhere in the southeastern United States passed through Middlesex County. The County’s central location and transportation infrastructure have kept it in the mainstream of travel and commerce from its earliest settlement to the present day.

The Late Eighteenth and Early Nineteenth Centuries



William Paterson

In 1787, New Jersey supported the adoption of a new Federal Constitution. Under the *Articles of Confederation*, New Jersey was in danger of being dominated by her more populous and economically stronger neighbors, New York and Pennsylvania. This was particularly true with respect to the commercial use and transit of the Delaware and Hudson Rivers. William Paterson, a lawyer from New Brunswick, who later became one of the first two United States Senators from New Jersey and Governor of the State, served as part of the New Jersey delegation to the Constitutional Convention and played a key role in the development of the *United States Constitution*.

At the Convention, he introduced nine resolutions, known as the *New Jersey Plan*, relating to the proposed structure of the Federal Government. While this plan was not adopted per se, some of its elements helped to end an impasse between the states and pave the way for the *Great Compromise*, which balanced the interests of the larger and more populous states with those of the smaller and less populous states.

¹⁵ The Whaleboat wars of the Revolution, <http://www.doublegv.com/ggv/battles/whaleboat.html>

The *New Jersey Plan* provided for federal supremacy, equal representation in the Senate, a federal judiciary, the *Three Fifths* clause (giving southern states partial representation in Congress for slaves), and the *commerce clause* giving jurisdiction over interstate commerce to the federal government. Ironically, the first dispute to be raised under the commerce clause of the Constitution was the 1824 case of *Gibbons vs. Ogden*, between New Jersey and New York, which involved transit rights on the Hudson River.

On November 20, 1789, New Jersey became the first State to ratify the *Bill of Rights* (the first 10 amendments) of the *U.S. Constitution*. This historic ratification vote occurred in the Perth Amboy City Hall. The Provincial Assembly had met in the Perth Amboy City Hall when Perth Amboy was the Provincial Capital of East Jersey, and the building had also served as the Middlesex County Courthouse until 1793, when the County Seat was moved to New Brunswick. Construction of this building dates back to 1713, and, although it has suffered two fires and a number of modifications, it is the oldest public building, in continuous use, in the United States today.

In 1800, Middlesex County was still primarily agricultural. The land on both sides of the Raritan River, from its mouth to Raritan Landing, was used for pasture and tillage and produced considerable quantities of grain and hay. County population had grown to just over 16,000, and the number of municipalities in the County also was growing.

In 1798, South Brunswick Township was founded when the small Villages of Kingston, Rhode Hall, Dayton, Kendall Park, Fresh Ponds, Deans and Monmouth Junction were incorporated into a single municipal entity. In 1816, Jacob Bergen built a gristmill on the banks of the Lawrence Brook to mill the grain of local farmers. The settlement of Bergen's Mill, consisting of a tavern and several houses, grew up around Bergen's gristmill. In 1843, Christopher Meyer founded the Meyer Rubber Company (one of the first rubber manufacturing plants in the United States), in Bergen's Mill. Area residents, at about that time, began referring to Bergen's Mill as "Milltown", and, in 1889, the Bergen's Mill area of North Brunswick was formally incorporated as the Borough of Milltown.

During the early years of the 19th century, although the United States was at peace with Great Britain, tension was growing between the two countries. In



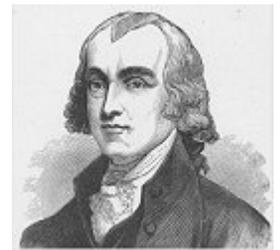
HMS Leopard Fires on USS Chesapeake

addition to the residual ill will left over from the Revolutionary War, and the desire of some Americans to make Canada a part of the United States, British maritime policies, arising from pressures of the Napoleonic Wars, and suspected British support of native-American resistance to the westward expansion of the United

States caused relations between the two countries to worsen.

By establishing a blockade of the European continent, the British Royal Navy attempted to prevent neutrals, like the United States, from trading with France and its allies or vassals. This created an economic hardship for American merchants accustomed to trading with continental European markets. Further, British warships would routinely stop and board American merchant ships to search for and remove suspected Royal Navy deserters. In one extreme case the British 50-gun frigate *Leopard* opened fire, without warning, on the American 36-gun frigate *Chesapeake*, when the *Chesapeake* refused to be boarded. Additionally, American frontiersmen charged that the British were arming Native Americans hostile to further American expansion into Native American lands (it is likely that this charge was greatly exaggerated).

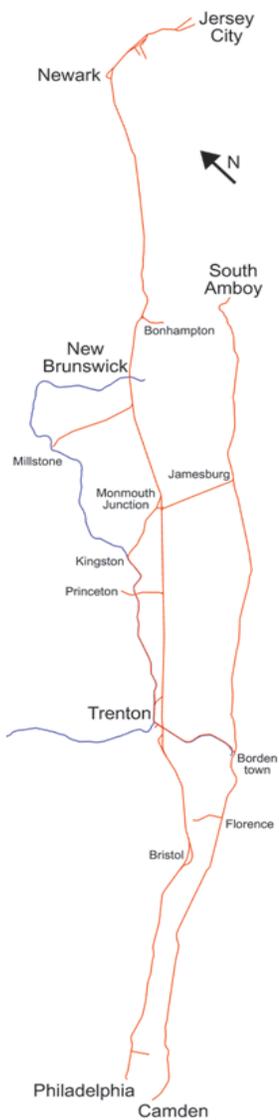
Despite the real and imagined provocations, not every State was prepared to go to war with Great Britain. When the matter came to a vote in Congress, on June 18, 1812, New Jersey's congressional delegation voted unanimously, but unsuccessfully, against going to war with Great Britain. Ironically, the British Orders in Council, which had created the offending restrictions on American trade, were rescinded on June 23, 1812, five days after the United States declared war. In voting against the war, the New Jersey congressmen had broken ranks with President James Madison, even though the entire delegation belonged to the same political party as the President.



James Madison

Notwithstanding the State's reluctance to go to war, during the War of 1812, the New Jersey militia actively protected the State's coastline against raiding parties from the blockading British fleet (at least 91 New Brunswick residents served with the 3rd Regiment, New Jersey Detailed Militia, and another 111 served with Colfax's Brigade, New Jersey detailed Militia stationed at Paulus Hook, - now Jersey City - New Jersey). The British blockade that cut off Middlesex County's access to imported manufactured goods, had the unanticipated effect of stimulating, out of necessity, the growth of a local textile industry within the County. This had developed by the war's end in 1814 (the peace treaty was not ratified until February 1815).

By 1830 the enormous amount of 1,000,000 bushels of grain was being shipped down the Raritan River each year. The magnitude of trade on the River was so great that the Raritan was "esteemed as one of the three greatest rivers of the country for her tonnage." The Raritan River was probably



C&A Railroad

the single most important factor in the early development of Middlesex County, but, in the opening decades of the 19th century, new and even more significant transportation plans and commercial projects were appearing on the County's horizon.

In 1815, the New Jersey State Legislature, adopting the first railroad act in the United States, authorized the formation of a company "to erect a railroad from the River Delaware near Trenton to the River Raritan at or near New Brunswick." In 1830, the Legislature granted a charter to the Camden and Amboy Railroad (C&A). John Stevens and his sons Robert and Edwin became the company's Chief Engineer, President and Treasurer. The railroad connected Camden with present-day South Amboy and had a station-stop in Jamesburg. From Jamesburg, a branch of the C&A ran to Monmouth Junction (part of present-day South Brunswick Township).

John Stevens, in building this railroad, designed a new type of T-rail, the hook-headed spike, the iron-tongue and various other devices still used in modern railroad track construction. He also pioneered the process of fastening the rails to wooden crossties, instead of to stone blocks which had previously been the practice. As a result of Stevens' efforts, the Camden and Amboy Railroad was the first successful, steam-powered railroad to operate in the United States.

In 1820, the State Legislature chartered the New Jersey Delaware and Raritan Canal Company. The Delaware River was (and is) navigable to a point north of Bordentown, and the Raritan River is navigable to New Brunswick, regardless of tide. These cities, therefore, were selected as the two ends of the proposed Canal. The main canal was 44 miles long, 75 feet wide and 7 feet deep. There was also a feeder canal, which ran from Bull's Island to Trenton. The D&R Canal was built between 1830 and 1834. It was constructed at a cost of about \$2,830,000, primarily by Irish immigrants working largely by hand.

During the 98 years it was used to transport commercial goods, the D&R Canal was one of the busiest navigation canals in America, with its peak years in the 1860s and 1870s. In the beginning, mule-drawn barges carried grain and other agricultural goods. Later, steamers carried massive amounts of Pennsylvania coal to New York. Even private yachts traveled the picturesque waterway, and, in 1899, the Navy's first submarine was towed through the canal. During its peak years, the D&R Canal carried more freight than the Erie Canal. The D&R Canal operated at a profit until 1892.



The Delaware & Raritan Canal

The first direct rail service to New Brunswick was provided by the Jersey City to New Brunswick line of the New Jersey Railroad and Transportation Company, which began operating in 1835. In 1839, the Camden and Amboy Railroad completed a new branch line, connecting New Brunswick with Bordentown through Trenton. In 1841, this branch line was connected with the Philadelphia and Trenton Railroad, allowing through-travel from Philadelphia to Jersey City, through New Brunswick. New Brunswick's premier river location, direct rail service, and ready access to the D&R Canal eventually spelled the end for Raritan Landing as a port and commercial center. Raritan Landing's river trade continued to decline until, by 1870, the port community was finally abandoned.

Originally settled by the Dutch, what is now the City of South Amboy was once known as Radford's Ferry, and later, when it was part of Perth Amboy, as the South Ward. After separating from Perth Amboy, South Amboy encompassed a huge area, 18 miles long and six miles wide, south of the Raritan River. In 1838, the New Jersey State Legislature incorporated some of South Amboy's land to create the new municipality of Monroe Township. Portions of Monroe later broke away to form Cranbury Township (1872), the Borough of Jamesburg (1887) and East Brunswick Township (1860 - some of the area incorporated into East Brunswick was taken from North Brunswick). In 1898, part of East Brunswick, in turn, split off to become the new Borough of South River. In 1902, another small part of East Brunswick land was added to the existing Borough of Milltown, and finally, in 1908, yet another part of East Brunswick became the new Borough of Spotswood.

The Civil War

By 1860, Middlesex County's population had grown to nearly 35,000, but, like the rest of New Jersey, County residents were not united on the issues which were dividing the country. New Jerseyans had generally opposed the Mexican War, and in 1848 Congressman John Van Dyke, of New Brunswick, attacked the war and predicted conflict over slavery in any lands eventually taken from Mexico.

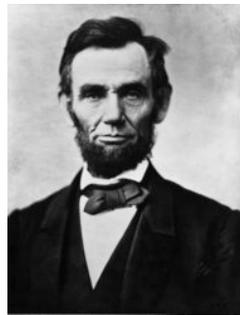
Slavery had died out in Middlesex County by the census of 1850. New Jersey law, nevertheless, continued to approach the institution of slavery from the purely legalistic perspective of "property rights." New Jersey in effect was prepared to enforce laws enacted to protect the property rights of slaveholders in their home States, despite the inherent evil of slavery. Prior to the actual secession of southern states, New Jersey exhibited many of the characteristics and attitudes typical of a border state like Maryland or neighboring Delaware. In some respects, New Jersey actually was a border state, despite its more northern location.

Notwithstanding the active participation of many state residents in the Underground Railroad, New Jersey would probably not have been ready to break with the South over the slavery issue, alone. In Middlesex County, for example, many manufacturers and other businessmen had major trading relationships in southern states. In some cases, the continuation of those relationships was a more pressing consideration than the desirability of eliminating the evil of slavery in those states.

In the Presidential Election of 1860, Abraham Lincoln received fewer popular votes, in New Jersey, than Stephen Douglas, although, due to an extremely convoluted system of electoral tickets, there was a unique split in the State's seven electoral votes, with Lincoln receiving four and Douglas receiving three. The *New York Times* referred to the 1860 Presidential Election in New Jersey as a "confused melee," and the State itself as "an exception to all general laws." Lincoln, incidentally, lost both New Jersey's popular and Electoral votes



Stephen Douglas



Abraham Lincoln



George B. McClellan

to George McClellan, an adopted favorite son (buried in Riverview Cemetery in Trenton, NJ), and Peace Platform Democrat, in the election of 1864.

Even when faced with the actual secession of southern states, New Jersey maintained a moderate position in favor of "the union, the Constitution as it is, and enforcement of the laws." The State Legislature called for "forbearance and compromise." Most New Jerseyans hoped to find common ground to preserve the Union. A few residents felt that New Jersey should also secede to join a Central Confederacy of the Mid-Atlantic States, including New York and Pennsylvania. One former governor argued that New Jersey should join the southern Confederacy, saying, "To join our destiny with the South will be to continue our trade and intercourse, our prosperity, progress, and happiness uninterrupted and perhaps in an augmented degree."¹⁶

Middlesex County residents were divided in their views on the war. In response to Lincoln's Emancipation Proclamation, *The New Brunswick Fredonian*, in an editorial entitled *The Patriot's Creed*, said, "anyone who does not stand up for all [administration] measures...is a traitor at heart."¹⁷ *The New Brunswick Times*, on the other hand, felt that the celebrations of the

¹⁶ Jackson, William J. "New Jerseyans in the Civil War", pg.35

¹⁷ Jackson, William J. "New Jerseyans in the Civil War", pg.102

“Abolitionists” following the Union victory, at the Battle of Gettysburg, were insulting to those who, “support the Constitution and the Laws and don’t yet think the (African American – racial epithet deleted) is better than the white man.”¹⁸ The *Times* writer promised a reckoning in the November elections.

Nevertheless, faced with the actual threat to the American Republic posed by the secession of southern states, many Middlesex County residents were ready to fight, and significant numbers rallied to the flag. Most were motivated by patriotism and the desire to preserve the republican form of government established by the Founding Fathers. Some enlisted because wage levels and the weakness of the New Jersey economy made military service financially attractive. Others saw military service as a way to accumulate savings, provide a level of security for after the war, or develop new opportunities in civilian life. Still others were willing to fight to end slavery. Notwithstanding their readiness to enlist, most individual New Jersey soldiers do not seem to have felt any deep hatred of the individual Rebel soldier or southern citizen.

Some units in the Federal Army were specifically recruited within Middlesex County. For example, the 3rd Militia Regiment of the New Jersey Militia Brigade was recruited from Middlesex, Mercer, Hunterdon and Monmouth Counties. Before the three-month enlistments of its men expired, this Regiment took part in the Bull Run campaign, although the Regiment did not see actual combat.

The 1st New Jersey Volunteer Infantry Regiment, which was part of the First New Jersey Brigade, included recruits from Middlesex as well as five other New Jersey counties. The 1st NJ Volunteer Infantry also was present at Bull Run, and, while not involved in the actual battle, the regiment helped to cover the retreat of the Union Army.

This regiment saw considerable action, serving with some distinction in the Peninsula Campaign, Second Bull Run (where the 1st NJ Volunteer Infantry, together with the rest of the 1st NJ Brigade attacked Stonewall Jackson’s entire corps), Crampton’s Gap, Fredericksburg, Burnside’s “mud march”, Chancellorsville (where the 1st NJ Volunteer Infantry was overrun while trying to halt the Confederate advance), Gettysburg, The Wilderness (where the 1st NJ Volunteer Infantry, low on ammunition, was, once again, overrun this time by Confederate General John B. Gordon’s Division), Spotsylvania Courthouse, and Cold Harbor.



John B. Gordon

¹⁸ Jackson, William J. “New Jerseyans in the Civil War”, pg.142



Philip Sheridan

After Cold Harbor, many enlistments of the 1st NJ Volunteer Infantry Regiment expired and the remaining men were incorporated into the 4th and 15th New Jersey regiments, which saw action at Petersburg and the Shenandoah Valley (where the Jerseymen helped save the day for the Union Army at Cedar Creek). The Survivors of the 1st NJ Volunteer Infantry were finally discharged on June 29, 1865. The 1st New Jersey Brigade ranked fourth among Union brigades for having the greatest number of its men killed and mortally wounded, and was described by General Philip Sheridan as “one of the best brigades in the service.”

Companies H and K of the 14th New Jersey Infantry were recruited in Middlesex County. This Regiment first saw action on November 27, 1863 (Thanksgiving Day) at Locust Grove, Virginia, where it fought well. The Regiment also fought at The Wilderness, the North Anna River, Cold Harbor (where it fought splendidly), Petersburg and the Shenandoah Valley (where it fought gallantly in battles at Monocacy Junction, Opequon, Fisher’s Hill and Cedar Creek). Of the original 950 men who set out with the Regiment, only 230 remained with the colors for the final roll call at Trenton on June 21, 1865.

Companies B, C, D, F, I and K of the 28th New Jersey Infantry were raised in Middlesex County. This regiment fought at Fredericksburg (where its attack reached a point within 25 yards of the Rebel lines) and Chancellorsville.



John Singleton Mosby

Finally, Company B of the 1st New Jersey Cavalry Regiment was raised in Middlesex, Passaic and Bergen Counties. This regiment first saw action, in the Shenandoah Valley, at Woodstock, Virginia. It also fought at Harrisonburg, Second Bull Run, Cedar Mountain, Brandy Station, Thoroughfare Gap, Antietam Creek and Fairfax Courthouse. The Jerseyans engaged the irregular cavalry of Major John Singleton Mosby, the legendary Gray Ghost, around Middleburg, Virginia, and were present at the battles of Fredericksburg and Chancellorsville.

At Brandy Station (for the second time), the Regiment successfully attacked a regiment of Confederate cavalry and captured its position. It then fought off counter-attacks by two additional regiments of Virginia cavalry before being forced back. At Gettysburg, the 1st NJ Cavalry, fighting dismounted, held its ground against an attack by the infantry of the Stonewall Brigade (originally commanded by General Thomas J. “Stonewall” Jackson), and later withstood several mounted attacks by the Confederate cavalry of General J.E.B. Stuart’s Cavalry Corps. The Jerseymen had just about run out of ammunition for their Burnside Carbines when General George



J.E.B. Stuart

Armstrong Custer led his Michigan cavalry into the fight and, finally, drove the Rebels back.



Richard E. Ewell

The Regiment fought gallantly at New Hope Church (where its dismounted cavalry troopers once again drove back enemy infantry), the Wilderness, Yellow Tavern, Haw's Shop, Trevilian Station, Petersburg, Southside Railroad (where one New Jersey trooper captured a Confederate General and won the Congressional Medal of Honor), Stoney Creek Station, Jarret's Station and Five Forks (where the Jerseyans drew General George E. Pickett's Confederate infantry out of its entrenchments, held off Pickett's attack until General Sheridan was able to counterattack, and helped to compromise the entire Rebel defensive line at Petersburg),



George E. Pickett

Amelia Courthouse (where General Robert E. Lee's supply train was captured), Sailors Creek (where Confederate General Richard E. Ewell was captured and four more New Jersey troopers won the Congressional Medal of Honor), and Appomattox Depot (where the Regiment completed the encirclement of Lee's army and thwarted break-out attempts by Confederate infantry until Federal infantry arrived to support the cavalry troopers). The 1st NJ Cavalry ranked sixth, of 272 Union cavalry regiments, in the number of casualties it suffered during the war.



A Charge of the 1st New Jersey

To be sure, some Middlesex County residents served in units other than those which were specifically recruited from the County. For example, Private Ira Smith, a New Brunswick bricklayer, served in Company I of the 11th New Jersey Infantry. Smith, who was assigned to permanent cattle-guard duty, deserted while his regiment was fighting at Gettysburg. "He claimed to be drunk at the time of his desertion and must surely have been drunk when he

subsequently enlisted again in the 26th Pennsylvania, a regiment brigaded with the Eleventh! Quickly discovered and arrested, Smith was sentenced to be shot, but a pardon by President Lincoln enabled him to serve out the rest of his enlistment, saving his life and, perhaps, his sobriety."¹⁹

¹⁹Bilby, Josph G.; Goble, William C., "Remember You Are Jerseymen!" pg. 187

Unfortunately, there was no one to save President Lincoln from being shot. John Wilkes Booth shot Abraham Lincoln at Ford's Theater on April 14, 1865. Lincoln died at 7:22 AM on April 15, 1865. A funeral train, *The Lincoln Special*, was dispatched to carry the President's body back to Springfield, Illinois. The *Lincoln Special* passed through New Brunswick and Metuchen, on Monday, April 24, 1865, as it traveled from Philadelphia, Pennsylvania to New York City, New York.



The Lincoln Special

The Late Nineteenth Century

In 1864, Rutgers (formerly Queens College) was designated as a land-grant college. In 1869, Rutgers and Princeton played the first intercollegiate football game in the United States. The game was played in New Brunswick, and Rutgers won.

Thomas Mundy Peterson, the son of slaves owned by the Mundy Family, was born in Metuchen. On March 31, 1870, he became the first African American to vote under the provisions of the newly ratified (February 3, 1870) 15th Amendment to the United States Constitution. Peterson, who was active in the Republican Party, was also the first African American in Perth Amboy to both hold elective office (on the Middlesex County Commission) and serve on a jury.

In 1884, the citizens of Perth Amboy presented a specially made medal to Peterson, commemorating his first vote; Perth Amboy School Number One, in which he worked as the custodian, was later renamed the Thomas Mundy Peterson School; and, March 31 is celebrated as Thomas Mundy Peterson Day in the State of New Jersey (which is ironic since New Jersey specifically rejected ratification of the 15th Amendment on February 7, 1870, six weeks prior to Peterson's historic vote).



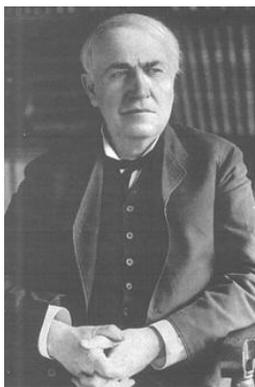
Middlesex County's economy had begun to change during the Civil War. The demand for manufactured goods, which had been generated by the war, together with a continually expanding transportation network, resulted in rapid industrialization throughout previously agricultural Middlesex County. In 1871, the Camden and Amboy Railroad, which had merged with the Delaware and Raritan Canal, began a series of mergers with other railroads to form the

Pennsylvania Railroad, giving Middlesex County access to a complete transportation grid linking Philadelphia and New York.

Companies of all sizes manufactured diverse products, such as trolley cars, shingles, barrel staves, cigars, textiles, sewing needles, bricks, glass, terra cotta tiles, leather goods, fruit jars, hosiery, wallpaper, nails, iron, copper, and medical/surgical goods in Middlesex County. Rubber shoes and other rubber products also were produced, and, “at one time, the County ranked second to Akron, Ohio in the manufacture of rubber products.”²⁰

A company-town developed around the snuff mill, built by former Confederate General George Washington Helme. This mill was built in East Brunswick on land, between Jamesburg and Spotswood, which was purchased by Helme in 1880. In 1888, the company town and an area of 1.1 square miles surrounding the mill seceded from East Brunswick to form the newly incorporated Borough of Helmetta.

The ever-growing need for workers in the developing businesses attracted immigrants from many foreign countries to Middlesex County, and caused the County’s population to diversify and increase. The number of municipalities in the County also continued to increase. In 1867, the Borough of Dunellen was founded around a station on the Elizabeth-Town and Somerville Railroad. In 1869, another 40 square miles of South Amboy was incorporated to form the new municipality of Madison Township. In 1975, the official name of Madison Township was changed to the Township of Old Bridge. In 1876, the Borough of Sayreville, which had also been part of South Amboy, was incorporated as a new municipality.



Thomas A. Edison

In 1877, at his Menlo Park (now part of Edison Township) laboratory, Thomas Alva Edison invented the phonograph. He followed this success with the invention of the incandescent light bulb in 1879.

The Wizard of Menlo Park, as Edison came to be known, obtained over 300 patents between April, 1877 and November, 1887 while he worked in Middlesex County. To maintain such an ambitious level of production, Edison and his workers set themselves a goal of one minor invention every 10 days, and one major invention every six months.

Some of the major accomplishments to come out of Edison’s Menlo Park facility included the template for a practical research and development laboratory; the first carbon telephone transmitter (this 1877 invention was an essential element of Alexander Graham Bell’s research); most of the components necessary for the transmission of electricity (the first electrical lighting system was demonstrated in 1879, making Christie Street, in present-day Edison Township, the world’s first electrically-illuminated street);

²⁰ Karasik, Gary; Aschkenes, Anna M., “Middlesex County Crossroads of History”, pg. 75

the first electrically lighted house (completed in 1880, in present-day Edison Township); the first electrical passenger railway in the United States (began operations in 1880); and a number of components essential for wireless communication (these 1885 patents were later assigned to Guglielmo Marconi).

In 1883, while trying to develop an improved light bulb, Edison mounted a metal plate or electrode, in the vacuum chamber of a light bulb, together with the two lighting filaments. Edison detected electrons flowing to the plate and realized that the current, which flowed between the two filaments, was also flowing to the electrode. Edison could not explain this phenomenon, and the discovery could not improve his light bulb. He, nevertheless, patented it, believing that it might have some future commercial application. Although he didn't realize it, Edison had stumbled upon the underlying technology of the electron or vacuum tube. This inadvertent discovery, now known as the "*Edison Effect*," is the basis of modern electronics.

In 1870, a loosely connected grouping of neighborhoods, that had been part of both Woodbridge and Piscataway townships, incorporated themselves as Raritan Township. In 1900, the Borough of Metuchen seceded from the center of Raritan Township, leaving Raritan looking like a 35 square mile doughnut with Metuchen forming the hole. Much later, in 1954, Raritan Township changed its name to the Township of Edison, in honor of Thomas Alva Edison who had accomplished so much in the Menlo Park section of the Township.



Robert Wood Johnson

In 1886, brothers Robert Wood Johnson, James Wood Johnson and E. Mead Johnson, with 14 employees, began producing a line of ready-to-use surgical dressings on the fourth floor of an old wallpaper factory in New Brunswick. In 1887, they incorporated Johnson & Johnson (E. Mead Johnson left the company to pursue his interest in scientifically based nutritional products. He established Mead Johnson & Company, which, in 1911, introduced Dextri-Maltose, the forerunner of modern baby formula). The corporate headquarters of Johnson & Johnson was established in New Brunswick, where it remains today.

By 1888, Johnson & Johnson's company earnings were \$25,000 a month. In that same year, Johnson & Johnson published the book Modern Methods of Antiseptic Wound Treatment, which was the standard text on antiseptic practices for many years. Robert Wood Johnson continued his quest to improve sanitary medical practices throughout the late nineteenth century. A major hospital in New Brunswick bears his name.

In 1887, Robert Wood Johnson met, and became lifelong friends with, Dr. Fred B. Kilmer. Kilmer was a New Brunswick pharmacist (whose customers included Thomas Alva Edison), and the father of World War I poet-hero Joyce Kilmer. Dr. Kilmer, who served as Johnson & Johnson's Director of Scientific Affairs for over 40 years, created one of the first medical research laboratories in the United States and was responsible for many innovations, including the

First-aid Kit and the practice of using talc under medicated plaster to protect the skin. The scented talc Kilmer used for this purpose eventually became Johnson's Baby Powder.

“During the Cretaceous Period, 65 to 140 million years ago, as the age of dinosaurs was ending, an immense belt of clay – the finely particulated, eroded and ground particles of decomposed granite and other rock – was deposited as sediment across the central region of New Jersey from the Raritan Bay to Trenton.”²¹ Beginning in the last half of the 19th century, the mining of this very high quality belt of clay, stretching across Woodbridge, the Amboys and Sayreville, together with the manufacture of clay products, became a thriving new industry in Middlesex County. Dozens of plants were established to manufacture pottery, bricks, tiles and architectural terra cotta.

Middlesex County clay was ideally suited to the manufacture of terra cotta. According to A Practical Treatise on the Manufacture of Bricks, Tiles and Terra Cotta, by Charles Davis, the Middlesex County clay belt “is one vast bed of terra-cotta clay, which for fineness of texture and plasticity has no equal in the world.”

Terra cotta became popular with American architects after the Chicago fire in 1871, when it was discovered that buildings faced with terra cotta survived the fire. This was because the kiln-fired ceramic material was capable of withstanding tremendous heat, and served to protect a building's interior framework. The Great Depression and changing aesthetics eventually led to the demise of the Middlesex County terra cotta industry, which had started in the 1850s, thrived between the 1870s and the 1920s and survived until 1968, when the last terra cotta plant, in Woodbridge, was closed.

The Twentieth Century

By 1900, the population of Middlesex County had grown to nearly 80,000. The number of municipalities in the County continued to grow as well. In 1906, part of Woodbridge was incorporated to form the new Borough of Roosevelt (the name was changed, in 1922, to the Borough of Carteret); in 1913, part of Piscataway was incorporated, by the State Legislature, as the Borough of Middlesex; and, in 1919, the Township of Plainsboro was created from parts of South Brunswick and Cranbury Townships.

There were still some active farms, but, by 1900, Middlesex County could no longer be called an agricultural community. During the latter part of the 19th century, a number of important industries had begun to develop in the County, and the trend toward industrialization continued through the early 20th century. In fact, the largest hosiery, musical-string and cut-nail manufactures

²¹ Murtha, Hillary “Uncommon Clay”, pg.5

in the United States, as well as major manufacturers of iron castings, playing cards, ice making and refrigeration equipment and horseshoes could all be found here in the early 1900s.

Companies like Johnson & Johnson, the Consolidated Fruit Jar Company, United Cigar (which, at its peak, employed up to 1700 workers), E.I. du Pont, the Michelin Tire Company, the U.S. Rubber Company, the Simplex Automobile Company, National Ironworks and the New Brunswick Carpet Company all employed substantial numbers of County residents. One example, during World War I, was the Wright-Martin Aircraft Corporation, which manufactured Hispano-Suiza aircraft engines (under a French license) for the U.S Army, employing 8,000 workers at its plant (originally the Simplex Automobile Plant, and later the Mack Truck foundry) on Jersey Avenue in New Brunswick.

In 1905, E.R. Squibb & Sons acquired a site in New Brunswick and built a large ether plant. In 1938, the Squibb Institute for Medical Research was opened, and, by 1944, Squibb was operating the largest penicillin plant in the world in Middlesex County. Later, in 1975, ACE Inhibitors (for the treatment of high blood pressure) were developed by Squibb in Middlesex County. In 1989, E.R. Squibb merged with Bristol-Myers to form the Bristol-Myers Squibb Company, which still maintains research and development facilities within the County.

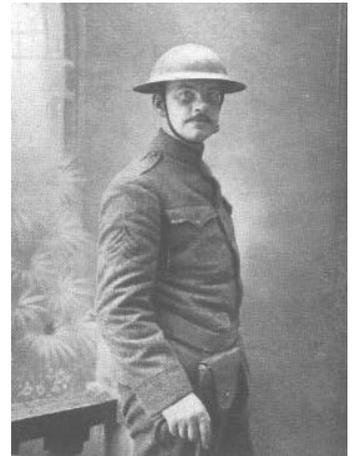


The State Theatre

Today, New Brunswick is known for its theater district. At the beginning of the 20th century, stage shows, Vaudeville, concerts, live performances and newly-invented moving pictures could be seen at the Rivoli Theater (where Ruth St. Denis, Ted Shawn and Louise Brooks performed on May 1, 1924), the Empire Theater, the Bijou Theater and the State Theatre. The State Theatre has recently been restored and is still successfully producing live performances and concerts in New Brunswick (thanks, in part, to the support of the Middlesex County Board of Chosen Freeholders). Live opera was performed at the 903-seat Opera House in New Brunswick which, converted to a movie theater, operated until 1951.

Education in Middlesex County also was making strides in the early 20th century. In 1914, Middlesex County established the first County Vocational-Technical High School system in the United States. In fact, the State of New Jersey did not adopt legislation authorizing counties to establish vocational schools until 1923. In 1918 the New Jersey College for Women (later Douglass College, which, in turn, became a part of Rutgers University) was established in Middlesex County.

Alfred Joyce Kilmer, commonly known as Joyce Kilmer, was born in New Brunswick on December 6, 1886. Joyce Kilmer, the youngest son of Dr. and Mrs. Fred B. Kilmer, was a journalist, poet, literary critic, essayist, lecturer, editor and author. Although he converted to Roman Catholicism when his daughter Rose was stricken with Poliomyelitis, Kilmer had been named after the curate (Alfred) and rector (Joyce) of Christ Church, the oldest Episcopalian congregation in New Brunswick.



Joyce Kilmer

Kilmer authored The Circus and Other Essays in 1916. In 1917, he had three books published, Literature in the Making, Main Street and Other Poems and Dreams and Images: An Anthology of Catholic Poets. He is, however, most remembered for his 1913 poem “Trees”, which was included in his 1914 collection, Trees and Other Poems. By 1917, Kilmer was considered America’s premier living Catholic poet.

Within days of America’s entry into World War I, Kilmer, who was entitled to a draft exemption, enlisted in the New York National Guard. With the help of Father Francis Duffy (Fighting Father Duffy), Kilmer transferred into the 69th Volunteer Infantry Regiment, better known as the “Fighting 69th” (later renamed the 165th Infantry Regiment, of the 42nd Infantry or “Rainbow” Division), where he quickly rose to the rank of Sergeant. Although he was eligible to be commissioned as an officer and was offered commissions on several occasions, he refused each offer saying that he would rather be a sergeant in the Fighting 69th than an officer in any other regiment. While serving in France he wrote several war poems, including Prayer of a Soldier in France (1918).

Kilmer had a preference for hazardous duties where he would have, as he said, “none of the drudgery of soldiering, but a double share of glory and thrills.” On July 30, 1918, at the age of 31, while leading a scouting party in search of German machine-gun positions at the Second Battle of the Marne, he was shot in the head and killed. He was buried in the Oise-Aisne American Military Cemetery in France, and was awarded the Croix de Guerre, posthumously, by the Republic of France. Although Joyce Kilmer was buried in France, a centograph in his honor was placed on the Kilmer family plot in Elmwood Cemetery, New Brunswick.

On October 4, 1918, building #61 of the T.A. Gillespie Shell Loading Plant in the Morgan section of Sayreville exploded, forcing the evacuation of the City of South Amboy. The plant, reputed at the time to be the largest shell-loading facility in the world, provided a significant portion of the artillery shells used on the Western Front in World War I. Loaded shells were routinely stacked on open railroad cars and under the floor-boards of the facility. The first explosion, on October 4, occurred at 7:36 p.m. and was followed by three days of secondary explosions. Sixty-four people lost their lives in this catastrophe,

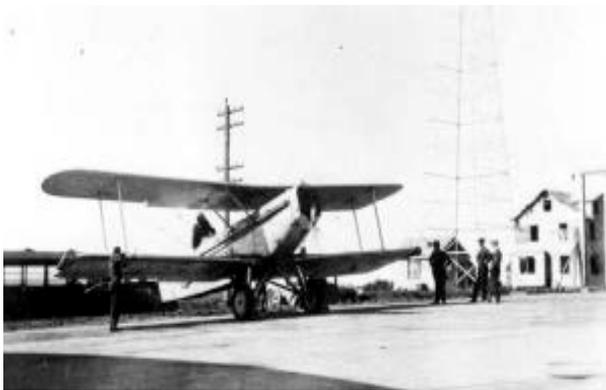
and most of the houses in South Amboy suffered shattered windows, damage to plaster walls and toppled chimneys. The estimated value of the damage resulting from these explosions was \$18 million.

Twelve U.S. Coast Guardsmen, stationed at Perth Amboy, were awarded the Navy Cross for their heroic actions in fighting the Gillespie Plant fire to prevent further loss of life and destruction of property. These brave Coast Guardsmen actually repaired railroad tracks, during the fire, so that they could move a trainload of TNT, threatened by the flames, to a safe location. Two Coast Guardsmen were killed trying to bring the fire and explosions under control.

The cause of the initial explosion has never been positively identified. Early reports speculated that it may have been caused by an accidental spark, company negligence or even German sabotage.

The Raritan Arsenal was another important World War I vintage facility, operated by the U.S. Army in Middlesex County. The 3,200-acre Arsenal operated from 1917 to 1963. During that period the Arsenal received, stored, shipped, packed and transferred ammunition, including projectiles, fuses, pyrotechnics, grenades and TNT. A number of accidental explosions, over the years, scattered ordinance, some unexpended, around the site. Arsenal personnel also disposed of various chemicals, including mustard gas, by haphazardly burying them on the Arsenal grounds.

When the Army finally abandoned the Arsenal property in 1964, the process of cleaning up the scattered ordinance and hazardous waste began. Today, Middlesex County College, a U.S. Environmental Protection Agency facility, several hotels and Raritan Center, the largest industrial park in New Jersey, occupy most of what used to be Raritan Arsenal.



Mail Plane Leaving Hadley Field

On November 1, 1924, the U.S. Post Office leased 47 acres of level ground from a farmer named John Hadley in what would become South Plainfield. This farm was transformed into a new airfield by clearing the ground, erecting radio masts, installing boundary lights, floodlights and revolving beacons. By December 1 of the same year, transcontinental airmail operations were moved from Hazelhurst, NY to Hadley Field in South Plainfield. On July 1, 1925, the first night airmail flight in

the United States (crewed by Dean Smith and J.D. Hill) took off from Hadley Field, taking 33½ hours to fly to the West Coast. 15,000 people had turned out that night to witness this historic take-off. In 1926, part of Piscataway Township, including Hadley Field, was incorporated by the State Legislature to



create the new Borough of South Plainfield. This was the 25th and last of Middlesex County's municipalities to be incorporated.

On December 7, 1941, Pearl Harbor was attacked by carrier-launched aircraft of the Japanese Empire. America entered World War II the next day. By June 1942, Camp Kilmer, the first purpose-built staging area for American troops, was activated in Piscataway and Raritan (now Edison) Townships. Camp Kilmer, named in honor of New Brunswick's poet-hero Joyce Kilmer, also was the largest (1,573 acres) army staging area in the United States.

As an installation of the New York Port of Embarkation, Camp Kilmer processed more than 20 divisions (containing over 2.5 million American troops) that were headed for the European Theater of Operations during World War II. During the war, Camp Kilmer was one of the most important processing and administrative installations in the United States.

The Camp was deactivated in 1949, but reactivated in 1950 at the outbreak of the Korean War, and finally deactivated again in 1955. In 1956, the camp was used, as part of Operation Mercy, to process Hungarian refugees, and, in 1958, became a U.S. Army Reserve Headquarters. In 1963, 1,500 acres of Camp Kilmer land were sold off, much of it becoming the Livingston Campus of Rutgers University.

The remainder of Camp Kilmer became the Sergeant Joyce Kilmer U.S. Army Reserve Center. This Center still houses the Headquarters of the 78th (Lightning) Division, now a Training Support Division of the U.S. Army Reserve. Earlier, while it was an active army Infantry Division, the 78th Division served with distinction in both World Wars (three Congressional Medals of Honor). In March 1945, one of its units (the 310th Infantry Regiment) was the first U.S. Infantry Regiment to cross the Rhine River into Germany over the Ludendorff Bridge at Remagen.

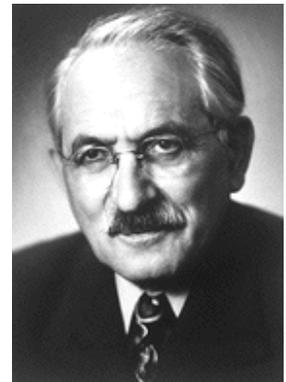
In 1942, the United States Army found that it needed a new waterproof sealing tape for ammunition boxes. The Permacel Division of Johnson & Johnson, in New Brunswick, developed a strong, fabric-based, multi-purpose, pressure-sensitive adhesive tape to meet this need. The new tape was 1.88 inches (48 mm) wide, used a rubber-based adhesive (for water resistance), had a polyethylene coated cloth backing (to facilitate ripping pieces from the roll) and, like almost everything military, was O.D. (olive drab) green in color. The tape was very useful, and became extremely popular with the troops, who used it to repair all sorts of military equipment. Since the tape would maintain its

adhesion when subjected to winds traveling over 100 miles per hour, it was used by the Air Force to cover gun ports on aircraft to reduce drag during take-off. Because the tape was waterproof, soldiers began to call it “duck tape.”

In civilian life, the versatile tape was in great demand during the post war “housing boom,” being used to fasten together and seal heating and air conditioning duct work. The color was changed from army green to silver, which would more closely match the color of the ductwork. The tape began to acquire the new name “duct tape.”

Ironically, although the duct tape that originated in Middlesex County has become one of the most versatile products for household and automotive use and is used to fix just about everything, it is no longer used to seal ducts. To determine which sealants and tapes would last, and which were likely to fail, research was conducted by Max Sherman and Iain Walker of the Environmental Energy Technologies Division of the U.S. Department of Energy’s Lawrence Berkeley National Laboratory. According to Walker, “Only one duct-tape product survived three months of the aging test. Eleven failed within days; some fell right off the joint. ... We think that heat degrades the glue, and that’s what’s killing the duct tape.”²² Sherman added, “Of all the things we tested only duct tape failed. It failed reliably and often quite catastrophically.”²³ Building codes in many jurisdictions now prohibit the use of duct tape to seal heating and air conditioning duct joints. The metalized and aluminum tapes, which are now used to seal ducts, in place of original duct tape, are, conveniently, often still called “duct tape.”

In 1944, Selman A. Waksman, Professor of Biochemistry and Microbiology at Rutgers University (which in 1945 became the State University of New Jersey), discovered 20 inhibitory substances, including streptomycin. He named this group of natural growth inhibitors “antibiotics” and patented streptomycin. In 1951, in cooperation with Rutgers University, he founded an Institute of Microbiology and donated 80 percent of his patent earnings to Rutgers University to endow and support the Institute. One-half of the remaining 20 percent of Waksman’s royalties was used to establish a Foundation for Microbiology, also in 1951.



Selman A. Waksman

During his lifetime, Waksman received numerous awards and honorary degrees for his scientific work, and was elected to the National Academy of Sciences. In 1952, he was awarded the Nobel Prize for Physiology or Medicine “for his discovery of streptomycin, the first antibiotic effective against

²² Preuss, Paul, “Sealing HVAC Ducts: Use Anything But Duct Tape”, <http://www.lbl.gov/Science-Articles/Archive/duct-tape-HVAC.html>

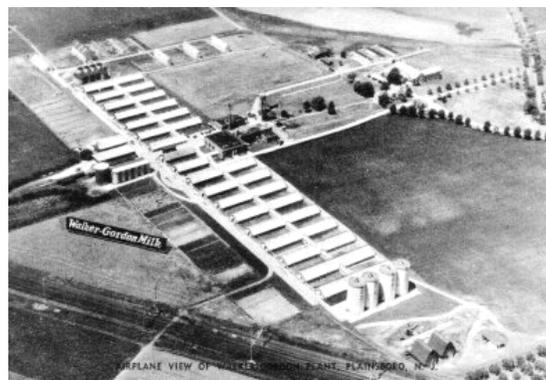
²³ Preuss, Paul, “Sealing HVAC Ducts: Use Anything But Duct Tape”, <http://www.lbl.gov/Science-Articles/Archive/duct-tape-HVAC.html>

tuberculosis.” Since the discovery of streptomycin, Selman A. Waksman has been known as the Father of Antibiotics.

Near the end of the 19th century (early 1891), Dr. Thomas M. Rotch, a pediatrician at the Harvard Medical School, felt that infant mortality could be greatly reduced by more careful nutrition. He, together with a scientist named Gustavus A. Gordon, developed a modified cow’s milk which was more like human mother’s milk – this was reconstituted whole milk with the addition of sugars and proteins, according to a doctor’s prescription. Bacteria levels were limited, and fat content was regulated in the modified milk. Rotch and Gordon’s work was financed by George H. Walker, and on December 1, 1891, the first Walker-Gordon laboratory opened in Boston.

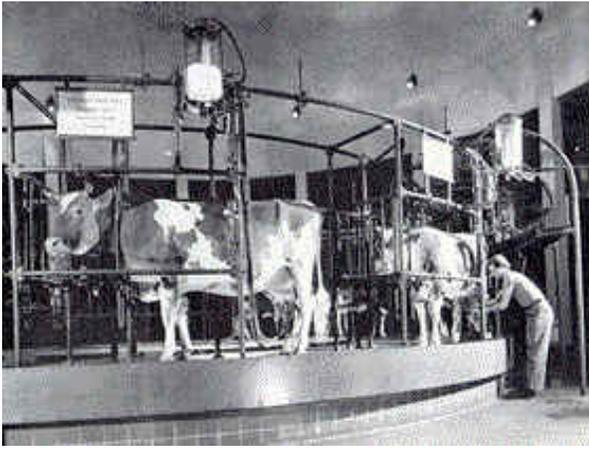
These men realized, early on, that the quality of their modified milk was greatly dependant on the quality, cleanliness and freshness of the milk with which they started. In the days before milk production and handling was regulated, much of the available milk was contaminated with intestinal parasites or even tuberculosis-causing bacteria. Walker-Gordon Laboratories decided that, in order to produce modified milk suitable for infant feeding, the company should operate its own dairy farm.

In 1897, Walker-Gordon purchased 140 acres of farmland in the Township of Plainsboro. The land was between New York and Philadelphia, on a main highway and near the main line of the Pennsylvania Railroad (desirable traits common to most of Middlesex County). In 1898, Henry Jeffers Sr., one of the first graduates of the Cornell University School of Agriculture, became resident manager of the dairy. In 1929, Walker-Gordon Laboratories became a wholly owned subsidiary of the Borden Company and the dairy in Plainsboro grew in size to 2,300 acres, with a dairy herd of 2,842 cows and bulls. Feed for the livestock was grown on-site. At its peak, the dairy measured 2,500 acres and produced 24,000 quarts of milk per day.



Walker Gordon Dairy Farm

In 1944, the Borden Company was forced, under anti-trust laws, to sell its Certified Milk Division. The family of Henry Jeffers Sr., together with a number of associates, bought the dairy from the Borden Company. By 1945, the Walker-Gordon Dairy Farm had become the world’s largest Certified Milk Dairy Farm. Certified Milk (originally called Guaranteed Milk) was a name used to designate raw or pasteurized milk that met or exceeded bacteria-count standards established by the Medical Milk Commission. The Walker-Gordon Dairy in Plainsboro continued to produce milk until June 1971. Thereafter it produced beef cattle and field crops until it was sold. Today, there are 355 single family homes where the dairy used to be.

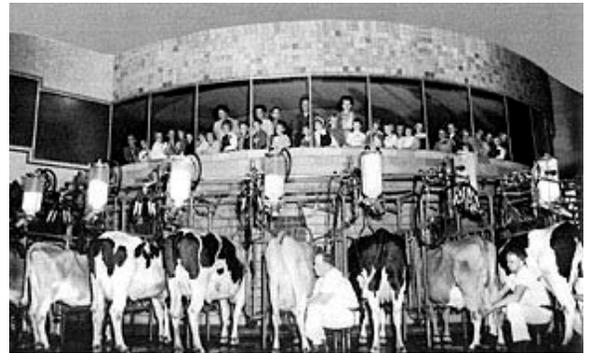


The Rotolactor

There are two interesting stories which should be a part of any history of the Walker-Gordon Dairy. In order to make milk production more efficient, a Rotary Combine Milking System, known as a *Rotolactor*, was developed at the Plainsboro farm in 1930. The *Rotolactor* was a 50-stall, hands-free, milking merry-go-round. Cows would enter a stall on the *Rotolactor* and be thoroughly washed. After the washing, teat cups were attached by a dairyman. Milk was then extracted, weighed and sent through a chilled tubing

system to the processing and bottling facility without any human contact or even exposure to the air. After each milking, both cow and stall were washed and the cow was released from the *Rotolactor*.

The *Rotolactor* was a tourist attraction in Plainsboro until dairy operations at the farm ended in 1971. A smaller version of the *Rotolactor* was built by Borden and displayed at the 1939 New York World's Fair (At the conclusion of the World's Fair, this smaller *Rotolactor* was moved to another dairy farm in Needham, Massachusetts, where it operated from 1940 to 1960). The *Rotolactor* exhibit was very popular with fair-goers, but only while the cows were being milked, twice a day. Between milking sessions, attendance at the exhibit was poor.



The Rotolactor

While they were trying to increase attendance between milking sessions, Borden employees realized that everyone who came to the exhibit wanted to know which of the cows being milked was *Elsie the Cow* (featured in all of Borden's advertising). The company inspected all of the 150 cows in the herd at the Fair and found one named *You'll Do Lobelia* that fit the bill. Thereafter, *Elsie the Cow* became the most popular attraction at the Fair.



Elsie the Cow

When the Fair closed, *Elsie* made special guest appearances around the country (being driven in her 18-wheel *Cowdillac*), and even appeared in an RKO feature film. Between appearances, *Elsie* lived at the Walker-Gordon Dairy in

Plainsboro. *Elsie*, more accurately *You'll Do Lobelia*, died as a result of injuries received when her truck was rear-ended on April 16, 1941. She was buried on the farm in Plainsboro, but, undeterred, Borden continued its highly successful advertising campaign with a new *Elsie* – no one could tell the difference.

A headstone was placed near the entrance to the Walker-Gordon Dairy which praised *Lobelia* as “one of the great *Elsie*’s of our time.” In June 1999, after the dairy had been sold, the headstone was moved to a new location on Plainsboro Road. While a plaque at the new site claims the site to be *Elsie*’s final resting place, *You’ll Do Lobelia*, the original *Elsie*, is buried elsewhere – presumably under one of the single family homes now standing where her dairy farm used to be.



Headstone of the Original Elsie

February 6, 1951 was a cold drizzly night. Pennsylvania Railroad train No. 733, known as *The Broker* because of its popularity with Wall Street employees, had left Exchange Place in Jersey City at 5:10 p.m. and was speeding south, toward Bay Head, at about 60 miles per hour. Because of a wildcat strike, which occurred that day on the competing Jersey Central Railroad, *The Broker* was unusually crowded. It was carrying about 1,100 passengers in its 11 passenger cars. Many of its passengers were forced to stand in the aisles. As the train passed through Woodbridge Township, it had to cross a temporary wooden trestle, being used that day for the first time.

The temporary trestle was built as a detour while work on a permanent bridge, associated with the construction of the New Jersey Turnpike, was completed. Seven days prior to February 6, the Railroad had issued General Order No. 1806 instructing crews on that line that, beginning at 1:01 p.m. on February 6, they were to reduce speed, from 60 miles per hour to 25 miles per hour, when passing through Woodbridge.

At 5:43 p.m., as the train reached the temporary trestle, about 100 yards beyond the Woodbridge Station, it was still moving at 50 to 60 miles per hour. The conductor, who had reminded the engineer about the Woodbridge speed restriction as the train left Perth Amboy, was concerned about the speed and intended to pull the emergency brake cord. He was unable to reach it in time because of the passengers blocking the aisle.



The “Broker” Crash

The steam powered engine made it across the trestle curve, but centrifugal force may have caused the 10,000 gallons of water (carried for the engine’s boilers) in the tender/coal car to shift, causing the car to derail, disconnect from the engine (which also tipped over), shear off its wheels and slide, upside down, down the 26-foot embankment along Fulton Street. The first and second passenger cars

fell on their sides, while the third and fourth cars slammed into each other (most of the 85 people killed were in the third and fourth cars). Eight of the 11 cars derailed, and two cars were left hanging precariously, three-stories above Fulton Street. Of the 1,100 passengers and crew on board *The Broker*, 85 were killed and more than 500 were injured. Surviving passengers and residents of Woodbridge worked heroically and unselfishly through the night to rescue and tend to the injured.

The Interstate Commerce Commission reached the conclusion that the train wreck had been caused by, “Excessive speed on a curve of a temporary track.” Following the crash, the Pennsylvania Railroad installed \$12 million worth of warning lights (there had been none in Woodbridge prior to the crash), and paid an estimated \$75 million to settle the many lawsuits arising from the wreck (none of which ever made it to trial). Middlesex County Prosecutor Alex Eber filed 84 counts of manslaughter against the railroad as a result of the crash, but withdrew them two years later to avoid the \$2.1 million, it was estimated, that the trial would cost the County if the case were prosecuted to a conclusion.



Caring for Injured Broker Passengers

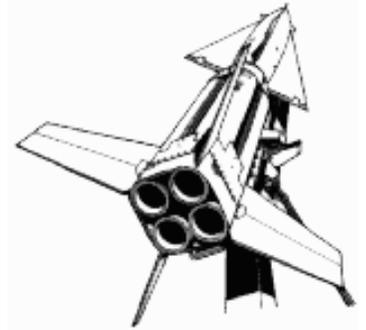
The Woodbridge train wreck is the fifth worst railroad accident in United States history. It was the third worst U.S. railroad disaster involving only one train, and it is still the worst railroad disaster in the United States since 1918.

On May 17, 1951, Princeton University’s 825-acre James Forrestal Research Center, in the Township of Plainsboro, was dedicated. Acquisition of this new campus, formerly the Rockefeller Institute for Medical Research, had doubled the size of Princeton University’s land holdings. Princeton’s aerospace and mechanical sciences research was moved to the new campus, and, later, magnetic fusion research was begun at the center. Originally this magnetic fusion research, classified under the government code name Project Matterhorn, was intended to explore the possibility of using fusion as a way of building the first hydrogen bomb. Concurrently, peacetime use of fusion, as an energy source, also was being explored.

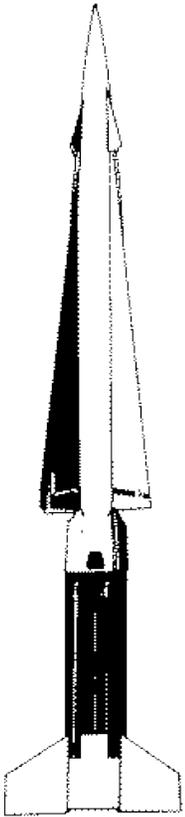
In 1958, Project Matterhorn was declassified. The fusion research, which used extremely hot ionized gases or plasmas, continued at the Center in the newly formed Princeton Plasma Physics Laboratory (PPPL). As part of this laboratory, the huge Tokamak Fusion Test Reactor was built. Later, also at PPPL, Princeton University and the University of Pennsylvania jointly built and operated the Princeton-Penn Accelerator. This device, built in Plainsboro in the early 1960s, was an atom-smasher. At its peak in the 1980s, the Forrestal Campus occupied 600,000 square feet of space and employed over 1,000 people.

Not all of the County's Cold War, high-technology equipment was located at the Princeton Plasma Physics Laboratory. In 1955, two Nike Air Defense Batteries, intended for the protection of Metropolitan New York, were established in Middlesex County. Nike Battery NY-

58/60 operated in the Township of Old Bridge between 1955 and 1968. Located in a pine forest, this two-magazine facility was intended to protect the southwestern air approaches to New York City. The battery was originally equipped with 20 Nike Ajax missiles. This complement was upgraded, in 1961, to 12 Nike Hercules missiles. Closed down in 1968, most of what used to be Nike Battery NY-58/60 is now a school bus maintenance facility and parking area, although some of the original base housing still stands.



Nike Hercules



Nike Hercules

Nike Battery NY-65 was located in the Borough of South Plainfield, next to Hadley Airport (formerly Hadley Field). Originally manned by the Regular Army, the base was later turned over to New Jersey National Guard personnel. Established in 1955, this battery also began with a complement of 20 Nike Ajax missiles and also was upgraded in 1961 to 12 Nike Hercules missiles. The battery was closed down in 1971. Both the battery and Hadley Airport have been demolished. Today, part of Route 287, an office complex and a shopping center cover the area where they were located.

NY-60R was built within the city limits of South Amboy.

This facility was one of three remote U.S. Army radar sites designed to provide enhanced radar coverage of the southern portions of the New York metropolitan area. This radar site was a component of the Nike Missile Defense System protecting that area.

Throughout the 20th century, Middlesex County continued to be the major thoroughfare for north/south travel along the East Coast of the United States. This position was reinforced as the amount of personal travel skyrocketed with the increased availability of family automobiles. Automobiles and trucks replaced riverboats and canal barges, and that change was reflected in the growth of the County's transportation infrastructure. The road network within the County expanded dramatically. U.S. Routes 1 & 9 and NJ Routes 27 and 35 were long-standing north/south arteries across the County, while NJ Routes 18, 33, 34 and 440 were established east/west arteries. These Federal and State roadways were supplemented by an extensive County road network, exceeding 327 linear road miles (800 lane miles), built and maintained by Middlesex County.

Built in the 1950s, both the New Jersey Turnpike (one of the most heavily traveled roads in the United States) and the Garden State Parkway (running the full length of New Jersey, from the New York Thruway, in the north, to Cape May, in the south) pass directly through Middlesex County. There are five Turnpike exits (plus two rest stops in each direction), and 10 Garden State Parkway exits within Middlesex County. In the 1960s, Interstate 287 was built, further expanding the County's transportation infrastructure. I-287 runs east and west through Middlesex County (from the Township of Piscataway to the City of Perth Amboy), with exits providing service to a number of Middlesex County municipalities.

On March 23, 1994, near the junction of I-287 and New Durham Road, a 36-inch Texas Eastern Transmission Corporation natural gas pipeline suddenly exploded and burst into flames near the Durham Woods apartment complex in the Township of Edison. The explosion and resulting fire severely damaged or destroyed a number of the buildings in the complex, and one death (a heart attack) was attributed to the disaster. 2,000 residents of the complex sued the Texas Eastern Transmission Corporation for damage caused by the explosion, and the Corporation paid an estimated \$65 million in out-of court settlements.

The National Transportation Safety Board investigation found a gouge in the pipeline, probably caused, years before, by construction equipment. This gouge, the brittle material of the pipe wall and excessive operating pressure collectively led to the pipeline's failure. The pipeline's lack of automatic or remote-control shut-off valves in the vicinity of the explosion delayed efforts to bring the resulting fire under control.

Following this disaster, the State of New Jersey passed regulations requiring potential excavators to call a telephone hotline prior to digging. This procedure is intended to ensure that the locations of any pipelines or utility lines on a potential dig site are accurately marked. By 1996, this "*One Call*" system had become an accepted practice across the nation.

By the 1960s, the population of Middlesex County had grown to over 434,000, making Middlesex the fifth most populous of New Jersey's 21 counties. Educational and cultural opportunities within the County had continued to grow as well. In 1964, Middlesex County College was established (classes opened in 1966), and, in 1977, the not-for-profit Middlesex Regional Educational Services Commission (for special education) was founded.

The highly acclaimed New Brunswick theater district began a major resurgence in the late 1970s, eventually becoming as popular at the end of the 20th century as it had been at the beginning. The Crossroads Theatre Company was founded in 1978 to develop, produce and present works relating to the African American experience. Crossroads Theatre produced over 100 works of diversity, many by the world's leading African and African American artists. In addition to several other awards, Crossroads was the first African American

theater in the United States, to receive a Tony Award (1999) in the category of Outstanding Regional Theatre.

In 1979, the George Street Playhouse was founded as a professional theater. It produced new and established plays, re-imagined classics and relevant educational programming. Attendance at the George Street Playhouse amounted to 140,000 theater-goers annually. Finally, in 1986, the State Theatre (a 1921-vintage vaudeville and silent-film theater that was later converted into an RKO movie theater) was acquired by the County of Middlesex and leased to the New Brunswick Cultural Center. Since that time the theater has been substantially renovated twice (the second renovation having restored the theater, as nearly as possible, to its original appearance). Today the State Theatre offers a wide range of very popular live performances.

The economy of Middlesex County experienced another change during the latter half of the 20th century. The biggest employers, for the most part, were no longer the large manufacturing companies that had dominated the County's job market for 100 years, many of whose plants had closed or relocated. Employment opportunities within the County shifted away from manufacturing and toward research and development, healthcare (New Brunswick has become a recognized healthcare center, rivaling New York and Philadelphia), financial, pharmaceutical and service industries.

The County's 20 largest employers (of which half were Fortune 500 companies), at the close of the 20th century, included four hospitals and a major healthcare network, two pharmaceutical companies, three financial companies, four technology companies, one distribution/warehousing company, one major parcel delivery company, one corporate headquarters with associated refining and distribution operations, and only three large manufacturing plants.

The Twenty-first Century



*Twin Towers of the
World Trade Center*

On September 11, 2001, terrorists crashed a hijacked jetliner into each of the twin towers of the World Trade Center in New York City (the crashes occurred at 8:47 and 9:03 a.m.). The smoke from the burning towers was seen clearly by many residents of Middlesex County. In fact, the burning towers themselves could be seen from the upper floors of tall buildings as far away as New Brunswick. During that awful day, the people of Middlesex County did much more than watch the towers burn. Within an hour after the attack, 54 Middlesex County ambulances, carrying 170 Emergency Medical Service personnel, were on their way either to New York City, the evacuation center at Liberty State Park or the assembly/staging area at the Meadowlands Complex.

At 11:15 a.m., 20 pieces of Middlesex County fire apparatus, with 156 firefighters, were dispatched to Staten Island Command. From there, they were used to protect Staten Island, Brooklyn and Queens while the New York Fire Department was concentrated at Ground Zero in Manhattan. Several Middlesex County fire rescue companies were sent directly to Ground Zero to assist with rescue and recovery operations.



September 11, 2001

Within hours of the attack, 138 Middlesex County law enforcement personnel were on their way to Manhattan to assist the New York City Police Department. Additionally, 60 police officers from the City of Perth Amboy helped to close the Outerbridge Crossing and provided security at the bridge. Eighteen Middlesex County Corrections and Sheriff's officers provided escorts for emergency vehicles and medical supply carriers traveling to and from New York City.



Ground Zero in New York City

At 9:30 p.m., the Middlesex County Fire Marshal, Michael Gallagher, and two volunteers drove the County's Mobile Command Post to Ground Zero, where they provided a communications link between New York City and the Emergency Medical Service units assembled and on-call in New Jersey. The Middlesex County Office of Emergency Management's Communications Vehicle was used as a Command Post by the New York City

Emergency Medical Service Division. Finally, the Hazardous Materials Response Unit of the Middlesex County Public Health Department was deployed at Liberty State Park to decontaminate people being evacuated from New York City, by ferry.

While this support was flowing into New York, the rest of the County's emergency response resources were mobilized to maintain order, provide security and protect critical sites within Middlesex County, during the period of uncertainty following the attack. Since many County commuters who had been in New York were unable to get home after the attack, the sitting Freeholder Director, the Honorable David B. Crabiel, and the County Superintendent of Schools directed all the schools in the County to remain open until students could be turned over to a responsible family member or designee. Tragically, 57 Middlesex County residents, of the hundreds who were unaccounted-for

immediately following the attack, had actually lost their lives as a result of this barbarous act of terrorism.

U.S. census figures, released in July 2006, indicated that the population of Middlesex County had grown to approximately 787,000. Middlesex County had become, for the first time, the second most populous of New Jersey's 21 counties (only Bergen County had a larger population). The resilience and desirability of this County and the energy and industry of its people have sustained its unbroken, centuries-long record of growth and prosperity.

For at least 4,000 (and perhaps as many as 12,000) years, people of widely divergent backgrounds and circumstances have come to Middlesex County to make a home, raise a family or earn a living. During that time, hunting and fishing grounds turned into farms; farms turned into factories, and factories turned into laboratories and offices. Canoes were replaced by wagons and river boats, which eventually gave way to canal barges and trains, which, in turn, were supplanted by cars and trucks. Throughout these many changes, Middlesex County remained a focal point and continued to grow and prosper.

The original Lenape who migrated across two continents, eventually to settle in Middlesex County, have, for the most part, been replaced by more than three-quarters of a million relative new-comers from all over the world. Many important events and milestones in American history have occurred in this County or within sight of its boundaries. Inventions, processes and theories that were first conceived or developed in Middlesex County have unarguably changed the lives of nearly every person on the planet.

The one enduring constant, throughout at least four millennia of human habitation, is the remarkable attraction exerted by this desirable area straddling the Raritan River, which has been felt by so many, for so long, for so many different reasons. Middlesex County has always been, and remains today, in the words of Freeholder Director, David B. Crabiel, **"The Greatest County in the Land!"**

~~THE END~~

To be continued...

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