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Nurturing Nature During the Golden Age of Piracy

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Nurturing Nature During the Golden Age of Piracy

Cover Page Footnote

A special thanks to Heidi and Jordan.

Nurturing Nature During the Golden Age of Piracy

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On June 7th, 1692, a cataclysmic earthquake ravaged the flourishing English town of Port Royal, Jamaica. Emmanuel Heath, a local reverend, described the event, “I found the ground rowling [growling] and moving under my feet... we heard the Church and Tower fall... and made toward Morgan’s Fort, which being a wide open place, I thought to be there securest from the falling houses; But as I made toward it, I saw the Earth open and swallow up a multitude of people, and the sea mounting in upon us over the fortifications.”¹ This historic natural disaster caused two-thirds of the city to be swallowed into the Caribbean Sea, killing an estimated 2,000 people at the time of the earthquake, and another 2,000 from injury, disease, and extreme lawlessness in the days following. The port, built primarily on sand, suffered from liquefaction, with buildings sinking as if they were on quicksand.² Heath continues, “Whole streets (with inhabitants) were swallowed up by the opening Earth, which then shutting upon them, squeezed the people to death. And in that manner several are left buried with their heads above ground; only some heads the dogs have eaten: others are covered with dust and earth, by the people who yet remain in the place, to avoid the stench.”¹ The devastation was immense. A majority of the city was wiped from the map.

Thirty-seven years before the earthquake, in 1655, the English seized Port Royal from the Spanish. English forces invaded the island under General William Penn and Admiral Robert Venables. The invasion of Port Royal was a bid to please Lord Protector Oliver Cromwell following a failed invasion attempt on Hispaniola, modern day Haiti. Following the victory, the English naval forces sailed back to England, leaving Jamaica vulnerable to a Spanish attempt to retake the island. A quick solution to the problem of minimal port defenses was made by then Port Royal Governor Edward

¹ Heath, E., and John Reid. *A full account of the late dreadful earthquake at Port-Royal in Jamaica: written in two letters from the minister of that place, from aboard the Granada in Port-Royal harbour, June 22, 1692*. Edinburgh: Re-printed by John Reid, to be sold at his house in Bells-Wynd, 1692.

² H.M.S. *Guernsey* Logbook. Public Records Office. Admiralty Records. June 22, 1692.

D'Oyley, who enlisted the help of the “Brethren of the Coast” to protect Port Royal, inviting them to make it their home port.³ The Brethren of the Coast were pirates from the Island of Tortuga, just north of Hispaniola. Often described as spendthrifts with a cruel and merciless attitude, the Brethren were the descendants of cattle-hunting *boucaniers*. *Boucanier* originally referred to cattle hunters in Hispaniola, who dried their meat on a smoker called a *boucan*, and occasionally raided vessels. Consistently tormented by the Spanish, the *boucaniers* retreated to the Island of Tortuga where they would squander their earnings for the year in one month.⁴ *Boucanier* was later anglicized to buccaneer, which simply means pirate or privateer.

The Brethren, having inherited a deep seeded hatred for the Spanish, proved to be useful to Governor D'Oyley. In Jamaica, the Spanish were successfully driven out, but the pirates took advantage of their new home in Port Royal. This gradually earned Port Royal the reputation of being the “wickedest city in the world”. The port became known for its lack of morals, excessive prostitution, slavery driven sugar production, and its rampant alcoholism - a prominent pirate utopia.

During this time period, Port Royal was proven to be a valuable asset. The Island of Jamaica is located just south of Cuba, straddling high density shipping lanes and straits necessary for trade to and from Europe. The port was also within close proximity to the Spanish Main, which encompassed the entire coastline stretching from Florida to South America, including parts of Cuba. This allowed for some of the most infamous pirate raids and expeditions to be launched from the harbor at Port Royal. In 1687, to the dismay of the pirates, Port Royal passed anti-piracy laws which called for punitive measures to be taken against those accused and tried. The once great pirate safe haven was quickly earning a new reputation for the execution of pirates. A prime example of this change in policy is that

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Dunn, Richard S. *Sugar and Slaves: The Rise of the Planter Class in the English West Indies 1624-1713*. New York: W. W. Norton and Company, 1973, p. 153.

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Exquemelin, Alexander O., tr. Alexis Brown, *The Buccaneers of America*. 1678. New York: Dover Publications, 2000, p. 52.

of notorious Captain John “Calico Jack” Rackam who, in 1720 was tried for piracy and subsequently gibbeted for all who entered the harbor to see.⁵ A gibbet refers to a tool used for publicly displaying the executed as a means to deter existing or future criminals, in this case, pirates. These drastic changes in policies regarding piracy illuminated the significance of the 1692 earthquake that ravaged the shores of Port Royal, marking a new era of piratical endeavors. The earthquake ended one chapter and began another as it entirely altered the epic history of the Golden Age of Piracy. Following the natural disaster, a majority of the sea trade moved across the harbor to Kingston, leaving Port Royal mostly abandoned.⁶ Piratical enterprises diminished for a short time at the dawn of the 18th century as the War for Spanish Succession began. The war was fought for the control of the Spanish Empire following the death of King Charles II, lasting from 1702-1715. Pirates now had a legitimate means of sustenance and sustainability as they sought employment in the war efforts. Major threats from pirates changed following the war. Rather than sailing for one nation against another, pirates banded together targeting the dichotomy between rich and poor.

The impact of nature on the course of history is somewhat underestimated and underrated in modern times. Today, humans take for granted the ability to understand nature's tendencies and the modern mechanisms with which we handle nature's wrath. Humans have developed the theory of plate tectonics to better understand earthquake frequency, intensity, and distribution, allowing for better prediction and preparation. Modern healthcare and medicine has reduced the threat of old world diseases dramatically. There are methods of monitoring wind patterns and accurately predicting future storms. This is not to say humanity has not been mangled by nature in recent times because it surely has. However, within the Golden Age of Piracy, this understanding was not a reality. The discovery of

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Defoe, Daniel. Edited by Manuel Schonhorn, *A General History of the Pyrates*. 1724. New York: Dover Publications, 1999, p. 150-152.

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Pawson, Michael, and David Buisseret. *Port Royal, Jamaica*. Barbados: University of the West Indies Press, 2000. p. 120-124.

trade winds was just beginning to influence European economics. Thunderstorms, hurricanes, and strong winds were still a serious threat to ships made primarily out of wood. Diseases were running rampant, decimating pirates during a time without quality healthcare. All of these aspects of nature played an immensely important role in molding pirate history as we know it today. These characteristics of Mother Nature were used to launch pirates into fame and fortune, as well as to redirect them into the grand blunders of the age. Humans in all eras of history are susceptible to the forces of nature, doing what they must to not only survive, but succeed. The pirates of the Golden Age were no different.

Land Ho!

Roughly 300 to 400 years ago, the “discovery” of the New World was the social and political craze in Europe. To Europeans, it was an entirely alien world with riches awaiting anyone daring enough to grab them. Monarchs across Europe were racing to develop a means to explore and exploit the new world. Following the Spanish conquest of the Aztec and Inca civilizations, rumors of rivers flowing with gold motivated the Spanish to explore deeper in the unknown land. Native populations were extorted, enslaved, and decimated in the name of wealth.⁷ The rivers of gold did not exist. However, during their diligent search the Spanish were shown a civilization changing mountain deep within the heart of South America.

Cerro Potosí or Potosí Mountain, located in modern day Bolivia, was incredibly rich with silver. Via the *encomienda*, a system of labor which rewarded the conquerors with the labor of the conquered, the Spanish forced natives to mine the mountain's riches, literally working them to death.⁸ Potosí Mountain became the driving force behind Spain's economy, having provided an estimated 60%

⁷ Thomas, Hugh. *Rivers of gold: the rise of the Spanish Empire*. London: Penguin, 2010, p. 231, 291.

⁸ Calloway, Colin G. *First peoples: a documentary survey of American Indian history*. Boston, MA: Bedford/St. Martin's, a Macmillan Education imprint, 2016, p. 86.

of all the silver in the world during the second half of the 16th century.⁹ Knowing the mountain was deep within South America and on the western side of the Andes Mountain range, the Spanish needed an easier means of transporting the mountain's riches to the old world. This prompted the Spanish to strategically place numerous strongholds and trading posts in Central and South America, as well as on islands in the Caribbean Sea. Utilizing the efforts of cartographers, the strongholds and trading posts were built along the coastlines and next to rivers, allowing for easy access from the inland to the sea. These strongholds formed what was known as the Spanish Main.

Fueled by enslaved natives, and combining the efforts of mule trains and Treasure Fleets, Spain became an extremely wealthy world power between the 16th and 18th centuries. The Treasure Fleets were convoys of multiple vessels that made the trip to and from the Americas every year. Once in the Americas, the Spanish Treasure Fleets would separate to gather precious metals and goods from the various strongholds along the Spanish Main before reconvening in Havana, Cuba. From Havana, the Convoys would pass through the Straits of Florida on their way home to Europe.¹⁰ A variety of goods were introduced to the new and old worlds for the first time. Referred to as the Columbian Exchange, anything from sugar, tobacco, hemp, cacao, coffee, cotton, livestock, and various foods such as bananas and pineapples made the trip across the Atlantic.¹¹ The economic success achieved by the Spanish in the new world made a tremendous impact on Europe. In order to keep up, other European countries hands were forced. They had no choice but attempting to tame the new world themselves. European

⁹ Flynn, Dennis O., and Arturo Giráldez. "Born with a "Silver Spoon": The Origin of World Trade in 1571." *Journal of World History* 6, no. 2 (1995): p. 209. <http://www.jstor.org.ezproxy.lib.purdue.edu/stable/20078638>.

¹⁰ Wagner, Kip. *Pieces of Eight: Recovering the Riches of a Lost Spanish Treasure Fleet*, New York: E.P. Dutton & Co., 1966, p. 51.

¹¹ "Jamaica Courant." *Weekly Jamaica Courant* (Kingston, Jamaica), July 30, 1718. Accessed March 6, 2017.

economics would never be the same because of the new sources of goods, production, and wealth. This would ultimately help shape future economic ideologies of the modern world.

The words “Spanish Main” evoke a tone of power and strength. It can be, and has been assumed that the Spanish Main was a highly defensible and impregnable wall separating the Spanish new world from the open sea. Convoys seemingly had the capability to sail from port to port along the main without having fear of capture. This for the most part was true during the 16th century, with the exception of the endeavors of Sir Francis Drake, the English explorer and privateer. Be that as it may, a frequently overlooked fact is how utterly colossal the size of the new world was to Europeans at the time. In 1493, Pope Alexander VI issued a public decree granting the Spanish King most western hemisphere, an area of land roughly 80 times the size of Spain itself.¹² Trying to control the new world weighed heavy on Spanish resources, forcing them to only settle the prime parts of the new world. By the mid to late 17th century, diseases had already ravaged the native populations and the Spanish could not defend every beach simultaneously, allowing for easy access to the mainland by raiders and buccaneers. This became a dangerous kink in the Spanish armor, providing the opportunity for the most infamous raids of the Golden Age of Piracy.

In late April 1666, famed French buccaneer Francois L'Olonnais sailed from Tortuga with a crew of 660 pirates aboard 8 ships with riches on their minds. The destination was Maracaibo Bay, known today as the Bay of Venezuela located along the South American mainland coast of modern day Venezuela. Within the bay on the southern side is a strait leading to an inland lake known as Lago de Maracaibo or Lake Maracaibo. The strait is geographically protected from the sea by two islets on the east and west. The eastern islet, Isla de las Vigilias or Lookout Island, had a hill with watchmen stationed there. The western islet, Isla de las Palomas, or Pigeon Island, was fortified and equipped

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"Papal bull inter caetera." *Papal Bull Inter Caetera 1493*. (January 2, 2009): 1. *MasterFILE Premier*, EBSCOhost (accessed April 24, 2017).

with cannons. Between the islets, shallow water and sandbars made it difficult for sizable boats to navigate the strait.

The inland lake itself is fairly large, stretching nearly 60 nautical leagues by 30 nautical leagues. Along the western shore of the strait lies the city of Maracaibo. The city of Gibraltar is located on the southern shores of the lake. The accessibility to the mainland, and the rock solid protection from the sea made these cities ideal trading posts. The majority of trade goods in Maracaibo was in animal hides and meat because the surrounding land was dry and infertile. However, Gibraltar had very fertile land suitable for fruits and vegetables, but primarily cacao. Between the cities, boats brought produce such as oranges, lemons, melons, and assorted vegetables from the plantations in Gibraltar in exchange for meat in Maracaibo. The amount of trade between the two cities made them valuable targets to

¹³
buccaneers.

When Francois L'Olonnais arrived in Maracaibo Bay, he was well aware of the defenses. It was impossible to approach Maracaibo without passing the fortifications on Pigeon Island. To combat this, L'Olonnais had to devise a plan. He commanded his fleet to anchor out of sight from the watchmen on Lookout Island. Then L'Olonnais landed the buccaneers three and a half miles to the west so they could approach the fort on land. Some of the pirates were spotted and a Spanish ambush party was sent after them. This party was discovered and attacked by another band of L'Olonnais' pirates, thwarting the fort's counter attack. L'Olonnais and the pirates captured the fort with relative ease, armed with only

¹⁴
swords and pistols. With the fort in his possession, the fleet could safely approach the strait leading to the city of Maracaibo. When the pirates arrived in the city, they found it barren. Most of the citizens had fled the city by the time the pirates arrived. Survivors from the failed ambush party had retreated to warn them. This was no mind to L'Olonnais and the buccaneers who celebrated their victory following

¹³ *The buccaneers of America*, p. 93-104

¹⁴ *The buccaneers of America*, p. 93-104

four consecutive weeks on the sea and in battle. L'Olonnais sent a party of 150 men into the jungle to find prisoners. Later that day, the men returned with 20,000 pieces of eight (Spanish currency) and 20¹⁵ prisoners.

Francois L'Olonnais, known for his vicious torture tactics, put many of the prisoners to the rack. The rack is a torture device that stretched the victim until their joints and bones ripped apart. This failed to yield useful information about the prisoners' stashed riches. Alexander Exquemelin, a fellow pirate and a successful natural historian described what follows, "Then L'Olonnais – who cared nothing for the death of a dozen or so Spaniards – drew his cutlass and hacked one of the prisoners to pieces before their eyes, vowing he would do the same to them all if they would not tell what they knew". This violent act of torture was highly effective. For 2 weeks the buccaneers stayed in Maracaibo, raping and pillaging the once prospering trade city which now laid in near ruin. Eventually, L'Olonnais and the buccaneers headed for Gibraltar. They would face some resistance on the way from the Spanish, but ultimately succeeded in raiding the city. The pirates tore down the Spanish flag in both cities and raised their own. When they finally sailed away, the pirates had looted 260,000 pieces of eight, and seemingly limitless goods and commodities. A month later, L'Olonnais and his crew landed back in Tortuga as joyful men. However, in typical pirate fashion, some of the men gambled away their money within 3¹⁶ days.

Having knowledge of geographical surroundings proved to be invaluable to pirates. As seen in the case of Francois L'Olonnais, it was the difference maker in his raiding efforts. Unfortunately for other pirates, this lack of insight would be detrimental. If the land in question was unfamiliar, the captain and his crew would be at a serious disadvantage in the event of a confrontation. Ships were in

¹⁵

Exquemelin, A. O., and Terry Breverton. *The illustrated pirate diaries: a remarkable eyewitness account of Captain Morgan and the buccaneers*. 1678. Sydney, N.S.W.: New Holland, 2008, p. 78-80.

¹⁶

The buccaneers of America, p. 93-104.

constant danger of running aground. To combat this danger, a tool known as a sounding line was used to take measurements of the water's depth. The sounding line was a lengthy stretch of line that had a lead weight suspended from it. When it was cast into the water, various marks or notches along the line would help the mariner determine depth. This method of measurement, dating back to ancient Greek and Roman navigators, was relevant for well over 1500 years.¹⁷ The ocean however, was highly unpredictable in terms of depth. Underwater cliffs could change shallow water into deep water in an instant. Running aground could cause serious damage to the vessel and halt the pirates' endeavor.

In August 1722, Captain John Fenn and his consort Captain Thomas Anstis were contemplating their next move. They had just found out their petition for a royal pardon from King George I had been denied. The petition stated, "That we your Majesty's most loyal subjects, have, at sundry times, been taken by Bartholomew Roberts... and have been forced by him and his wicked accomplices, to enter into, and serve, in the said company, as pirates, much contrary to our wills and inclinations."¹⁸ They hid out on an uninhabited island just south of Cuba for nine months awaiting a response. Without much in the way of provisions, Anstis, Fenn, and the crew hunted hogs, and captured turtles to pair with the rice they had. To kill time, the pirates would sing and dance. They would create mock courts, and try one another for piracy. On the day they received their ill-fated news, the pirates decided to return to their abominable way of life and sailed south from the island.¹⁹

Fenn and Anstis sailed away on the *Good Fortune* and the *Morning Star*, two ships they had stolen while under the lead of Bartholomew "Black Bart" Roberts. The following night, Captain Fenn carelessly ran his ship aground on Grand Cayman Island. The ship was rendered useless, wrecked upon

¹⁷ Oleson, John Peter. *Greek and Roman Mechanical Water-lifting Devices: The History of a Technology*. Phoenix. Supplementary Volume; 16. Toronto; Buffalo: University of Toronto Press, 1984, p. 119-176.

¹⁸ *A General history of the pyrates*, p. 290.

¹⁹ *A General history of the pyrates*, p. 292.

the coast. When the morning arrived, Captain Anstis found the shipwreck and set anchor to fetch the survivors. Anstis had brought aboard Fenn and some others when two Royal Navy Man-of-War ships appeared on the horizon. In the panic to escape, the anxious pirate Captains cut the rope to the anchor, stranding much of the crew. Within range of the cannons for many hours, the *Good Fortune* lived up to its name as a great gust of wind aided their escape. Captain Anstis and Captain Fenn had successfully escaped to an island near Honduras. Unfortunately, as ill luck would have it, they came across another Royal Navy Man-of-War named the *Winchelsea*. The Royal Navy had surprised them and set the ship ablaze. Both captains retreated into a nearby forest. Captain Anstis escaped the pursuers only to be shot while lying in a hammock awhile later. Captain Fenn was captured, put in chains and then subsequently hung.²⁰ Captain Fenn and Captain Anstis were mere victims of geography. If Captain Fenn had not ran his ship aground, their careers as pirates may not have been cut short.

This story, as that of Francois L'Olonnais, reflects the substantial impact geography made on pirate history. The size of the new world proved to be too much for the Spanish to defend, allowing for the English, French, and Dutch to firmly establish themselves within it. The configuration of Caribbean Islands propagated piratical endeavors, allowing pirates to cut off shipping lanes, and become a tremendous burden on the trade economy in Europe. However, geography could hinder the pirates if they were unsure of the characteristics of the land in question. This inspired pirates to prepare for what was ahead by way of recruiting or enslaving navigators, cartographers, carpenters, and other high skilled sailors who could maximize their success and minimize their failures.

Do you catch my drift?

The way in which global wind patterns have impacted human and maritime history specifically is nothing short of astounding. These complex global wind patterns are created by two major aspects: atmospheric pressure, and the Coriolis Effect. Wind is caused by differences in atmospheric pressure. It

²⁰

A General history of the pyrates, p. 296.

is the result of air movement from higher to lower pressure areas around the globe. The temperature difference between the poles and the equator determines the pressure difference. Simply put, hot air rises at the warm equator, circulating back on itself toward the colder poles where the air drops to the surface pushing back toward the equator, thus creating wind. This pattern of circulation is skewed by the rotation of the earth, known as the Coriolis effect.²²

Named after the French mathematician and scientist Gustave de Coriolis, the Coriolis Effect explains that the earth has different circumferences at different latitudes; therefore rotational velocity is increased near the equator and decreased near the poles. When you consider the fact that the earth rotates on its axis things become more complicated. Since the earth rotates on its axis, circulating high pressure air is deflected at the equator to the northeast in the Northern Hemisphere and to the southeast in the Southern Hemisphere. This deflection is what we call the Coriolis Effect. If the Earth did not rotate on its axis, the atmosphere would only circulate between the poles and the equator in a simple back and forth pattern.²¹

This modern understanding of winds did not come about till the late 19th century. It gives an explanation to why wind patterns form. This explanation also gives insight into the trade winds, a prevailing wind pattern of easterly winds blowing toward the equator from both the southeast and north east. These winds meet at the doldrums, an equatorial region with calms, sudden storms, and unpredictable light winds. Here the winds rise because of the low pressure and hotter temperature, then dissipate. This dissipation of wind left sailors stranded in the open ocean, forcing them to search for the patterns. Some explorers and navigators attempted to understand wind, but did not have the tools to fully grasp and recognize the patterns.

One of the first to explore and document the intricacies of the trade winds was the Famed

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Ross, David A. *Introduction to oceanography*. New York, NY: HarperCollinsCollegePublishers, 1995, p. 199-226, 339-343.

English explorer, scientist, natural historian, and buccaneer, William Dampier. CJ Cooney, who edited many of Dampier's works describes him, “Not all men settle for a comfortable and convenient life. Some are born with the spirit of the rover in their blood, seeking only adventure and treasure, knowing only the path of blood and thunder. But sometimes, once every several billions of souls, a man of spectacular violence is also a man of science. Such a one was the pirate William Dampier, the mildest man to ever cut a throat.”²² William Dampier lived during an exceptional period of human history: the crossroads of the golden ages of piracy, sail, and exploration. He kept a journal of his travels, describing the flora and fauna of lands he visited, as well as detailed data on currents, wind, and tides. These famous journals would later become some of the most influential works of his time, inspiring the likes of famed explorer James Cook, and famed biologist Charles Darwin.²³ Dampier has contributed more to the modern world than he was aware of while living.

In William Dampier's novel, *A Discourse of Winds*, he attempts to formulate an understanding of the natural causes for wind, and documents the patterns that became apparent to him. Dampier describes, “Trade-Winds are such as do blow constantly from one point or quarter of the compass, and the region of the most peculiar to them, from about 30 degrees North, to 30 degrees South of the equator.” He continues, “There are drivers sorts of these winds. The general Trade-Winds are only in the Atlantic Ocean, which parts Africa from America, in the East Indian Ocean, and in the Great Southern Sea (South Pacific).”²⁴ Dampier had a hunch of the natural forces which created the winds, but he did not have an effective means to describe them given the time in which he lived. He noticed

²² Dampier, William. *A New Voyage Around the World*. 1697. Tomes of William Dampier, 2014, p. X.

²³ "William Dampier: Pirate and travel writer." Western Australian Museum. Accessed March 25, 2017. <http://museum.wa.gov.au/about/latest-news/william-dampier-pirate-and-travel-writer>.

²⁴ Dampier, William. *A Discourse of Winds, Breezes, Storms, Tides and Currents*. 1705. Tomes of William Dampier, 2014, p. 325.

the prevailing patterns that had helped navigators before his time. This minute understanding of wind allowed for Dampier to become the first person to circumnavigate the earth three times, solidifying himself in the history books.

Along with this understanding, Dampier wrote of another natural occurrence. The phenomenon that is ocean currents. Dampier describes, “In some places they run constantly one way, and never shift at all. ’Tis generally observed by seamen, that in all places where Trade-Winds blow, the current is influenced by them, and moves the same way with the winds.”²⁵ He attempted to correlate two variables, and his hypothesis was proven correct. Today, humans understand that surface currents in the ocean are created as a result of wind dragging along the surface in combination with the Coriolis Effect. The drag pulls the water on the surface of the ocean in the same direction as the wind, building up strength. Then, as with the wind, the Coriolis Effect deflects the currents, creating the same circular pattern across major bodies of water.²⁶ The combination of the wind and current allowed for Europeans to dominate the world stage, but not without snags along the way.

As Dampier documented, the natural forces bound the shipping across the Atlantic Ocean to patterns similar to the trade winds and ocean currents for maximum efficiency. Competing European countries were well aware of this, and did their best to exploit it, as did pirates. This is the explanation as to why pirates set up shop where they did. As noted previously, Port Royal was perfectly situated in the Caribbean, along with the Bahamas, Barbados, Tortuga, and other islands. All of these places straddled the wind patterns, ocean currents, straits, and passages necessary for trade to flourish between Europe and the new world. This advantage could hinder them however. If Barbados in the east was hypothetically attacked, there would be no hope for backup from their closest ally Jamaica to the west because the wind would push their sails west. This type of knowledge is in part due to Dampiers

²⁵

A Discourse of Winds, Breezes, Storms, Tides and Currents, p. 355-363.

²⁶

Introduction to oceanography, p. 199-226, 339-343.

work. On one hand, Dampier is hailed as one of the most important explorers in English history for his contributions and achievements through his journals. On the other hand, his ventures as a pirate were more or less a failure.

On September 11th, 1703, William Dampier sailed away from Kinsale, Ireland as the captain of the *St. George*.²⁷ Six months later, following a nasty storm they encountered while rounding Cape Horn, Dampier and his crew arrived in the Juan Fernández Islands off the coast of Chile. Here they replenished their water supply and provisions. A French merchant ship was spotted off the coast which Dampier engaged in battle for 7 consecutive hours. Dampier failed in capturing the vessel and was forced to retreat. He had succeeded however in taking a number small penniless vessels along the coast. All of which he let go freely because they “would be a hindrance to his greater designs”, as stated by William Funnell, a member of Dampier's crew. His intentions were to raid the town of Santa Maria, which was rumored to have a cache of gold. This raid was immediately greeted by heavy resistance resulting in an immense failure, to which Dampier's crew became restless.

The pirates had a second opportunity arise in which they attempted to capture a wealthy galleon. This was also a failure. The damage sustained to the *St. George* forced Dampier to retreat. The crew lost trust in Dampier, becoming argumentative, and eventually parted ways with their captain.²⁸ The *St. George* was riddled with ship-worms which ate away at the bottom of the vessel. This created hazardous leaks prompting one crew member to maroon himself onto the uninhabited Juan Fernández Island. That crewman made a good call because the *St. George* eventually sank in Peru, leaving Dampier and his remaining crew marooned as well. Dampier was rescued, but once back in London, he faced a great deal of legal trouble from his incapability as a ship captain. Worms appear as a result of not careening the vessel. Careening a vessel was a tough job. The ship needed to be turned on its side

²⁷

Funnell, William. *A voyage round the world*. London: Printed by W. Botham for James Knapton, 1707, p. 1-3, 15-16, 35-46.

for cleaning and repair. Caring for his vessel was something Dampier rarely, if ever did, giving him the reputation of a slob.²⁸

Dampier arrived back to London in late 1707. He was desperately trying to revive his career as a privateer after his recent embarrassment. He was facing a court martial for his incapability as a captain. His crew mutinied, and his ships were infested with worms.²⁹ Dampier approached the son of his recently deceased longtime friend with hopes he would be a financial backer for an upcoming voyage. The Privateer Woodes Rogers, who would later become the first Governor of the Bahamas, frantically accepted the offer from Dampier. The two went about recruiting more investors, including a Dr. Thomas Dover, who became an integral part to the voyage. After purchasing and equipping two ships known as the *Duke* and the *Dutchess*, they gathered a crew and set out to sea.³⁰

Treat the Disease, Not the Symptom

On August 1, 1708, the *Duke* and the *Dutchess*, sailed from Ireland “to retrieve the losses we had sustained by the enemy”, as the captain of the expedition Woodes Rogers wrote in his journals.³¹ The goal was to ambush a Spanish Manila Galleon. The Manila Galleon was the Pacific Ocean equivalent to the Spanish Treasure Fleets in the Atlantic Ocean. In the Pacific, these boats transported heaps of silver to Asia in exchange for spices.³² In order to reach the Manila Galleon, the voyage had to round the southern tip of South America, a place known for hazardous weather. The voyage led by Woodes Rogers began with a stop on the Island of Madeira off the coast of Africa. Here the mariners

²⁸ Woodard, Colin. *The republic of pirates: being the true and surprising story of the Caribbean pirates and the man who brought them down*. Boston: Mariner Books, Houghton Mifflin Harcourt, 2015. p. 70

²⁹ Lloyd, Christopher. *William Dampier*. London: Faber and Faber, 1966, p. 96-127.

³⁰ *Woodes Rogers: a cruising voyage round the World, Vol I*. London: Printed for A. Bell, 1712, p. 2.

³¹ *Woodes Rogers: a cruising voyage round the World, Vol I*. p. 8.

³² Schurz, William Lytle. *The Manila galleon*. Manila: Historical Conservation Society, 1985, p. 193.

picked up wine for the trip. Aware of the frigid temperatures looming in the Antarctic, Captain Rogers quipped, “Good liquor to sailors is preferable to clothing.”³¹ Pirates drank an exuberant amount of alcohol. After just a handful of weeks, water supplies would turn green and disgusting, spreading illnesses such as dysentery, salmonella, and cholera.³³ Alcohol was the best option, and often the only option..

As the ships progressed south, the air grew colder. On January 5th, 1709, the *Duke* and the *Dutchess* entered the Pacific Ocean. The wind became violent, and waves greater than 30 feet high pulverized the *Dutchess*. Edward Cooke, the executive officer, describes the wave, “it beat in all the cabin windows and bulk-head... and had not the bulk-head of the great cabin given way, all we who were there must inevitably have been drowned, before the water vented.”³⁴ Luckily for the crew the bulkhead, which is a vertical partition or wall, fell, allowing water to rush out of the room, keeping them alive. The ice cold seawater soaked everything within the ship’s hull. Following the near disaster, the *Duke* and the *Dutchess* sailed north, away from the hazardous Antarctic and into warmer weather. They had barely, but successfully rounded the tip of South America. With their clothes still soaked from days in freezing temperatures, the pirates began to fall ill by the dozens.

It is an undebatable fact that Mother Nature’s most potent weapon of destruction is disease. Historically speaking, diseases have made a greater impact on humanity than all other combined disasters derived from nature. Within the Golden Age of Sail, disease was rampant. Sailors were often exposed to typhus, influenza, malaria, and many other infectious diseases. These problems came about from the filthy living conditions aboard a ship. In the case of the *Duke* and the *Dutchess*, scurvy

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The republic of pirates: being the true and surprising story of the Caribbean pirates and the man who brought them down, 2015, p. 41.

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Cooke, Edward. *A voyage to the south sea, and round the world: Vol I*. London: Printed by H.M. for B. Lintot and R. Gosling, 1712, p. 33.

became a serious issue. Scurvy is a result of a lack of vitamin C. The symptoms include weakness, bruises, and gum disease. The general lack of hygiene at this time did not help to prevent gums from being infected. Scurvy is believed to have taken more mariners' lives than all other reasons combined in the Age of Sail.³⁵ A poor diet at sea was no help either. The primary part of a pirate's diet was salted meat. In a time with no refrigeration, the only way to preserve meat was to store it in barrels of salt. The meat would dry out, harden, and become unappetizing. Flour was baked into hard biscuits which became moldy and maggot infested. Sailors were encouraged to close their eyes while biting into the biscuits so as not to see the wiggly maggots.³⁶ Edward Cooke notes that 30 men aboard the *Dutchess* had scurvy and many others showing symptoms of it.³⁷ Captain Rogers prepared for the outbreak by bringing a cache of limes along, but those provisions quickly ran short. In need of replenishing the provisions, the ships stopped at an uninhabited island that Dampier had been to on his previous trip to the Pacific, the Juan Fernández Island. Here they came across a lone man who had been marooned on the island. His name was Andrew Selkirk.

Andrew Selkirk had been stranded on Juan Fernández Island for four and a half years. He had survived alone since William Dampier's previous voyage when he marooned himself by refusing to sail on a worm infested ship. Selkirk nearly lost his ability to speak English by not having anyone to converse with in four and a half years.³⁸ Woodes Rogers offered to take him off the island, but he remembered the living conditions of the voyage that got him stuck there in the first place. When Selkirk was made aware that Dampier was aboard, he decided it would be safer for him to stay in

³⁵ Bown, Stephen R. *Scurvy: how a surgeon, a mariner, and a gentleman solved the greatest medical mystery of the age of sail*. New York: Thomas Dunne Books/St. Martin's Griffin, 2005, p. 1-7, 33-46.

³⁶ "HMS Victory: food and the galley." HMS Victory: food and the galley. Accessed March 31, 2017. <http://www.stvincent.ac.uk/heritage/1797/victory/food.html>.

³⁷ *A voyage to the south sea, and round the world: Vol II*, p. 35.

³⁸ *Woodes Rogers: a cruising voyage round the World, Vol I.*, p. 129.

solitude on the island than sail again with Dampier and his lack of cleanliness. He was assured that Dampier was not in charge, and that the conditions were better.³⁹ Selkirk was convinced, and the pirates sailed away from the island.

After several weeks at sea, the water supply ran short again, forcing the pirates onto the mainland to replenish their supply. Dampier suggested a place he had sacked on his voyage in 1684.

The city of Guayaquil in modern day Ecuador.⁴⁰ Once in Guayaquil, a series of bickering between crew members, a botched ransom negotiation with the governor, and a hotheaded reaction to it all by Woodes Rogers turned this raid into an utter failure. The pirates did easily take control of the city, but the time it took for the ransom negotiations to fail gave Guayaquil's resident's time to hide their valuables. The only thing found which was valuable to them was alcohol. Many of the men began drinking heavily. In their drunken stupor, the hunger for riches took over. The pirates began to dig up corpses in the graveyard. This turned out to be a crucial mistake. In previous weeks, Guayaquil had been stricken with the bubonic plague. The negotiations eventually resulted in a minor victory for the pirates, who were given 26,810 pesos in exchange for the pirates leaving the city. The *Duke* and *Dutchess* sailed back out to sea. The pirates felt reluctant sense of renewal and accomplishment. This did not last long as they began to fall sick by the dozens once again.⁴¹ The plague became voracious, killing many of the pirates and forcing them back to land. They were weak and needed to recover from the sickness. On June 13th, 1709, the *Duke* and *Dutchess* anchored off the shores of Gorgona Island, off the coast of modern day Columbia, to regain their health. Captain Woodes Rogers writes, "We

³⁹ *A voyage to the south sea, and round the world: Vol II*, p. xx-xxi.

⁴⁰ *The republic of pirates: being the true and surprising story of the Caribbean pirates and the man who brought them down*, p. 78.

⁴¹ Little, Bryan. *Crusoe's Captain: Being the life of Woodes Rogers, seaman, trader, colonial governor* Oldhams Press, 1960, p. 87-100.

immediately agreed to return to Gorgona... Our men being very much fatigued, many of them sick, and several of our good sailors dead, we are so weak, that should we meet an enemy in this condition, we could make but a mean defense.”⁴² The pirates stayed on Gorgona Island for six weeks, after which they sailed for the Manila Galleon in early August, 1709.

Nearly five months would pass before the pirates encountered the galleon. After a crew member spotted the sails on the horizon, the *Duke* and *Dutchess* began to chase after it. The men were eager to secure quality loot for it had been a failure of a voyage till now. The chase lasted all night. The next morning, the *Duke* caught up to the Galleon. The vessel came alongside the Galleon, firing her broadside cannons. In such close proximity, both vessels' crews fired their muskets upon the other. In the skirmish, Captain Rogers was severely injured after a musket ball ripped through his left cheek and became lodged in his jaw. Unable to talk, Rogers wrote his orders on paper. The *Duke* then sailed in front of the galleon, turned, and broadsided it with everything they had. The Galleon gave up resistance. The men successfully boarded then captured the Manila Galleon, their biggest prize thus far. The captain of the acquired vessel, the *Nuestra Señora de la Encarnación Disenganio*, surrendered. In an attempt to save his own life, the captain ceded information about a much larger treasure ship that had left that year. It was called the *Nuestra Señora de Begoña*, weighing 900 tons, and loaded with luxuries.⁴³

Captain Woodes Rogers, his face entirely grotesque, scribbled orders to bring the fleet to a secluded harbor for repairs. Four days later, the *Begoña* appeared on the horizon. Grossly unprepared for battle, the pirates saw this as their last chance to redeem what had mostly been a failed voyage til recently. The pirate vessels surrounded the *Begoña*, in hopes of catching it in a crossfire. With the ravages of food poisoning, scurvy, bubonic plague, and countless other diseases, it is astounding that

⁴² Woodes Rogers: a cruising voyage round the World, Vol I., p. 215.

⁴³ Woodes Rogers: a cruising voyage round the World, Vol I., p. 294-295.

any of the *Duke* and *Dutchess's* crew lived to see the Manila Galleon. However, simple survival was not enough for them; they were desperate to redeem their failed voyage and claim the *Begoña's* treasures. Unfortunately, the massive ship proved to be too much for them to handle. Edward Cooke writes, “The enemy fired at us all three at once, but slow, seldom missing our masts and rigging. The *Dutchess* lay by to stop her leaks, and secure her foremast, being very much disabled, having twenty five men killed and wounded, and the sails and rigging much shattered.”⁴⁴ The pirates were forced to retreat, embarrassed once again. In early 1710, the pirates sailed across the Pacific. They anchored in England on October 14th, 1711, their voyage an overall failure.

This story, following Woodes Rogers, Edward Cooke, William Dampier, and Andrew Selkirk is considered to be legendary among anyone with a solid interest in pirates. Captain Woodes Rogers went on to be appointed Governor in the Bahamas. Andrew Selkirk became the inspiration for Daniel Defoe's famous novel *Robinson Crusoe*. Edward Cooke's journals became famous, and William Dampier the same. Along their paths, they experience a little of everything living a maritime lifestyle during the Age of Sail had to offer even though the goals of the voyage were not met. If only the health and living conditions been a bit more cleanly, their history would be far and away different than is known now. Had illnesses and diseases not run rampant on the vessels, these pirates may have been successful in their conquests. This could be said for all sailors, mariners, pirates and privateers throughout this era. Gottlieb Mittelberger, a German author, describes his transatlantic voyage, and the conditions of the ship, “But during the voyage there is on board these ships terrible misery, stench, fumes, horror, vomiting, many kinds of sea-sickness, fever, dysentery, headache, heat, constipation, boils, scurvy, cancer, mouth-rot, and the like, all of which come from old and sharply salted food and

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A voyage to the south sea, and round the world: Vol I., p. 349-350.

meat, also from very bad and foul water, so that many die miserably.”⁴⁵ Conditions aboard a boat in this time were clearly not safe.

When It Rains It Pours

On August 28, 1712, the great pirate haven of Port Royal was once again devastated. This time by one of the most powerful hurricanes in the island's history. The hurricane began around eight at night and lasted till roughly two in the morning. Josiah Burchett, the Secretary of the Admiralty in England writes, “The lightning was very dreadful, seeming like a continued flame, while the wind roared like thunder. Several people were drowned on the shore in this tempest.”⁴⁶ People on shore were killed in droves as toppling houses smashed them. A number of ships sank. Many other vessels driven ashore, or capsized. Among the wreckage, a slave ship called the *Joseph Galley* lost the entire crew, including 107 slaves chained in the hold.⁴⁷ At the time of the storm, many pirates were still hanging around Port Royal. Pirate Captain Charles Vane was possibly aboard a sloop given the moniker of *Diamond*, which was in the harbor at the time of the disaster. The *Diamond* was owned by famous pirate Captain Henry Jennings, who Vane was closely acquainted with.⁴⁸ Vane luckily survived this frightening night and licked his wounds. Henry Jennings and Charles Vane will later play an important role as the beneficiaries of damage caused by a destructive storm in the years to come.

The storms that occur in the tropics are so immensely violent, they are given a separate name as to not confuse with the common thunderstorms of the mainland. Tropical cyclones, also known as

⁴⁵ Mittelberger, Gottlieb, and Eben, Theodor. *Gottlieb Mittelberger's Journey to Pennsylvania in the Year 1750 and Return to Germany in the Year 1754*. Priv. Print. For J. Y. Jeanes, 1898, p. 20-23.

⁴⁶ Burchett, Josiah. *A complete history of the most remarkable transactions at sea*. London: Printed by W.B. for J. Walthoe and J. Walthoe Junior. 1720, p. 785.

⁴⁷ *The republic of pirates: being the true and surprising story of the Caribbean pirates and the man who brought them down*, p. 85.

⁴⁸ *The Tryals of Captain John Rackham and other Pirates*, Kingston Jamaica: Robert Baldwin, 1720, p. 37.

hurricanes, typhoons, or tropical storms, are intense and powerful storms that only form over massive bodies of water. As a result of the aforementioned Coriolis Effect and the wind generated by it, these storms only form in specific locations around the globe. Tropical cyclones very rarely form further than 5° from the equator, gathering their strength from the winds combined with warm water evaporation near there. The storms reach their peak intensity while over the ocean and weaken as they approach land. This is because the storm can no longer draw energy from the ocean.⁴⁹ This is not before doing serious damage to anything or anyone in the storm's path. Within the Golden Age of Piracy, these horrific storms became a routine.

In mid-1715, the War of Spanish Succession had ended. King Phillip V of Spain was desperate for money following the costly war. This led him to pressure Captain General Don Juan Esteban de Ubilla into rushing the departure of a Spanish Treasure Fleet from Havana. The fleet was slated to be the first in a number of years to arrive in Spain because of the war. These circumstances prompted this to be an unusually large payload carried by the fleet. The loaded fleets met in Havana during the early summer of 1715. This resulted in an 11 vessel fleet, laden with luxuries. Captain-General Ubilla, pressured by superiors, rushed the fleet to sea, risking the valuables aboard during the early weeks of hurricane season.⁵⁰

On July 31, 1715, the Spanish Treasure Fleet sailed north along the coastline of Florida headed for Spain. The winds picked up, and the waves became fierce. One of the most powerful reported hurricanes in history was encircling the fleet just before midnight. Miguel de Lima, Captain of the *Urca de Lima*, a vessel among the fleet, describes the storm, "The sun disappeared and the wind increased in

⁴⁹ Henderson-Sellers, A., and H. Zhang. *Tropical cyclones and global climate change: report from the WMO/CAS/TMRP Committee on Climate Change Assessment (Project TC-2)*. Bundoora, Vic.: Royal Melbourne Institute of Technology, 1997, Print, p. 19-38.

⁵⁰ "Spanish Treasure Fleets--Reading 2." National Parks Service. Accessed April 07, 2017. <https://www.nps.gov/nr/twhp/wwwlps/lessons/129shipwrecks/129facts2.htm>.

velocity coming from the east and east northeast. The seas became very giant in size, the wind continued blowing us toward shore, pushing us into shallow water. It soon happened that we were unable to use any sail at all...and we were at the mercy of the wind and water, always driven closer to shore. Having then lost all of our masts, all of the ships were wrecked on the shore, and with the exception of mine, broke to pieces.”⁵¹ The hurricane shipwrecked ten of the eleven vessels, scattering an estimated seven million pesos across the shoals and shallow waters. The lone surviving ship, *El Grifon*, was far enough ahead of the fleet that it escaped the storm, unaware of the wreckage until weeks after its return to Europe.⁵²

Of the 2000 men aboard the vessels, fewer than half survived the storm. Captain Ubilla was among the dead. The waves had mounted over the deck, engulfing the vessels and washing away all life aboard. Crew members were smashed against rocks lining the same reefs their vessels slammed into. Others were yanked under the surface and drowned. Those who survived scrambled to build a makeshift camp out of the broken and splintered wood which lined the beaches along with hundreds of dead bodies. The survivors immediately sent a dispatch to St. Augustine, the nearest settlement to the north. Here they would break the story of one of the greatest catastrophes in maritime history.⁵³

The news of the wreck spread like wildfire. St. Augustine sent word to Havana, where the news filtered to the rest of the Caribbean. Once the story had hit Jamaica in November of 1715, a frenzy of would-be treasure hunters scurried to organize salvage parties. Pirate Captain Henry Jennings became infatuated with the opportunity, enlisting the help of 180 men, 14 of whom were experienced divers.

⁵¹ Della Scott-Ireton and Barbara Mattick, *"Urca de Lima"* (St. Lucie County, Florida) National Register of Historic Places Registration Form, Washington, D.C.: U.S. Department of the Interior, National Park Service, 2001, Section 8, p. 2.

⁵² *The republic of pirates: being the true and surprising story of the Caribbean pirates and the man who brought them down*, p. 105.

⁵³ *Pieces of Eight: Recovering the Riches of a Lost Spanish Treasure Fleet*, p. 60-73.

His crew included pirates who would later make names for themselves. They were Charles Vane, Edward England, and Samuel “Black Sam” Bellamy.⁵⁴ Jennings set sail from Jamaica almost immediately. Once December arrived Jennings was approaching the southern coast of Florida near modern day Miami. Here the pirates encountered a Spanish mail boat which they promptly captured, interrogating the crew. The Captain of the vessel, Pedro de la Vega, offered little resistance informing the pirates of the location of Spanish salvage camps. Vega told the pirates of two camps about 100 miles north. He also informed the pirates that his ship was captured and released just the previous day by pirate treasure hunters who asked the same questions. Jennings knew he had to move quick. The pirates imprisoned Captain Vega, but did not harm him. Sure enough, as they sailed north, campfires from the Spanish salvage camps appeared in the distance.⁵⁵

By the time the pirates had arrived at the camps in early 1716, the Spanish had already salvaged a majority of the wrecks and sent the valuables off to Havana. The Spanish had been picking the two nearby shipwrecks clean for weeks before Jennings and company arrived. Slaves had been forced to hold a heavy rock and dive into the ocean sometimes 30 to 50 feet deep. Many slaves died in this process from drowning, ruptured lungs, and the bends, which occurs from built up nitrogen levels in the divers blood. When the diver resurfaces, the nitrogen gas bubbles in their veins resulted in paralysis or nerve damage, but most often death.⁵⁶

Jennings landed a group of 150 men and began marching for the main salvage camp, utilizing drum lines as a form of intimidation. The leader of the camp was Admiral Francisco Salmon, a survivor of the hurricane, and commander of one of the wrecked vessels. Salmon heard the drums of Jennings

⁵⁴ Kraska, James, and Brian Wilson. *Contemporary maritime piracy: international law, strategy, and diplomacy at sea*. Santa Barbara, CA: Praeger, 2011. p. 31.

⁵⁵ *Testimony of Pedro de la Vega*, Havana: 13 January 1716, in Translations of Spanish and Vatican Documents from the Archive of the West Indies, Seville, Spain. p. 112-115

⁵⁶ *Pieces of Eight: Recovering the Riches of a Lost Spanish Treasure Fleet*. p. 66.

men approaching rapidly, and being heavily outnumbered, he immediately surrendered.⁵⁷ Even though much of the recovered riches had already been sent to Havana, the salvage camp held roughly 350,000 pieces of eight on site and was continuously collecting more.⁵⁸ Jennings was given the location of the stashed treasures and proceeded to load the boats with it. The raid was a massive success with nearly nonexistent confrontation or violence.

Henry Jennings and the pirates sailed south to Nassau, Bahamas. Jennings thought it would be a good, quiet place for the pirates to divide the plunder. The island was situated fairly close in proximity to the shipwrecks allowing for Jennings and many other treasure hunting pirates to make future return trips to the salvage camps. The profits made by Jennings and his crew literally bankrolled piratical endeavors for years to come. Once safely in Nassau, the pirates formed what was known as the “Flying Gang”, consisting of some of history’s most infamous pirates, including the aforementioned Charles Vane, Samuel Bellamy, and Edward England, as well as starting the career of the single most famous pirate of all time, Edward “Blackbeard” Teach.⁵⁹ All thanks to a single storm, the Flying Gang went on to become the most feared group of pirates in history.

Sail into the Sunset

Nature's wrath has been, and will continue to be, a major deciding factor in nearly all human history. Throughout the timeline of humanity, different civilizations have vied for supremacy, using the forces of nature as propagation for their goals, or succumbing to the wrath and power of nature. In 480 B.C.E., the Greeks used the geography of the land to hold off the Persians during the famous Battle of Thermopylae. The Greeks were drastically outnumbered, but by filtering the Persians into the “Hot

⁵⁷ *Testimony of Pedro de la Vega*. p. 113-114

⁵⁸ *A General History of the Pyrates*. p. 36.

⁵⁹ *The republic of pirates: being the true and surprising story of the Caribbean pirates and the man who brought them down*, p. 113.

Gates”, a narrow passage between mountains, were able to delay the Persian advance into Greece. The battle is one of the famous last stand battles in history. The bubonic plague, a disease caused by a single-celled bacterium, killed an estimated 200 million people in Europe between the years 1343-1356. The Black Death, as the plague was known, shoved the continent into social, religious, and political upheaval becoming known as one of the most devastating pandemics in world history. In 1588, a thunderstorm decimated the Spanish Armada as it famously attempted to land an invasion force on England and overthrow Queen Elizabeth I. This storm killed more men and wrecked more ships than what resulted from direct combat. It is still revealed at today as one of the largest maritime blunders of all time. Despite the grand plans humanity has attempted, nature has always, for better or worse, controlled our destiny.

Pirate histories are littered with instances where natural forces determine the outcome of events. The Golden Age of Piracy saw courageous men attempt to corral nature’s forces, finding patterns and nuances that aided the success rate of their pirating career. Men such as François L’Olonnais, who had the wits to use the surrounding geography to his advantage in his extremely profitable raid of Maracaibo. Men such as William Dampier, who paved the way for future naturalists, biologists, and historians with his meticulous journal-keeping, but whose focus on documenting nature diverted his attention from the condition of his ship and crew, ultimately tarnishing his pirate reputation. Men such as Henry Jennings, who capitalized on a deadly hurricane by plundering the wreckage of the Spanish Treasure Fleet allowing him to fund the most terrifying group of pirates in history. These men sought opportunity and understanding in the endless onslaught of nature’s wrath, and solidified their place in history by doing so.

When Port Royal, Jamaica was ravaged by the 1692 earthquake, nearly half the town was washed into the sea, including the grave site of legendary pirate Henry Morgan. Henry Morgan was arguably the most famous name of the Golden Age of Piracy, aside from Blackbeard, and yet a single

storm eliminated all physical traces of him from Earth. The swallowing of his grave by the sea signifies the unrelenting, and unforgiving influence of nature's wrath. Pirate lifestyle took on every aspect of the society and natural world of the time. Pirates, no matter their nautical skills, cutthroat leadership, or successful raids, were subjects of Mother Earth. In the end, all humans are subjects of Mother Earth.

Bibliography

Primary Sources:

Burchett, Josiah. *A complete history of the most remarkable transactions at sea*. London: Printed by W.B. for J. Walthoe and J. Walthoe Junior. 1720.

Cooke, Edward. *A voyage to the south sea, and round the world: Vol I*. London: Printed by H.M. for B. Lintot and R. Gosling, 1712.

Dampier, William. *A Discourse of Winds, Breezes, Storms, Tides and Currents*. 1705. Tomes of William Dampier, 2014.

Dampier, William. *A New Voyage Around the World*. 1697. Tomes of William Dampier, 2014.

Defoe, Daniel. Edited by Manuel Schonhorn, *A General History of the Pyrates*. 1724. New York: Dover Publications, 1999.

Exquemelin, Alexander O., tr. Alexis Brown, *The Buccaneers of America*. 1678. New York: Dover Publications, 2000.

Exquemelin, A. O., and Terry Breverton. *The illustrated pirate diaries: a remarkable eyewitness account of Captain Morgan and the buccaneers*. 1678. Sydney, N.S.W.: New Holland, 2008.

Funnell, William. *A voyage round the world*. London: Printed by W. Botham for James Knapton, 1707.

Mittelberger, Gottlieb, and Eben, Theodor. *Gottlieb Mittelberger's Journey to Pennsylvania in the Year 1750 and Return to Germany in the Year 1754*. Priv. Print. For J. Y. Jeanes, 1898.

Heath, E., and John Reid. *A full account of the late dreadful earthquake at Port-Royal in Jamaica: written in two letters from the minister of that place, from aboard the Granada in Port-Royal harbour, June 22, 1692*. Edinburgh: Re-printed by John Reid, to be sold at his house in Bells-Wynd, 1692.

H.M.S. *Guernsey* Logbook. Public Records Office. Admiralty Records. June 22, 1692

"HMS Victory: food and the galley." HMS Victory: food and the galley. Accessed March 31, 2017. <http://www.stvincent.ac.uk/heritage/1797/victory/food.html>.

"Jamaica Courant." *Weekly Jamaica Courant* (Kingston, Jamaica), July 30, 1718. Accessed March 6, 2017.

"Papal bull inter caetera." *Papal Bull Inter Caetera 1493*. (January 2, 2009): 1. *MasterFILE Premier*, EBSCOhost (accessed April 24, 2017).

Testimony of Pedro de la Vega, Havana: 13 January 1716, in *Translations of Spanish and Vatican Documents from the Archive of the West Indies*, Seville, Spain.

The Tryals of Captain John Rackham and other Pirates, Kingston Jamaica: Robert Baldwin, 1720.

Woodes Rogers: a cruising voyage round the World, Vol I. London: Printed for A. Bell, 1712.

Secondary Sources:

Bown, Stephen R. *Scurvy: how a surgeon, a mariner, and a gentleman solved the greatest medical mystery of the age of sail*. Toronto: Thomas Allen Publishers, 2005.

Calloway, Colin G. *First peoples: a documentary survey of American Indian history*. Boston, MA: Bedford/St. Martin's, a Macmillan Education imprint, 2016.

Della Scott-Ireton and Barbara Mattick, "*Urca de Lima*" (St. Lucie County, Florida) National Register of Historic Places Registration Form, Washington, D.C.: U.S. Department of the Interior, National Park Service, 2001.

Dunn, Richard S. *Sugar and Slaves: The Rise of the Planter Class in the English West Indies 1624-1713*. New York: W. W. Norton and Company, 1973.

Flynn, Dennis O., and Arturo Giráldez. "Born with a 'Silver Spoon': The Origin of World Trade in 1571." *Journal of World History* 6, no. 2 (1995): p. 209. <http://www.jstor.org.ezproxy.lib.purdue.edu/stable/20078638>.

Henderson-Sellers, A., and H. Zhang. *Tropical cyclones and global climate change: report from the WMO/CAS/TMRP Committee on Climate Change Assessment (Project TC-2)*. Bundoora, Vic.: Royal Melbourne Institute of Technology, 1997.

Kraska, James, and Brian Wilson. *Contemporary maritime piracy: international law, strategy, and diplomacy at sea*. Santa Barbara, CA: Praeger, 2011.

Little, Bryan. *Crusoe's Captain: Being the life of Woodes Rogers, seaman, trader, colonial governor*. Oldhams Press, 1960.

Lloyd, Christopher. *William Dampier*. London: Faber and Faber, 1966.

Oleson, John Peter. *Greek and Roman Mechanical Water-lifting Devices: The History of a Technology*. Phoenix. Supplementary Volume; 16. Toronto; Buffalo: University of Toronto Press, 1984.

Pawson, Michael, and David Buisseret. *Port Royal, Jamaica*. Barbados: University of the West Indies Press, 2000.

Ross, David A. *Introduction to oceanography*. New York, NY: HarperCollinsCollegePublishers, 1995.

Schurz, William Lytle. *The Manila galleon*. Manila: Historical Conservation Society, 1985.

"Spanish Treasure Fleets--Reading 2." National Parks Service. Accessed April 07, 2017.
<https://www.nps.gov/nr/twhp/wwwlps/lessons/129shipwrecks/129facts2.htm>.

Thomas, Hugh. *Rivers of gold: the rise of the Spanish Empire*. London: Penguin, 2010.

Wagner, Kip. *Pieces of Eight: Recovering the Riches of a Lost Spanish Treasure Fleet*, New York: E.P. Dutton & Co., 1966.

"William Dampier: Pirate and travel writer." Western Australian Museum. Accessed March 25, 2017.
<http://museum.wa.gov.au/about/latest-news/william-dampier-pirate-and-travel-writer>.

Woodard, Colin. *The republic of pirates: being the true and surprising story of the Caribbean pirates and the man who brought them down*. Boston: Mariner Books, Houghton Mifflin Harcourt, 2015.