

## **Evidence Supporting the Theory That Vikings Walked on Oak Island:**

### **Now that Season Seven of The Curse of Oak Island has Ended**

**Dr. Doug Symons, May 2020**

Many people cite the January 1965 Reader's Digest article (MacDonald, 1965) on the Treasure Hunt on Oak Island (OI) as being their inspirational moment leading to life-long interest in the story of OI. I also read that article as a child and was moved by thoughts of buried pirate treasure on some distant Island on the South Shore of Nova Scotia (NS). In the case of some icons such as the late Dan Blankenship and Fred Nolan, and currently, Rick and Marty Lagina and their "Fellowship of the Dig", initial interest in the same article ultimately turned into life commitments. But there was another article which caught my attention as a child in a 1968 special edition Reader's Digest hardcover book put out to commemorate uniquely Canadian stories at the time of Canada's 1967 Centennial as a Nation. This book did not have a story about OI. But it did have one about the Viking discovery of North America around the year 1000 AD, written by famous Canadian author Farley Mowat (1968). Who would have thought these two inspirational stories could ever have anything to do with one another? But 50+ years later, they may. Vikings were known as warriors and most famous for raids and settlement though out Europe and beyond, but they were also farmers, traders, and above all else, astonishing travelers and explorers. That is what this is about.

So what about OI? The basic structure of OI deep in Mahone Bay is East and West glacial drumlins with a swamp in-between. Recent evidence from Geoscientist Dr. Ian Spooner, the Lagenas, and cast of the History Channel Series "The Curse of Oak Island" (COOI) reveals evidence of human activity in the swamp dating to around 1120 AD. This stunning date raises the question of who could have been responsible for this activity. The only known possible peoples are Mi'kmaq indigenous peoples of the Maritime Provinces and Norse Vikings, unless there were early voyages of some other group. The goal of this report is to review evidence supporting a Viking theory and put forward some background research and provocative ideas. At time of writing, COOI Season 7 has just ended. This paper evolved with the show over the past five months.

### **Vikings and Vinland**

The Mi'kmaq are the indigenous peoples living in NS and their history at that time was passed down through oral tradition, stories, and petroglyphs carved into rock. One spoke of a "blue-eyed people" sailing from the East before the later arrival of the French, British, and others, although it difficult to source this quote. From the Mi'kmaq perspective, initial contact with Europeans would probably been with Norse Vikings (Paul, 2006), although this could have been in southern NFLD. They were hunter-gathers who spent summers on the seaside gathering bounty from the ocean and winters in the interior of Nova Scotia where weather was

more temperate, and hunting was readily available. For example, in the National Park Kejimikujik in South West Nova Scotia, many petroglyphs and archeological finds have been made in the form of stone tools and arrowheads of stone. However, petroglyphs largely consist of etchings on rock and thus rarely exist more than 500 years, so they provide no contemporaneous evidence of a possible Norse presence (Deveau, 2020). Little hard evidence of Vikings comes from Mi'kmaq history, other than a great respect for original peoples living their own lives in their own way (Paul, 2006).

Vikings were known to travel widely from their base in Scandinavia through the Baltic, Black, Mediterranean Seas, as well as settlements in Normandy and the British Isles, in addition to Faroe and Orkney Islands, Iceland, and Greenland. Much has been written about *Grænlandinga saga* and *Eirik's saga* (to be referred to as "sagas") and descriptions of a place in North America called Vinland, which was located according to various theories anywhere from the northerly tip of Newfoundland (NFLD) to the northeast seaboard of the United States. There have been ongoing debates as to the translation of the sagas from Old Norse, their literal meaning, and their origins through oral traditions until written down in the 13<sup>th</sup> Century. Authors/ scribes are not agreed upon. It is far too weighty to review all those debates, but it is worth noting that Vinland has been proposed by some as a broad region encompassing areas of NFLD and mainland North America, and by others as a more localized description of the southern part of NS. The latter theory dates back to Storm's original proposition in 1887 and its challenge to scholars that Christopher Columbus did not "discover America" (Merrill, 1935). In a famous sentiment of Oscar Wild, America had often been discovered before Columbus, but it had always been hushed up. Discovered meaning by non-First Nations peoples, who lived here for many millenia

A Viking presence in North America and Nova Scotia has been scrutinized by scholars since that time by comparing known descriptions of the current Eastern seaboard according to those in the sagas. For example, Larsson (1992) carefully reviews and expands on these comparisons and concludes Vinland was in the southern part of NS, a suggestion supported by actual descriptions of the Sun's azimuth at winter solstice in the sagas (Ekman, 2016). Then there is the Yarmouth runestone, which was a highly controversial find of a Dr. Fletcher in 1812, a history described by Tomkinson (1937) with not just disinterest, but true annoyance of the attention it brought to NS long ago. But the point is, Vikings on the Southern Shore of Nova Scotia has been suggested for a long time.

Various books (e.g., Harris, 1967; O'Conner, 2018; Sullivan, 2018) retell the original OI 1795 AD story of three boys Daniel McInnis, Anthony Vaughn, and John Smith discovering a depression in the ground under an Oak Tree with a block-and-tackle hanging from a branch. They then began the MP dig and the treasure hunt had begun for all the treasure hunt Syndicates and Companies to come since that time. It is beyond this paper to review the details of this original story, a story told so many times that OI researchers and fans can recite most of it by heart. But an interesting and early version of the story was written by Charles Driscoll

(1929), which even includes an interview with Daniel's great grandson John McInnis (which he spells "McInnies"). After recounting the story of discovery and subsequent search activity, Driscoll (1929) draws some startling conclusions. First, he dismisses the theory of Pirate Treasure, which was the prevailing view in 1929 related to Captain Kidd lore. It was his belief "the treasure is of much more ancient origin than any of the treasure-seekers have ever supposed" (p. 697). Second, he theorizes that OI was visited by Vikings around 1200 AD, who were under threat of disease, native peoples, and dwindling numbers. According to this theory, they were retreating back to their place of origin and only had a single boat remaining, so only food and clothing could be taken. They thus deposited all their treasured and cherished items and sailed away. Should their ship have been lost, the nature of their activity would have been lost with it. Driscoll (1929) concludes this is a far-fetched theory and invites us to "fetch the theory less far". However, he is the first to suggest that Vikings walked on OI. I will fetch the theory that they were there, although not in retreat.

In contemporary times, Alessandra Nadudvari (2016) proposed a Templar theory of OI, but she also involves Vikings. In her report, she reviews the Viking presence at L'Anse aux Meadows and evidence of further possible exploration to Nova Scotia and the Eastern seaboard. Vikings of course had settlements in the North of Scotland, Ireland, and the Orkney Islands, and would have been very familiar with Templars and may even fought by their sides in the Crusades when religious artifacts may have been removed from the Holy Lands. Nadudvari (2016) proposed that sometime in the 1100 to 1300 AD time frame, the Vikings may have actually provided transportation or navigation for Templars to visit OI. It was a place far from the reaches of the Catholic Church where their original Gnostic religion was safe. This is an inspiring idea, but I will stay focused on Vikings for now.

Some of the confusion about the location Vinland is based on various artifacts throughout the Eastern seaboard of the US in places like Maine, Rhode Island, and Massachusetts, and others in the Midwest in Minnesota presumably from a Northern route through Hudson Bay, Lake Winnipeg, and Red River Valley. US - based finds were carefully reviewed by Godfrey (1955), but his conclusion is striking:

*we have been looking too far south. Climatically, Greenland was much warmer around the year A.D. 1000 than it is today, and presumably Labrador, Newfoundland, and Nova Scotia were equally more pleasant. It is probably in one of these regions that Norse artifacts, graves, and house foundations should be sought. Such an interpretation, too, is born out by the sagas themselves (p. 43).*

This statement in 1955 now looks prophetic given what would come in the next decade.

### **L'Anse aux Meadows as a Viking Outpost**

Perhaps Viking sagas and the story of Vinland would never have gotten much public attention until the 1960s when Norwegian explorer Helge Ingstad and his daughter Benedicte were led to grass-covered mounds locals presumed to have left from indigenous peoples like

the Beothuk. Their subsequent archeological work took many years. It led to L'Anse aux Meadows as an accepted evidence of a Norse presence in North America around 1000 AD (Ingstad, 1985). To restate, Vikings have been proven to be on the top tip of the island of NFLD as early as around 1000 AD. I have been to this impressive place, recreated as a National Historic site and recognized as a UNESCO World Heritage Site in 1978. So what was L'Anse aux Meadows? Wallace (2009) argues the Greenland had only 2500 settlers at its peak and those in power had the best lands. They therefore would have no motivation to settle in new lands to the West, and in fact, Greenland itself was quite an extension of the Viking world and supply chains for those settlements already. However, exploration for resources to bring to Greenland would be highly desirable, particularly lumber and foods not available to Greenland (Smiley, 2000). For example, Ledger et al. (2019) suggest L'Anse aux Meadows provided excellent resources in highly valued eiderdown (down from the Eider duck) and Cod for salting and drying. Further, they recently conducted an environmental archeological analysis in a peat trench dug near the building sites, and date activity from as early as 910 AD and lasting to as late as 1145 AD, which is consistent with original carbon dating of around 1000 AD (Ledger et al., 2019).

However, Wallace (2009) suggests that L'Anse aux Meadows also served as a winter camp from which to launch such summer excursions to explore and exploit resources in further lands. A summer excursion usually consisted of a summer-long trip to some far-off place, camping and gathering resources, and then a return to base in the fall with what is found and harvested. The sagas describe two such excursions, the most productive of which was one "to the West". There would be reason to believe that a summer excursion would be an annual event, with a return to a location that proved useful, and the Vikings would know that there was more to find sailing South in addition to West as climate became more temperate and growing season longer. Wallace (2012) describes how there would be camps along the way, but little to find in an archeological record a millennium later other than fire and cooking pits not distinguishable from First Nations people, as tools and weapons were valued and never or rarely been left behind. As the authors of the sagas are unknown, the voracity of the phrase summer excursion "to the West" is not known. If some powerful group wanted to hide the location of OI and was involved in writing down the sagas, they simply had to change "South West" to "West". Vikings had been converted to Christianity and there were later Bishops appointed to Iceland and Greenland colonies. Priests, Templars, and Monks were closely associated with the Norse (Nadudvari, 2016), and are possible scribes of the sagas in a civilization where literacy was uncommon. Templars seemed to be in all the same places as Vikings such as Normandy, British Isles, and Scotland, and travelled through the Mediterranean and Baltic/Black Seas to the Holy Land and Constantinople. In the words of Doug Crowell, *Templars Were Vikings*.

### **Summer Excursions, Hóp, and Recent OI Finds**

According to the sagas, an exception to temporary stop-over camps on summer excursions was a destination called *Hóp*, which was the part of Vinland where rich and exotic resources were supposed to be found. Wallace (2012) suggests a *hóp* literally means a shallow tidal lagoon protected from the open ocean that a ship can only enter at high tide. There are supposed to be sandbars and the lagoon fed by a river, which directed attention of scholars to the NB coast and Kouchbougac area or Québec in parts of the lower St. Lawrence River. However, in a recent COOI episode Ian Spooner described the likely shape of the OI swamp 1000 years ago as being an inlet or pond on the East side from the ocean at high tide, possibly with a sand bar at low tide. The West side of the swamp is higher, and could have been meadow or wooded 1000 years ago, with sediments only dating to the 1600s. This paper will develop the idea that OI could be either *Hóp* or some other Viking summer encampment

Another feature recently reported in the COOI is the “paved area” (i.e., platform/deck/patio/dock) which would have been at the end of the tidal inlet. This structure of gravel and stones apparently has a relatively flat surface, large surface area, and may be from 1100 AD. GPS measurements from COOI reported this feature is 1 or 2 feet below sea level at high tide, which is exactly the elevation for this feature at water’s edge as ocean levels were about 3 feet lower 1000 years ago. If Vikings were on OI, they may built part or all of this feature and used it not just as a platform area relatively out of site from Natives on the mainland. More will be said about this paved area later.

There is evidence Vikings not only dry-docked their boats, but also portaged them, by using oars through the oar-locks on both sides to lift and propel boats on land using log rollers for up to 100s of meters of portage. For example, this is how they crossed a divide in watersheds to make it from the Baltic to Black Seas in the East. Lifting a boat onto a prepared dock area is easy by comparison. A bed of alders over the rock may have been used to place the boat on, which would have been easier on the ship and its three-inch keel. The find of a “crushed stick” in the hands of Ian Spooner between rocks in the dock area of the swamp in a recent COOI episode could be a remnant of this activity. The importance of a crushed stick is that Nature does not crush sticks on flat ground, nor does Nature throw rocks around crushing sticks. In a shocking announcement the COOI finale, this crushed stick was carbon-dated to 1022 to 1218 AD at a 95% confidence interval, with 1120 AD being the center of that range.

Wallace (2012) reports there would be a more substantial camp at either *Hóp* or some other summer encampment, at which she expects there might be remaining features of unusual markings in sod, remains of a firepit, and possibly small tools and artifacts. Viking firepits apparently were constructed by lifting sod and digging a hole for the fire, surrounding part of this with stones. Firepits hold rich archeological evidence as they may contain artifacts, animal bones from meals, and charcoal remnants which can be carbon-dated. No such firepits have been located on OI, although it is not known whether they have been looked for or existed in areas of OI vastly disturbed in the search for treasure, particularly by the Dunfield excavation (e.g., Sullivan, 2018). An encampment on OI would likely be on the East drumlin on forgoing

glacial till, compared to the rocky and irregular landscape of the West drumlin. I have no idea what OI looked like 1000 years ago, but heavy forest was likely throughout and little sod, although less is known about what the current swamp area would have looked like back then.

Buildings at L'Anse au Meadows were three large Viking longhouses built with thick sod walls and sod-covered roofing over a wooden frame, as well other smaller buildings. Such buildings should not be on OI as these were permanent structures designed to over-winter. But if summer excursions were for a whole summer and perhaps multiple summers, it is unlikely simple tents were used. However, there is an ancient living structure called a "Roundhouse", also called Celtic, and sometimes called wheelhouse. These date back to the first millenia and continue to be documented archeologically in the UK to this day (Hendry, 2020). This structure was round and about 20 feet diameter. Modern reconstructions of these using ancient buildings can be found on YouTube. They are constructed by creating a round wall about 4 feet high. This wall can be made either out of wood planks or hardwood posts dug firmly in the ground. In the case of posts, they were interwoven with alder sticks and then covered outside and inside with clay to harden. Note that the most recent episode of COOI suggested clay was mined in the eye of the swamp around 1100 AD. Long rafters are then used to create a tall conical roof using support poles and mounted on the low wall. These are lashed together at the top using bracing. The phrase "wheelhouse" is because the roof rafter structure looking upwards from the inside looks like a wheel with the rafters as the spokes. Long grasses are then cut to create a thatched roof on the structure although bark shingling is possible. Wooden pegs could be used in place of nails. The roof would keep rain out.

A central firepit would have its smoke rise and fill the ceiling, but then dissipate from loose thatch or shingling at the center of the roof. As there were no windows, the door frame area was the sole source of sunlight, so I would expect the door was aimed south or southwest to take in as much light as possible. As noted by Wallace (2012), these two structures usually had a second door opposite the first one to maximize the circulation of fresh air and deal with smoke. The existence of such a structure on OI would be indicated by a circular marking on the ground and possibly post holes at depth as living quarters would be high traffic areas and the soil would be compressed and "lived in". The doorway has various constructions and could lead to any remaining circular markings as an irregularity in the circle. Buildings at L'Anse aux Meadows were not made this way, they were made with thick sod walls, a rectangular peaked roof structure of timber and alder supports, and then a double layer of sod as roofing material, the inward layer facing grass-side down and the outward one grass-side up. That is because the L'Anse aux Meadows buildings were designed for winter cold and sod provides insulating properties. Regardless, as the East Drumlin on OI was likely forested 1000 years ago, sod may not have been available. Any exploration of the East Drumlin should be sensitive to round demarcations on the ground and evidence of firepits not previously investigated. In addition, any straight line features down the slope of the East drumlin towards the swamp would be interesting as one Viking archeological site had just a feature and proposed it to be the latrine.

Another find from the swamp are old stakes with axe cut points, with most of the wood rotted away, but a foot or so remaining of what was likely a longer stake. These have been called “survey stakes” on the COOI show or “ships masts” on others, but there is another possibility. Vikings cooked over a firepit by suspending a cauldron by chain from a tripod of heavy wooden stakes lashed by rope near their apex. I do not know dating on these stakes, so this is also speculative. Rope of Vikings by the way was incredibly strong as it was sometimes made from walrus hide. Vikings also used kilns to make tar, glass beads from sand, pine tar, and iron from bog iron, although there would be no reason to do this on a summer excursion, and such activities were taking place in L’Anse aux Meadows and certainly Greenland. Another find of this season of COOI was in sediment coring the “eye of the swamp”, in which sediments were “disturbed” around 1100 AD. If stones were moved and the eye dug at this time, natural seepage from East and West drumlins would collect and form an open-air source of freshwater necessary for any encampment. Ian Spooner reported this water would very likely be drinkable. It would serve as a water source for Vikings. And clay.

Viking ships apparently sailed about 5 to 15 knots per hour and L’Anse aux Meadows was approximately 736 nm miles from Oak Island, so assuming a speed of 10 knots and direct sail and no stops, such a trip would take a little over three days, or more assuming poor conditions and stops more like a week or two. Less than 100 nm separate the SW corner of NFLD from the NE corner of NS. In other words, most of this sailing would be along the west coast of NFLD and then the east coast of NS, in which stops could be made. There are tall mountains on both sides of this open water, so land is actually visible for a significant part of this sail from NFLD to NS and back. There would be two routes along Cape Breton: the NW side and through the Canso Strait to the Eastern Shore, or down the SE side straight in line with the Eastern Shore and down to the South Shore. NS would be easier to “find” than NB or PEI. This represents a major departure from exploration of Vinland orthodoxy that Vikings always sailed coastlines. But Mi’kmaq apparently paddled from Cape Breton to Southern NFLD and back in simple canoes, and if Vikings met up with the Mi’kmaq, they could have heard of a vast land to the Southwest.

L’Anse aux Meadows was never intended as a permanent settlement and there is a lack of archeological evidence of farming and barns for livestock supporting this proposition, although it assumed there had to be some pigs and cattle for milk (Wallace, 2009). There is debate as to how long L’Anse aux Meadows was maintained, although Ledger et al. (2019) showed it could have been up to 100 years. Others suggest it was maintained for a briefer time and just several decades. Regardless, activities there indicated making bog iron, smithing of nails, carpentry, and boat repair. The archeological evidence suggests around 100 people could live at L’Anse aux Meadows at peak capacity, with some large buildings of 100 square meters and other smaller buildings. This reflects the social hierarchy of Vikings in which large buildings were for those in charge and smaller buildings for those with lesser status and maybe even slaves. Wallace (2009) says that the archeological evidence of diet at L’Anse aux Meadows from bones found point mainly towards seal, whale, and cod. However, there is also an

abundance of game on land that could be hunted also. She concludes that archeological evidence is consistent with the sagas and known construction of Viking settlements. She cautions that L'Anse au Meadows was also an encampment of Beothuk 100s of years before the Norse, which is likely why NFLD locals referred to the hillocks of soil as indigenous remains "Indian burial mounds" prior to the Viking discovery.

### Flora Evidence

It is important to relate archeology and historical references to evidence of flora. iNaturalist is a website platform based on crowdsourcing of observations and identifications of plants and animals, and can be seen as a form of citizen science apparently with a half million registered contributors (Skarlatidou, 2019). An iNaturalist observation records an encounter reported with an individual organism at a particular time and place, which are submitted, verified, and added to geographical maps of biodiversity. This website is well-known to biologists and environmental scientists, and is actually used to teach students within relevant university courses such as Botany. There are acknowledged limitations of iNaturalist reflecting the facts that current flora and observations could be from past human introduction and can change over the centuries, and limitations of observations to some geographical areas more than others due to human traffic variations. As evidence of potential change in flora across time, there was apparently a "Little Ice Age" in the North Atlantic reflecting significant cooling around 1450 AD (Anchukaitis et al., 2019), which could impact distributions of flora. Some have also related this event to the abandonment of the Greenland settlement prior to that time. Despite these limitations, iNaturalist is the best source available to examine distributions of flora short of archeological finds or pollen in sediments.

The sagas describe the discovery of Vinland, but there is no agreement on its location. A literal translation of its name is that it refers to wild grape vines, although even this is disputed, and there are many other interpretations of meaning including that it is simply a marketing ploy to make the place sound attractive, just as Erik the Red gave Greenland its name likely to attract settlers. Given there are no wild grapes in Newfoundland, it is likely that Vinland was visited in summer excursions from L'Anse aux Meadows. Many have pointed to NB as Vinland given that wild grapes are found there. However, iNaturalist suggests the wild grapes (*Vitis riparia*) are only found in the interior of NB in and around the St. John River valley, and it is hard to imagine Vikings foraging hundreds of miles inland after a sea voyage. On the other hand, it is possible that Vikings sailed all the way around NS and into the Bay of Fundy, which has the highest tides in the world, and the sagas do make mention of swift tides. The Strait of Canso between Cape Breton and mainland NS (a millenia before a causeway was built) also has swift tides of several nm/ hour.

Wild grapes have not been found at all on nearby PEI. In Québec, wild grapes have been verified along the St. Lawrence River, but no further East than Quebec City. But there are wild grapes on the Southern Shores of Nova Scotia. There are observations of such grapes in the Halifax area and up the LaHave River in Bridgewater (see also Larrison, 1992), although some

have said there were no wild grapes growing in Nova Scotia. In fact, there are now and likely were. Wallace (2012) says that the sagas also describe *vinvio* which are “grape trees”. She describes how wild grapes only grow where there are deciduous trees such as Oak, and actually grow up the trees to make it appear grapes are growing on the trees, much like a modern pergola.

Of course, Nova Scotia is rich in berries, with many observations of raspberries, blackberries, blueberries, and cranberries. In fact, iNaturalist reports a naturally occurring cranberry bog modestly inland from the head of Mahone Bay (the town, that is), which is interesting if the wild grapes of Vinland are interpreted to mean cranberries. This would be consistent with the interpretations of Vinland as not literally meaning wild grapes. Berries are hardly unique to Nova Scotia, simply an available food source, and when dried or liquified, transportable back to feed others. Berries and certain wild vegetables are known as excellent sources of Vitamin C, which prevents dreaded Scurvy that plagued communities in the North Atlantic and is even mentioned in the sagas as *skyrbjugr* (Crellin, 2000). Storage and transport of berry juices could have been done in barrels or clay casks, which is how Vikings transported liquid commodities.

Another plant mentioned in the Sagas is “self-sown wheat” growing on the shores of Vinland, which has also garnered considerable scholarly attention. Some believe this refers to foxtail barley, which grows in many locations throughout coastal areas of NB, PEI, and NS, including Halifax and beaches to the East. The fact that barley is even mentioned is noteworthy as the principal form of drink for Vikings was a form of beer made of crushed barley. Larsson (1992) concluded that the self-sown wheat observations represented wild rye, but this has only been found in the Northern shores of the Bay of Fundy. Such a plant would be desirable to make a thatched roof, although other seaside grasses would likely be suitable.

It is well known that archeologists found three butternuts at L’Anse aux Meadows, but they could not be carbon-dated or subject to DNA analysis as to their age and origins. The Butternut is known as *Juglans cinerea* as well as White Walnut, which in early Fall produces a highly nutritious oily nut that can be eaten raw or prepared into a variety of breads, sauces, and other foods. The butternut is not indigenous to NFLD, Greenland, or Iceland. However, iNaturalist (2020) confirms the widely held belief that Butternuts are found in NB, PEI, and NS, and the Forestry Department lists the Butternut as native to the indigenous Acadian Forest of Nova Scotia (Nova Scotia, 2020). Maps on iNaturalist suggest possible ranges of species, but also specific places where observations have been made. Most historians have focused on NB as a possible source of these butternuts, focusing on the coastline around Chaleur Bay and the Miramichi River (e.g., Wallace, 2012). However, there are no actual and verified reports of butternuts on coastal regions of NB.

iNaturalist (2020) does document observations of Butternuts in two locations in PEI on the southern shore and many locations in NS on the southern shore. There are many NS locations around the Halifax area and the Bedford Basin, as well as at the head of the Bay Fundy

in the Minas Basin. Most relevant to OI, there is an observation of butternuts in Mahone Bay on Clay Island, which is a very short distance from OI, just on the other side of Frog Island looking East from Isaac's Point. It is not known if a naturalist has ever made systematic observations of OI's flora, but White Walnuts may well be there also, and if not, Clay Island is only a short boat ride away. No doubt a proposed summer excursion would have brought a skin-covered kayak for local exploration around a suitable place once found, which is how local travel took place in Greenland. Or they could have built one once here, likely from deer or moose-hide. Currently, it is known that Clay Island is owned by the Municipality of Chester who maintains trails on the island, and thus has a considerable number of visitors as it is easily accessible by boat (Chester, 2020; Friends of Nature, 2011). This could bring naturalists on-site to make observations.

A few other things about Butternuts. According to the Committee on the Status of Endangered Wildlife in Canada (CSEWC, 2017), Butternuts became an endangered species in Canada in 2017 due to Butternut Canker. They also noted that Butternuts occur primarily in neutral soils of pH 5.5 to 8, which occur in areas with underlying limestone, and is generally absent from acidic regions. It tends to reach greatest abundance in rich well-drained loam soils. These are the conditions of the East Drumlin of OI: limestone bedrock and well-drained glacial till soil.

Beyond flora and as is noted in the many books about OI, it is in a wonderful location for foraging, fishing, and hunting. Mahone Bay is teeming with fish (e.g., mackerel) and seals even to this day. Salmon rivers such as the nearby Gold River were close at hand (now sadly the salmon are gone) and Salmon is explicitly mentioned in the sagas. There is considerable game to hunt, and deer have even been seen swimming the 400 meters from the mainland to OI (and now photographed using the causeway). Hunting large game was done apparently done by either bow and arrow or spear. For the tips of arrows and spears, the bush craft version of these are made of slate, and the slate bedrock of the West side of OI apparently has outcrops where it is readily available at the surface. In addition, they also used something called a "hunting pit", which is simply a large steep sided pit up to nine feet deep dug into the ground that game could be chased and fall into (Kristjánsson, Einarsson, Jónasson, & Mcaleese, 2012). One such pit was found on East side of the Northern Peninsula of NFDL (i.e., Sops Arm), although it was described as a "trench" and likely to drive Caribou into. However, it could not be definitively dated. However, given MP lore, unknown history, and potential repurposing, any possible pit digging activity is always of interest.

As an island, OI would have provided some protection from possibly hostile indigenous peoples, which in Greenland and L'Anse aux Meadows were Inuit and Beothuk. And being so deep in Mahone Bay, the waters around OI were usually calm and protected from the open ocean. While these conditions are true of many locations throughout the Maritime Provinces, they do not have unusual human activity dated to 1100 AD and the all the history of OI since.

## Viking Ships Were Made of Oak

An exciting event was when the *Islendingurí* sailed into St John's Harbour in NFLD in the year 2000, 15 August 2000 to be exact (NFLD, 2000). I was overjoyed to be present at the event, and despite heavy fog, the fireworks went off after dusk. It was the 1000<sup>th</sup> year anniversary of such a voyage credited to Leif Erikson himself, although historically there is no known date for such an event nor verifiable past-presence of Leif Erikson himself. But it does speak to the Millennial celebrations of the Norse being in North America long ago. The first port of call for the *Islendingurí* in her transatlantic voyage to NFLD was L'Anse aux Meadows. The ship was apparently an exact replica of an old Viking ship, called *Gaukstada*, which was found incredibly well preserved in an ancient burial mound in Norway in 1882. That night in St. Johns, this ship looked so small from afar as she appeared through the fog. Built in 1996, it was 22.5 metres in length, 5.3 metres beam, 1.7 metres draft, Oak and pine construction, and 18 tons of wood with 5,000 nails. The relevance to OI lies in the construction of such ships designed to cross oceans. Bruun (1997) among others describe how such ships were built, with trading vessels built wider and with fewer oars than speedier ships for war and raids, the latter being built for speed and thus narrower with more oars. As a summer excursion hope to bring back bounty from a summer of foraging, it was likely a cargo ship called *knörr* (Hurstwik 2020) which would have gone to OI. These boats were largely powered by sail. The *knörr* did not have the famed Viking dragon head on its prow as those were on ships for war and raids designed to terrify.

Greenland relied on skin covered kayaks to get about locally. But ocean voyages required Viking Ships, the kind which brought them to Greenland. The Norse knew how to construct them. Discovery of actual Viking Ships did not occur until recent times, and their engineering rivals those of any ancient civilization because of the construction, keel, and simplicity. But they were built of Oak, the strongest wood known to them for this purpose at this time. The hull was built from many straps of a single piece of Oak slit down its grain by wedge and hammer, then smoothed by axe to retain its natural strength (Bruun, 1997; Espedal, 2017). Saws were never used as they would disrupt the natural strength of the wood in line with the grain of the wood. These thin one-inch thick boards were overlapped and nailed with iron bog nails, packed with hair (or coir?) and covered with either tar (meaning pine tar) or animal fat/grease to be water tight. There was interior bracing. The bow and stern were attached to the hull and keel. They had sails made of wool, which was lowered to be a tent in times of storm. So if you are in Greenland at that time and want to build and repair Viking ships, you have no way of doing so unless Oak is brought from Norway to Greenlanders. But maybe you could find your own Oak.

Archeological evidence suggests boat repair took place at L'Anse aux Meadows and summer excursions and exploration may have sought lumber. While only boat repair is mentioned, it not known why boat construction would have been different, or alternatively, Oak harvested for transport to Greenland. Some sources suggest lumber was harvested from Labrador. NFLD is rich in hardwoods such as Birch and Maple, as well as softwoods such as Pine

and Spruce according to Fisheries and Land Resources for NFLD. It is remarkable that NFLD has no Northern Red Oak or Champion Oak, (*Quercus rubra*), and in fact, no Oaks of any kind. However, iNaturalist shows that the Northern Red Oak is common throughout NB, PEI, and NS, which represent their northern range. OI of course has Northern Red Oaks, and actually continues to have them to this day. I have seen these with my own eyes on tour walking tours of OI I have done. Summer excursions from L'Anse aux Meadows could have been to harvest Oak trees for return to L'Anse aux Meadows and even Greenland. It is unknown what Vikings transported in the way of Oak lumber or how they did it, but if lumber could be transported from Norway to Greenland there must have been a way. Science Norway (2014) describes how Norway Oaks were regularly exported for ship building to many countries and were in abundance there up until the 16<sup>th</sup> Century, but are now endangered due to overharvesting and environmental change.

### **Purpose, Materials, and Construction of the Paved Area**

As Season 7 of the COOI is over, there have been striking findings in the paved area mentioned earlier. The East side of the swamp near the ocean is deeper than the West side and would have held water 1000 years ago according to geoscientist Dr. Ian Spooner. It may have had an opening to the Ocean, which is exactly what Frog Island looks like according to Google Earth. This shows a large tidal basin between two drumlins, and an opening through the beach structure that permits ocean water to come in and out with the tide. It is possible OI looked like this. Alternatively, the beach may have been closed off at this point, in which case the East side of the swamp is deep enough that it would be a closed off pond, or one only breached during storms or the highest of tides. For the sake of this discussion, either account works because the focus is on the East side of the swamp ("inlet") and its relevance for the paved area. By the way, the paved area is not "paved", it is simply layers of rocks, but for consistency, it will be called the paved area.

The paved area has been shown to extend from roughly halfway into the swamp triangle and to the North towards the eye of the swamp. It is roughly rectangular and was reported to be 80 X 170 feet. Recent evidence is that it is under several feet of current swamp sediment, it contains strata of rock material at the bottom, a layer of stones that is about six inches thick, and then large stones in places for capping. Keeping in mind the ocean levels of the time, the paved area would have been just above sea level at high tide. Nothing is known about its purpose, the method of construction, or where the materials came from and how. In keeping with the 1100 AD dates and Viking theory, here are some hypotheses.

First, a look at L'Anse aux Meadows. According to a map of Wallace (2012, p. 11), this site was located on Epaves Bay that had a long and gradual beach. Most relevant, there was an inlet to the sea called Black Duck Brook that Viking Ships could be dragged into for safe keeping, perhaps on the inward side of the shore. Most of the building structures were on a ridge 50 meters North of this brook with bogs on both sides that provided sod for building and good ocean visibility. Wallace (2012) suggested this visibility was crucial: who was coming and going

and were they friend or foe. There was also a furnace hut close to the south side of the brook with kiln and forge capabilities. OI has many of these features: an East Drumlin for living activity and an inlet for boat safe-keeping and other unknown activities. It would be attractive and familiar to Vikings on a much smaller scale for a much smaller crew.

So what purpose would a paved area at the end of the inlet serve? As suggested on COOI, the structure was very flat with only a slight back-to-front grade. It could have been built for drainage. It would not hold water and thus make activity in the inlet area possible. The COOI show has suggested it would facilitate “on loading and off loading” of boats, which makes sense and perhaps other unknown “industrial activity”. Such a structure would be regularly cleaned by rain and dried quickly by sun due to the drainage. Without a paved area, the end of the inlet would have been soil and quickly turned into a mud-pit. From what is visible on COOI, the rocks are rounded. The paved area makes sense. As suggested by Ian Spooner, a small scale version of this happens to this day at freshwater cottages with a soil earth shoreline. The first thing the cottage owner does is gather rocks and throw them on the shoreline so they have a stable and clean entry to the lake. The function is essentially the same. The magnitude is not.

The paved area is large and purpose unknown, but here is more speculation based on the date of 1100 AD and Viking theory. First, it is known Vikings drydocked their ships. To protect the ship from deterioration from water organisms, ships were dragged onshore when not used for periods of time. Keep in mind the ship to a Viking was everything, the only way of returning “home”. This would preserve the hull of the boat during a summer-long dry-dock and allow inspection of all its seams. Archeological evidence of Viking ships found suggests they were regularly beached out of water based on significant wear that has been found on the keel, consistent with drydock (Hurstwic, 2020). It would also make the boat harder to steal by potential native raiding parties should one appear, an event that would essentially strand the Vikings in perpetuity. The ship-craft was apparently highly skilled so they would have neither the skills nor means to make another one.

This would take up some space, but not much of it. Second, the paved area would provide considerable clean and dry work-space. As only parts of the paved area have been exposed, it is not known what archeological remains are there, but these could include evidence of fire pits and simple building structures. In keeping with the Viking theme of summer foraging activities, a smokehouse for the smoking, drying, and preserving of fish and meat is possible, particularly salmon and mackerel, for the Winter months back at L’Anse aux Meadows. These can be made entirely of wood simply by tenting a smoldering fire and suspending fish over the top on a sapling skewer. On the other hand, if a living structure were built on the East Drumlin as was suggested earlier, fish and meat could be dried and smoked simply by suspending it high in the smoky rafters of the structure. This technique that was apparently commonly used, although unsightly to the dwellers. Other activities on the platform could be simple carpentry of implements, rending berries into juice for the return home, making clay pottery from the clay of the eye of the swamp to construct casks for the transport

of goods, and maybe even simple canoe construction from moose-hides over wooden frame. Moose were plentiful in Nova Scotia at that time, although now in Cape Breton due to over-hunting. In terms of large game, Mi'kmaq regularly hunted moose and deer in the region. Metal tools were rare and consisted mainly of axes, which would never be left behind, so the platform should contain no metal artifacts nor ceramic ones from this time period (the Vikings did not have ceramics other than wealthy ones back in Europe). The paved area could even have been used for tents as temporary living space with a bed of boughs laid over top, providing a smoother floor than the stones, but I think over time a living structure would have been built on the East drumlin, particularly if summer excursions were repeated.

Turning to materials and construction, there are three options: materials came from the beach, the surface of the land, or the subsurface of the land. First, the stone material may have come from the beach. Given the size of the paved area, a considerable amount of material would have to be moved for its construction from the beach about 150 meters away. The East inlet could have been used to do this. It would have been easy to build a large raft out of local trees, with alders, fir, and pine providing the maximum buoyancy and thus maximum load-potential of material. Whatever was needed of beach material would be loaded on the raft, and then the raft floated down to the other end of the inlet, where material could be piled and the paved area built. As the inlet has no current, this could have been done simply by poling or dragging by rope. Given the size of the paved area, many trips would be needed. A rough estimate is the about 250 cubic yards of material would need to be moved if the Vikings built all of it, or alternatively, a smaller amount if they only built part of it and more was added later by others.

From what I have seen on COOI, the layer of rock and stone is not highly structured like a rock wall, simply a layer of smaller rocks. This would drain the paved area and give a clean working space, not unlike working on a rock beach. Over time, the paved area became under water and sediments buried it to its current location several feet under sediment. In current times, it would serve no purpose, but with the swamp drained and digging taking place, it would resume its role as a water conduit as seen on COOI. Back at the Ocean-side beach, recovery would take place after the removal of rocks: they would be replaced by natural beach processes and thus look not much different today, although Charles Barkhouse suggested on an OI tour the beach by the swamp "looked different" (and I cannot recall how).

Second, platform materials could have come from the surface of nearby land. This would simply involve gathering moveable stones and throwing them onto land at the end of the inlet at that time. This involves the least work, and glacial till near the swamp has ample material to choose from. But neither of these beach nor land surface explanations and building of a paved area at the end of the inlet really account for its vast size.

Thus there is a third explanation to account for the materials for the paved area. They may have come from underground activity. What if there were tunneling activity at the edge of the swamp? Both sides of the swamp have slopes, but it is the East side where a tunnel could

be dug through glacial till at a horizontal or downward angle. If such activity were to be hidden, the easiest way to hide tunnel materials is simply to throw them on land at the end of the inlet. If the goal were to ultimately hide this activity, these tunnel tailings would be distributed flat rather than in a pile, and then the ocean inlet closed and swamp ultimately flooded. This is the simplest method of disposing of tunnel tailings and then hiding an entry. The MP is quite far from the paved area, so this tunnel proposal is not necessarily related to MP activity. Digging 250 cubic yards of till in a 6X8 foot shaft means a tunnel up to 300 feet, although a horizontal tunnel can only be 120 feet with no air vents. This would take you under the East Drumlin but North West of the MP. Another underground source of material would be the swamp area itself if part of it were hand dug.

It is unknown whether the slopes up from the East side of the swamp have been fully explored because the swamp was largely ignored until Fred Nolan took interest, and he seemed interested something being IN the swamp. He did build a “road into the swamp” for drilling purposes at what would have been the end of the proposed inlet, but these remain in place to this day (built in 1976 according to one picture, but shown to this day by vegetation able to grow on this feature due to elevation and thus lower water-level depth). From what his son Tom Nolan said on the show, his father was unaware of a vast paved area in the swamp, but the full extent of his thinking on the matter is not known. Fred Nolan drilled where he did in the triangular-shaped swamp for some reason, perhaps because it was in the center. Parenthetically, in a drilling activity on the COOI from the end of Fred Nolan’s road into the swamp, the paved structure appeared at the same depth it appears elsewhere.

But the paved area may have disappeared after Viking activity as it became overgrown with vegetation. Alternatively, it could have been repurposed by any later visitors to the Island and may have attracted them in the first place as it would lead to the obvious thought “something happened here”. Some of the wood and swamp finds date human activity in the 1600s. The eye of the swamp would have been an easy source of freshwater. Clay may have been continued to be needed, as suggested by the original Money Pit story, i.e., the “clay on layers of logs”). And whatever else might have happened later. This would lead to other activities and finds from dates in the 1600s. But something happened that would eventually turn the swamp into its current form, which could have been the closing of the ocean access by depositors or natural processes to bury until now whatever happened in the swamp.

### **The Canopy Oaks**

What OI does not have anymore are the large Canopy Oaks, which can be seen in pictures dating back to the 1930s. According to R.V. Harris (1967), these Canopy Oaks died suddenly around 1960 (around when his 1958 first edition came out). He attributes their demise to black carpenter ant infestations (p. 5), which is a little suspect as carpenter ants create nests in the inside of trees eating the middle pulp and do not always kill a tree or do so very slowly. This idea would also require the simultaneous infestation of all Canopy Oaks which were scattered throughout Isaac Point at the roughly the same time, and killing all of them

within years of each other. It should be noted that the Canopy Oaks were never formally identified by a botanist and no samples remain unless there are still stumps on Isaac's Point or someone kept acorns, such as the Restall Family's presentation of acorns in this season of COOI. But there is no doubt the trees existed and contributed to the lore of OI.

Some people maintain these Canopy Oaks are simply Northern Red Oaks growing with few lower branches because of a higher canopy. I find this hard to believe as there are currently Red Oaks on the Island that bear none of this shape even though some are in deep forest. Others suggest these Oaks are some other unknown variety of Oaks, perhaps from elsewhere in the world. Driscoll (1929) suggests these trees were Southern Oaks (*Quercus virginiana*) and he would have seen them. This is an evergreen Oak found throughout Southern U.S. States, although their range does not go much further north than Virginia. This oak variety has one of the smallest acorns (Aizen & Patterson, 1990). On the other hand, if they kept leaves throughout the Winter, this would be readily observable and passed on by those on the Island even without botanical training. Regardless, the fact that they are not on any of the 100s of Mahone Bay Islands is extremely unusual. But they would make OI easy to locate for as long as such trees existed. These trees contributed to the current name OI, which was called Smith's Island and for a brief time Gloucester Island prior to around 1790. It was renamed OI just prior to the discovery-story of the Money Pit under the branch of an Oak Tree five years later. Which is uncanny timing.

Were the Canopy Oaks indeed some kind of Oak Tree, they would be a huge resource for Vikings given the practice of a ship's length being dictated by how long Oak boards are. Canopy Oak trees remain a mystery on OI, but they certainly had long trunks. Local Red Oak tree trunks branch out after only 10 feet or so and the biggest is only 20 to 30 meters, and up to 50 meters in height. But the Canopy Oaks would have been worth gold to Vikings if they were there at that time and would have been a valuable commodity to ship back to Greenland (Wallace, personal communication, 11 February 2020). Nuts were also part of the food supply for ancient explorers by sea, and acorns can be eaten once roasted to reduce their tannin content. It is possible that if Canopy Oaks are some introduced species of Oak, they may have been brought to OI as a food source and then distributed throughout the island by squirrels who found the food cache.

It is also possible that the "Canopy Oaks" were not Oak trees at all. Their identity may have been a modern invention related to the equally modern myth that "all Oaks and seven men must die" before the treasure is found, which I believe came from a literary work in the mid 1900s. While Canopy Oaks have been referred to as such, we have no verification by botanists, and they do not look like pictures of any Oaks I can find. So the "higher canopy" explanation is possible, and we are blinded by the unnatural shape of ornamental trees growing with no competition for sunlight compared to those growing in a forest where competition is high. Note that Google pictures of trees are always standing alone, not in dense forest

competition. Until identified, there is another explanation to be considered: what if the Canopy Oaks were not actually Oaks? Could they be Butternut trees?

According to CSEWC (2017), Butternut trees must be in the overstory to survive in closed-canopy stands. In other words, their growth effort is put into gaining height before branches are spread out to maximize their photosynthesis potential of leaves above those of others. Butternuts can grow as tall as 60 feet, which gives them that capacity, comparable to or exceeding that of Red Oaks and various conifers. When other trees are cut down, the Canopy stands out from their overstory needs and height. If in a stand of Red Oaks, it would be the Oaks that would be cut down to provide the massive amount of timber necessary for all the OI depositing and search tunnels. If the Canopy trees were Southern Oaks, why would they not have simply been cut down for timber like their Northern Red Oak cousins? Why were they selectively left alone during all the MP activity which would have used many thousands of board feet of timber? White Walnuts are a softer wood good for carving but not useful to shore up tunnels. Of course, as an ornamental tree in someone's yard, White Walnuts are much shorter and lush as there is no competition for sunlight. But in Canopy competition, they would grow as high as possible and then branch out.

If this speculation is true it leads to another explanation of "where did the Canopy trees go on OI?". Apparently indigenous White Walnuts have been dying throughout the 1900s from Butternut Canker, and are now an endangered species (CSEWC, 2017). Butternut Canker is an airborne fungus which could have attacked all remaining Canopy trees at once given it appeared in North America as early as 1940. Apparently, the fungus attacks the Canopy and then works down the trunk, killing even mature trees (TreeCanada, 2020). That would account for the loss of the majestic canopy trees seen in photographs from the 1930 photograph apparently around 1960 (Harris, 1967) and disease tends to attack all trees in the same area, much like we saw in more recent Dutch Elm Disease. Red Oaks did not all die and some are alive and well to this day. This means OI may well have a lush flora history of White Walnut but not anymore, so an investigation of any residual stumps would be helpful. Even a current failure to find White Walnut on OI does not negate this idea. In the defense of past peoples on OI, the focus was on digging and treasure, and an appreciation of flora, historical change, and biological evidence of history on OI would never have occurred to them to even document, except in passing.

There is one other thing to note about White Walnut. Harris (1967) describes how after the "Canopy Oaks" died and were cut down, a trunk of one was examined. An inspection of the bark apparently revealed "strange markings" on one and an "embedded knife blade" which had broken off in the tree. Who knows where this artifact is. But something little known about Walnut trees is that they can be tapped for syrup, much like a Sugar Maples to make maple syrup (Hammond, 2016). Which would involve creating a tap through the bark in spring and cutting in with a knife to harvest sap. Mi'kmaq apparently made syrup as early as 1600 and

some sources credit the idea came from *Glooskap* himself. However, there is no known history of Vikings making syrup, with their only source of sugar coming from honey.

## Conclusions

Did Vikings walk on OI? Sadly, we will never fully understand the depth of such a hardy people so advanced in transportation, navigation, and bush skill. In the absence of hard archeological evidence such as that found at L'Anse aux Meadows, the answer at this time is simply "do not know". But the orthodoxy that Christopher Columbus "discovered" America is gone: Vikings were the first Europeans here, "here" meaning the home of indigenous Mi'kmaq. Mi'kmaq are known to be semi-nomadic leaving little in the way of an archeological foot-print. They had settlements in nearby Martin and Gold Rivers and they may have had a day trip to hunt game on OI, but why would they build stone-works in the swamp? The COOI show has revealed evidence of human activity dating back to around 1100 AD. This is a date when the Norse were known to be in NFLD and their sagas speak of excursions from that base to the far edges of Vinland to a destination called *Hóp*. There are few other options for human activity on OI other than Mi'kmaq or some other explanation such as Basques, Mayans, or some early Templar voyage. The goal of this report was to review evidence consistent with scholarly inquiry and archeological discoveries to suggest a fit between what is known and the possibility that OI may have been visited by Vikings.

The history of OI shows evidence of many peoples walking the Island over the ensuing centuries including Spanish, English, and French in stories related to depositing and hunting for treasure(s) or other artifacts. These stories are recounted in many books about the Island's rich, sometimes tragic, and painfully hard to understand history. Absent from these books, however, are any theories about activity as far back as 1100 AD. If Vikings used OI for summer foraging from L'Anse aux Meadows, they would have been the first Europeans there and may have shared information about its existence to others. Vikings were converted to Christianity, and, in fact, Bishops were in place in Greenland and Iceland, who may actually have been scribes of the sagas that mention Vinland. Vikings were close allies of Templars and may even have been involved in the Crusades with them. As the Norse travelled and traded throughout Europe, word could have been carefully shared about this location and how to go there, although such word would have been highly prized and treated in a secret fashion by some. It may have gone no further than the King of Norway or those in charge of Greenland, Iceland, and Orkney Islands. If there is (or were) treasure or artifacts on the Island, it could have been at the hands of subsequent peoples who used this information about OI for their own activities centuries later. But given the absence of any available information, this would be either the highest of secrets, or alternatively, just a fairy tale.

The stone paved area is a new feature of the swamp discovered this season on COOI with an unknown purpose. It would have been made with stone material that could have come from three possible sources: the beach, land surface, or beneath the land. If the Vikings were on OI for foraging, those dates would likely be in the 1000s AD given L'Anse aux Meadows was

abandoned around 1100 AD, but this still overlaps with the confidence interval of dates of the “crushed stick” found in the paved area. It is possible that Vikings built no paved area at all or a smaller version of the paved area for docking and some work. This report explains how material could have been rafted across the east inlet from the beach or simply from stones on land. The vast size of the paved area raises the alternative explanation that the material came from underground tunneling on the East side of the slope of the swamp, made flat so as to be ultimately buried in the swamp. There is no evidence for this hypothesis, but the paved area is so new its origins need to be examined. Dates in the 1100s AD could still involve Vikings returning or leading others to an Island they knew well, and the paved area expanded. The others would most likely be Templars given the dates and close association with Norse.

Have Vikings been considered by OI authors? Driscoll (1929) first suggested the Norse were on OI, although his theory is that Vikings were also depositors, whereas the current report only describes them as visitors. D’Arcy O’Conner (2018) wrote that “Some have thought that Oak Island and the immediately adjacent mainland had been the site of a Norse settlement and that it may have thrived for many years” (p. 70). However, he then discards this hypothesis based on Money Pit and other wood samples failing to carbon date before 1500 AD as well as the presence of coconut fiber to which Vikings should not have access. He wrote this before current evidence of “features not explained by nature” in the swamp. Note that the current proposal disconnects the potential of early Viking presence with activity related to later depositing and searching for treasure or artifacts. I cannot find other meaningful consideration of Viking involvement in other contemporary books other than Randall Sullivan’s (2018) review of the 1398 voyage of Henry Sinclair, Earl of Orkney, and possibly other Templars to the West following old Viking sailing routes. Nadudvari (2016) made this proposal as well. Zena Halpern (2017) described an even earlier Templar voyage in the 1100s to North America by a Ralph de Sudeley, and “landing on an Island of Oaks”, and relates the route of this voyage to the Norse. So there are other ideas out there that go beyond the scope of this report.

This report has fragmented OI history into three phases: the initial discovery in 1100 AD by Vikings, return visits by other groups, and then “modern times” starting with the initial Money Pit discovery, settlers, and search attempts. I now call these times “Discovery”, “Depositing”, and “Searching”. It helps you organize the finds as they are reported on the COOI show as dates of features and artifacts need to fit a time frame in addition to a people. I wrote this before the COOI season 7 finale in which the Leginas and cast essentially did the same thing: laying out dated artifacts across the centuries from 1000 AD to current times. I would disagree with the early part of the timeline, which lists “Norse Exploration” in 1200 AD as I think it is earlier. Clearly this report is focused on Discovery. Notice this report is silent about finds in the Money Pit, Smith’s Cove, Nolan’s Cross, Coconut Fiber, and other OI features and artifacts. This report is also silent about who subsequent peoples and their activities were. According to the proposal of this report, those came later. If Vikings are established as a fact on OI, it then leads to new inquiry into a “missing link” between them and potential depositors and searchers that came hundreds of years later, which may point in specific directions. There is an absence

of thought from many theories of OI that propose the World's valued treasures or wealth would simply be sent to place that was not known to exist. European knowledge of the place is important and Vikings could have been the first Europeans on site. And OI may indeed be *Hóp*, or some similar place where Vikings had summer excursions for resources. This may be the starting point of a complicated, long, and secretive series of activities over Centuries. But the starting point.

#### *Notes*

*This report was written and revised throughout season 7 of the COOI, which has now concluded. Obviously some thoughts presented here are purely speculative. This report was inspired by discussion with Dr. Ian Spooner and Doug Crowell January 2020 about publicly known facts of Oak Island, and they are thanked for their insightful comments, animated discussion, and direction to some of the original sources since that time. Alessandra Nadudvari, Teresa Pendleton, Laird Niven, Terry Deveau, Cyndi Bussey, and Birgitta Wallace are thanked for their comments. Many other Oak Island FB group participants too many to name are thanked for their dedication to the Hunt and on-line discussion over the past five years. Dr. Doug Symons is a Psychology Professor with a science background at Acadia University, Wolfville NS, B4N 2R6, Canada, and can be contacted at [doug.symons@acadiau.ca](mailto:doug.symons@acadiau.ca)*

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