Rotted Oak Logs of the Money Pit Platforms

There was much commentary in the Oak Island Treasure Story lore about the oak logs which made up the platforms within the Money Pit. Many had "rotted where the logs were embedded into the hard clayey soil of the walls of the Money Pit." This was investigated as a possible scientific clue as to **WHEN** the Money Pit was filled in. The following pages are excerpts from our Books first volume, "**Oak Island Mystery Trees and other Forensic Answers**, Chapter 8, "**Planting Evidence**." This forensic study is the mycological analysis of what would happen to oak logs in such a setting. Enjoy!

Dating Decay & Displacement

A few years ago from the comfort of my couch, the thought came to me perhaps we could make determinations which would or could forward the finding of answers to the *WHO*, *WHAT*, *WHEN*, *WHY* and *HOW* of the Oak Island enigma. Heck, I've seen enough television to know 'they' can determine anything nowadays, *right?*

Lucky for me, I finally found just such a premier expert of experts on all things below me – *literally, below my feet*. He has such an impressive record of experience, expertise, and education, his entire 58-page resume is include in Appendix M, "*Experts Examine Evidence,*" along with the reports of his findings. Here, we will first announce his findings regarding the "*Rot and Decay of Oak Logs making up the Platforms Within the Money Pit*."

The Oak Island treasure story tells of the legend of searchers digging down within the depression, which would later be properly called the Money Pit. We are provided descriptive statements of what was seen and in what condition is was witnessed to be as they dug deeper and deeper. Like all other aspects of this enigma, we have forensically examined the commentary about the platforms within the Money Pit, and the descriptions of the oak logs which made up those platforms. Some of those reporting's are listed at the end of this chapter yet can also be viewed in their full context in Appendix C, "*On the Record*."

Be it known, the searchers said the oak logs making up the platforms within the pit, were rotten. Rotten enough a strong man could break them from their embedment into the hard clay walls with which they were wedged. Yet they were not decayed to the point where the weight of the refilled soil they supported, broke their hold into the wall.

So what exactly caused those logs to rot and decay and what does that have to do with finding out WHEN this all happened?

Wood decay or wood rot is the decomposition of wood by microorganisms, primarily by their enzymatic activity – 'feeding off the nutrients of the wood fiber.'[21] The suspect microorganism is fungus – *which is among us!* They are the only group which foments wood decay. There are other sources which can deteriorate wood or fibrous organic materials. To name just a few such as ultraviolet light, marine animals, insects, and others, but they are not causing decay or rot, and they do not create the volume of destruction of wood fiber as do those cute fibrous fungi feeders. Without them, we would have so much wood on Oak Island, Billy Gerhardt would be king of the island!

The funky fungi which feast of fibers, loves it when it is damp wood. They need it wet, they need oxygen to breath while eating, and they like it warm when at the food bar. Gee sounds vaguely familiar.

Brown Fungus is the primary culprit in consuming dead wood. Honey Fungus is big on attacking living trees and loves to move in and colonize before the Big Eat. Other fungi already live on the wood and slowly eat their own homes.[19] I believe it is these fungi that we are examining in the decay of the oak logs within the Money Pit.

But who would know for sure? *Easy Peasy*... a "Mycologist." No, not your *'collogist'*... a person who knows all about *mycology*. This is the field of fungi - pun always intended. It includes the study of their genetic and biochemical properties, their taxonomy, their use to humans as a source for tinder, traditional medicine, and for fungi food. It also studies the psychoactive substances which some of them funky fungi produce, as well as their ability to be toxic and cause infections.

Wow! Where do you get a degree in that? My son must be studying to be a mycologist, as his room definitely is a working lab! Does that make him..... *my mycologist?*

Most importantly, mycology can tell us how long it took for those foraging funky fiber-feasting fungi to fill up and decay a Northern Red Oak log, used to make a platform deep within our very own Money Pit on Oak Island! Our expert who is working his magic to determine how long it would take for the soils within and atop the Money Pit, to settle, compact and consolidate, has provided us here, a timeline to which the rate of rot and decay has been determined once the Money Pit was filled in and decay developed.

Rot and Decay of Oak Logs

Dr. Bryan G. Hopkins, Ph.D., CPSS, is an expert in soil science and currently a Full Professor in the Plant and Wildlife Sciences Department at Brigham Young University. His academic teaching focuses on environmental chemistry and plant, soil, and water science and management. Professor Hopkins has multiple degrees in Horticulture and Agronomy and is currently the Coordinator for the North American Proficiency Testing (NAPT) program for the Soil Science Society of America (SSSA), which oversees data quality for approximately 150 analytical laboratories from around the world.

In addition, Professor Hopkins is the active managing owner of Hopkins Scientific LLC, in Provo, Utah. He and his staff of scientists and researchers were enlisted to perform an examination and modeling of a blind scenario, descriptive of the Oak Island setting. This scenario provided geology and atmospheric and weather conditions of the island and surrounding area. It also provided redacted witness statements, abridged written reports, affidavits, and descriptive writings of searcher activities when discussing rot of wood, settling of soil, and moisture conditions within the Money Pit. As stated, those descriptive writings are reposted at the end of this chapter.

Dr Hopkins and his team have submitted their initial draft report on the decay-based degradation of the logs within the pit, in an effort to attempt to determine an approximate window of time as to when the pit was refilled.[20]

This report is shown in full in Appendix M, "*Experts Examine Evidence,*" and the summary findings are provided below.

> *"The parameters of our model have now been sufficiently outlined that we can provide a reasonable window of time in which these red oak logs could have been buried in the soil. We have set the decomposition mass ration to between 30% and 70%, We know that the cooler subsoil temperature (44 degrees F) increases the microbial growth rate by a factor of 3-4, we have set it at 3.5 for this model. We also know that the rate of decay for the sapwood and outer bark is roughly 16% annually while the rate of decay for the heartwood is approximately 1% annually. The diameter of the red oak logs is 7.5 inches, the total 2 dimensional surface area is calculated at approximately 139 cm2. It's also established that the composition of red oak logs is typically 10% sapwood and 90% heartwood (Brown 2019). 10% of the total surface area is 13.9 cm2 and 90% of the of total surface area is 125.8 cm2. When all the outlined variables are input into this rate of decay model, we can then calculate a window.*[20]
>
> *Beginning with shorter end of the window, 70% original oak log mass remaining would take **175 years** to occur. For 50% of the original oak log mass to remain would take **273 years** to occur. For 30% of the original oak log mass to remain would take **420 years** to occur (Figure 1). While that range of 175 to 420 years is a significantly wide estimate of time, that is the best that can be derived given the information provided within the scenarios.*

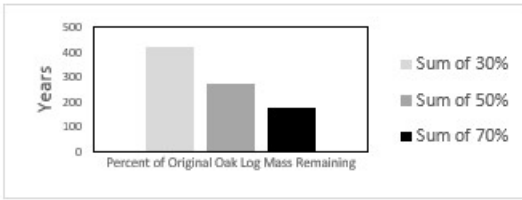

Figure 1: The amount of time it would take, given the inputs, to have a percentage of the original oak log mass remaining undecomposed.[20]

This forensic report provides for us the duration of elapsed time, based on the calculations of how much mass of the oak log was remaining undecomposed within the platform structure, in that pit environment. Wooden logs with only 30% of their mass being decomposed, would have been within the MP environment for 175 years. Logs with 50% of their mass being decomposed, would have been within the MP environment for 273 years. the logs with 70% of their mass being decomposed, would have been within the MP environment for 420 years! The latter is the conservative choice.

Assuming therefore the depression/Money Pit was discovered and partially excavated in 1795 or as late as 1804, would indicate the 175 years of degradation would date the filling of the Money Pit to around **1620-1629 AD**. The 273 years of degradation would date the filling of the Money Pit to around **1522-1531 AD**. And the 420 years of degradation would date the filling of the Money Pit to around **1375-1384 AD**. Below are some quick references applying this data:

> Coincidentally, it initially appears our *175 years* decay degradation of 30% of oak logs, aligns quite well with James A. McQuiston's ***"1632"*** theory dealing with Sir William Alexander and the Knights Baronet of Nova Scotia.
>
> Then again, the *273 years* of decay degradation at 50% of the oak logs within the MP, falls within the window of a bevy of radiocarbon-dated wooden swamp artefacts dated within 1474-1575.
>
> And still, never to be undercut, the *420 years* of decay degradation at 70% of the oak logs, does ironically fit with the varied radiocarbon datings of the mountains of coconut coir fiber found within the island! Around **1375 AD**.

Keep in mind, these scientific calculations are not based in any way on what searchers, storytellers, or historians have said about those logs which made up any platforms within the MP. This forensic answer is what would actually happen with wood in such a scenario underground with the known makeup of the soil and weather of Oak Island. This is evidence which can be used and not dismissed.

The Oak Island story discusses a wooden platform every ten feet, down to approximately 110 ft depth, or more. The description within the Money Pit clearly describes the 10 ft, 20 ft, 30 ft, 60 ft, 90 ft, 98 ft, and 103 ft platforms. The latter two being determined by borings through them. Otherwise, they use the term *marks, marker,* or tier for the 40 ft, 50 ft, 70 ft, 80 ft, and 110 ft platforms. Many people do not associate the descriptor of a "marker" as necessarily being an actual platform. Yet in mining of the day, a marker (marcher correct spelling) was a Scottish term to reference a platform or partial platform or landing.[2] It is hard to believe the "markers" *covered* in charcoal, or small inscribed stones, or puddled clay, or eelgrass and coconut fibers... were somehow just a 'mark covered' on the side of the pit walls or somehow suspended within the pile of the fill. Did someone lowered on a rope make a mark on the wall of the pit with these materials, or lay them on top of the soil at 10 ft of fill just so they could then dump another ten feet on top of that? Furthermore, without those platforms at those 10 ft 'marks,' what was supposed to hold up the dirt above? At 45.9 metric tons per ten-foot height of fill,[4] an oak log platform simply wedged into the side of the shaft could not hold more than the weight for two platforms, if at that. Other authors discuss further platforms or barriers going as far down as 171 ft. For now, 110 ft will do us.]* *Excerpt from Appendix H, "***Dirty World of Detritus***."

Below are excerpts of commentary regarding "Platforms" within the Money Pit, and subsets of Book related historical notations found in Appendix C, "***On the Record***." Taken from larger text writings, these are reduced for this post.

8. "The Oak Island Diggings," by Jotham Blanchard McCully, October 16, 1862. Published in "The Liverpool Transcript." Pgs. 3 & 8.

"...After going down ten feet they found a layer of oak timber, at twenty the same, and thirty the same...

...and we commenced where they first left off, and sunk the pit 93 feet, finding a mark every ten feet. Some of them were charcoal, some putty, and one at 80 feet was a stone cut square, two feet long and about a foot thick, with several characters on it. All the way down they were confined to a diameter of 16 feet, by the softness of the ground within that limit. The pick marks could be distinctly seen all around the sides of the pit. After they got down 93 feet, they forced a crowbar down and struck wood at five which appeared to be a platform from its being level, making in all to the supposed platform 98 feet...

9. "Oak Island, The Reasons for Supposing Treasure is Buried There," by Paul Pry. For the Yarmouth Herald. 2-19-1863. Pgs. 1-6.

"...The surrounding earth being of a hard bluish clay, so hard, that a strong man could only penetrate the soil two or three inches with the blow of a pick. At every ten feet a mark was discovered, some were of timber, one charcoal, one of putty, and the eighty feet mark was a stone about two feet long, cut square, which is yet to be seen in the chimney of an old house near the pit."

10. "History of the Oak Island Enterprise – Chapter 1," By James McNutt. Printed in "The Colonist" on 1-2-1864, Truro, Nova Scotia. Pgs. 1-4

"...On removing the stones, they saw that they were entering the mouth of an old pit or shaft that had been filled up. The mouth was seven feet in diameter, and the sides of the pit were of tough, hard clay, but the earth with which it had been filled up was loose and easy to be removed. They dug ten feet lower down when they came across a tier of oak logs tightly attached to the sides, and the earth below the logs had settled nearly two feet. The outside of the logs was so rotten that they felt confident they must have been

imbedded there for a great many years. On removing them they continued the work till they were fifteen feet further down...

...when they struck a second tier of oak logs, corresponding with the first. Ten feet lower down they found a tier of charcoal, and ten feet further a tier of putty. Further down was a flag stone about two feet long and one wide, with a number of rudely cut letters and figures upon it...

...After reaching a distance of ninety feet the earth in the center of the pit became softer and water began to show itself. At ninety-three feet it increased, and they had to take out one tub of water to two of earth."

13. "Account by James McNutt, Secretary of the Oak Island Eldorado Co.," known as the Halifax Co. Transcribed by Les MacPhie. Work carried out from Dec. 1866 - Jan. 1867. Pgs. 1-6.

"... to dig in the clover patch at the ten feet found a tier of wood and the pit to be 12 feet in diameter. At twenty another tier of wood, at 30 feet a tier of hand timber, and the pick marks was clearly to be seen on the hard sides. By this time, the work was too hard for ***four men*** *to carry on...*

...and resumed the work at 30 feet where the others left off. At 40 feet a tier of charcoal, at 50 feet a tier of smooth stones from the beach with figures and letters cut on them, at 60 feet a tier of manilla grass and the rind of a coconut, at 70 feet a tier of putty, at eighty feet a stone 3 feet long and 1 foot square with figures and letters cut on it, and it was free stone being different from any on that coast...

...Then, in boring the remaining holes, two oak planks were passed through of the thickness of 4 inches and about 3 feet apart. A sort of grass was brought up by the auger, the same as found in the pit at 60 feet and a substance white in color and much resembling putty."

15. "History of the County of Lunenburg," by Mather Byles DeBrisay, Judge of County Courts and Member of the Historical Society of Nova Scotia. Harvard College Library, 4-7-1896, Cambridge, Mass. Second Edition, 1895. Originally written at Bridgewater and La Have, February 1870 . Pgs. 301-306

"...The mouth was seven feet in diameter and the sides were of tough, hard clay; but the earth which had been used in filling was loose, and easy to be removed. Ten feet lower was a tier of oak logs, tightly attached to the sides, and the earth below them had settled nearly two feet. The logs were very much decayed on the outside. Removing these, they went fifteen feet farther down. They went on and struck a second tier of logs like those first found. Ten feet lower they came to charcoal, ten feet below it to putty, and farther down to a flagstone about two feet long and one foot wide, with rudely cut letters and figures which they could not decipher."

16. "The Story of Oak Island – 1935," by Frederick L. Blair. Included in "Buried Treasure", part of Oak Island Treasure Company's Public Share Offering. "Additional" information included.

"...After digging a few feet, they found that they were working in a well-defined shaft, the walls of which were hard and solid; and it is said that in some places old pick marks were plainly to be seen, while within these walls the earth was so loose that pics were not required. On reaching a depth of 10 feet they came to a covering of oak plank. They kept on digging until a dept of 30 feet was reached, finding marks at each 10 feet...

...Work was at once resumed by this company and the shaft was excavated to a depth of 95 feet. Marks were found every 10 feet, ***as before****, and an iron bar was frequently used in taking soundings. The 90 foot mark was a flat stone about 3 feet long and 16 inches wide...*

...Until the depth of 95 feet was reached no water had been encountered, neither had sand or gravel through which water could possibly percolate been met. It was Saturday evening when the depth above named had been reached, and it was at this point that a wooden platform was struck, extending over the entire surface of the shaft, as revealed by the soundings...

...The platform was struck at 98 ft., just as the old diggers, as before mentioned, found it when sounding with the iron bar. After going through this platform, which was five inches thick, and proved to be spruce...

19. "History of Oak Island, Nova Scotia, and of the Work Done There at Different Time to Recover Buried Treasure," by Frederick L. Blair. 1926. known as Exhibit B. Pgs. 4-5.

"...One of the lower and larger of its branches, the outer end of which had been sawed off, projected directly over the center of a deep circular depression in the land about thirteen feet in diameter...

...On reaching a depth of ten feet the workmen came to a covering or tier of logs, the ends embedded i the walls of the pit evidently for the purpose of carrying the weight of the earth above and thereby intending to prevent a subsidence at the surface. They kept on digging until a depth of thirty feet was reached, finding marks at each ten feet...

...Marks were found every 10 feet, as before, and an iron bar was frequently used in taking soundings. The 90-foot mark was a flat stone about three feet long and sixteen inches wide."

20. "Sworn Affidavit of J.W. Andrews, C.E.M.E Consult Engineer." As a boy, watched searcher operations in 1849 on Oak Island. Lives in Brooklyn, NY. N.S. Archives, MG1 Vol.383. Part of F. Blair report.

"First, the story as told by Messrs. Smith, Vaughan, and McGinnis of their discovery of the oak tree with block and tackle and chain in its crotch, and the circular cavity with grass grown over it, differing from the surrounding growth, was known to be a fact and firmly corroborated. Next, the digging a pit in this circular space which showed evidence of a previous excavation. Again, the sinking of the pit to a depth of (as memory serves) about 90 to 110 feet when water to the depth of 30 feet was found in this pit and morning when the workmen came to resume work...

...A covering of fiber over one of the plank platforms said to be coconut fiber – later said to be a vegetable growth from Japan or Mexico. I have a sample of it that I have had for many years, which I obtained directly at the works."

23. "To Nova Scotia: The Sunrise Province of Canada" by T. Morris Longstreth. Personal visit to Smith's Cove and Interview with anonymous Woman from Chester, Nova Scotia. 1935. P. 26.

"... At ten feet down they came to a covering of oak plank. At twenty feet a second covering. And at thirty a third."