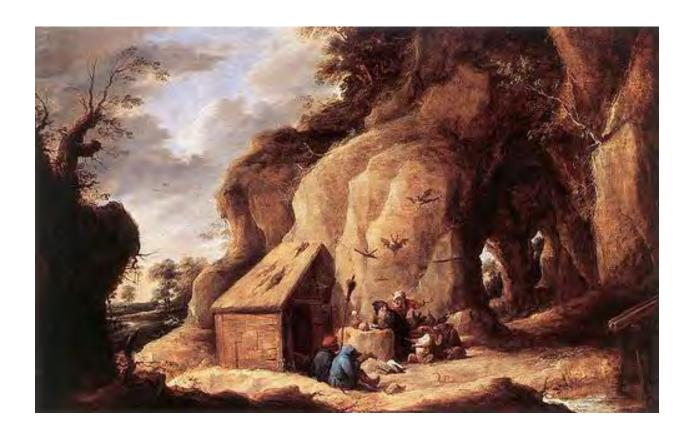
# The Journal of Spelean History



# The Journal of Spelean History

### Official Publication

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#### The Association

The American Spelean History Association (ASHA) is an Internal Organization of the National Speleological Society and exists for the study, dissemination, and interpretation of spelean history, and related purposes. All persons who are interested in these goals are cordially invited to become members. Dues are \$2 per issue of the *Journal of Spelean History*. Dues can be paid for up to 20 issues (\$40). Checks should be made payable to "ASHA" and mailed to the treasurer.

## The Journal

The Journal of Spelean History (JSH) is the Association's publication and is mailed to all members. JSH includes articles covering a wide variety of topics relating to man's use of caves, including historical cave explorations, saltpeter and other mineral extraction, and show cave development. Members are invited to contribute material and to comment on published material. ASHA assumes no responsibility for statements made by contributors.

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## SAINTS AND CAVES

### Colleen O'Connor Olson

Saints have long been attracted to caves. Cavers even have our own patron saint, St. Benedict, who supposedly lived in a cave near Subiaco, Italy, for three years in the fifth or sixth century. He reputedly could predict the future, drive out demons, and stop the devil from attacking. St. Benedict is also the patron saint of nettle rash, so he can do double duty for you if you walk into stinging nettles while hiking to a cave. St. Benedict's Cave in New Zealand is named after him, though St. Benedict never made it that far south.

Perhaps so many saints lived in caves because a cave is the perfect home for someone who wants seclusion or to reject luxury and worldly items—traits often associated with saints. St. Anthony of Egypt may have been the first saint to live in a cave; some believe he was the first Christian to live in consecrated solitude.<sup>2</sup>

Born to wealthy parents in AD 251, Anthony was orphaned as a teenager. Feeling the call to serve God, he gave his wealth to the poor and retreated to a desert cave, where demons tormented him. One story says Anthony's praying and fasting finally caused Satan to give up his attack.<sup>3</sup> In another version, demons beat St. Anthony to death in his cave. His servant found him and carried him out, but Anthony came back to life and had his servant carry him back to the cave. Anthony called to the demons, which came in the form of wild beasts. As the demon beasts were about to tear Anthony to shreds, God caused a flash of light, scaring them away.<sup>4</sup>

In spite of his solitary lifestyle, St. Anthony had many followers. He started a monastery in Phaium, Egypt, and is remembered as the founder of monasticism or the father of the Monks. He died in his cave at 105 years old.<sup>5</sup>

Ukraine has its own cave-dwelling St. Anthony. Born in a village about 100 miles from Kiev in 983, Anthony sought a strict

monastic life of struggle and solitude. The monasteries he visited near Kiev did not suit his needs, so he moved into a cave. As others joined him in his life of prayer, vigil and fasting, the group outgrew the cave, so they dug a bigger cave, which became the Near and Far Caves monasteries. Also known as the Monastery of Kiev Caves, it is still considered an important site in Slavic Orthodox Christianity. The Soviets closed the monastery and turned it into a historical–cultural preserve in 1926, but it was returned to the church in 1988.

Like the other two Saint Anthonys, St. Anthony of Padua sought solitude in caves. Born in Lisbon in 1195, Anthony made his way to Padua, Italy. There he became famous for his ability to convert heretics, one of whom was a horse, and for his miraculous sermon to fishes in the River Brenta.<sup>8</sup>

One of Anthony's favorite hideaways is believed to be a cave in the Sacred Woods near Spoleto, Italy. He also used a cave at Mount La Verna, 90 miles north of Assisi. Today, the cave is called the Oratory of St. Anthony and attracts many pilgrims.<sup>9</sup>

St. Giles of Provence was born into nobility in Athens in the seventh century. He used his money to serve God and help the poor, but wealth interfered with his spiritualism. So he went to Nimes, France, to live in ultimate poverty in a cave. Legend has it he was so poor, that God sent a doe to his cave to give him milk. One day, the king's hunters chased the doe into the cave and shot at it with an arrow. The arrow missed the doe, but hit Giles, permanently injuring him. The hunters reported the accident to the king of France, who sent doctors to the cave to treat Giles, but he refused their help. In spite of Giles' desire for solitude, he gained many admirers, including the king, who built the monastery of St. Giles in his honor. 10

St. Ninian, the founder of Scotland's first Christian church in AD 397, used a cave near Whithorn Abby, Scotland, as a retreat. Appropriately called St. Ninian's Cave, it has attracted Catholic pilgrims since the middle ages. Tenth and eleventh century crosses and other Christian icons found among the collapsed rock in the cave can be seen at the Priory Museum at Whithorn.<sup>11</sup>

St. Patrick, the patron saint of Ireland, is said to have spent time in a cave on an island in Lough Derg in County Donegal, Ireland. While in the cave, Patrick had visions of Hell, giving the island and the cave the name St. Patrick's Purgatory. Lough Derg is supposedly where St. Patrick drove all of Ireland's snakes into the water. Some believe pre-Christian Druids saw the lake and the cave as sacred and used the site for pagan rituals. Perhaps St. Patrick driving the serpents from Ireland is symbolic for driving out paganism.

St. Patrick's Purgatory has been a destination for pilgrims since the sixth century. In the old days, the pilgrimage focused on physical penance and hardship, using ceremonies supposedly ordered by Patrick himself. Pilgrims had to request permission from a bishop, who warned them of the trip's perils. If the pilgrims persisted, the bishop gave them a recommendatory letter to take to the prior of St. Patrick's Purgatory, who also discouraged them from making the pilgrimage. If the pilgrims wanted to continue, they were allowed to fast and pray for fifteen days in the church. After receiving communion and being sprinkled with holy water, the pilgrims were taken to the cave and discouraged again. If they still had not given up, individual pilgrims were locked behind a door in the cave. If a pilgrim was still there when the door was unlocked the next morning, he was led to the church for fifteen more days of prayer and the pilgrimage was complete. If the pilgrim was not there when the cave door was opened, he was believed to have not survived.12

Modern pilgrims still visit St. Patrick's Purgatory between May and August. The pilgrimage is now shorter and less extreme—three days of prayer and fasting, with dry toast, oatcakes, and tea or coffee. Instead of penance and hardship, today's pilgrims focus on prioritizing values and spiritual renewal. <sup>13</sup>

The teenage St. Servolus, from Trieste, Slovenia, lived in Sveta Jama, or Saint Cave. The cave entrance has Slovenia's only underground church, where a festival in honor of St. Servolus is held every May 24<sup>th</sup>.

Above the cave is the castle Socerb. At one time, castle residents took advantage of the cave's temperature (about 46 degrees Fahrenheit) to store food and wine. Legend has it the wine spoiled, since a church should not be used as a wine cellar. Sveta Jama is open to those who wish to visit the cave/church/saintly residence by carbide light.<sup>14</sup>

In 1300, St. John the Hermit, aka John the Stranger, set out with 99 companions to find a place to live in seclusion (he was a sociable hermit). God instructed them to sail to the Greek island of Crete. Before boarding the ship, God made John invisible, so he was left behind. When John's companions got to Crete and realized he was not there, they called for him. John heard their call and threw his tunic into the sea and sailed on it to Crete.

John and his companions moved into Zoures Cave and the Characas Caves on a cliff near the town of Palaiochora. They preached and built a church. They are known today as The Holy Fathers or Agii Pateres.

John's life of seclusion with 99 companions was not very secluded, so he left to find a more solitary life. For a while, he lived in a cave near what is now the town of Spilia, and eventually moved to the Cave of St. John near Chania, Crete. St. John is said to have lived in the cave alone, dedicating his life to worship, until he met an unusual fate. While he was gathering herbs in the woods, a hunter mistook him for an animal and shot him with an arrow. Fatally wounded, John crawled back to his cave. The hunter, thinking

he was tracking his prey, followed him. When the hunter found John praying his final prayer, he realized what he had done and asked for forgiveness. As the saint died, music and sweet smells filled the cave. John's former companions, still living in Zoures and Characas Caves, supposedly died on the same day, October 6th.

Pilgrims and tourists seeking miracles visit Zoures Cave and the Cave of St. John. One story tells of a seven year old child who got lost from his parents and other pilgrims who had come to see the Cave of St. John. They searched the cave, but could not find the boy. They gave up, thinking the poor child must have died in a tight place they could not get to. The next year, another group was at the cave during the annual celebration in honor of St. John and the Holy Fathers. They found the child in the cave, looking quite healthy for being lost in a cave for a year. He said an old man (St. John) brought him bread and water every day. 15

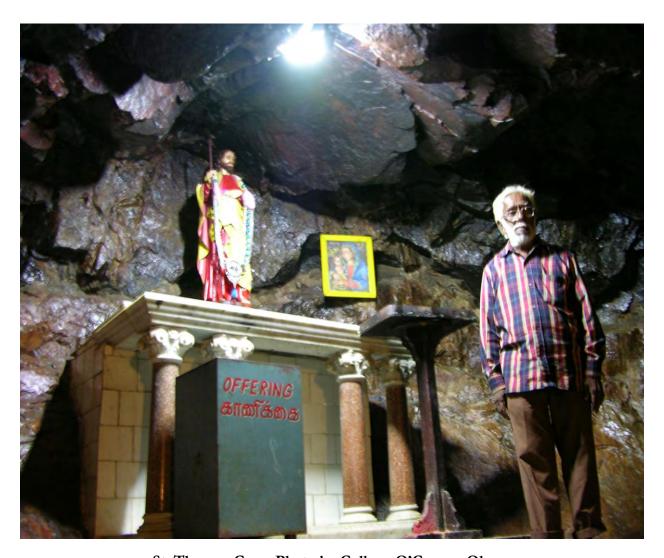
Near St. John's Cave, is Bear Cave, another cave where a miracle is said to have occurred. Monks from nearby Gouvernetou Monastery wondered why the cistern in the cave was always empty. They posted watch in the cave to see who was taking the water. The question was answered when a big bear came to get a drink. A monk prayed to the Virgin Mary, who turned the bear to stone. The stone bear can be seen near the cistern today. In the cave is a shrine dedicated to Panegia Arkoudiotissa, or the bear-fighting Virgin Mary. The cave's connection to religion and bears predates Christianity. In ancient Greece, it was a shrine to the Greek goddess Artemis taking the form of a bear.<sup>16</sup>

St. Fillan, the patron saint of the insane, supposedly lived in a cave in the eighth century near what is now High Street in Pittenweem, Scotland. St. Fillan's Cave is a shrine; inside is a holy well said to have healing powers. Fillan's relics (possibly his bell and staff) are also associated with miracles. According to legend, insane people

were bathed in the fountain at the church Fillan founded at Glendochart. They were then bound and left overnight near the relics to be cured of their mental illness. If the ropes were miraculously undone during the night, the cure was a success.<sup>18</sup>

St. Thomas (the Doubting Thomas who questioned Christ's resurrection) is traditionally believed to have brought Christianity to India in the first century. Some doubting historians say Thomas never went to India, but a small cave at Little Mount in Chennai (formerly Madras) India is believed to have been his home for four years when he arrived there in AD 68. My husband, Rick, and I visited Little Mount and St. Thomas' Mount, a nearby hill where some believe Thomas was martyred after being chased from his cave by people who objected to his new religion.

Rick and I were in Chennai for only one afternoon, so we were not sure if we could make it to the famous cave. Luckily, we found a driver who could take us there. Our driver, Joseph, was familiar with St. Thomas' Mount, but had never been to the cave at Little Mount. With directions from the locals and a photo of Little Mount, we made it to the small chapel built by the Portuguese in 1551 that sits over St. Thomas' Cave at Little Mount. A larger church, the Church of Our Lady of Health, was added on in 1971. To the left of the altar in the original chapel is the cave's five foot high entrance. Our driver Joseph and a guide, also named Joseph (not a common name in India), stooped into the cave with us. Rick and I are used to poking around caves, but this was my first cave trip wearing a skirt and sandals. The cave has a second entrance, just big enough to crawl through. Joseph, our guide, said that when Thomas prayed for a way to escape from his enemies who pursued him into the little cave, the rock broke away, revealing the entrance. Joseph showed us what he believed to be St. Thomas's fingerprints preserved in stone at the escape entrance.



St. Thomas Cave. Photo by Colleen O'Connor Olson.

According to our guide, Thomas also left his footprint in a rock outside the cave. The footprint is much larger than a human footprint; Joseph said it has expanded with time. Near the footprint is a pool of water that is said to never stop flowing (though it wasn't flowing that day). Legend has it the spring was created when Thomas struck the rock with his staff, causing water to pour out. Like other springs connected with saints, the water is said to have healing powers. Next to the spring is a cross carved in the bedrock, the handiwork of Thomas himself, Joseph said.

St. Thomas' Mount, about two miles from Little Mount, also has a church where

you can see relics, including one of Thomas' bones and a painting attributed to the Apostle Luke, carried to India by Thomas.

Some believe the world's first church is in a cave. The Apostle Peter preached and worshiped at the Grotto of St. Peter in Antioch (modern day Antakya, Turkey) around AD 50; eventually, St. Peter's Church was built in the cave. An altar, a stone throne, remains of some fresco paintings, and part of a mosaic floor are still in the cave. <sup>19</sup> In 2008, part of the cave collapsed, causing it to be closed to the public. <sup>20</sup>

More than one St. Peter is associated with a cave. In search of solitude in the

thirteenth century, St. Peter of Korisha lived in a cave in the mountains near what is today Prizren, Serbia. Legend has it that demons in various forms disrupted his spiritual solitude. The rocks called to him in his sister's voice, but he ignored them, knowing it was a trick. A demon disguised as a snake bothered him, so St. Peter fasted and prayed for help until Michael, the Archangel, arrived and drove the snake away with his sword. Other demons showed up in the form of ravens, which tried to peck Peter's eyes out, but he drove them away with prayer. Demons kept trying to drive Peter from his cave, claiming it was their cave. After Peter prayed for strength, the demons gave up.

Some monks arrived at St. Peter's cave, wanting to join him and live in abstinence, separate from the world. He let them live around nearby cliffs and taught them about his spiritual life.

Knowing he was nearing the end of his life, Peter asked the monks to carve a stone grave in his cave. One night soon after, the monks heard angels singing and saw Peter's cave glowing with candle light. They investigated the cave the next morning; it was filled with beautiful perfume. They found Peter's deceased body, his face glowing, already lying in the grave they made for him.

St. Peter's relics are believed by some to have healing powers. In the 1500s, they were taken to the cave church of St. Michael at Black River (also called Crna Reka) Monastery,<sup>21</sup> where they are today.<sup>22</sup>

France's Grotto of Massabielle is the world's most famous cave associated with a saint. The cave and its spring attract thousands of pilgrims annually. Some people hope to be healed by the spring's water; others just want to visit a place where they believe miracles occur.

The grotto's beginning as a site of miracles was February 11, 1858, when fourteen-year old Bernadette Soubirous<sup>23</sup> (now St. Bernadette) went to Massabielle to gather bones and wood. There she saw a lady dressed in a white dress and veil, a blue belt,

and a yellow rose on each foot. The lady said the Rosary with Bernadette, and mysteriously disappeared.

Bernadette returned to the cave, where she continued to see the lady in white. As word of the vision got out, people accompanied Bernadette to the cave. On Bernadette's ninth visit to the grotto, the lady showed her a spring, which Bernadette drank from. A couple weeks later, the first miracle occurred when a woman put her dislocated arm in the spring and pulled it out healed.

The next day, the lady in white told Bernadette to tell local priests to build a chapel at the grotto. She relayed the request to Friar Peyramale. As a test that the vision was more than the young girl's imagination, he demanded the lady state her name and make a rose bush near the cave bloom in winter. The lady said she was the Blessed Virgin Mary. Another miracle soon occurred. A physician, Dr. Douzous, watched as Bernadette held a candle flame to her skin without being burned. (I am not sure if the rose bush ever bloomed.) Bernadette saw the Virgin at the Grotto 18 times. Pope Pius IX declared Bernadette's vision of the Virgin Mary at Massabielle to be a Catholic dogma, or something true in the faith.<sup>24</sup> Today, the cave and spring are known by the name of the nearby town—Lourdes.

## **NOTES**

- 1. Terry H. Jones, "Patron Saints Index," Catholic-Forum, <u>www.catholic-forum.com</u>.
- 2. "Saint Anthony Father of the Monks," <a href="https://www.coptic.net">www.coptic.net</a>.
- 3. "Saint Anthony—Patron Saint of Grave Diggers." Saint Profile: Saint Anthony, www.domestic-church.com.
- 4. "Anthony the Great." Wikipedia, www.wikipedia.org.

- 5. "Saint Anthony—Patron Saint of Grave Diggers." Saint Profile: Saint Anthony, www.domestic-church.com.
- 6. "Anthony of the Kiev Caves." Orthodox Wiki, <u>www.orthodoxwiki.org</u>.
- 7. "Monastery of the Kiev Caves." Orthodox Wiki, <u>www.orthodoxwiki.org</u>.
- 8. Catholic Encyclopedia, "St. Anthony of Padua," <a href="https://www.newadvent.org">www.newadvent.org</a>.
- 9. American Catholic. "Three Favorite Hideaways of St. Anthony of Padua," www.vaticans.org.
- 10. John Puxty, "Giles of Provence," *Claves Regni*, the on-line magazine of St. Peter's Church, Nottingham, with All Saints, www.stpetersnottingham.org/saints/giles.htm
- 11. Show Caves, "Caves of Britain: St. Ninian's Cave," <a href="https://www.showcaves.com/english/gb/caves/Nini">www.showcaves.com/english/gb/caves/Nini</a> an.html.
- 12. Sacred Texts, "The Cult of Gods, Spirits, Fairies, and the Dead," <a href="https://www.sacred-texts.com/neu/celt/ffcc/ffcc310.html">www.sacred-texts.com/neu/celt/ffcc/ffcc310.html</a>.
- 13. The Catholic Diocese of Clogher, "The Diocese of Clogher, Lough Derg, Place of Pilgrimage," www.clogherdiocese.ie/loughderg.
- 14. Show Caves, "Sveta Jama," <a href="https://www.showcaves.com/english/si/showcaves/Sveta.html">www.showcaves.com/english/si/showcaves/Sveta.html</a>

- 15. Kretakultur, "About St. John the Hermit," www.kretakultur.dk/english/folklore/saints.
- 16. Ibid.
- 17. Gazetteer for Scotland, "Overview of St. Fillan's Cave," www.geo.ed.ac.uk/scotgaz/features/featurefir st23.html.
- 18. Terry H. Jones, "Patron Saints Index," Catholic Forum, <a href="www.catholic-forum.com/saints/saintf49.html">www.catholic-forum.com/saints/saintf49.html</a>.
- 19. Show Caves, "Caves of Turkey: Grotto of St. Peter in Antioch," <a href="https://www.showcaves.com/English/tr/caves/StPeter.html">www.showcaves.com/English/tr/caves/StPeter.html</a>.
- 20. Show Caves, "Cave Church of St. Peter-Grotto of St. Peter in Antioch," <a href="https://www.showcaves.com/English/tr/caves/St.Peter.html">www.showcaves.com/English/tr/caves/St.Peter.html</a>.
- 21. Serbian Orthodox Diocese of Raska and Prizren, "The Life of Our Blessed Father Peter of Korisha," <a href="https://www.kosovo.com/stpeter.html">www.kosovo.com/stpeter.html</a>.
- 22. Serbian Orthodox Diocese of Raska and Prizren, "Crna Reka Monastery," www.kosovo.com/ecreka.html.
- 23. Christopher L.C.E. Witcombe, "Lourdes, France," Sacred Places, www.witcombe.sbc.edu/sacredplaces/lourdes\_html.
- 24. Lourdes France, le site official des Sanctuaires vous accueille, <u>www.lourdes-france.org</u>.

# THE SERPENT GOD OF THE IRON CAVE: A NATIVE AMERICAN CAVE MYTH FROM THE UPPER MIDWEST

# **Greg Brick**

One of the most pervasive cave-related myths among the aboriginal inhabitants of the New World was that their peoples had originally lived underground, subsequently making their way to the surface, where they live today. A prominent example is the story of the ancestral Aztecs, who emerged from seven caves and founded the Mexican capital, but there are many variants of this basic story (Jones, 1885; Bierhorst, 1985; Heyden, 2005). "Such tales of an under-world are very frequent among the Indians," the mythologist Daniel Brinton (1868) wrote, "and are a very natural outgrowth of the literal belief that the race is earth-born." But there is another sort of Native American cave myth, less well known, that I would like to describe here.

William Back (1981), of the United States Geological Survey, wrote a valuable "Hydromythology and article, hydrology in the New World," in which he described Native American water myths, as in Mesoamerica, where there were whole civilizations, such as the Mayans, that depended upon groundwater resources. Farther north, Back described Hiawatha, "the best-known cultural hero north of Mexico," who had some aquatic associations. Ever since Henry Wadsworth Longfellow's famous 1855 poem, The Song of Hiawatha, Hiawatha has had a strong association with the locally well-known Minnehaha Falls in Minneapolis, Minnesota, but it must be emphasized that Hiawatha is said to have been an Iroquois Indian, lived in pre-Columbian times (circa AD 1450), and belongs more properly to the state of New York (Howard, 1971; Lockard, 2000). A genuine example of hydromythology from the state of Minnesota not discussed by Back, involves the subterranean god Unktahe of the Dakota Indians.

The first that I ever heard of Unktahe (there are many variant spellings of this name, sometimes singular, sometimes plural) was in the final days of the long-running State Highway 55 controversy in Minneapolis, for which I was called in as a groundwater consultant in the late 1990s. The rerouting of the highway through Minnehaha Park was controversial and opposed by local Native Americans because it meant the removal of sacred oak trees and could have reduced the flow of the historic spring at nearby Camp Coldwater (Figure 1).



Figure 1. Camp Coldwater Spring, Minneapolis.

"Camp Coldwater," according to White & Lindberg (2001), "was the first settlement of European-Americans in Minnesota that was not primarily a fur trading post, fort, or mission.... The site...was the location of many 'firsts' in Minnesota history, a good reason to call it the birthplace of Minnesota." Indeed, Camp Coldwater has been called Minnesota's Plymouth Rock. The spring, gushing from the Platteville Limestone at 60 gallons per minute, supplied early Fort Snelling with cold drinking water—a welcome alternative to the warm, turbid waters of the nearby Mississippi River.

Gary Cavender, a local Native American spiritual leader, filed an affidavit in the Highway 55 court case, dated October 13, 1998, in which he stated:

The Camp Coldwater spring is a sacred spring. Its flow should not be stopped or disturbed. If the flow is disturbed, it cannot be restored. Also, if its source is disturbed, that disturbs the whole cycle or the flow. The spring is the dwelling place of the undergods and is near the center of the Earth. The spring is part of the cycle of life. The underground stream from the spring to the Mississisppi River must remain open to allow the gods to enter the river through the passageway. The spring is the site of our creation myth (or 'Garden of Eden') and the beginning of Indian existence on Earth. Our underwater god (Unektehs) lives in the spring. The sacredness of the spring is evident by the fact that it never freezes over, and it is always possible to see activity under the surface of the water.

Unktahe is credited with creating the Earth and human beings and is considered "the patron of medicine men." The prolific Minnesota historian, Edward Duffield Neill (1882), recounting what anthropologists would call an earth-diver myth (Rooth, 1957; Kongas, 1960) from Dakota cosmogony, wrote that:

The Jupiter Maximus of the Dahkotahs is styled Oanktayhee.... He is said to have created the earth. Assembling in grand conclave all of the aquatic tribes, he ordered them to bring up dirt from beneath the water, and proclaimed death to the disobedient.... It is the belief of the Dahkotahs that the Rev. R. Hopkins, who was drowned at Traverse des Sioux, on July 4th, 1851, was killed by Oanktayhee, who dwells in the waters, because he had preached against him.

Mary Henderson Eastman (1849), wife of the painter Captain Seth Eastman, wrote,

Unktehi, the god of the waters, is much reverenced by the Dahcotahs. Morgan's bluff, near Fort Snelling, is called 'God's house' by the Dahcotahs; they say it is the residence of Unktehi, and under the hill is a subterranean passage, through which they say the water-god passes when he enters the St. Peter's [Minnesota River]. He is said to be as large as a white man's house.

The Pond brothers, Samuel and Gideon, were early Christian missionaries in the Fort Snelling area of Minnesota, arriving in 1834. Gideon Pond (1889) stated that "the bubbling springs of water are called the 'breathing places of the wakan." (*Wakan* means sacred.) Pond's statement was much quoted as an allusion to the Camp Coldwater spring during the Highway 55 controversy. Pond goes on to say of Unktahe that "though destitute of the trident, the horse and the dolphin, yet, because he rules in the watery worlds...it may not be out of place to denominate him the Neptune of the Dakotas." He added:

One of these gods, it is believed, dwells under the Falls of Saint Anthony, in a den of awful dimensions, and which is constructed of iron.... Not many years since, at the breaking up of the ice in the Mississippi River, it gorged and so obstructed the channel between the falls and Fort Snelling, that the water in a few hours rose very high.... A cabin which stood on the low bank under the Fort, was carried away with a soldier in it, who was never heard of afterwards. It is universally believed by the worshipers of the god in question, that the occurrence was caused by one of these gods passing down the river, who took the soldier for his evening meal, as they often feast on human spirits.

According to Riggs (1879), "when Hennepin and Du Luth saw the Falls of St. Anthony together [in 1680], there were some nice buffalo robes hanging there as sacrifices to Oonk-tay-he, the god of the place." (Figure 2)



Figure 2. "The falls of St. Anthony," lithograph by Henry Lewis, 1848.

Dorsey (1894), in his "Study of Siouan Cults," for the U.S. Bureau of Ethnology, wrote about "The Unktehi, or Subaquatic and Subterranean Powers,"

The gods of this name, for there are many, are the most powerful of all. In their external form they are said to resemble the ox, only they are of immense proportions. They can extend their horns and tails so as to reach the skies. These are the organs of their power. According to one account the Unktehi inhabit all deep waters, and especially all great waterfalls. Two hundred and eleven years ago, when Hennepin and Du Luth saw the Falls of St. Anthony together, there were some buffalo robes hanging there as sacrifices to the Unktehi of the place.... It is believed that one of these gods dwells under the Falls of St. Anthony, in a den of great dimensions, which is constructed of iron.

Unktahe was usually visualized as a fish or serpent—see the depiction of Unktahe in Figure 3, from Emerson's Indian Myths (1884). Many tribes of North American Indians had similar stories of water monsters (Gatschet, 1899). This serpent imagery was exploited during Major Stephen Long's 1819-20 expedition to the Rocky Mountains, which was meant to consolidate the gains of the famous explorers Lewis and Clark (1804-1806). The steamboat in which Long ascended the Missouri River was officially named the Western Engineer but was nicknamed "Long's Dragon" because it was made to look like a serpent. The goal was to terrify the Indians along the river, a sort of primitive psychological warfare (Dillon, Beidleman, 1986). The steamboat was welldescribed by Nichols and Halley (1980):

Designed to impress the Indians, as well as to navigate on the shallow western streams, the vessel appeared to ride on the back of a large water serpent. At the bow a black, reptilian head with a red mouth and protruding tongue belched smoke and steam from gaping jaws. To further the serpentine illusion, the engine and all other machinery rested below decks or out of sight, and even the paddle wheels had covers over them. "From under the boat, at its stern, issues a stream of foaming water," reported a contemporary. "To the eye of ignorance, the illusion is complete, that a monster of the deep carried her on his back, smoking with fatigue, and lashing the waves with violent exertion."

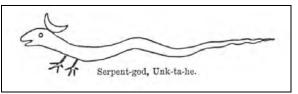


Figure 3. The subterranean god Unktahe, from Emerson's *Indian Myths* (1884).

In another story, Unktahe appears more like the kraken of European folklore. According to Pond (1889):

It is related that as some Indians were once passing through Lake Pepin, they suddenly found themselves aground in the middle of the lake. Their god had risen to the surface, and they were lifted from the water on his back! Instantly they were enveloped in clouds, and a terrific tempest arose which chilled them with fear. Eagerly they offered their prayers and sacrifices to their venerable grandfather, when the waken monster began slowly to beat his drum, the sound of which was like present thunder, while his eyes glistened like two moons.

But Unktahe had another, very different physical manifestation. Referring to the religion of the Dakota Indians, Samuel Pond (1908) wrote,

Their chief object of worship was Unkteri, the mammoth, though they had many erroneous opinions concerning that extinct species of elephant, and did not know that the race was extinct.... They described the species as resembling the buffalo or ox, but of enormous size. As they worshipped many other animals, it was natural that the mammoth, which so much exceeded the others in size, should be adopted as their chief god. To his worship their most solemn religious festivals were dedicated. They supposed that the race was still in existence, and, as they were not seen on land and their bones were found in low and wet places, they concluded that their dwelling was in the water. Their bones were highly prized for magical powers, and were perhaps as valuable to them as relics of a saint are to a devout Catholic. A Dakota told me that he had discovered some of the fossil bones in the lake opposite Shakopee, but was unable to raise them without some boat larger than a canoe.

Other accounts, it should be noted, stated that the god was based on the mastodon, rather than the mammoth. "The fossil remains of

the mastodon," Pond (1889) wrote, "are confidently believed to be the bones of the Onktehi which have been killed by the Wakinyan [thunderbird]." Durand (1994), who translates "Unktehi" as "the Terrible One," notes that "Bones of the mastodon are those of this deity which the Dakota preserve with great care in their medicine bags." The bones of both mammoths and mastodons have been found in Minnesota (Schwartz & Thiel, 1954).

Mammoths and mastodons entered into Indian mythology in very widely separated localities in the Americas (Scott, 1887; Kindle, 1935), although we must be careful not to infer too much from this circumstance (Eiseley, 1945). Considering Unktahe's role as a subterranean god, it is interesting to note that the very name "mammoth" derives from a Finno-Ugric word meaning "earth mole" because the animal's remains are found in the Siberian permafrost, where it was thought to live underground like a giant mole (Cohen, 2002).

Finally, the Scottish folklorist Lewis Spence (1914) favored a meteorological interpretation of Unktahe:

The Dakota Indians worshipped a deity whom they addressed as Waukheon (Thunder-bird). This being was engaged in constant strife with the water-god, Unktahe, who was a cunning sorcerer, and a controller of dreams and witchcraft. Their conflict probably symbolizes the atmospheric changes which accompany the different seasons.

Although the Camp Coldwater spring and the cave under St. Anthony Falls are the most commonly mentioned local haunts of Unktahe, the subterranean god is also associated with Carver's Cave, in the nearby city of St. Paul, Minnesota (Figure 4). Cavender, the Dakota elder quoted above, "who visited the cave in the 1940s and 1950s, recalls that his grandfather...would not let him go very far back in the cave, because a spiritual entity, the UNKTEHI, lives in the lake in the back of the cave" (The 106 Group Ltd., 2003). Additional fragments concerning

Unktahe, mostly variants of those already given, are presented by Schoolcraft (1851-57), among others.

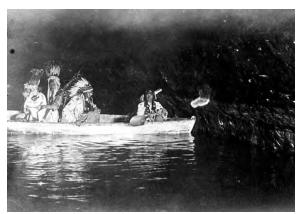


Figure 4. Carver's Cave, 1913.

## LITERATURE CITED

Back, William, 1981. Hydromythology and Ethnohydrology in the New World. *Water Resources Research* 17 (2): 257-287.

Beidleman, Richard G., 1986. The 1820 Long Expedition. *American Zoologist* 26(2): 307-313.

Bierhorst, John, 1985. *The Mythology of North America*. New York: William Morrow & Company.

Brinton, Daniel G., 1868. The Myths of the New World: A Treatise on the Symbolism and Mythology of the Red Race of America. New York: Leypoldt & Holt.

Cohen, Claudine, 2002. The Fate of the Mammoth. Chicago, IL: University of Chicago Press.

Dillon, Richard H., 1967. Stephen Long's Great American Desert. *Proceedings of the American Philosophical Society* 111 (2): 93-108.

Dorsey, James Owen, 1894. A Study of Siouan Cults. *Eleventh Annual Report of the Bureau of Ethnology*. Washington, DC: Government Printing Office.

Durand, Paul C., 1994. Where the Waters Gather and the Rivers Meet: An Atlas of the Eastern Sioux. Prior Lake, MN: P. C. Durand.

Eastman, Mary Henderson, 1849. Dahcotah, or, Life and Legends of the Sioux around Fort Snelling. Reprint of 1849 edition, Afton, MN: Afton Historical Society Press, 1995.

Eiseley, Loren C., 1945. Myth and Mammoth in Archaeology. *American Antiquity* 11 (2): 84-87.

Emerson, Ellen Russell, 1884. *Indian Myths; or, Legends, Traditions, and Symbols of the Aborigines of America*. Reprint of 1884 edition, Minneapolis, MN: Ross & Haines, Inc., 1965.

Gatschet, Albert S., 1899. Water-Monsters of American Aborigines. *Journal of American Folklore* 12: 255-260.

Heyden, Doris, 2005. Caves. IN: *Encyclopedia of Religion*, 2<sup>nd</sup> Edition. Thomson Gale.

Howard, Helen Addison, 1971. Hiawatha: Co-Founder of an Indian United Nations. *Journal of the West* 10: 428-438.

Jones, George S., 1885. The Cave Myth of the American Indians. *Magazine of American History* 13: 552-567.

Kindle, E.M., 1935. American Indian Discoveries of Vertebrate Fossils. *Journal of Paleontology* 9: 449-452.

Kongas, E.K., 1960. The Earth-Diver. *Ethnohistory* 7(2): 151-180.

Lockard, Joe, 2000. The Universal Hiawatha. *American Indian Quarterly* 24(1): 110-125.

Neill, Edward Duffield, 1882. *The History of Minnesota*, 4<sup>th</sup> Edition. Minneapolis, MN: Minnesota Historical Company.

Nichols, Roger L., and Patrick L. Halley, 1980. *Stephen Long and American Frontier Exploration*. Newark, DE: University of Delaware Press.

Pond, Gideon H., 1889. Dakota Superstitions and Dakota Gods. *Minnesota Historical Society Collections* 2: 215-255.

Pond, Samuel William, 1908. The Dakotas or Sioux in Minnesota as they were in 1834. *Minnesota Historical Society Collections* 12: 318-501.

Riggs, Stephen R., 1879. The Theogony of the Sioux. *American Antiquarian* 2: 265-270.

Rooth, Anna Birgitta, 1957. The Creation Myths of the North American Indians. *Anthropos* 52: 497-508.

Schoolcraft, Henry Rowe, 1851-57. *The Indian Tribes of the United States*. Philadephia, PA: Lippincott, Grambo.

Schwartz, G.M., and G.A. Thiel, 1954. *Minnesota's Rocks and Waters*. Minneapolis, MN: The University of Minnesota Press.

Scott, W.B., 1887. American Elephant Myths. *Scribner's Magazine* 1: 469-478.

Spence, Lewis, 1914. The Myths of the North American Indians. London: G.G. Harrap.

The 106 Group Ltd., 2003. Determination of Eligibility of Carver's Cave and Dayton's Bluff Cave, Bruce Vento Nature Sanctuary Project, St. Paul, Ramsey County, Minnesota.

White, Bruce, and Dean Lindberg, 2001. *Camp Coldwater: The Birthplace of Minnesota*. St. Paul: Turnstone Historical Research (pamphlet).

# A CIVIL WAR ERA ACCOUNT OF A TOUR OF MAMMOTH CAVE, KENTUCKY

### Donald B. Ball

In a South embroiled in the depths of a devastating and eventually unsuccessful war for survival, the publication by the Richmond, Virginia, firm of Ayres & Wade in early September, 1862, of the inaugural issue of the Southern Illustrated News offered a welcomed relief from the endless news of battles, casualties, filled hospitals, and increasing shortages of consumer goods. Begun as an effort to fill the gap left by the unavailability of popular magazines no longer imported from the northern states, the News offered light reading, insights into then-current (but unobtainable) Parisian fashions, poetry, advice for ladies, and similar articles.

In terms of spelean history, one of the more interesting articles was an extended account of a tour of Mammoth Cave. Although the author of this piece gives no hint as to when this tour took place, it was obviously post-1851, yet prior to the war. Another generally contemporary description of a visit to Mammoth Cave is reported by Sevcik (1991). While considerably shorter than the earlier and now-classic guide book Rambles in Mammoth Cave, During the Year 1844 (Bullitt 1845), the Southern Illustrated News article is not without its own interest. Of note within this account, the length of the tour (a multi-day adventure), the abundance of provisions taken (including wine), smoking cigars, discharging a firearm within the cave, will likely catch the attention of modern readers as perhaps ill-advised activities. Discounting such remarks, observations within the text regarding prehistoric burials and skulls (cf. Bullitt 1845:24, Meloy 1968, Pond 1937, Wilkins 1820) will certainly be of immediate interest to archaeologists while passing mention of the presence of both bats and blind fish (cf. Anonymous 1851, Hartwig 1871:159, 168, Hayward 1854:650, Silliman et al. 1851) will reinforce the early attention directed toward the cave's fauna. Most—if not all—of the place names associated with Mammoth Cave mentioned by the unknown author of this account were well established by the middle of the nineteenth century (cf. Hayward 1854:650-652), although Hagen and Hutton (1991) note that some names have changed through time as one generation of guides replaces their predecessors.

It is appropriate to observe that "Old Mat...our excellent guide," mentioned several times within this narrative, is briefly described by Taylor (1860:205), who remarks:

Mat, who ranks next to Stephen [Bishop] among the guides, is also a mulatto, of about the same age—a careful, patient, intelligent, and amiable man, but with less geological knowledge than the latter. He does not belong to the cave property, but is hired out by his master.

The article's original (and sometimes inconsistent) spelling has been retained throughout. As readily exemplified by the numerous typographical errors within the text of this article, undertaking a new publishing venture in the South under wartime conditions was fraught with numerous logistical perils and production problems. First and foremost, among the supplies that were perpetually shorthanded and often of sub-standard quality was paper, despite the presence of two paper mills in Richmond (cf. Ball 2002). This circumstance was compounded bv presses for which replacement parts could not be obtained, lead type which was used almost to the point of illegibility, and poor quality ink. Not infrequently, both the type setters and editorial staff were subject to military service further depriving printers and publishers alike of much needed and virtually irreplaceable skilled labor. Accordingly, publishing anything on a reasonably regular basis under these represented conditions remarkable a monument to journalistic tenacity. The

complete citation for this simultaneously amusing and informative account is:

Anonymous, 1864. Extract from a Tourist's Journal (attributed to "D. S. C."). *Southern Illustrated News*, Part I—April 9, 1864 (pg. 109, cols. 1-4), Part II—April 16, 1864 (pg. 117, cols. 1-4). Richmond, Virginia.

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# **EXTRACT FROM A TOURIST'S JOURNAL**

# [Part I]

As the prone rays of the resplendent god of day are pencilling their magic designs upon the western cliffs, I bid *au revoir* to my *personnel* and the outer world, and in the character of historiographer, I prepare for a subterranean tour within the womby recesses and infolded mysteries locked up in the Egyptian obscurity of the celebrated Mammoth Cave.

Our party, consisting of seven, having paid a high compliment to an excellent supper, at nine o'clock, rendered appreciable by an evening's occupancy of a heavy stage, commence with a hearty good humor the metamorphosing necessary, or, at least, customary, to the descent.—The gentlemen, as the sine qua non of their outfit, consisting, in part, of cane, canteen, oil and matches, did not forget a fine supply of long familiar brands of champagne (which, by the by, proved a fine antidote in cases where the overpowering magnificence of the scenery, acting upon the more appreciative, caused depression of spirits!) And the blooming ladies being bloomered, and all supplied as the wise virgins, with crowding emotions of pleasure and apprehensive anticipation, our merry party issue from the hospitable roof of the Cave City Hotel into the grandly picturesque dell which is to initiate us into the greater sublimity which awaits explorations. Upon finding ourselves upon this beautiful walk, which terminates at the mouth of the cave, some hundreds of yards distant, illumined by the cheering rays of a full-orbed moon, which seemed dedicated for

the occasion, to make us more enamored of the world we were about to leave, we could hardly restrain our mirth for the peculiar effect of the ladies masculine toilet, or our admiration for the stoicism with which they had submitted to their unsexing, to the evident depletion of their artificial charms! What a beautiful, graceful figure have I reclining on my arm! Oh, beautiful, beautiful boy! With what calm, undisturbed happiness could I drink in the beauties of thy transparent soul, with what a fullness of joy could I embrace thee as a friend—in that garb, but—

"The bashful look, the rising breast Alternate spread alarms; The lovely stranger stands confest A maid in all her charms."

Pursuing our pleasant walk, and lively conversation, we presently discover ourselves at its terminus, ending in a dark and precipitate gorge, where the lambent rays of the moon are excluded by the overhanging cliffs, and all the lavish beauties of the flight are shut out by the breath from the jaws of this monster bastard of Nature. Discovering the fog at the entrance, caused by the respiration of the cave, so dense as to render our farther progress impossible, we remained by our lamps. Old Mat, of Port Crayon celebrity, our excellent guide, with a conscious dignity illustrative of his important part, proceeded to supply us with lights, and in a few minutes our brilliant lamps joined their rival rays in beautiful reflection from the frowning piles of grey old cliffs; as peal on peal of joyous laughter reverberated through its unexplored recesses, at the cost of old prominent peculiarities, venerable dignity could not counteract the ludicrous effect of his studied a la militaire. Would that I could preserve a portraiture of our picturesque little party as we stood that calm and quiet night, surrounded by that savage grandeur, piled heap on heap away up to where the blasted rock or whitened tree cast back, through the intervening fog, the

triumphant rays of the illumined heavens. How unspeakably sublime! Shut up in our gorgeous amphitheatre, with its woody drapery and random leaps of architecture faintly pictured beneath the dim, religious glow of Hesperus and her train.

"The balmiest sigh, Which vernal zephyrs breathe in evening's ear, Were discord to the speaking solitude which wraps the scene."

Would that I could retain the happy outbursting of wit and humor; the tender pathos of newly-begotten emotions; the high tributes of intellectual appreciation, lavished upon the wanton air of these hidden dells by our venturesome tourists. But only in fancy can we appear as then; each with a satchel of oil and matches, a long, rustic cane, a port folio and crayon; some carrying the wine and others the delicacies, and all with the peculiarly constructed lantern betraying our strange costumes; the attentive gallantry of the men, and the timid reliance and affecting naivete of our lovely boy-ladies, as we all stand at the mouth of the cave. But as it is our object, regardless of time and labor to unfold the mysteries entombed in this great crypt of Nature, we are denied this happiness, and leaving the happy by-plays of sentiment and wit enacted within its endless rotundas and Atlantean halls to faithful and happy memory, we confine ourselves to the duty of a faithful statistical compiler, the performance of which shall, at least, have the merit of truth.

Our guide having halted here to assume *in propria personae* the dignity of his office, we discover that we are one hundred and ninety feet above the surface of the Green and Cumberland rivers; at which point we enter the narrow gateway which ushers into the vestibule of our temporary abode. Here our worthy guide called a council, and, with august bearing, gave directions as to our future course of conduct, warning us against disobedience, and advising us to great care of false steps, etc., the whole of which resulted in

spreading alarm among the ladies. Being a military genius, he also suggested the propriety of our organizing ourselves into a methodical appointment, whereupon the beautiful and accomplished Miss Cleveland was selected artist—"present upon the spot"—and the vivacious colonel Grayson chosen special surveyor, and the dignity of crayon-topographer was *viva voce* conferred upon the writer. Others were self-selected to less onerous and more enjoyable offices. *Nons verrons*.

The entrance fronting the gateway is twenty-five feet in height by thirty in width, around which, at all seasons of the year, is a mist caused by the respiration of the cave except when the temperature of the cave is as the outer temperature. This is only once a year. The cave, generally, breathes twice a year.—Its inhalations and exhalations being regulated by the outward temperature, we ascertained that when the external temperature was below that of the cave fifty-nine degrees—the current sets from the former to the latter, while on the other hand the order is reversed. In this subterranean world no change of temperature or variation of darkness is ever known.

After leaving the mouth, we enter a small archway, walled with rock, which the miners excavated searching for saltpetre in 1812, to be used in the defense of Norfolk in the days of trouble with John Bull. In this narrow pass the ladies were greatly frightened by some of the lights being put out by the hastening current of wind, which afforded some of us rather a better demonstration of the current of their affections than could possibly have been elicited in a drawing-room tete-a-tete. As a warning to all future tourists, it should be placarded that in order to pass in at the gateway with your lights, it should be strictly observed that several entire evolutions of the body, with the light in front, are necessary in passing this critical point. Having relit our fair companions' lamps, and the guide having given us lecture No. 1, we enter the Narrows, which is six miles in length,

varying from forty to sixty feet in height, and from sixty to three hundred in width. Passing over a portion of this, which is despoiled of its attractions by some evidences of art, we enter the Rotunda—a chamber one hundred and seventy feet wide, and one hundred feet to the upper portions. The floor in this room is strewn with vats and pipes which were used by the miners in 1812. Upon examination, it can be discovered that no decay whatever can be seen. To the right, Audubon's Avenue conveys us over a pleasant walk of about two miles to the first beautiful collection of stalactites, which we had admired some time in the distance, the rays of our many lamps making them look like a rolling sea of fallen stars. Here, in this gaudy palace, is the Bat Residence. These monkish denizens, being disturbed by our obtruding lights, manifested their surprise and indignation by turning out in force, and giving us repeated slaps in the face, with other evidences of provoking contumacy. Our sticks being brought into requisition, "we gained a decided victory over largely superior numbers." The ladies, it would seem, have a great antipathy to bats, and great lack of expertness in the use of a stick (the story of the broom stick to the contrary notwithstanding), for, in their furious brandishments, our precious hats lit in numerous inconvenient chasms, giving some of us a very magnified idea of the size of these particular bats;—and thus history has it.

At the entrance of Audubon's Avenue are several cottages, built for consumptives many years ago. Our reverbose guide informed us that the architects of these subterraneous abodes, with the fallacious hope of cure from an unvarying temperature, inhabited here for four months without seeing light. which period ended the hallucination and their life.—These structures are of heavy rock masonry, with doors that would be peak the good judgment of a Welsh frontiersman; without windows or top, there being no sun to admit, nor rude tempest to withstand. Our well-posted guide attached many legends to this locality. After resting awhile, upon couches of glittering stalagmites, while some sang those sweet old songs that carried us back to our city homes—while our jealous sketch-books were busy with nature's rich museum—and while the more ambitious were rendering their names immortal in rough chirography upon these imperishable tablets, almost reluctantly we bid adieu to the Rotunda, and, passing over huge hanging rocks, we enter, with religious awe, the Methodist Church, which we ascertain to be eighty feet in diameter and forty in height. In the pulpit, constructed of stalactites about twenty feet high, we were told the gospel was expounded fifty years ago. Judging from the denomination of the church, we infer that our ancient brother was a Methodist. Although there were no Methodists in our party, we could not but pronounce it far more beautiful than the boasted architecture of St. Paul's.

[To Be Concluded in Our Next.]

# [Part II]

For the present, we leave the main cave, and enter, to the right, what is termed the Gothic Galleries. The gallery which we pursue leads us under the Grand Arch, which is fifty feet wide and sixty high. In the distance we beheld looming up, in dire solitude, a dark and threatening object that causes us to pause in wonder, although we recognize a shape that hardly elicits a passing glance in the metropolis. Our attentive guide informs us that it is the Giant's Coffin. It is forty feet long, by twenty in width, and eighteen in depth. In form it is a perfect coffin. With a sigh for the departed ghost of the giant, we pass around his coffin, and enter what is conceited by tourists to be the most dismal and gloomy place on earth—the Deserted Chamber. This room is rendered famous by the huge figure of an Ant-Eater, made by the effervescence of oxide of iron on the brilliant ceiling. A little farther on is most plainly seen the figure of a giant, child, and giantess. This is a quite symmetrical and lively picture. The old fellow is a hundred feet high; lady giantess is of a just proportion. She is kneeling, and

papa is dropping their little (?) hopeful into her arms. After much diversion at this family scene we pass on amidst the sublimity of the scenery, and arrive at the figure of a colossal mammoth; this we pronounced a failure in the sculptor, but a fitting mausoleum of those legendary monsters. On the floor of this Altantean corridor are tracts of wheels, and of oxen! How and when were these impressions made? How did they get there? Wrapt in amazement we pass on and come to what the writer regards as the acme of the untutored sublimity of this hidden world. Here, in mute wonder, we paused to give audience to the prophet voice that, like the beacon of Bethlehem, stood forth in a world of darkness to tell of the existence of a God.—Great vale of terrible sublimity! How fit an abode for proud human thought—great thoughts, to expatiate and explore balsamic truths and wholesome sentiment, how pregnant and how welcome here. Here when brooding darkness interdicts all future change, and imperial reason makes its court for inspiration divine in apt converse with the Deity. But when pen can paint emotions so crowding and so transcendent! Our guide broke the awful silence with, "this is the Star Chamber," why did he not say-a second heaven! This chamber is four hundred feet in length. The ceiling is a very blackness of darkness, all studded with beautiful coruscant stars. Upon examination we ascertained that the stars are caused by the action of glauber salts upon a black firmament of gypsum. The ladies were quick in discovering, to the left a brilliant comet just ending its erratic course behind the western horizon. Often had we been impressed with the beauties of a star lit night in our lovely South, or upon the green Atlantic; some of us, upon the wild mountains of Switzerland, and others, upon the carpeted plains of vernal Italy; but never before did our appreciation bring up such high tribute to this beauteous effect of nature as was called forth by this *miniature* of the great world's garnished dome. The horizon of this little world is formed of brilliant stalagmitic piles, which, by

the light of our lamps, presented, in the distance, a strange, undefined appearance, not unfamiliar to the traveler who has taken a night ride among the lesser mountains of Germany. Old Mat, ever intent upon displaying the beauties of his mammoth museum, informed us that he intended to bring up a thunder storm! Thereupon, he took all of our lights from us, and warning us against "no kissing," proceeded towards the northern extremity, and commenced an irregular descent into a subterranean vault. As he descended the sky over head seemed overcast, slowly, by a threatening cloud, and, at intervals murmuring thunder added to the splendid delusion. Slowly, one by one, could we see the smiling little stars disappear behind the heavy black cloud; presently, the comet was lost to view, and then we were in total darkness! Such as we imagine preceded; "Let there be Light;" darkness so oppressive that it could almost be felt, so dense that we could hardly breathe. Though we could hardly realize that there was no immediate use for overcoats or umbrellas, the mystery of the storm was easily explained. As the guide descended with the lights, the shadows of the overhanging cliffs, cast upon the bright firmament, produce the clouds, irregularity making it appear as if there were piles of clouds rolling in threatening menace. The thunder was caused by a noise made by the guide in his lower rotunda, which was sufficient in these huge vaults to reverberate and re-echo back peal on peal of deafening thunder. I had neglected to remember the lightning, which played in promiscuous pencilling athwart the clouded sky, as our ingenious guide's concentrated lights encountered the brighter promontories of stalactites in his serpentine descent. After an absence which (had it not been for the ladies) would have been anything but pleasant, old Mat returned, and we had an April "clear off," which is explainable in the same manner as the storm. The angry clouds rolled gradually away, leaving the apparent sky clear and serene.

From this chamber we pass into the Floating Cloud Room, which connects with Proctor's Arcade. This room has the appearance of being at sea in a dreadful storm, by the falling off of the gypsum from the transparent walls and ceiling. To add to the wildness of this scene the unevenness of the floor causes locomotion to be attended with considerable danger. Howbeit, it was not regretted by the gentlemen, as it was the first occasion of their absolute necessity to their fair companions.—Proctor's Arcade is said to be the greatest natural tunnel in the world. It is one hundred feet high, forty in width, and three-quarters of a mile long. When this avenue is illuminated by a Bengal light, placed at Kenny's Avenue, (which is its terminus) it creates a sight so magnificent that you feel as if you were transformed to the courts of the Empyrean. I questioned myself to know if I were not sweetly dreaming of a new order of Arcadia. With our faculties overburdened with the sublimity of this scenery, we pass through Wright's Rotunda; its shortest diameter is four hundred feet; to the ceiling, forty-five feet. Here is the only place that is an accurate idea of the distance to the surface of the outer world can be obtained. The distance here is only fifty feet, and, therefore, is regarded as dangerous locality. I should state that in other places of our journey we were many miles below this point. Here our accommodating guide illuminated both extremities with Bengal lights. I can only say that it was indescribably beautiful.

Many avenues leading off from here, we decided to take the nearest one to the Fairy Grotto, where an aid extraordinary to our guide had been dispatched to have in readiness a collation, preparations for our wine, (do not infer from this that we are yet unacquainted with the quality of our champagne, for, in candor, I must confess that several "Poor Yoricks" mark our course) and some shawls for a siesta after our three o'clock dinner: for it is in the evening of the next day following our entrance. Passing through several uninteresting avenues, we

enter, somewhat fatigued, the long-wished-for Fairy Grotto, not being willing to make our *sejour* elsewhere than in this paradisiacal rotunda. It is filled with lovely staglamites [sic], and is one mile long. On account of its beauty, that beggars all description, its smooth, level openings of white earth, its princely couches of shining stalagmite, and, in other respects, its peculiar construction, it was a happy selection for weary tourists to wander to greet dainty delicacies, to revel, and to muse under the pleasant influences of woman's presence; and then, in sweet dreams, to revisit in more beauteous coloring the things they have seen.

Having had several halting places, we are not much fatigued, and with right good will, happy hearts and joyous mirth, we arranged ourselves around a large shawl (spread on a table of white stalagmite), containing our sumptuous dinner. With the passing beauty of our sweet companions, heightened by exercise and graceful vivacity; with our lights fantastically arranged amid the gorgeous niches; with some in languid and meditative repose upon the rich breasts of some colossean couch; while others, in happy converse, stroll in solitary pairs, remote, beneath the overhanging arches. Shall I forget our guides, who with cork-screws, and endless fund of legends, were ever attentive to our corporal, and mental repast. Presently, fatigue and the impressive silence wooed us to "kind Nature's sweet restorer, balmy sleep," and in Utopian similitude we seek that gentle assuagement from the overwrought ideal, of oppressive magnitude; the beauty of which could hardly be rivalled in the picture galleries of dream-land. The silence of entombed death has regained its dominion in these desert halls. No breath stirs, and no sound longer disturbs the death-like quietude of these hidden vaults. How quiet! How impressive! How awfully sublime! But, hark! Can it be?—but I must not say what sound, from yonder sleeping beauties, disturbs my dozing meditations, for I would not have it in history that a beautiful woman can snore. Oh, horrors! I will have to

resort to another cigar.

After a refreshing sleep and a cup of excellent Mocha, we leave the ladies and some of the gentlemen of our party in Fairy Grotto, and lighting our cigars we start upon what is termed the "long route." We select a spacious avenue which leads through "Solitary Cave," (which has no mark of interest save a beautiful cascade). However, it should be stated that this is the most gloomy room in the cave, except the "Dead Sea." After much tugging over a rocky pass we enter the Chief City, which we find to be two hundred feet in diameter, and forty in height. As all of these subterranean localities derive their names from some characteristic feature, we notice that the ground is strewn with rocks, which makes it present the appearance of a city in ruins. From here, a distance of three miles, are often seen evidences of running water. The suburb of the Chief City terminates the Main Cave. After a rest, which was rendered necessary by the rugged heaps of fallen rocks representing the ruined city over which we have passed, we proceeded through Long Route. The first chamber that particularly attracts attention is Martha's Palace. It is entered over a narrow declivity called the Steeps of Time. Though we cannot arrive at the genealogy of this Martha, we cannot doubt but that she was fond of the magnificent. The Palace is forty feet high and sixty in diameter. Here we find the first spring in our route, whose limpid waters are soon lost in the yawning mouth of some adjacent chasm. Our guide informed us that, from time immemorial, it has been called Richardson's Spring. Near here have been found two human skulls, which were afterwards exhibited by our party. They are supposed to be of a race preceding ours.

Pursuing our route, we enter Side-Saddle Pit, the ceiling of which is sixty feet in height; it is ninety feet deep and twenty wide. It derives its name from the peculiar construction of its architecture. From here we enter the largest chamber embraced in our tour (it would take six weeks of indefatigable

labor to make the tour of the whole cave). It is called Minerva's Dome. Owing to the great danger attending locomotion in this Atlantean hall, we could get no accurate measurements. After many useful cautions from Mat we find ourselves on the sides of the "Bottomless Pit." Though thousands of wandering tourists have left here unable to solve the mystery hanging around the conviction of the "bottomless pit," we were intent upon investigating it to its bottom. It is usual for the guide to light a Bengal light and hold it over the pit until nearly consumed, and then drop it down, and as it invariably burns out before reaching the bottom, it has been believed by some that it has no bottom at all. I took a piece of this brilliant chemical light, and attaching it to a stone, hurled it down immediately. Down, down, down it went, illuminating its rugged sides, till at last we had the triumph to see it burning dimly away down yonder-on the bottom. Spanning the Bottomless Pit is the Bridge of Sighs, which is enclosed with an iron railing to prevent any one from slipping into the surrounding pits. One false step here would be fatal. We congratulated ourselves that we had left the ladies several miles in the rear.

Beyond the Bridge of Sighs is the Revellers' Hall (usually selected for parties to take luncheon in). The Scotchman's Trap is the outlet from this hall. This trap is a circular opening, through which we have to descend. It is a huge overhanging rock, sustained by apparently, a hair's breadth of stalactite. Should this trap fall it would effectually close the portion of the cave in which our other party reposes. Contiguous to this trap is a large rock which our guide tried to induce us to believe represented a Shanghai chicken. It is about fifteen feet high. Leading from here is the Fat Man's Misery, so-called because it is a low, tortuous avenue, fifty yards in length, which it is difficult for a corpulent figure to pass through.—One of our party being very unfortunate in this respect found it almost impossible to work himself through—his efforts and lamentations affording us great

amusement. Great Relief is entered through this misery. A pleasant room, fifty feet high and forty across. It should be noted that the waters of Echo River sometimes ascend to this height. The avenue styled Bunyan's Way is directly over this room, and connects with that magnificent walk called Pensacola Avenue.

Going on through River Hall, Judge C., an immensely dignified personage, fell and spilled his oil, extinguished his lamp, and afforded us a hearty laugh. In a few moments we are by the beautiful, pellucid waters of the River Styx. Its waters being swollen, navigation is limited within a very narrow compass; the overhanging stalagmites kissing its bright surface in the distance precludes the possibility of the pleasant sail we had anticipated. The river varies in width from forty to seventy feet. No outlet to these waters has ever been discovered. We traverse Bacon Chamber, (containing a great amount of hard bacon!) at the terminus of which is the Dead Sea; a body of water 30 feet deep, and 20 wide. It is spanned by the Natural Bridge, superior in point of wild magnificence to the celebrated National Bridge of Virginia. This is, without doubt, the most gloomy place that had ever appalled our senses in all our wanderings. Nothing more of interest attracts the tourist's attention until we enter Lake Lethe; which is an hundred and fifty vards in length, and from ten to forty feet wide, and in depth, from ten to forty feet. Its banks are very precipitous, which render it extremely hazardous to reach. We, however, cross it in boats, and disembark in the Great Walk which extends from Lake Lethe to Echo River, a distance of five hundred yards. Very often, a rise of water connects the two, and fills up the avenues so rapidly that visitors can with great in precipitate difficulty, flight, themselves beyond its reach. Echo River extends from Silliman's Avenue to Great Walk, a distance of five and a half miles. When Green River, outside, is swollen, these waters flow towards the Walk. When it falls they flow in an opposite direction. We observed that Echo River is so clear that the white rocks can be seen on its bed, as far down as twenty feet. With Bengal lights on the opposite side, the boats on its surface appear to be gliding through the air. This mysterious stream is inhabited with beautiful eyeless fish, which can be seen sporting in their numerous "schools."

Very reluctantly we pass through Purgatory and enter Pass El Ghor which is a mile and a half long and very wide, with exceedingly rugged walls. Falling from the ceiling is a glittering cascade, which causes the traveller to pause to admire its wild beauty. Owing to moisture here; stalactites and stalagmites are very numerous. To the left we are forced to enter the Infernal Regions, a horrible place, where even the most active and diligent are sure to fall. Within this chamber is the Sea Serpent, which is as long as you can throw a stone. From it is necessary to ascend the Hill of Fatigue (a very appropriate name, by-the-by). It is only worthy of notice from its ascent being the most difficult and dangerous job ever performed.—The Great Western is an immense rock, resembling the hull of a ship. The celebrated Rabbit inhabits here, but even with the assistance of our apt imaginations, we could observe but little resemblance to its namesake. Our guide informed us that this avenue was named in honor of Dr. Silliman, of Yale College, whose explorations here have unfolded many hidden curiosities.

Passing through Silliman's Avenue, Rhoda's Dome is entered, which is less terrific and grand, but, possibly, more beautiful than the rest. Lacy's Arcade is connected with this; which is the highest dome in the cave, being over five hundred feet in height. The sides seem to be draped with immense curtains hanging from the ceiling to the floor. It is necessary to re-enter Pass El Ghor, which we found to be two miles in length. Its principal attraction is Fly Chamber and Table Rock. The Crown is a beautiful rock on the left of the avenue, resembling a coronet. Emerging from El Ghor, we enter Corrinue's Dome,

which is forty feet high and nine wide. This dome was formed by the solvent action of the water during the overflow of El Ghor. The Black Hole of Calcutta is to the right, fifteen feet deep.—Here the Chimes encountered; which being struck by our sticks, emitted a beautiful musical sound. In continuing our passage we observe that Wellington's Gallery is not attractive. Hebe's Spring is four feet in diameter, and one foot deep. By mutual consent, we drank to the health of the fair Hebe. Half a mile from here, Pass El Ghor communicated with a body of water called Mystic River, the origin or extent of which has never been ascertained. After leaving the dubious banks of Mystic River, Martha's Vineyard opens to the admiring view; its rich walls covered with stalactite, coated with gypsum and oxide of iron, presenting a passable resemblance to clusters of grapes. Projecting from the wall is a large stalactite, suggesting the Battering Ram.

Washington Hall connects Snowball Room, which is thickly studded with snowballs of so great brilliancy that the vision is impaired by the riveted gaze of admiration elicited. Disregarding several halls of minor attractions, we soon find ourselves in Cleveland's Cabinet. It is three quarters of a mile long, sixty feet deep, and twenty feet wide.—With a little assistance of the imagination, and Mat's character for veracity, we find that the ceiling of this princely hall is literally lined with flowers of every description. Not flowers nurtured by the benevolent rays of a Southern sun, with the fostering rains of gracious Spring; but the long elaboration of the unvielding rock. The beholder is struck by the inconceivable beauty of the scene. Even before our guide had informed us that this has ever been the favorite resort for the ladies, we had expressed our regrets that the Hill of Fatigue, Fat Man's Misery and the Dead Sea separates us. Behind a curtain (formed of a graceful, white pendant stalactite) in Mary's Bower. The Last Rose of Summer is eight inches in diameter, and of snowy whiteness.

Bacchus' Glory is a large alcove, strewn profusely with stalagmites resembling grapes. In this alcove is that admiration of tourists—Diamond Grotto. We amused ourselves by waving our lights to and fro, which caused the beautiful coruscations to rival in splendor so many real diamonds. A poet's fancy, in the most coveted afflations [sic?] could hardly conceive of a picture of more beauty.

After periling our lives in the laborious passage of the Rocky Mountains, (which is one hundred feet high, formed or rocks fallen from above, and surmounted by Cleopatra's Needle) we arrive at the verge of a gorge seventy feet deep, and one hundred wide; beyond which the cave divides itself into three compartments, possessing features of more or less grandeur, which must be fancied in the ideal of the appreciative tourist, who, after the sublimity just seen, pauses exhausted, in wonder and amazement, upon the rugged brink of the Malistrom!

The *ultima thule*, the *ne plus ultra* is reached! Here sublimity, grandeur, and chaste beauty, are lost in a deep, dark, and ominous labyrinth. What mortal eye can gaze into the threatening limits of this Tartarean gulf without thoughts of those infernal regions into which it seems to be the inlet? Low murmuring in the distance, away down its dark, uneven walls, the wild leapings of a viewless stream can be heard, as it hastens to its unknown ocean. Beyond, is opened to the contemplation a view so fearful that even the most venturesome have no desire to risk the passage.

By lowering a Bengal light, avenues can be seen leading off from near the bottom of this strange pit. We descend by an iron railing to the Seat of the Mummy. Tradition says that the bodies found in this dismal place were the bodies of an Indian female and child. Both were in a perfect state of preservation—the infant a few feet from its mother. One of our party fired his pistol here, and the concussion was so severe that it almost deafened us, being much louder than the

report of a columbiad.

By reference to our watches we find that forty-seven hours have elapsed since we parted with our less inquisitive party in Fairy Grotto, and that the time for our reassembling is near at hand, and there being no other points of especial interest, and being fatigued, or more appropriately—"used up," we will transport ourselves to that happy retreat.

Before entering we hear the happy voices of a party returning from a stroll to the River Styx, where they have been to relieve the monotony upon its airy waters, while, gently wafted above the merry hum, we hear the dulcet melody of some sweet voice that has carried the fair singer from her wild prison house to the "loved ones at home." Others are reclining in pleasant *tete-a-tete*, while, apart, the lazy smoke of an Havana is seeking the overhanging rocks.

We are welcomed by three cheers, and a hot collation, and a new introduction to the champagne basket.

Lost in the aerial sublimity of this wild enchantment, with all the indulgences for ideality; an anchorite in this profusion of nature's charms, the writer finds himself isolated with stranger thoughts. How productive of thought to entertain the various emotions which these wonderful mysteries, entombed in the Crypt of Nature, produce in the attentive mind. Here the little pellucid drop of limestone-water continues noiselessly its beautiful creations, and, directed by the finger of the invisible God, it peoples the dark caverns of the inner earth with forms of surpassing loveliness, to charm none but the prying gaze of the inquisitive tourist. Whence were derived the rules of architecture and sculpture by which these halls and galleries were built and decorated in a style more gorgeous than the Moorish Alhambra, more magnificent than the palace of Babylon, more graceful than the temple of Minerva. What sculptor has written his name and immortality upon these fair proportions? What Phildeas has traced these ever during lines of beauty?

Ah, this inquiry leads to an humiliating thought, that the honored men of the earth—the Painters, Architects, Sculptors, and all the list of fame, are but the instruments of the great first-cause, as are these tiny drops of water, to show forth grandeur, beauty, and truth unto men. And how vain appears the blaze of glory when we reflect that these most insignificant agencies operate, by the guidance of Providence, more definitely, and to the production of more magnificent results than the most brilliant name of all the catalogue of glory every attained.

Who can commune with these great works of God without realizing that spirit of wrapt devotion so beautifully expressed by Milton:

"These are thy glorious works, parent of good, Almighty! Thine this universal frame, Thus wondrous fair; thyself how wondrous then! Unspeakable! who sittest above these heavens, To us invisible, or dimly seen In these thy lowest works. Yet these declare Thy goodness, beyond thought and power divine. Speak ye who best can tell—ye sons of light—Angels; for ye behold him, and with songs And choral symphonies, day without night, Circle his throne rejoicing! Ye in Heaven, On earth, join all ye creatures to extol Him first, Him last, and Him without end."

Bright and early on the morning of the fourth day, our little party emerged into the gladsome rays of an Autumn sun, as it played in fitful smiles through the aromatic copswood of our favorite walk; and, bye-and-bye, upon the vine-clad portico of the cottage Hotel, the lusty postillions, flourishing their long whips and our ill-treated baggage, we bid a reluctant adieu to Old Mat, and the endeared scenes of our happy adventures, and with a loud crack of the whip we "ho, for old Virginia."

## LITERATURE CITED

Anonymous, 1851. Observations on the Mammoth Cave. *Scientific American*, o.s. 6(45; July 26):358. New York.

Anonymous, 1864. Extract from a Tourist's Journal (attributed to "D. S. C."). *Southern Illustrated News*, Part I—April 9, 1864 (pg. 109, cols. 1-4), Part II—April 16, 1864 (pg. 117, cols. 1-4). Richmond, Virginia.

Ball, Donald B., 2002. Paper Mills in the Confederate South: Industrial Archaeology of a Forgotten Industry. *Ohio Valley Historical Archaeology* 17:1-62.

Bullitt, Alexander Clark, 1845. Rambles in Mammoth Cave, During the Year 1844, by a Visitor. Morton & Griswold, Louisville, Kentucky (reprinted 1973 with an Introduction by Harold Meloy, Johnson Reprint Corp., New York; 1985 with an Introduction by Harold Meloy, Cave Books, St. Louis).

Hagen, Sue, and Michael Hutton, 1991. Place Names in Mammoth Cave. *Journal of Spelean History* 25(1):10-15.

Hartwig, George, 1871. *The Subterranean World.* Scribner, Welford, and Co., New York.

Hayward, John, 1854. Gazetteer of the United States of America: Comprising a Concise General View of the United States, and Particular Descriptions of the Several States, Territories, Counties, Districts, Cities, Towns, Villages, Their Mountains, Valleys, Islands, Capes, Bays, Harbors, Lakes, Rivers, Canals, Railroads &c.; with the

Governments and Literary, and Other, Public Institutions of the Country, also Its Mineral Springs, Waterfalls, Caves, Beaches, and Other Fashionable Resorts; to Which are Added Valuable Statistical Tables. Published for the author and for sale by James L. Gihon, Philadelphia.

King, Edward, 1875. The Great South; A Record of Journeys in Louisiana, Texas, the Indian Territory, Missouri, Arkansas, Mississippi, Alabama, Georgia, Florida, South Carolina, North Carolina, Kentucky, Tennessee, Virginia, West Virginia, and Maryland. American Publishing Co., Hartford, Connecticut.

Meloy, Harold, 1968. *Mummies of Mammoth Cave*. Micron Publishing Company, Shelbyville, Indiana (re-printed 1977, 2002).

Pond, Alonzo W., 1937. Lost John of Mummy Ledge. *Natural History* 39(3)176-184.

Sevcik, Ed, 1991. An 1854 Visit to Mammoth Cave. *Journal of Spelean History* 25(2):25-30.

Silliman, B. S., Jr., J. D. Dana, and W. Gibbs, 1851. On the Mammoth Cave of Kentucky. *American Journal of Science and Arts*, 2nd series, 11:332-339.

Taylor, Bayard, 1860. At Home and Abroad: A Sketch-Book of Life, Scenery, and Men. G. P. Putnam, New York.

Wilkins, Charles, 1820. An Account of the Exsicatted Body, or Mummy, Found in a Cave. American Antiquarian Society, Archaeologia Americana, Transactions, and Collections 1:361-364. Worcester, Massachusetts.

# COMMENTS ON "THREE NINETEENTH CENTURY ACCOUNTS OF HOWE CAVERNS"

# Thom Engel

I have been working on a book on the history of Howe's Cave during its first phase of commercialization. In this process I have uncovered considerable information previously unknown that clarifies much of the cave's history. Therefore, I would like to offer some comments on Donald Ball's submission of three 19th accounts of Howe's Cave, which appeared in the last issue of this *Journal* (July-December 2008).

Mr. Ball is correct about the pre-1842 "history" of Howe's Cave being unclear. The story of the forest parson, Resig, and the Jewish peddler, Schmul, is discussed by Clymer (1937). The story cannot be independently verified. Indeed, the book on which this is based, *Der Waldpfarrer am Schoharie (Fifty Years in the Wilderness)* by Frederick Mayer is a work of fiction first published in 1911. Edward Hagen, late editor of the *Schoharie County Historical Review*, wrote in the Spring-Summer 1972 issue of the *Review* that, "the book is not 'so realistic' or 'as close to the facts" as he had been led to believe.

In fact, the first time I read the tale, it did not have the ring of truth. Most accounts of Howe's Cave from the 1840s refer to Howe's need to enlarge the entrance. In one account the entrance was "entirely stopped up with dirt and rubbish." Plus considering the nature of Jewish-Christian relations in the 19th century it would seem unlikely that a Jew would take a Lutheran parson into his confidence. Also, the majority of early Jewish immigrants to the American colonies were Sephardic Jews and "Schmul" is a decidedly non-Sephardic name.

A few words about early weddings in Howe's Cave. The wedding of Harriet Elgiva Howe to Hiram Shipman Dewey on 27 September 1854 was the third wedding in the cave. Huldah Ann Howe was married the preceding month in the cave on the 9th. However, the earliest wedding was in 1852 when Peter House of Cherry Valley married Jerusha Catharine Flint of Canajoharie.

It is unclear when formal tours ended at Howe's Cave. However, it is clear that into the early 20th century individuals could show up and have the possibility of a tour. It is clear that when John H. Cook mapped and photographed the cave for his 1906 paper, that the cave was still intact. Furthermore, when Grabau wrote on the geology of the Schoharie Valley, including a brief discussion of Howe's Cave in 1913, he did not mention the cave being breached by quarrying. This and other documentation suggests the cave was

intersected by quarrying between 1915 and 1925.

The 1851 article was written by Simeon North. I have verified this. At the time of his visit to the cave, North was president of Hamilton College in Clinton, New York. This particular article has a long and convoluted history of publication that I will endeavor to elucidate. It was first published in Knickerbocker Magazine. It was then reprinted in Sharpe's London Magazine without attribution as to the source. From there it was reprinted in Littell's Living Age by editors who assumed the author was British. It was also taken from Sharpe's and abridged for publication in Isaac Pitman's Phonographic Correspondent. It was also reprinted in the New York Evening Post, the Daily Atlas, and the Vermont Journal. I "unearthed" it in 1974 and it was reprinted in The Northeastern Caver. Large swaths of the North article were also plagiarized by Alice Cary, the poet, for her 1857 article in the National Magazine. She also ripped off large parts of E. George Squier's 1842 article and Giles Fonda Yates' 1842 article.

The 1862 article also has an interesting, if rather shadowy, background. The article is clearly an abridged and edited form of the Pip letter. This was a handwritten letter in the collection of Howe Caverns Inc. written by someone named Pip. It is not clear who Pip was. One theory is that it was J. Pierpont Morgan, whose childhood nickname was Pip. This theory seems unlikely. By 1861 Morgan was already fairly wealthy. It is hard to envision him walking from Columbia County to Howe's Cave which does happen in the letter if not the 1862 article. He also married for the first time in 1861. Morgan also had to deal with the so-called Hall Carbine Affair in 1861. Doubling the mystery is that the author of the 1862 article may not have been Pip, at all. In the letter there are two visitors to Howe's Cave. In the article, there are four. There are other significant differences.

The 1871 Colt article is just one of many like it including but not limited to *The Round Guide* (1871), *The Summer Excursionist* (1874), *The Hudson River by Daylight* (1874), *Popular Resorts and How to Reach Them* (1875), and on and on. It became common to include Howe's Cave in these guidebooks because it was about 1867 that the railroad reached Howe's Cave. The timing is unclear, but we do know that the railroad was completed to Schoharie Junction, four miles east of Howe's Cave, by 1865, and to Binghamton by 1869.

# Cave Clippings

For an amusing counterpoint to the usual laudatory accounts of Mammoth Cave, read this clipping from "an Unromantic Point of View" by Calhoun Richards, published in the *New York Times*, September 7, 1868—right after the American Civil War. A lengthy digressive paragraph about the inconveniences of Western steamboat travel, following the first paragraph, has been omitted.

### THE MAMMOTH CAVE

Pleasures and Pains of Western Travel

-Uncertainties of Railways and
Steamboats-A Woman's Experience
Under Ground-The Mammoth Cave
from an Unromantic Point of View.

From an Occasional Correspondent.

ST. Louis, Mo., Thursday, No., 20, 1808. Every traveling American sliculd read the Guide Book to the Mammoth Cave. No matter, thereafter, what his geographical situation, no matter how limited his time and means, he will some way or other go to see it. From this visit, he will learn never again to take into his confidence a guide book. A severe lesson, but a sure one. We started for the Cave from Cincinnati. It was here, baving accidentally come across a guide-book, that I first conceived the idea of making the visit. John pleaded want of time; I convinced him time was made for man. Then he urged want of money; I offered him mine. (Here, as usual, he looked skeptical.) Then he said, any of the servants at the Spencer House, would shut up the cellar for fifty cents and let me walk to and fro in it, as long as I wished-the Cave was only a black hole in the ground, full of stones to stumble over. Exultingly, I produced my guidebook, and read to bim descriptions-so graphic-of the " Methodist Church," the "Glants' Coffin," the "Htar Chamber," the "Floating Cloud Room," "Martha's Palace," the "Bottomiess Pit," the "Fat man's Misery and great Reliet," "Lake Lethe," the "Dead Sea," the "Rocky Mountains" and "Ei Ghor Pass," and more than all, of a beautiful limpid stream misnamed the "River Styr," on whose shore were tiny, smooth pebbles-rebbles which we would gather for our beloveds, in memory of this cave visit. Then I read of the beautiful cycless fishes, stripel blue and green and gold, that lived in this little brook, happy as "bashish caters," dreaming away their sightless lives, without thought or fear of the murderous hook, that had destroyed the family rest of so many of their up brethren. I conquored. (Women would always gain their suit if they started in the first place with an attitude and a tone that defied failure, and, above all, saved their tears. Tears should never be brought in till every other effort has failed -tuen they are just the thing.)

Nothing occurred out of the ordinary way till we reached Louisville, or if there did, we have been so long in starting that I must not tell about it. From Louisville to Cave City our way lay through a beautiful, woody, and peculiarly Kentucky country, and from Cave City to the Cave, fitteen miles by stage-coach, we passed through scenery rich and varied, but by a people, living, as none but those who have seen the same class in the South, could believe they lived. At last we reached a real comfortable looking, sizable Southern house, white, with green blinds and long balconies, and wings of bedrooms on all sides. It was well shaded, and looked altogether a

fit resting place for weary travelers. This house is near the entrance to Mammoth Cave, Its proprietors hire it, and the Cave yearly, from their owners. As it was late evining we deterred our walk through the Cave till the next day. We had for supper pork, eggs, bread and butter and tez-the milk was out. The next morning I awaked to remember that I had had visions of heaven in my dreams, not the result of late pork-cating, but of a last reading of the guide took. It had fold me that "the table at this hotel was not surpassed by that of any in the Union," and that "the rooms were furnished in the most luxurious and comfortable style;" but I never let the boardy ben, in the almost carpe:less room in which I slopt; nor the breaktast of bread and butter, and pork and eggs and tea, (the milk was again out,) interfere with my taith i. "the beauty and sublimity, and grandeur of the Mammoth Cay .. " Not I. My only regret was, that I had not come prepared with a "Turkish dress, trimmed with lively colors, made of flannel or cloth, assui ed the weare.'s tiste," but as "a lady must not take a gentleman's arm, except in illness-it looking awawaro," I de erminen to show my knowledge of good sectedy, by strictly obeying this command, as I had neglected the other. We started, with the guide, each will a lantern, and a lunch basks:. Through the garden, over a short field, across a fence, down a decivity of twenty-five feet, and we are at the cave entrance. The guide went ahead-we following. When we had gone about lorly feet, our two lanterns went ou; he turned and relit them, and told us this was common, because of the draft, near the entrance. I tegan to hope it was not common a little further on. Soon we were entirely away from the ray of light.

said, pointing against the wall, "These are puts-there are in this part of the cave, several millions of them." At this point I dropped my lantern, which went out and covered my head with my shawl. I had somewhere heard that if bats got into the hair nothing short of decapitation would save you, but the guide poked one with his cane (we were all carrying cunes for grace) to show us that they could not be moved from their determination to "stick." The sight was an awful one, (I here took Jonn's aim:-: hese black horrible creatures, numbering bree million, at least, close against the slimy wall in .his dreadful silent place; it sickened me at the very onset of our twenty miles journey-yet my faith was strong. Iknew I must soon meet the " beauty and subl mity and grandeur" that I had read of. On we went, through the black darkness, our faces guastly in the dim lantery-light; and the whole scene like a death tramp through the Interno. The guide, faith ful to his prof seion, called every stone by a name, in one tone, and then talked about it in another. The "Rotunda" he called very loud, then told us in ordinary voice that this part of the Cave was directly under the dining-room of the hotel. I here mentally determined to eat no more eggs and pork, and breat and butter and tea (without milk) in that room. From the "Rotunda" we passed into the " Methodis. Church." This was simply a large yellow-looking staltactite, beside which a foolish gir! has been married. She promised her dying mother, who had a hard matrimonial experience, that she would marry no man on the face of the earth, so she married here. Passing on we met a large stone, res.ing on smaller ones; this was called the "Glant's Coffin." I saw no resemblance, but as John kept sarcastically saying, "Don't you see it?" I bravely said, I did. O er the celling of white limestone, just here, the guide pointed to a "giant, his wife and child"—the "giant" in the act of passing the "child" to his "wife." I looked long and hard. I was very anxious to see this resemblance, having read a page about it in the guide-book, but the more I looked, the more I didn't see. Some black gypsum had formed over the white limestone, but I could see no giant's family in the formation. An " Ant-eater " was then pointed to us, but I attributed my not recognizing it to the fact of never having seen an "ant-eater" in the flesh. On and on we walked. John smoked and smiled; let his light go out, and frequently asked me how I was enjoying myself. On and on through the black impenetrable darkness, in the overpowering silence, passing huge stones which had famous names, and black corners, called "palaces" and "churches" and "arcades," or whatever else men had chosen to name them, my enthusiasm as well as my strength was lagging. There were five miles to compass, in what is called the short walk, and filteen miles in the

long walk, but how could I ask to return after having

The guide stopped and in true cicerone accent

gone but three miles. So, bravely, I kept up, expressing an admiration I could not feel for what in reality was but a long black hall with heavy stones on all slues, which enthusiasts or money makers had named romantically and described enthusiastically to staract visitors. Soon we came to seven cottages. Here my heart stood still while the guide told us how human beings who had left luxurious homes, had come here in search of life and healthto die! Waat a story those cottages told! what a story of clinging to life, yet sure it was passing away I longing to live, yet seeing death come nearer and nearer, every hour. Five months in the deep darkness these people lived till three of them died, then when the breath grew shorter and the voice weaker, and the cough more frequent, the others left and died immediately upon meeting the outer air. What stories were here! One long, long night of hope and despair and suffering. What a mad love of lite must have prompted these intelligent people to believe that they could be cured of their disease, sway from light and sir, and sun and cheerfuln se ! These cottages told the saddest tales I over dreamed of. Five months in this awful place! I felt that five days would make me a lite-long lunatic! Near those cottages we were shown a stone, behind which a gentleman, lost, was tound. He had wandered from his party, and his light was going out, he became at ouce deranged and bid behind this stone. They found him forty-eight hours atter he was lost, having passed this stone without suspecting he was there several times. The guide told us of another instance of a poor young lady who had set down to rest, and when her party got so far in advance that she could no longer hear their voices, she arose to follow them, and stumbling, her light went out. Though they found her a few minutes after, she was in a state of insanity, from which she did not recover for years.

On still we walk. We pass the "Labyrinth"-only another spot of darkness. A square sione, called the "American Eagle." Another stone, called an "Arm Chair." A pile of stones-the "Rocky Mountains." Down four or five steps of stones-the "El Ghor Pass." To the "Floating Cloud Room"-a stone perched on the ceiling. To "Martha's Palace"stones a little way apart, called the "Steepes of Times." To the "Maeistrom"-a hole 175 feet (?) deep, down which GEO, D. PRENTICE's son was once toolish enough to go. At last, to a narrow, muddy water-the "limpid brook," the beautiful bome of the eyeless fishes I had read of. Horrible creatures, white as death, without a color or mark on them. Heavens! how they wriggle in search of prey! -each other! . I must get out of this place! But the guide says he has still the "Star Chamber" to show us, only about a half mile from the entrance down a sidewalk-so, to the "Star Chamber" we go. This part of the Cave, a little higher than some other paris, has a ceiling of black gypsum, on which are white spots,

looking like stars, made by throwing stones up. "Now," said the guide, "you two sit down here, and I will take your lanterns and walk slowly behind that ledge of rocks, and make the light, as it passes over the ceiling, look like the moon disappearing; then I will walk under the rocks and after appear away at the other end with the lanterns, which will make the whole scene seem like the sun rising. "What! leave us here alone in the utter dark?" I thanked him. I had seen the sun rise outside several times. Besides I had just here a distinct remembrance of baving once read about this same "Star Chamber" in a TIMES correspondent's letter, and I did not forget the fear he described in being left alone for this same sun-rising scene. No! I had no idea of seeing the sun rise in the dark, so I walked on. Not so, John. He sat down with a smile that plainly said, "Severe lessons are the surest." I had only to sit down beside him. The guide left. I implored him not to forget us. I assured him I should lose my reason in half an hour. Oh! it was cruel to suffer so. After the moon hallucination we were in the deep dark. I peered through it for one ray of the lantern's light. I called the guide. I listoned for one sound of a cricket's chirp to break the awful silence. I clung close to John. It was a half hour, and no light came. An hour, and my brain was becoming bewildered. Then, a little face, with its sweet blue eyes and light curling hair, stood distinctly before me like an angol; and after this I know nothing till I awoke on the bed a: the hotel. The guide had left us less than three minutes.

WHAT IS THIS MAMMOTH CAVE?

The chemist would answer by dealing largely with such words as carbon, himestone, gypsum, sulphate of sods, sulphate of lime, the mechanical agencies of the green River, &c., &c. But a visitor cares for none of these, therefore to such I say, the Mammoth Cave, in its great extent—200 miles already

explored—in its awful overpowering stlence, in its depth of darkness, this Mammoth Cave, the beginning to which is lost in infinity's mists, is more impressive of nature's great power than anything I could ever conceive of. But still, it is no place for any but the very strong in nerve and health to visit. A nervous person imagines, in spite of himself, great eyes staring at him from every corner, and cold hands, ready to grasp his shoulder, at every siep. It is hard to make him trust his dearest irlend in this place. It is every, very hard to make him trust the strange guide whom he has never seen before. The Mammoth Cave has no "beauties" in it; there is no "grandeur" about it, no "sublimity." It is exave, a long and winding cave, fill d with stones and rocks; and but for the remarkable exaggerations of its guide-book, published for moneymating, it is doubtful if any but the enemical sen ent would ever visit it.

# Reprints

# Daniel Coxe's Avian Saltpeter

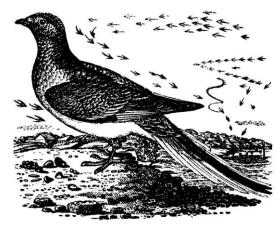
Dr. Halliday, in an earlier number of this Journal (July-September 1995), advocated the idea that at least some cave nitrate deposits were derived from passenger pigeon guano.1 He cited several lines of evidence: that the earth beneath henhouses was sometimes mined for such purposes, so by analogy, wild pigeon deposits would have worked, too; that during the American Civil War, there is some suggestion, in the form of postal covers, that the Confederate Nitre Department had prospected the eponymous Pigeon River in North Carolina for such deposits; and that the oak-hickory area in the southeastern United States, which corresponds with the distribution of classic saltpeter caves as delineated by Carol Hill, provides a food (acorns) so beloved of these pigeons. Halliday concludes that "This [postal] cover opens a promising new channel for saltpetre mining research."

I was therefore intrigued when I came across a series of three articles by the ornithologist Albert Hazen Wright, published in The Auk in 1910-1911 (i.e., just before the passenger pigeon became extinct, in 1914). Wright quotes numerous passages from the historical literature documenting passenger pigeons, but one by Daniel Coxe corroborates Halliday's theory and is reprinted below.2 Wright states that Coxe's account of his father, also named Daniel, dates to "the close of the sixteenth century," but this is almost certainly a mistake, since the elder Coxe was in fact active a century later, at the close of the seventeenth century.3 Although the elder Coxe apparently never visited America, his "province of Carolana" comprised what is now "North and South Carolina, Georgia, Florida, and Louisiana," and the title existed until 1769.4

"I had almost forgotten to communicate two commodities, one for the health, the other for the defence of our bodies.... The latter is saltpetre, which may probably be here procured cheap and plentifully, there being at certain seasons of the year most prodigious flights of pigeons, I have been assured by some who have seen them, above a league long, and half as broad. These come, many flocks successively, much the same course, roost upon trees in such number that they often break the boughs and leave prodigious heaps of dung behind them; from which, with good management and very little expense, great quantities of the best saltpetre may be extracted."

#### **NOTES**

- 1. William R. Halliday, "An Informative Pigeon River, NC, Nitre Department Cover," *Journal of Spelean History*, Vol. 29, No. 3 (July-Sept 1995), pp. 68-71.
- 2. Albert Hazen Wright, "Other Early Records of the Passenger Pigeon," *The Auk*, Vol. 28, No. 4 (Oct 1911), pp. 427-449. The Coxe quote is given on page 438 and is footnoted as follows: "Coxe, Daniel. A Description of the English Province of Carolana, By the Spaniards called Florida, and by the French La Louisane, etc., In Hist. Coll. Louisiana, By B.F. French. Part II, Philadelphia, 1850, p. 270."
- 3. Frank E. Melvin, "Dr. Daniel Coxe and Carolana," *The Mississippi Valley Historical Review*, Vol. 1, No. 2 (Sept 1914), pp. 257-262. Melvin introduces Dr. Coxe in the first paragraph as "proprietor and assiduous promoter from about 1698-1730 of the province of Carolana Florida."
- 4. G.D. Scull, "Biographical Notice of Doctor Daniel Coxe, of London," *The Pennsylvania Magazine of History and Biography*, Vol. 7, No. 3 (1883), pp. 317-337.

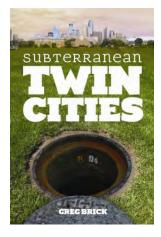


THE WILD PIGEON.

Contributed by Greg Brick.

# Book Reviews

SUBTERRANEAN TWIN CITIES, by Greg Brick, NSS 33695. University of Minnesota Press, Minneapolis, MN, 2009. Paperback, 228 pages, 6 by 9 inch format, ISBN978-0-8166-4597-8. Available for \$18.95. Reviewed by William R. Halliday.

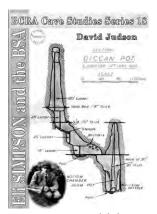


Greg Brick teaches geology the University of Wisconsin at River Falls. He also is editor of The Journal of Spelean History. This brand-new book melds his interests quite admirably. Perhaps it can be described best as a highly personal update of the guidebook of the 1980 N.S.S. Convention in the Twin Cities, which was obsolete upon publication because of misidentifications of omissions

didn't even mention Fountain Cave, one of the earliest show caves in the Midwest. Greg's book remedies such omissions, and much more. To cavers unfamiliar with goings-on beneath the Twin Cities, it may come as a surprise to learn that these caves are in sandstone, not limestone. The SiO2 matrix of sandstone is generally considered to be only about 1/10 as soluble as limestone, but under some circumstances, that 1/10 produces crawlways and even sinuous walking passage with familiar phreatic contours (the Wisconsin Dells and north slopes of Scotland's Firth of Forth also contain such caves). In the Twin Cities area, the triggering mechanism appears to have been sudden steepening of the hydraulic gradient in the local sandstone aquifer due to comparatively recent retreat of the Falls of St. Anthony. For generations, local municipal engineers and a wide variety of industrialists have made use of these convenient underground spaces, enlarged them, and connected them to a variety of artificial counterparts. In some cases, it is no longer possible to tell which is which. Since boyhood, the author has been fascinated by this seemingly baffling three-dimensional network of natural and artificial caves, dozens of miles in length despite inevitable closures for innumerable real and fancied risks of "cave-ins." The book thus is a great introduction to the debatable pleasures of a whole new branch of caving. Most of the obstacles encountered by limestone cavers exist here in sandstone, and some very special additional ones best omitted from family reading. Specifically, Greg shows that, although the sewers of Minneapolis may lack the musical and dramatic accolades of the sewers of Paris, their sewage is at least as notable. His tales recall the surreptitious years of early Flint Ridge

exploration, when inadvertent emergence from the wrong hole—or interception by unsympathetic Authority en route to the right one—could prove as disastrous as many an underground mishap. Greg tells it all with an irresistible wry humor. Only the most inflexible calcareospeleologist will put this book aside without finishing it.

ELI SIMPSON AND THE BSA, by David Judson. British Cave Research Association, 2009. Cave Studies Series 18. ISBN 0-900265-34-5. A4, 64 pages, softbound. £5.50 plus £1.00 postage from <a href="bcra.org.uk/pub/">bcra.org.uk/pub/</a>. (Speleobooks will probably have it in the U.S. by the time this is published.) Reviewed by Bill Mixon.



"Cymmie" Simpson started caving in 1901 or 1902. He went on to be a fanatical collector information about caves and old mines in England to some extent elsewhere, and he founded the British Speleological Association in 1935. He was apparently somewhat of a control freak, and he soon acquired quite a few rivals. One of his controversial

acts was to try to tightly control access to Lancaster Hole, discovered in 1946. This promptly led to the formation of some rival clubs and eventually to the Cave Research Group. The latter finally merged with the BSA in 1973, more than ten years after Simpson's death. A nice report on the discovery of Lancaster Hole and its development into the Ease Gill System is contained in a 1989 book by Jim Eyre.

This new book on Cymmie and the BSA is based on Simpson's extensive archives, now being stored and cataloged on revocable loan from the BCRA to the British Geological Survey. Reproduced in the book are numerous photographs dating from 1903 and cave surveys from 1906. Included are discussions of the archive itself, the history of the BCRA, and capsule biographies of a number of other people involved with Simpson in his speleological efforts. Viewed as literature, the thing is rather disorganized, but it is a valuable contribution to the early history of British caving and aspects of speleo-politics there. It certainly points out the importance of preserving and cataloging historical archives about caves and caving. If the NSS is doing anything like that, the effort is subliminal. I've been involved in NSS committee work for thirty-six years, and I've never been asked to save anything for the NSS Archives Committee.



The bronze monument to the passenger pigeon at Wyalusing State Park, Wisconsin, photo by Greg Brick.