

Norman Muller: Seeing Stonework through an Art Conservator's Eye

Interview, November 10, 2018

by Peter Anick and Sydney Blackwell

There may be no one as comfortably conversant in both early Renaissance and ancient Roman painting techniques and enigmatic rock structures in the Northeast as Norman Muller, who brings his conservator's eye and researcher's mind to each domain. Muller was an art conservator for fifty years, thirty-five of them with the Princeton University Art Museum, from which he retired. Out of the studio, he has long been a sought-after NEARA member for his knowledge about significant stone sites, especially Oley Hills in eastern Pennsylvania and the Smith Farm in Rochester, Vermont. Muller has written several articles on rock structure sites for *NEARA Journal* and other publications, more than three dozen papers on fourteenth-century Italian paintings and ancient Roman painting techniques, and was the technical contributor to *The Dawn of Christian Art in Panel Painting and Icons*, which was published in 2016, along with concurrent editions in French and Italian.

NEARA Journal editor Peter Anick had a chance sit down with Norman Muller at the 2018 NEARA Conference in Nashua, New Hampshire. Their conversation has been lightly edited for length and clarity.

Peter Anick: *Norm, maybe you could tell us about how you got interested in the topic of looking at these lithic structures in New England.*

Norm Muller: Well, I moved to Worcester, Massachusetts, from San Diego in 1975 or 76. I'm a painting conservator and I got a job at the Worcester Art Museum. While I was there, somehow, I met Malcolm Pearson. He was the former owner of the Upton chamber and also formerly owned America's Stonehenge in New Hampshire. We went on some trips together. He took me to Putney, Vermont, to the chamber that one enters through the roof.



Norman Muller.
Photo by Peter Anick, 2018.

When we visited, Jim Whittall and others were doing excavations around the chamber. Being new to all of this, I just listened.

I wasn't heavily involved in the study of Indian stonework

at that time. What I was really focused on was the study of early Italian painting techniques, but the subject of enigmatic stonework captured my attention. At the Putney chamber, Whittall passed around artifacts to show me, but I thought, "Well, they don't look like anything to me." So I really discounted a lot of what they were saying at the time.

Malcolm took me to the Morrill Point mound, which was also being investigated by Jim Whittall. That's a Maritime Archaic site that is very, very important. Jim Whittall was excavating it without authorization. He had done a fair amount of work, and very good work, apparently. According to some of the archaeologists I heard from, his approach was very sound. He was very methodical and careful to record everything. He had also tried to date the stones. There's a set of boulders, one after the other, in a row at an angle that partially encloses the mound, and Whittall dated the soil around the boulders.

Where is the mound located?

Near Newbury, Massachusetts, along the coast, near the mouth of the Merrimack River, I believe. It's very well-known, in fact, one of the films that Ted Timreck did focuses on that particular mound.

They uncovered some Maritime Archaic artifacts going back nearly five or six thousand years or more. Jim Whittall was asked to leave the site when the owners of the property found out what he was doing.

After meeting Jim Whittall and Malcolm, I met Barry Fell, probably in 1977. There was a conference up in Vermont and Barry Fell was one of the speakers there. They were discussing the chambers in Vermont, and whether they were ancient, or whether they were just built by the farmers. Fell claimed that some of them contained ogham inscriptions. I didn't attend the conference, but I have the book of the talks that were given at the time.

Was that the Castleton Conference? [Castleton Conference on Ancient Vermont, Castleton Vermont, 1977]

Yes.

So that's how I got started. But then I moved down to Princeton, where I've spent the past thirty-five or six years. I belonged to the Thoreau Society, and sometime in the 1990s, I heard from Steve Ells, a Thoreau scholar who lived in Lincoln, Massachusetts. We corresponded by email and

he asked me if I knew anything about the Estabrook Woods [in Concord and Carlisle, Massachusetts.] I remembered I was involved with an orienteering group when I first moved from Montreal to Boston around 1970, and I had set up a course in Estabrook Woods. During the process of setting up, I came across a log structure, hewn logs. Steve asked me if I could show him this log structure. It was maybe 1995 or '96. When we walked in the Estabrook Woods and finally found the structure, it didn't look like anything that I had recalled. It was all knocked down and everything. On the way back he said, "Are are you interested in stone structures, unusual enigmatic structures? There's one here in the Estabrook Woods and I can show it to you." We followed a colonial wall along the base of Hubbard's Hill. Integrated into the wall was an above-ground chamber of some sort, without the roof. The walls were slanted. The entire feature was fascinating.

Then he told me that Mark Strohmeier had written about the chamber and gave a report to Harvard University, which owns the land. Steve said if I wanted to know more about the chamber, I should write to Mark, which I did when I got home. I never met Mark. We only had a few long telephone conversations about the different things he found. What I recall from our conversations is that his voice was quivering—very emotional—when talking about the stonework he had found. He said, "Read *Manitou*. You've got to read *Manitou*. Read it! After you've finished it, call me back."

I bought the book, and after I read it, I called him back. He said, "You've got to meet my high school friend, Fred Werkheiser, who lives in Bethlehem, Pennsylvania. Fred knows a lot of sites." Fred owned a shoe store in Nazareth, Pennsylvania.

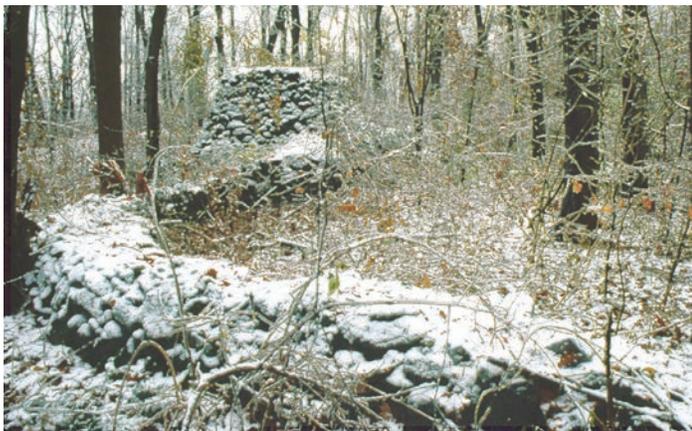


Figure 1. A curved wall and cairn at the Oley Hills site in Pennsylvania. Photo by Norman Muller, 1997.

So I met Fred around 1996, and he took me to some sites, one of which was Scot Run in Pennsylvania. Another one was around the Delaware Water Gap. At one point later that summer at his store, he showed me photographs of a site in Berks County, which I called the Oley Hills site. He had been there many times and thought it was a magnificent site. He showed me some photographs of the features there, and I thought, yeah, it looks interesting.

Early November—1996, I think it was—we drove in his truck to Oley Hills to the base of the hill. We went up the back way and he showed me these features after an ice storm in November. It's spectacular. There's a stone mound with a curved wall leading to it. When I saw it at that time, with all the ice covering it, I thought, "My God, it's an incredible site." The ice, of course, made it look more impressive than it does without it, but it's still an awesome site. I thought, "I've got to learn more about this site" (Figure 1).

I corresponded with just about everybody. I corresponded with the state archaeologist, who at the time wrote back saying that it looks industrial. Of course, they were all pooh-pooing this idea that the Indians built with stone. Then I invited other people, archaeologists, up there. There was a conference in 2002 that Fred organized, which focused on the Oley Hills site, where people came up from the Archeological Conservancy from Washington. Some gave presentations. I gave a little talk at the time. But still, most people in authority discounted it as an important site.

What did they think it was?

Colonial.

But what was it serving in the colonial context?

They didn't talk about that. The authorities were not interested in the features at the Oley site since they, the archaeologists in Harrisburg, thought everything was colonial. That was it. Case closed. Except for a small handful of archaeologists, such as the late Jim Peterson from the University of Vermont, who had an open mind and was not afraid of searching for the truth.

So that's where it began and ended.

Just a little more on that. Was there a farm or some colonial structure there?

Below the hilltop. There was nothing on the ridge itself. It's very rocky. There was farming down in the valley below, but not on the summit, the ridge top. I mean the soil is very, very thin, and it's really crummy. In fact, the person who first bought the farm, a Christian Abentschon back in the early 1750s, owned the land for ten years, and then he disappeared. He left the area, never paid his debt. The whole thing became a legal mess until the 1870s, when the people who owned the land around there decided to straighten it out. Christian Abentschon was apparently just tired of not making ends meet. Certainly he couldn't farm the ridge. There was nothing to farm. The soil was just too poor there to farm. I think he just had it. Christian Abentschon left Pennsylvania and moved to North Carolina to farm. He just moved away and abandoned his property.

Did you ever check to see what was down there in North Carolina?

Well, that's for another lifetime. My lifetime, it's sort of running out, you know.

Around 1997 or '98 I invited a state geologist to the site,

William Sevon, Bill Sevon. He came up with his wife and that was one of the most important meetings I think I had regarding the site. He looked at the big boulder on the top, which is actually the heart of the site, and he said, “You know, I think it originally rocked.” I found his comment really interesting.

He also said that the quartz that you find incorporated in some of the cairns up there came from the valley below. The ridge itself is granitic gneiss. He said that you won’t find any dikes of quartz up there. He said quartz definitely had to come from the valley below.

He also said that the Wisconsin glacier ended its southern movement twenty miles north of Oley Hills. So the glacier didn’t dump rocks and unusual stones like quartz at the site. That didn’t occur.



Figure 2. A tor at the center of the Oley Hills site in Pennsylvania. Photo by Norman Muller on his first visit, 1997.

He called the big boulder on the summit a tor, which is an outcrop that has weathered in place (Figure 2). It turns out that the stone of the big boulder is the same as the base rock, as the ridge itself. There’s nothing that’s unusual about that.

But, unfortunately, archaeologists don’t seem to care about knowing this stuff. They’ve got their minds set that all of the unusual stone features are colonial. “No matter how much you throw at us, we’re not gonna believe it.”

So that’s where it’s been for me for these twenty-something years that I have been involved in this site.

I had a date for some cinder samples we found at the base of



Figure 3. An analysis by thermoluminescence dated this sample from the Oley Hills site to 1200 years BP. Photo by Norman Muller, 2007.

the terrace, scattered among stones that had collapsed. The cinder samples were odd (Figure 3). I brought one of them to a friend of mine, and he said, “Ah, that’s from a coal fire.” But then I talked to another friend of mine, a conservator at the Freer Gallery, who suggested I send them to Robert Gordon, an archaeo-metallurgist professor at Yale, which I did. He wrote back that the cinder was from a clay-lined hearth that contained a very hot fire. It also had bits of shale, limestone, and other stuff mixed in with the froth. One of the cinders was sent to Victor Bortolot, who does thermoluminescence dating in a lab in Connecticut, or did. He’s probably still there. He performed TL on one of the cinder samples and he came up with a date of about 1200 before the present time. But, he said that because no research has been done on these kinds of cinders, the date was only tentative and not a hard piece of evidence.

But why wasn’t he satisfied with that?

Because he said he had never worked on stuff like this, and because it wasn’t all clay—other stuff was mixed in with this froth—he hadn’t really worked on this stuff before.

You had a cinder that had some clay with some other stuff mixed in with it. The cinder I would think was wood or something? What was the cinder composed of?

He didn’t analyze that. He said it was from the lining of a clay-lined hearth.

So how big are we talking?

Size of a walnut, or smaller. And they were all found at the base of this feature called the terrace. I found one of them on the surface, in a cavity at the top of the terrace, one of the cinder samples. So I knew that the cinder samples that were below must have been part of the terrace, probably at the very top.

It’s because of this one date I have through thermoluminescence and the fact that I think this site is so important, that I wanted to pursue this new method of dating, OSL dating, because you can date stone. They have done that in Greece and have come up with really accurate dates for features that they already know a lot about.

A Greek scientist who does OSL dating put me in touch with Jim Feathers at the University of Washington, who’s the top expert in this technique here in the US. He told me how to obtain a sample. I followed his advice and, in June [2018], a small group of us went out to Oley Hills, to the terrace. The landowner, who was very nice, fortunately allowed us to take two sets of samples from the hole that was dug in the surface of the terrace. We got stones from about a foot below the surface, and we had to do all of that in the dark, using only red light. I bought a light-proof Coleman tent, but to make sure it was light-proof, we put some tarps over it. We cut a flap in the floor, pulled it back, and that was the access we had to the surface. John Waltz, a friend of mine, obtained the stones. They were

very carefully wrapped up in black plastic, so that no light would expose them, and then one set was sent to Jim in Washington State. He'll probably analyze them in June or July [2019]. Hopefully, we'll get a date, which I think will confirm the date that I already have for the cinder sample.

Are there more cinders still in place up there, do you think? Because that might be another thing worth doing archaeologically, pull stuff out so we have the provenience of it and you could date that.

Yeah, I think that's what I would do. I think very carefully removing some of the stones—it's about a foot-layer thick of these small stones and on top of bigger stones that comprise the structure of this feature.

So that's the heart of the site, the boulder and the terrace. Plus there is a wall that curves around in front of the boulder. There's nothing like it. I know of no other site like this, and I've travelled quite a bit in the Northeast. To me it's really important, so my main focus has been on that for the past twenty years.

I explored the rest of the ridge. There were two other sites on the ridge, south of the main Oley Hills site. They're smaller, but they're still important. One of them has a series of small sections of wall linking boulder to boulder. I have been put in touch with Philip Smith, who wrote an article for the University of Georgia in 1962 about indigenous walls in Georgia. He was a graduate student in anthropology at Harvard University back in the 1950s, and for two summers he worked with Arthur Kelly, who was the founder of the Department of Anthropology of the University of Georgia and was also interested in Indian stonework. He had Philip Smith do this report on the walls in Georgia. One of the comments that Philip made at the end of his report was that the walls seemed to emphasize outcrops and they linked boulder to boulder. When I heard that, I thought back to this feature at the Oley Hills site at the south of the main site, where you have this wall linking boulder to boulder (Figure 4). I've kept that in my mind as I've been traveling around.

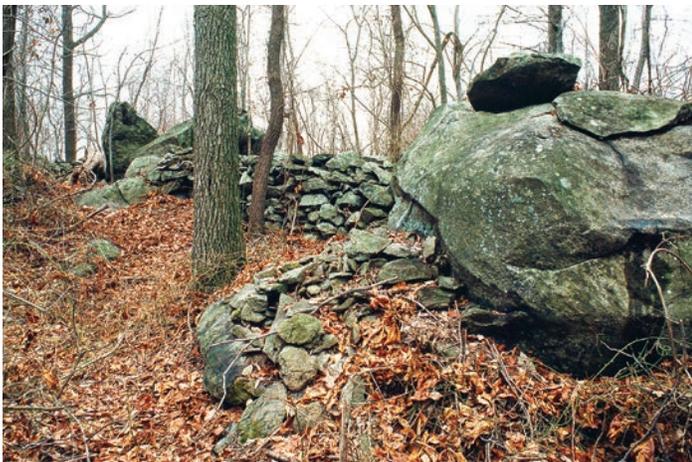


Figure 4. A wall links major boulders at the Oley Hills site in Pennsylvania. Photo by Norman Muller, 2008.

Also, I was interested in the structure of the main cairns at the Oley Hills site. They're really well made and flat on top. I kept thinking, well, where else are these cairns with flat tops? And so I've traveled around. I went to Montville, Connecticut, and I found some wall sites there that reminded me of what I found at the Oley Hills site.

How did you know where to go?

People contacted me or I got in touch with them. In Montville I met a young lawyer, Jon Chase, who's also a historian. He studied colonial history at the University of Connecticut. And I have met people over the years, I don't know how. They all fall together.

It seems whenever I'd run into you, you were always chasing something down.

There was another Chase that I met, I think unrelated to Jon, who showed me the Montville complex, an area in Montville where there are these two unusual stone chambers. At the very top of one, in the center, is a quartz cobble embedded in the soil. Outside, I found later, there's a stone circle adjacent to the chamber, a large stone circle about five feet across.



Figure 5. A flat-top cairn in Brooklyn, Connecticut. Photo by Norman Muller, 2005.

When you say stone circle, you're talking about just a ring of stones?

Yes, cobble-sized. But they're embedded in the soil to a certain extent. It's not recently placed on the surface.

My main focus after Oley Hills was trying to find out where else are these flat-top cairns? I found in Brooklyn, Connecticut, an incredible flat-top cairn, that's about 45-feet long in one direction, seven-feet high, not in great shape (Figure 5). But it's incredible. And there are two other cairns around there, more or less flat-topped.

When I went up to Vermont, to Rochester, I found a whole slew of them. But there are more there in Vermont than what you find in Rochester. I think now that these flat-top cairns were inspired by the earthen, geometric mounds in Ohio.

There is a geometric earthen mound in Great Barrington, Massachusetts, next to the Housatonic River. There's a wonderful LiDAR image, which shows the beautiful shape of it (Figure 6).

The short way goes west, east. The long way is north, south. It's thought that this earthen mound was a glacial

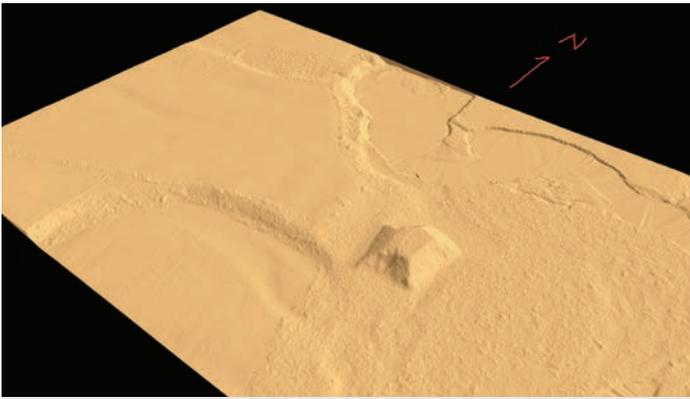


Figure 6. A 2015 LiDAR image reveals a prominent rectangular mound near Great Barrington, Massachusetts. [MassGIS Data: LiDAR Terrain Data Index, 2016]

kame that had been carved to this particular shape. Certainly, soil had to be added to it. There was a fellow in town in the 1960s who quarried at the mound and found, like eight feet down, a layer of willow twigs. He went down another eight to ten feet and found another layer of twigs. And he kept these twigs in mason jars in his house. I heard this all from Jim Parrish. I thought, gee, I've got to find those mason jars. Well, the man died and apparently his house was sold and everything—mason jars, you know, they heaved them.

So at least we know that this type of material was incorporated into the mound, probably to stabilize it in a certain way. The Indian authorities don't want anything touched. I've gotten wind that, no, you can't dig into this mound anymore, but I think some digging can be done responsibly, because we need dates. How old is it? How are we going find out a date for it if we can't obtain material that we can date?

But what we need, for all of this kind of work we do, we need dates. And once we have some dates, that's something for a good case.

Yes, so you were up at the Smith site in Vermont? The farm? And you said that they did do a study of that not too long ago?

Like a year or two ago. University of Vermont came down to assess.

What did they conclude?

They studied a small number of cairns. They were only there for about a week. John Crock was one of the archaeologists in charge. He wrote this report, which was submitted to a Green Mountain National Forest archaeologist, who hasn't acted on it, but the report more or less concludes that the cairns that they studied are agricultural in nature.

And on what basis was that?

They simply concluded that the mounds were "agricultural" because they are on abandoned farm land. The archaeologists simply can't accept that unusual stonework predates the colonial occupation of the land, and so they twist their

evidence into knots to fit this preconceived notion. Yet the site is loaded with deliberately placed quartz, and manitou stones are found here and there. This the archaeologists don't bother to address.



Figure 7. Norman Muller in front of a cairn at the Smith site in Rochester, Vermont. Photo by Pete Muller, 2015.

There were two people who were also investigating the site, one of whom was Una MacDowell, who's from Northern Ireland and trained as an archaeologist, and Phil Hilts, who was a science writer. He was in charge of the journalism department at MIT, I think. The two of them together had studied two of the cairn sites on West Hill, one of which is the Schenkman site that contains the wall over the stream, an incredible site, and then the main Smith site, on which they have recorded about 160 different structures of different sizes and shapes (Figure 7).



Figure 8. A page from the Smith Farm Daybook, 1847. Photo by Norman Muller.

I did a study of the deeds for that property, putting all of them in order. It turns out that when it was first bought by Smith in the early 1840s, only four acres of land had been cleared. The cairns, of various sizes, extend over an area of fifty or sixty acres. That, to me, is proof that these things were not built after Smith moved there. Plus I found his daybooks (Figure 8). I went through them very carefully from the 1840s to the 1880s and 90s. Nowhere is it mentioned building anything with stone—no walls, no nothing. So it didn't occur, although the stuff predates the occupation of the hill by the colonists.

Did it talk about him using the land where those cairns were for anything?

In his daybooks he mentions exactly the kind of operations that he was doing at the time. He was cutting a lot of wood for charcoal, charcoal burning. Plus he had various crops.

The slopes where most of the cairns are—I think that was used for hay, because the archaeologists found a rusty scythe on the hillside there. [For more about the Smith Farm, see “An Historical Analysis of the Smith Farm and Stone Mounds, Rochester, Vermont” by Norman Muller in *NEARA Journal*, Volume 48:2, Winter 2014]

What do you think of all the archaeoastronomy that's been done on these sites?

I'm really not into archaeoastronomy. I've read some articles about it, and I think it's not being done in a very methodical, careful way by people in NEARA. There's probably something to it, but we live in an area where it's mostly cloudy throughout the year—I think we have like 280 days of cloudy days, and plus, we have a lot of trees and shrubs and things which obscure the sky. It's not that the Indians were unaware of the sky. They certainly were. The use of quartz, the way it's been used in some of the features, it's certainly a reflection of the sun and the moon. But in terms of archaeoastronomy, I just don't buy it. I have this article written by an astronomer up in Vermont, which was published in *Vermont History*. [“Archaeoastronomy in Vermont” by Gary D. Parker in *Vermont History Journal*, Volume 50:248-255] He addresses some of the claims that Mavor and Dix had made for the chambers up in Vermont. He says it just doesn't work that way. So I've taken his word as more important than Mavor and Dix, because he's very methodical.

I just don't buy all of this long distance alignment. I think it's just a lot of nonsense. Like the “Hammonasset Line” [a series of lithic sites running from Long Island through Connecticut which amateur researcher Tom Paul has proposed were intentionally constructed along a virtual line oriented to the solstices.] I just say, well, how do you do it? If you're on Long Island, how do you determine a point on the other side of Long Island Sound? How is it done? What if you go a quarter-mile either north or south, you'll probably find a similar line of features, eventually.

I think a lot of that is unfortunate. The Upton chamber is an important site, but not as a foresight for the cairns on Pratt Hill. I think that whole idea of building something so enormous as a sighting platform for some stone mounds on a hill a mile away, so you can see the sky—I don't think you can see anything from the inside of that on a dark night. I'm sorry. Plus you have all the trees. Mavor and Dix have claimed the land between the chamber and the mounds on Pratt Hill was cleared. What evidence is there of this? We don't know.

A thing about Thoreau, he could go in the woods and tell what time of the year it was, the month, even the week, based on things he saw growing—plants, animal actions, things of that sort. There was an account in *Connecticut's Indigenous Peoples* by Lucianne Lavin. She mentions how she was interviewing some Native Americans in Connecticut and they said that this whole thing about building things to determine the time or time of the year, no, they didn't

do that. Well, that's exactly how I think, too. They didn't have to do that.

Herman Bender wrote a couple of wonderful articles for the *NEARA Journal* pointing out this thing of time. More members should read that article [“Archaeoastronomy Investigations on Petroform Sites in the Mid-continent of North America, a Common Sense Approach with Commentary” by Herman Bender in *NEARA Journal*, Volume 47:1, Summer, 2013], and think about what he's saying, because he's more or less saying the same thing.

I've never gone in that direction. I've focused on a small area of these stone mounds and looked at it from: What can I learn from all of this stuff? What does it tell me? I know that these particular structures are found throughout New England, meaning the flat-top mounds.



Figure 9. A “lace wall” in Ashfield, Massachusetts. Photo by Norman Muller, 2014.

I'm interested in walls, too. There is a lace wall I visited in Ashfield, Massachusetts. It's a quarter mile long, and three-quarters of a mile from a road.

It runs along a stream, right?

For a while. Of all the lace walls I've seen, that's the most incredible one I've ever seen (Figure 9).

So what do you think of that? What do you make of it?

It's definitely Indian.

Why is that?

The way it forms, the way it goes out of its way to connect with boulders, to outcrops, to ledges, and things like that. That's exactly what Philip Smith was describing.

Not all walls are the same, of course. There were walls at the Oley Hills site not like lace walls. They don't go from boulder to boulder.

Have you ever run into petroglyphs in any of your explorations?

No, I haven't, except at the Bob Miner farm [Hopkinton, Rhode Island]. I was shown this circle. I think that's natural. Some of them have may have been enhanced. But then I found a figure eight on the side of one of these boulders that have not been eroded. I don't believe they're petroglyphs. In fact, I wrote to Robert Bednarik in Australia, who was the

expert on rock art. He wrote this long article on cup marks. So I sent him photographs of a site that's in Holliston, Massachusetts, of what look like cup marks underneath one of the boulders.

Ah, yes. I think I know what you mean.

I had a problem with thinking of them as cup marks, because I don't think the boulder has been moved at all. And yet this material, these cup marks, seems to be underneath such a small portion that you're not going to be able to make a cup mark underneath there. He thought that this was all natural, formed when this boulder was embedded in ice, and probably moved around a bit and ground. And all of these so-called cup marks were formed at that time. That's a more logical explanation for this than somebody trying to make cup marks.

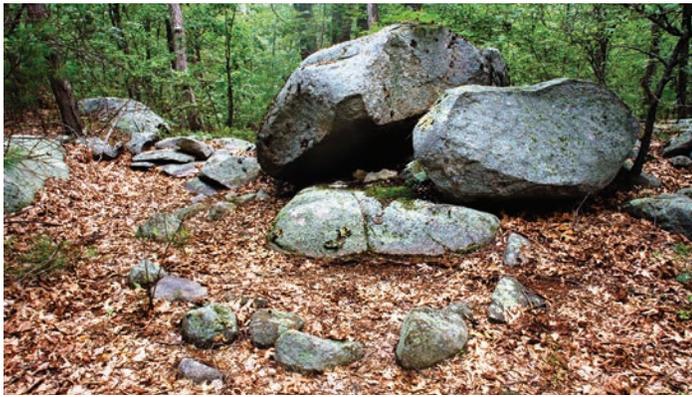


Figure 10. Stones encircle this boulder grouping in Holliston, Massachusetts. Photo by Norman Muller, 2006.

I found stone circles at the site in Holliston (Figure 10), one of which forms a perfect alignment with two quartz pieces embedded in the soil, which then aligns up with one of the big boulders, one of the four or five in a row. This is the only alignment that I really believe, because I can see it.

How big a circle are we talking here?

I'd say it's about six feet, five and a half feet, six feet.

Is it filled in all the way around?

I'd call it a petroform. Stones are resting on the ledge itself, but placed in more or less a circle. There are four boulders in a row, and they're all connected by short sections of stone, like a wall. One of the boulders has split. They're good, big boulders. There's a semicircle of stones that has been constructed around, outside the boulders, connecting the two, which is exactly what I found in Pomfret, Vermont.

On this hill, which overlooks the Suicide 6 ski site in Pomfret, there's a split boulder with a semicircle of stones around it. The stones touch one another. The stone that's next to one of the split halves is quartz. The other stones there are of gneiss. I've looked at it and thought "that construction is actually telling me something." It's telling me that there's energy being transmitted from one stone to the other.

Quartz has been used by Indian shamans forever and it was

considered like frozen light. It was called the sun's semen. It was the color of the moon. It had this important quality to it. Plus, if you rub two smooth pieces of quartz together that you may find on the beach, you come up with, not a light from striking it, but something called triboluminescence. It's a glow, a white glow that comes from stressing two pieces of quartz together, not hitting them so you get a spark.



Figure 11. Quartz slabs on a crescent-shaped feature in Rochester, Vermont. Photo by Norman Muller, 2010.

That's a quality that the Indians knew about. They would keep pieces of quartz in a little bag they would carry around them to give them power, force, from it. So quartz had a lot of flow to power.

At the Smith site in Vermont there's a feature, which some people call the boat. Well, I say it's not a boat, there's no water around here. I call it a crescent, like a crescent moon. At the top center of this feature—it was 30-something feet long and about three feet high—are these two stacks of quartz, slabs of quartz, one on top of the other (Figure 11). They come from a seam of quartz about a hundred and fifty feet away from this. Slabs of this material have been found at two or three other sites on the Smith site. It was deliberately incorporated in some of the other cairns at the site, because it had this incredible quality.



Figure 12. Rare example of a wall built over a stream on West Hill in Rochester, Vermont. Photo by Norman Muller, 2007.

In fact, Ted Timreck pointed out there's a spring that actually emanates from one end of that quartz seam. That, too, makes it very powerful.

In fact, a wall over a stream is one of the most incredible sites I think I've ever seen up there (Figure 12). There is a substantial wall that was built on top of the stream. But first a stone culvert was constructed to contain the little brook, and then flat slabs were put over that, and then they built the wall on top of that. So you see it curves up to the slope—wow!

I first showed it to a friend of mine, an expert on pre-Columbian art. I took him up to the Smith site. He said, "You know, that represents a water serpent." The others didn't know what the hell to say, when he mentioned that. I think he's probably absolutely right.



Figure 13. A turtle petroform at the Bob Miner farm in Hopkinton, Rhode Island. Photo by Norman Muller, 2006.



Figure 14. A turtle petroform at the Francis C. Carter Preserve in Charlestown, Rhode Island. Photo by Larry Harrop.

I'd also like to point out a petroform that I found on the Miner farm, among some cedar trees. Petroforms are boulder outlines—circles are common—but at the Miner farm I found what I believe is a petroform turtle (Figure 13). The ledge it is on is covered with moss and lichen, and the petroform itself is heavily patinated with lichen. I believe this feature is very ancient. I'm reminded of

another petroform (Figure 14) that Larry Harrop found in a vernal pool in Charleston, Rhode Island, after the water had evaporated. More attention should be given to this kind of stone feature.

Remember we were talking about you had known somebody who had made some cairns? What's the story behind that?



Figure 15. Modern cairns in Knoxlyn, Pennsylvania. Photo by Norman Muller, 2011.

Yes, in the town of Knoxlyn, Pennsylvania. Bill Sevon, the geologist, told me about this. He was driving around and spotted these things in this guy's backyard. I went there and it turned out that the owner's father or grandfather built them in retirement. They're incredible (Figure 15). There wasn't much lichen on them, which is a clue that they weren't that old. But impressive.

So you can't always accept that if you find a big cairn that it was built by the Indians. It might have been built later. The Gages [Mary and James Gage] have come up with that book, *The Land of a Thousand Cairns*. They conclude that some of these features were built during the colonial period. The Indians were still around and they were still practicing their old ways. You know, I don't think it's cut and dried like that. I'm sure a lot of those cairns predate when that area was settled.

So in terms of your advice to what NEARA should do, the dating seems like the top priority, I guess.

Of course. All of this is just talk. I've done a lot of research in my life. I've written like three dozen articles of various types in the work that I did as a conservator, study in ancient early Italian painting techniques. I've worked in libraries most of my career, and I know the kind of thing that really makes sense. For NEARA, what makes sense is to come up with some dates. What's the point of doing it? It's fun, yes, but I have a different mindset. I need to know that I have some real information on what I'm looking at. What is it? How old is it? Who built it? Things like that. ❖