

## FROM DISASTER TO DELIGHT

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When I first visited the French River Chamber in North Grosvenordale, Connecticut (**FIGURE 1**) during the summer of 1984, there were indications that its structural integrity had been deteriorating for a while. In the process of excavating for the foundations of a nearby condominium development, dynamite had been used.

The vibrations had weakened the chamber's sidewalls, shifted the capstones, and cracked the lintel above the entry (**FIGURE 2**).

With the owner's permission, I reinforced the sagging lintel with 5 iron supporting bars (**FIGURE 3**). To insure that neighborhood kids wouldn't endanger themselves, the owner installed a wooden frame and doorway to secure the entryway.



**FIGURE 1.** FRENCH RIVER CHAMBER, SUMMER 1987.



**FIGURE 2.** CRACKED CAPSTONES.



**FIGURE 3.** IRON RODS SUPPORT BROKEN LINTEL.



**FIGURE 4.** NEARA FIELD TRIP DISASTER, SPRING 1997.

The 1997 NEARA spring meeting was held in nearby Woodstock, Connecticut. The owner gave me permission to show this classic, oval-shaped, drywall chamber as part of our traditional Sunday field trip. Approximately 30 fellow members gathered around as I opened the door. Unbeknownst to me, the broken lintel had sagged more and was only being supported by the door and frame. Creak, crack, crunch!

As the door opened, the two lintel halves plummeted to the ground and the entire left supporting wall crumbled to my feet (**FIGURE 4**). I turned to see the crowd gasping in unison. It was truly a preservationist's nightmare.



FIGURE 5. TEMPORARY LALLY COLUMNS.



FIGURE 6. WHAT A MESS!

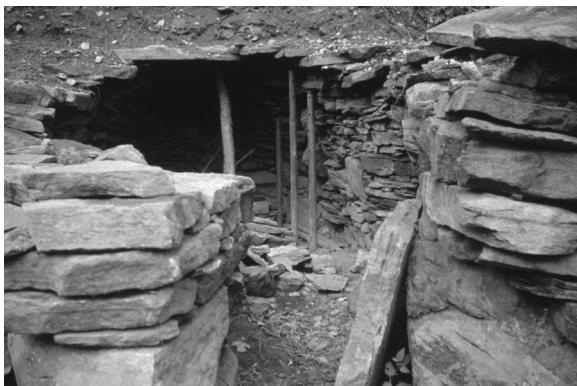


FIGURE 7. CAPSTONES REMOVED.

Before reconstruction could start, we realized that we had to deconstruct further. There were numerous “about to fall” rocks in the upper corbelling. The dirt mound on top was removed with shovels, the cracked capstones were slid off, and unstable sidewall rocks were removed (FIGURE 7). Fortunately, the rear of the chamber and most base rocks were intact.

I assured the perturbed owner that the situation would be corrected, then tried to figure out how. With the able assistance of Connecticut coordinator Doug Schwartz, we submitted a reconstruction plan to NEARA and the owner.

We immediately installed adjustable steel lally columns to stabilize the precarious capstones (FIGURES 5, 6).

Using existing photo enlargements, we identified the major rocks and coded them with painted numerals (FIGURES 8, 9).



FIGURE 8. CODE NUMBERS PAINTED ON ROCKS.



FIGURE 9. PHOTO ENLARGEMENT WITH CODE NUMBERS SHOWN.

Expert stonemason Rick Deojay, who appreciated the importance of this lithic structure, spearheaded the reconstruction effort. Our burly mentor had the knowledge, experience, and all the right tools of the trade. NEARA members Ken di’Giuseppe and Joe Knight, and my son, Alex Egan, along with several other volunteers faithfully gave weekend days and skin from their knuckles over the next few years of the process.

An access trench was dug just outside the perimeter, so that the walls could be rebuilt soundly (FIGURE 10).



FIGURE 10. PERIMETER ACCESS TRENCH.



FIGURE 11. RECONSTRUCTION BEGINS.

Rick stressed the importance of chinking, jamming small rock pieces into the cracks between the larger rocks. Soon we were ready to replace the lintel and capstones (**FIGURE 11**).

A 30-foot oak tree trunk served as a lever on a 5-foot oak post, which acted as a fulcrum. An iron chain connected the lintel to the end of the lever. Amazingly, with the weight of several people, we easily hoisted the new 500 lb. lintel and gently maneuvered it into place (**FIGURES 12, 13**).



FIGURE 12. 30-FOOT LEVER HOISTS 500 LB. LINTEL.



FIGURE 13. MANEUVERING LINTEL INTO PLACE.

New capstones were carefully placed over the corbelled sidewalls. To prevent future shifting or water seepage, we cemented between some of the capstones, where the mound was certain to conceal it. Then the mound of dirt was replaced and ground cover was planted (**FIGURES 14, 15, 16**).



FIGURE 14. REPLACING CAPSTONES.



FIGURE 15. CEMENTING GAPS TO PREVENT WATER SEEPAGE.

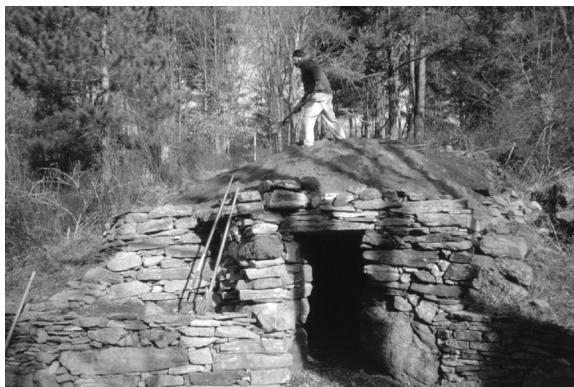


FIGURE 16. REPLACING THE DIRT MOUND.

The chamber was now “as good as old” (**FIGURE 17**). The process of planning, getting materials, and organizing volunteer days took about 5 years. The owner was fully appreciative and delighted with the result. So, what started as an embarrassing disaster is now a feather in NEARA’s preservationist cap.



FIGURE 17. “AS GOOD AS OLD”, SPRING 2002.