ABSTRACT

Based on eyewitness and historical reports, the decimated remains of an old Jewish bathhouse and mikveh, or ritual bath, are believed to be buried in the back yard of a home in Ponedel, Lithuania (Figure 1). Using ground penetrating radar (GPR), we examined the site during the summer of 2018 in order to determine the validity of these claims, map out any potential structures, and determine whether or not any further archaeological action is justified. During World War II, the Nazis and non-Jewish Lithuanian militia murdered about 90 percent of Lithuanian Jews in a span of about three years (United States Holocaust Memorial Museum, 2019). Thousands of Jewish cultural structures were destroyed all around the country. Research such as this allows for Lithuanian Jews to reclaim some of their lost history and locate potential locations for memorialization.

INTRODUCTION

Prior to World War II, parts of Lithuania served as prominent centers for Jewish culture. The Lithuanian Jewish population reached about 160,000 – about seven percent of Lithuania’s total population (United States Holocaust Memorial Museum, 2019). During the summer of 1941, Germany invaded the territories of the Soviet Union, which had absorbed Lithuania in 1940. With Germany’s newly-established occupation of Lithuania came three years of genocide and cultural degradation by the Nazis; a continuation of the prejudicial actions of the non-Jewish Lithuanian militia who came before (Freund, 2019). By the end of the summer of 1941, when most of the killing was complete, many of the Jewish Lithuanians living in rural areas had been executed. By November of that same year, the Germans had murdered most of the Jewish people who had been forced into the ghettos of the larger cities. During the German occupation, Lithuania had suffered one of the highest Jewish genocide rates in all of Europe (United States Holocaust Memorial Museum, 2019). Synagogues and other structures of Jewish cultural significance had been destroyed, vandalized, and decimated all around the country; including the famous Great Synagogue of Vilna, hundreds of Jewish cemeteries, and ritual bathhouses. The objective of this research is to determine the exact position and layout of a culturally-significant structure, known as a mikveh, within one of these bathhouses located in the small community of Ponedel. Ponedel is located in Northeastern Lithuania, and held a small population of 611 Jewish Lithuanians in 1923, according to the most recent records (JewishGen, 2019). This structure is called a mikveh, a constructed pool or bath of natural water in which people can be submerged in order to purify themselves after becoming ritually unclean, according to the Jewish faith (Freund, 2019). A way in which someone might become unclean is through coming into direct contact with human remains (Freund, 2019). Though the mikveh has been lost to time and buried, a hand-drawn map from 1934 indicates the structure’s former location (Figure 2). Today, stone sections of the structure can be seen sticking out of the sides of a large mound located in the backyard of a modern Ponedel home.

METHODS

Using a Sensors and Software pulseEKKO GPR system with 500 MHz antennae, a roughly 14 m x 13 m grid was collected across the hill covering the Ponedel mikveh (Figures 3 and 4). Fifty-three parallel lines were collected at 0.25 meter line separation. Fifty-two of the lines are shorter than 14 meters as a result of obstructive vegetation or other physical impediments. A large fire pit sat atop the hill, reaching a diameter of about 4 meters. Stones and metal piping were exposed along one side of the pit. Topographic measurements of the site were collected using a Topcon RL-H4C laser leveling system. Cartographic mapping of the location was conducted by Dr. Phil Reeder, of Duquesne University, through the usage of a Total Station. Line arrangements, data processing, and three-dimensional rendering of the collected GPR datasets was completed via GFP Edit, EKKO_Project Sliceview, and Voxler, respectively.

RESULTS

Upon examination of the processed datasets collected at the mikveh site in Ponedel, abnormalities in the stratigraphy are visible at about 1 meter in depth (Figure 5). Abnormalities are indications of the presence of something that does not match the natural soil composition surrounding it. The long, thin, angular shape, size, and locations of these obstructions indicate the presence of wall foundations, rectangular in shape. These foundations are about two meters thick. These anomalies span across a majority of the grid, indicating a length of about 14 meters along the Y-axis, and a width of about 11 meters along the X-axis. While the presence of this mikveh is confirmed, the site does not provide researchers with enough archaeological substance for a complete excavation to be recommended. With the data gathered by our team in Ponedel, the site may now be recognized or memorialized by the Lithuanian government or Ponedel community and the property owner. This memorialization might be accomplished through the installation of a physical marker, or established protection of the site as a whole.

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