(TITLE SLIDE) INTRODUCTION

During the late 19th and early 20th centuries, the creation and use of mineral spring resorts was on the rise; people from Kentucky and the neighboring states would come to visit the spring resorts and partake of their natural mineral waters via road or river packet or steamboat as well to enjoy the other services and activities offered at the resorts. These mineral spring resorts existed in many counties in Kentucky, many of which were located in the Bluegrass Region which coincidentally is where the majority of previous archaeological work as been done. This research represents a detailed synthesis of the archaeological data collected about one resort, Massey Springs in Warren County, Kentucky and is the basis of my masters thesis. This paper will first begin with a brief history of the history of mineral spring resorts in Kentucky as well as the mineral spring resort industry in Western Kentucky. It is important to note here that at last year's KHC Archaeology Conference, I gave a paper on Massey Springs Mineral Resort, however it focused on the relationship of archaeology with vernacular architecture. This paper will look more specifically at the archaeology that has been done at this site, the conclusions of those methodologies, and future implications.

After the brief history of the industry and the site, we will move directly into the archaeological aspects, including multiple techniques of absolute and relative dating and locating features using other tools like metal detectors. In this section, I will discuss how methods were used and applied to the site. Later, we will return to each method and the findings of each. This paper will end with a final section on what this research means to not just archaeologists, but professionals of other fields

such as vernacular architecture and folk studies, and how other professions could use this research in their own studies.

HISTORY OF MINERAL RESORT SPRINGS IN KENTUCKY

TIMELINE SLIDE

Natural mineral springs have been used by humans since the earliest recorded times, this includes native Americans and the earliest settlers that made their way into the area. However, resorts associated with these springs began to flourish in what is known as the Postbellum subperiod of the history of Kentucky, or between the years of 1865 to 1915. In the most general sense, this was fueled by cultural changes during the Postbellum subperiod, for example the movement of foreigners into the western Kentucky area, including the area of Warren County and the counties surrounding it. In the case of this paper, many of those counties are those that have or had mineral spring resorts.

Coleman states this time period as being part of the 'gay nineties' in which there was a renewed interest in watering holes across the area and many new resorts associated with these springs began to pop up across Kentucky. This seems to be true; many of the mineral spring resort began to pop up at this time across western Kentucky.

Even though there is such as historically rich base, there is little written work on the mineral spring resort of western Kentucky. Darlene Applegate, as part of a literature review, compiled a preliminary synthesis on one mineral spring resort, Massey Springs Resort, which will be discussed more later. At this point, Darlene Applegate and I have begun scouring the archives of various counties in the south-

central region of Kentucky in search of mineral spring resort hotels. As part of a second project, we hope to compile an inventory, of sorts that lists all the mineral spring resorts in the specific counties in our search area. Currently, our search area is comprised of 26 counties and we are dividing them between ourselves. In our search, we are looking for mineral resort hotels along with any information that could help us when thinking about the importance to these sites and this industry to the history of Kentucky.

MASSEY SPRINGS MINERAL SPRING RESORT HOTEL

SLIDE MAP Massey Springs resort started originally with two different sites. The first was a small frame structure that was situated on a bluff overlooking the Green River in Warren County Kentucky. The mineral spring associated with it was located below the hotel, on the floodplain. The second hotel, which replaced the smaller hotel after it burned, was located on the floodplain below the bluff and was adjacent to the mineral spring. The first hotel came into use by 1893 and ended in 1905, which was when the second hotel was being constructed and opened until its last days in 1914. The Massey Springs resort hotel was named after James Melvin Massey who purchased the land in 1893, ran, and probably adapted the first hotel.

SLIDE SPRING This is also for whom the iron-rich spring is named after. The resort was then sold at the turn of the century or just after to George Cole and his associate from Memphis, J.S. Williams, who built the second, frame hotel and ran the resort until its closure in 1914.

Although no photos of the first frame hotel remain today, accounts from those whose family worked at this hotel do exist. According to a written account, the first hotel had two large halls that crossed each other and ran the entire length and width of the hotel. These two halls essentially cut the hotel into four quarters and the rooms were formed from the corners. According to this account, the halls created a ventilation system for air movement and created a nice atmosphere for those staying there.

SLIDE COLOR HOTEL

The second hotel of the Massey Springs resort was very different from the first hotel. The major difference between the two was that the second hotel was a frame construction and had many more rooms than the previous. This hotel was three stories and featured a full three-tier veranda, multiple additions, and manicured lawns with gaming areas.

SLIDE HOTEL

Although both resort hotels played an important role in the development of Kentucky and the boom of recreational tourism, the second hotel has much more information and documentation than the first hotel; this in the beginning was a problem, especially when it came to learning more about the site in general and gathering more specific information about the site, such as dates for use and construction and actual dimensions. For this, we employed archaeology as a tool in order to learn more about the first mineral spring resort hotel.

ARCHAEOLOGY

As you all know, there are so many different ways to use archaeological methods and techniques to gain information and that most of this comes from what we can see on the surface and what we see when looking at artifacts from excavation or collection. In the case of Massey Springs, using archaeology is one of the most, if not one of the only viable options for learning more. This specifically is the case since, as you may remember me saying earlier, there is no physical structure still at the site and very little sources exist that detail the site; this includes written descriptions and photos. Our main goal was to learn as much as we could about the first hotel at this site, this included a more solid date of construction and use and a more definite footprint of the structure.

Beginning with dates, we used three main avenues of relative and near-absolute dating: window glass shard dating using the Moir formula, glass artifact color relative dating, and nail chronology. I would like to start with the most relative, glass artifact color dating and then move towards more concrete ending with the Moir date we calculated.

Glass artifact colors can give us rough time frames of reference for specific sites; this is certainly true if artifacts collected at a site are of pertinent colors that have specific ranges of time for use or creation. Two specific glass colors that do have a diagnostic quality and that were recovered from the first Massey Springs resort hotel site were teal mason jar glass and amethyst glass shards.

During the excavation of pierstones and surface collection, we collected a large amount of teal mason jar shards. Simply put, because these jars were only manufactured for a short period of time, between 1890 and 1930, we are able to conclude that the time of occupation for this site could have been between these years. Finding this specific type of glass at the site, in a considerable density only adds a layer to our dating hypothesis.

Amethyst glass is another temporally diagnostic glass color that exists in a considerable density at the first Massey Springs hotel site as well. However, there has in recent years been some problems with using this glass color for dating, as the previously thought beginning and end dates have been moved and re-evaluated such as in the 2006 issue of the journal Historical Archaeology. However, generally speaking, amethyst glass was well established by the 1890s and was being phased out by the 1930s. Like the teal mason jar shards, amethyst glass collected at the site gives another range of years; luckily the two coincide.

Continuing on with dating methods from less to more concrete, lets turn to nails recovered from the site and the use of nail chronology in applying a date.

Currently, we have collected over 300 nails from surface collection and excavation around pierstones; the majority of these nails tend to be wire nails with an occasional exception of a cut nail. Generally, wire nails were adopted into use by the 1880s to 1890s, and so even though the nail chronology of this site is very vague so far, it still offers a relative period for the earliest date of construction, which also coincides with other sources.

SLIDE DATES

The last dating technique that often yields a more definite date uses window glass shards and the Moir formula. Using all window glass shards collected from surface collection and excavation, we calculated a Moir window glass date of 1897. Since at this point, we feel fairly positive that this date is correct we do hold this to be possibly an earliest construction date, however there is still the chance that windows could have been replaced or the date is skewed in some way. However, taking this date as truth is believable because this date coincides with other dates and corroborates the earliest date of construction that we received from our very sparse collection of sources. So, as a re-cap, glass color gives us dates of 1890s to 1930s with teal mason jar shards and amethyst shards; nail chronology gives us a date of post 1880s-1890s; and window glass shards and the Moir formula give us a date of 1897. A final date range would be 1880s to the 1930s, with a definite date of 1897. Looking at the early end of all of these ranges of dates, the Moir formula date fits in perfectly with the others.

You may recall that this research had two goals; to find a date and to find a footprint of the structure since references and accounts are scarce. Now lets turn to the footprint of the structure and how it has changed considerably from the first idea we had and our techniques and tools for locating more of it.

SLIDE MAP Some of you may remember from last year, this graphic represents what we thought the hotel footprint was in our initial investigations. Not quite small, per say, but at the time we had only found two pierstones. After many more days in the field and changing the way we were thinking and looking at the site, SLIDE PIERSTONES we are now confident that we have located at least 11

pierstones and have expanded the footprint beyond the possible four rooms that we had initially drafted. **SLIDE NEW MAP** Looking at the new footprint, the idea of the original four rooms still exists, however we had added two additional spaces on the far east side of the footprint. As of now, we do not know what these spaces are or what they were used for. All measurements are roughly the same 5 meters by 5 meters. The dotted lines on this graphic represent what we believe to be possible locations of walls. Locating these were a little more tricky as no structural remains beside the pierstones are left. For this part of our investigations, we employed the use of a metal detector.

During excavations around the pierstones, we noticed that each assemblage we collected had a high density of nails and window glass shards. We realized that nails were a nearly ubiquitous artifact type for this site, however they seemed to be concentrated near where we had hypothesized the walls of the structure would have been. We tested our hypothesis by scanning the surface of where a known wall was, specifically in the southwest corner room and discovered that we could tell a very distinct difference in the metal detector readings in the wall-areas and the non-wall areas; along the possible walls the metal detector either almost continuously beeped or we were able to follow the readings in straight lines. This method was how we sketched in the possible other walls of the structure. These possible other walls also fit perfectly with the pierstones we have located and they are all very similar in length.

FUTURE RESEARCH

So, now I would like to go back to the bigger picture of this paper and this entire project. As I mentioned before, this work is part of my masters thesis which is a much larger project with a scope that covers multiple disciplines. The future implications and possibilities of this work are vast; it is my hope that at the end of this project I will be able to develop a model for understanding historic sites which integrate more than just archaeology, but also lenses of study like vernacular architecture and oral history collection. This model would be multi faceted as well, consisting of what to expect when looking at architectural styles and elements; what one could anticipate in the cultural geography, settlement patterns, and landscape use; and anticipated archaeological remains and assemblages, in both the structural and purely material culture sense. What I have demonstrated here is aspects of archaeology that play a significant role in my research, but also in the model itself. This is just a small section of a larger, more holistic picture of our past and heritage.