Chapter 5
Archaeology of Telling Time: Plants and the Greenhouse at Wye House Plantation

Mark P. Leone and Elizabeth F. Pruitt

Frederick Douglass was one of the main forces behind the emancipation of slaves in the USA. He was one of the main spoken and written voices behind Abolition. But throughout the nineteenth and twentieth centuries he was more famous, more prominent, more celebrated in New York and Boston than in Baltimore or Maryland's Eastern Shore where he was born and raised, or in Maryland in general. He was almost unheard of in Maryland, as opposed to Washington, D.C., until 10 years ago. In Maryland, there were no statues, places, or buildings named for him. His statue was only just now put in the US Capitol and for the District of Columbia, not for Maryland.

This setting describes the silence, or erasure, or failure to celebrate Douglass that still characterizes the place of Douglass in Maryland. Only now is the last governor of Maryland honoring Douglass in Annapolis, Maryland's Capitol City, where Roger Taney sits before the State House.

This essay, using historical archaeology, was part of the academic celebration of Maryland's overlooked history in an exhibit at the Academy Art Museum in Easton, Maryland. The seeds of that exhibit were planted at the unveiling of a new statue of Frederick Douglass in front of the Talbot County Court House in Easton in 2011. This is the place where Douglass was jailed when he was young. The statue and many celebrations around Douglass were organized by the Frederick Douglass Honor Society which also sponsored our exhibit of the archaeology done by us at Wye House where Douglass, as a child, discovered what slavery was when he realized that he was a slave.[1]

[1] The exhibit was supported by Richard and Beverly Tilghman who own Wye House and who are Lloyd descendants, the Division of Research, the Graduate School, the College of Behavioral and Social Sciences, and the Department of Anthropology of the University of Maryland,

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Our exhibit, coming from 7 years of archaeology and intensive analysis at Wye House, is called "Joint Heritage at Wye House." It features the culture that slaves and owners made together, not willingly but inevitably. Culture happens not by plan, but because humans make culture because they, or we, live with it and cannot live without it. We make ourselves with words and things. This notion, peculiar to anthropology, has enormous force when we see how enslaved people and very rich owners make something in common that has all the integrity that being human is, regardless of rank or degradation. Culture comes because we can talk, eat, think, believe, have families, and sing. When people are people, they make something that allows them to be and that is the joint culture, or heritage—because it is now gone—at Wye House from about 1700 to about 1900. Douglass was a part of this scene. He described some of it but did not see creativity, but rather human violence, which he determined to abolish. He did. Now, our job is to find through archaeology what he missed: the common society that was made in these two centuries on Maryland's Eastern Shore and to make this creation the basis for a new history of Maryland. That new history would replace the one of slavery, racism, segregation, and lynching.

The exhibit was easy to conceptualize because three doctoral students, Elizabeth Pruitt, Amanda Tang, and Benjamin Skolnik, who were working on research at Wye House, had made remarkable discoveries, and had a coherent story about how to understand what Douglass saw but did not describe or understand. This was and is one culture, not two: one Black and one White.[2] We found that there was one landscape: two classes; one set of animal food sources, one cuisine, with two classes of cooks; and one set of plants for growing and eating and two kinds of horticulture. This was the core of our exhibit and showed what had been excavated within slavery. But we went further. While Douglass helped to end slavery, his statue commemorates the past and a past denied. Our exhibit described an unknown creation that is alive today in living, preserved landscapes, Southern cuisine, and African-American gardens and yards.

The opening of our exhibit in Easton was on the night before the 50th anniversary of Martin Luther King, Jr.'s March on Washington. The March was a demand for equality, a demand that the world of equals be brought into a fuller existence through fair treatment, the law, and employment. We said that those requests were present at Wye House from the beginning of slavery and that the March on Washington began there. The origins of the life of equality, a life of equals, a common culture, falsely seen as two for centuries, was deep in the ground on all plantations, discovered through archaeology, and could be seen through an anthropological exhibit.

College Park. The exhibit was also supported by the Historical Society of Talbot County, the Maryland Historical Society, the Maryland State Arts Council, the Talbot County Arts Council, and the Maryland Humanities Council, through support from the National Endowment for the Humanities.

[2] In this chapter, Black and White are capitalized where the words indicate a racial identity. Throughout the African diaspora, these two categories were created in such a way that allowed one to remain free while the other was enslaved for generations. These labels distinguish groups of people as they came to define and identify themselves as separate from each other at Wye House and other plantations.

Fig. 5.1 Lloyd women in the garden gathering flowers at Wye House (early twentieth century). (Courtesy of the Tilghman family)

The "Joint Heritage at Wye House" exhibit that contained our work at the Academy Art Museum in Easton, Maryland put a different epistemological base under Talbot County history and under Eastern Shore history. It attempted to say that slavery, racism, and the violence of both can be seen as a part, not the whole, of this area. Using the materials excavated by archaeology and understood through anthropology, there is a history and a unified present that owner and enslaved made, while one strived for profit and survival and the other for freedom and survival.

Our research, illustrated there from August to October 2013, showed censuses of slaves, remains of animal bones used for food, pollen from useful plants, and knowledge of slave landscapes to show the origins of a determination to be equal, self-sufficient, African, and whole in the face of endless bondage (Leone et al. 2013).

Therefore, this essay and our exhibit are part of the literature that addresses slavery in one way and not in the famous ways. For a long time, Wye House has been famous as an example of Georgian architecture, lavish formal gardening, and the lives of the Maryland plantation elite (see Fig. 5.1). It was an empty landscape, appreciated for its beauty, but not for the labor that produced that beauty. The history was about Edward Lloyd I, who founded Wye House in the mid-seventeenth century and the many generations of Edward Lloyds who came after him. In contrast to this, the plantation was famous because of Frederick Douglass, who was enslaved at Wye House as a boy and describes his experiences at the beginning of his autobiographies, exposing the hardships and demoralization he felt in relation to the space. He describes an institution so wicked it had to be eliminated. The other way, and the way we look at this history, acknowledges the wickedness of slavery, but sees all humans as cultural, and therefore, as creators of systems of meaning that guarantee survival: language, religion, music, dance, cuisine, medicine, and aesthetics. Our data and our discipline direct us to this last way.

We are concerned with two questions. How can we understand the greenhouse at Wye House? Then, how are this greenhouse and its garden tied to the African-American gardens immediately adjacent to our lives in Easton? The second question

Fig. 5.2 White wagon wheels, tires, and edging at the entrance to Perry and Henrietta Royal's yard, Alabama. (Courtesy of University of Tennessee Press and Richard Westmacott. Reprinted by permission)

means: how are the gardens, yards, and fields on the Eastern Shore of Maryland tied to African-American yards across the street or down the road? (Fig. 5.2)

Our unifying theme is the order of plant use made on the Eastern Shore by people of African descent and people of European descent when one was enslaved and the other owners of them. Here we have two gardening traditions, two peoples gardening together—however involuntarily—and two living gardening traditions today, in sight of each other but with one not recognizing the second, and the second not wanting recognition.[3] However, it took both to make each work so successfully. (Fig. 5.3)

We use two ideas to show how the greenhouse worked and thus how gardening traditions on the Eastern Shore of Maryland came to take the forms they do. Our secondary point is that the greenhouse and gardening practices that remain visible at Wye were one of many and that what we describe is the result of a hypothesis that

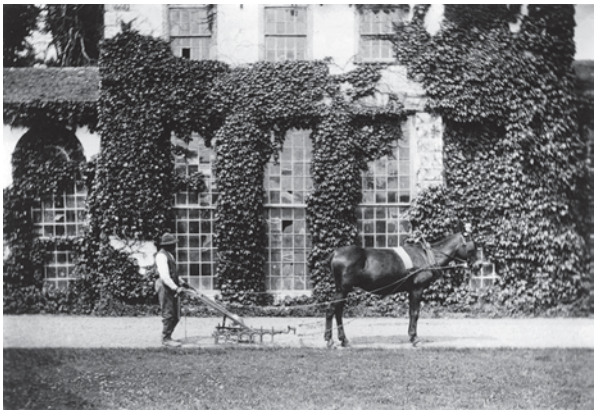

Fig. 5.3 Harrison Roberts, who was enslaved at Wye House and worked as a gardener after Emancipation. (early twentieth century photograph)

[3] We do not have permission to use images of any of the three African-American yards we have seen in Easton.

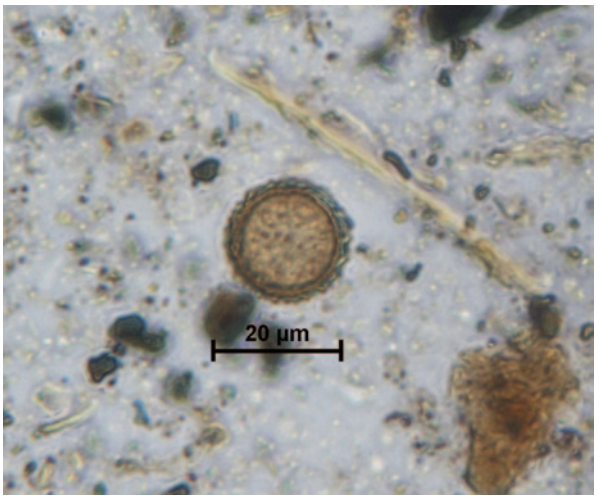

Fig. 5.4 Microscopic photograph of *Arrowhead* (genus *Sagittaria*) pollen from Wye House. (Courtesy of Dr. Heather Trigg of the Fiske Center for Archaeological Research)

could be applied to any of the surviving farming landscapes on the Eastern Shore and to the large number of African-American descendant communities in their and our neighborhoods. We begin with pollen analyses and then move to the idea of a floral clock. But the unifying idea is about the use of plants.

Most plants produce pollen and many archaeologists collect pollen samples (Fig. 5.4 and Fig. 5.5). When Richard and Beverly Tilghman, heirs to Wye House, invited us to excavate in the Wye greenhouse, we were, of course, amazed at the opportunity and took it. There was never any doubt that we would dig as little as possible in the south room of the greenhouse because it is a unique environment. There was never any doubt either that we would collect pollen samples and have

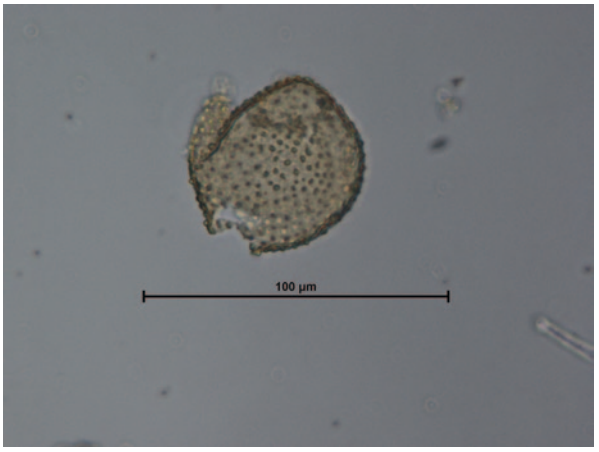

Fig. 5.5 Microscopic photograph of Wild Ginger (genus *Asarum*) pollen from the type collection at the Fiske Center for Archaeological Research. (Courtesy of Dr. Heather Trigg)

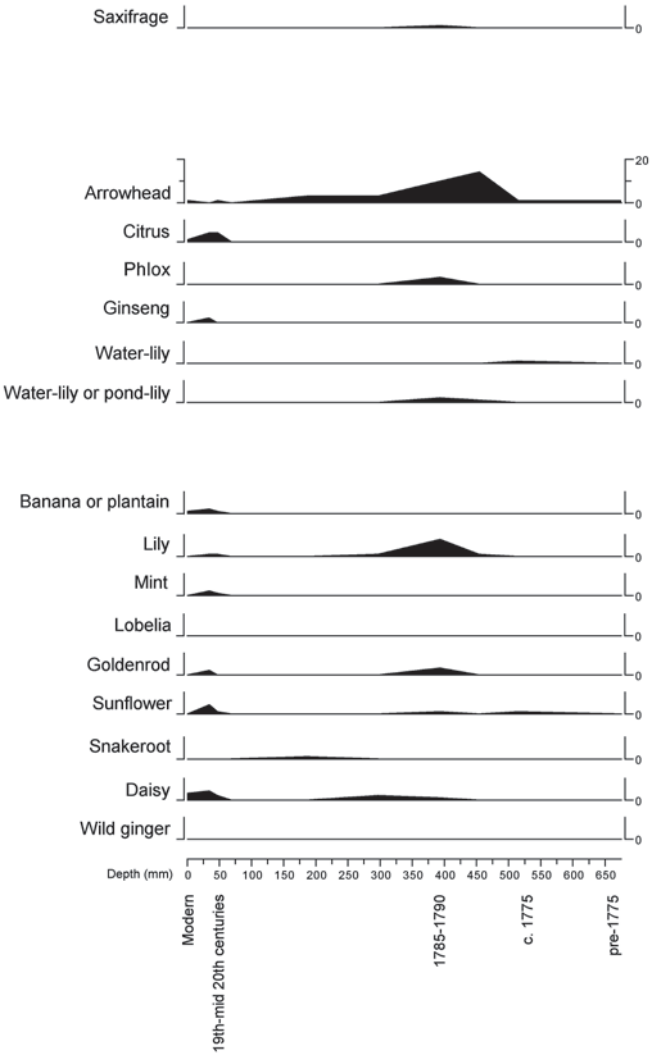

Fig. 5.6 A selection of pollen samples excavated from the Wye Greenhouse main room, which shows the edible, medicinal, and ornamental plants grown in this building by the Lloyds over time. Plants such as lilies and daisies are Aequinoctales. (Adapted from the report by Dr. Heather Trigg and Susan Jaccobuci of the Fiske Center for Archaeological Research)

them analyzed.[4] The pollen graphs created from selected data were on display in the exhibit and can be seen in Figs. 5.6 and 5.7. The graphs show three important things. The plants in the south room of the greenhouse are different from those in

[4] The excavations were done by Matt Cochran, John Blair, and Stephanie Duensing (Blair et al. 2009; Blair and Duensing 2009). The analyses were done by Heather Trigg and Susan Jacobucci, both archaeologists and palynologists at the Fiske Center for Archaeological Research at the University of Massachusetts, Boston (Jacobucci and Trigg 2010).

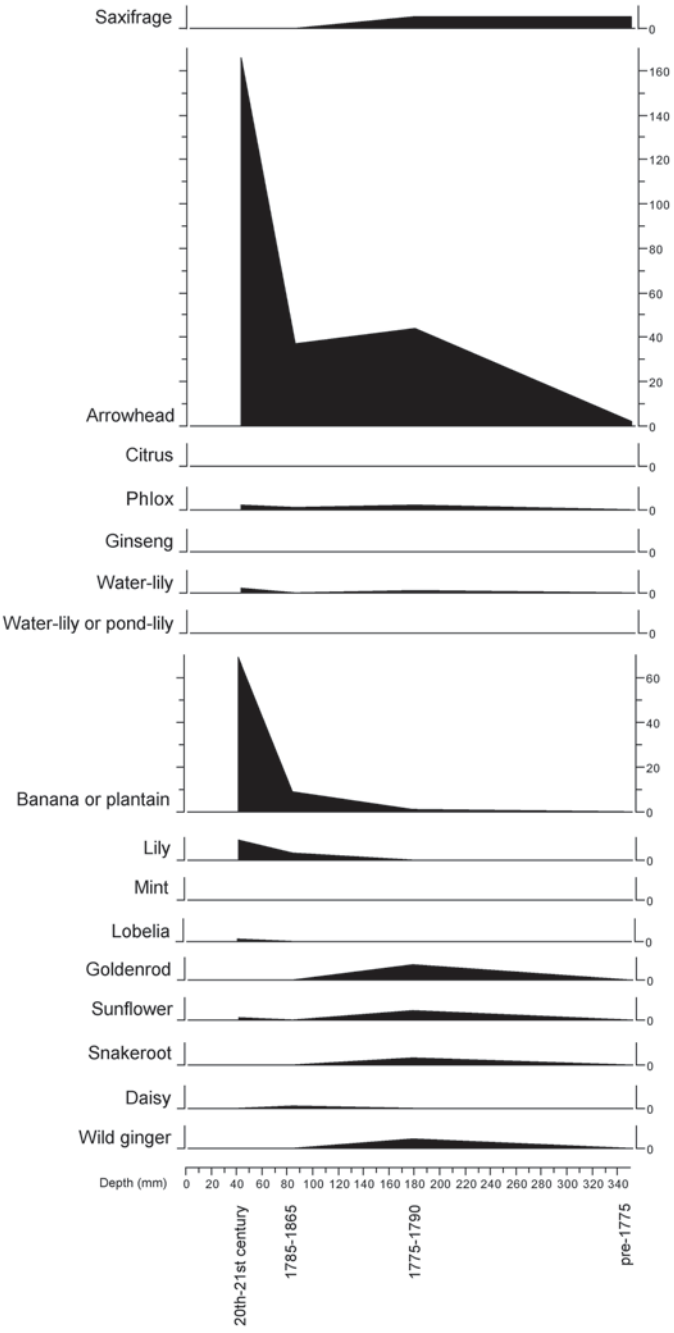

Fig. 5.7 The selection of pollen samples excavated from the slave quarter attached to the Greenhouse shows the differences between the uses of plants in this living area and the main room. Plants such as *arrowhead* and *wild ginger* could be used to treat various ailments and illnesses. (Adapted from the report by Dr. Heather Trigg and Susan Jaccobuci of the Fiske Center for Archaeological Research)

the slave quarter built on the north side of the greenhouse. There are more medicinals, comestibles, and utilitarians in the slave quarter. Second, beyond these graphs there were over 100 species and families of plants in both the south room and in the quarter. Thus, the greenhouse rooms were a pivot, a center, or a nexus of plant populations and use. The greenhouse was not about oranges. Third, there is a mix of domesticated and wild plants in the pollen. The greenhouse is not the result of John Bartram's seed catalogue. It is not about rarity, or delicacy, or tropicals. It is about the mix of the seed and plant catalogue and collecting in the forest and swamp. Therefore, we suggest the greenhouse with its controlled temperatures and watering is an experiment station which involves finding greater productivity for available plants regardless of their source. Therefore, we wonder if it could be a local source—one of hundreds—of potential domestication. This would be the conscious genetic manipulation of the mutations, available in any plant population, which, if managed Mendelian style, could produce a local variety of a species that was of greater use, quality, or productivity. It will take a lot of expertise that we do not have now to pin this identity on local greenhouses, but it is worth seeing if this is a part of the building's and garden's identity.

In archaeology, there are three big problems: How did humans evolve? How did we domesticate wild plants and animals? And, how did cities occur? The emergence of culture and consciousness is the most important one. Even so, our intent here is to position the Lloyd's family use of scientific gardening next to harvesting the woods and swamps of useful plants by African-Americans. We put that process into hot houses, garden plots, and at least two greenhouses and the experimental efforts of the day, as shown by the records of John Beale Bordley who created a plantation (Bordley 1784, 1797, 1799) a few miles away on Wye Island. We then introduce human selection of productive parts of plants and come out with the possibility of the propagation of a mutant form. Once that is a viable hypothesis, then we ask: Who gets credit? The people who did the work. Who did the work? That is for those to decide who intend to write a new and different history of Talbot County, Maryland.

Part of the answer has to come from knowing how the work of religion, spirits, magic, grace, and prayer effect the use of external and internal cures. The African-American traditions of Hoodoo and conjure were not divorced completely from medical practice until the 1940s and 1950s (Hazzard-Donald 2013, pp. 156–178). Therefore, we can begin to think that the herbal healing evident in the pollens in the greenhouse was used. This tradition understood that if good herbs cured the head, then the body would heal itself (Linn n.d., pp. 12–21). Therefore, we do not see slaves, we see a conscious African tradition. We see this today, although we do not yet know the details, in the silvered Virgin Mary in the middle of Easton, in the little figures in a nearby downspout, and in the diamond latticework and mirrored ball a few houses away. Are these the healing environments that survive?

Our case for joint heritage regarding plant use at Wye House comes from establishing an active African-American presence. Evidence comes from excavated remains of domestic life in the northwest room of the greenhouse which archaeology shows to have been a living quarter from about 1790 to about 1840. People lived

there and because the crockery is inexpensive and not matched, the people were probably, but not inevitably, slaves (Blair et al. 2009).

Second, there are two African-American bundles that date to the same time in the greenhouse environment. One was at the threshold of the living quarter. This makes the room a quarter. The other was at the apex, or key stone, of the vault of the brick furnace that provided heat to the greenhouse. The prehistoric pestle, reused because of its glint and therefore its connection to light and fire, is likely to be part of African-American usage. These two bundles are part of West African religions with the second connected to deities called forth by fire and iron.

This logic leads to the work of the greenhouse as Europeans would see it. Gardening item inventories count a water pump and a thermometer owned by the Lloyds in the late eighteenth century (Talbot County 1796–1797). The pollen and expense records show large numbers of plants having many different requirements for temperature and water in the greenhouse and, therefore, the need for different degrees of heat and cool, and wet and dry conditions, all for propagation.

The image we want to build on, but to fix, is Douglass's note that the abundant gardens of Edward Lloyd IV were supervised by imported Scots gardener, Mr. McDurmott, attended by four slaves (Douglass 1855, pp. 108–109). Mr. McDurmott has an identity, minor as it is. We add one to the enslaved. From the slave censuses, we may guess at their names. The Lloyd records list four enslaved gardeners in 1796, before Douglass' time, but perhaps surviving until he arrived. They were named Big Jacob, Little Jacob, Kitt, and Stephen, and we know more about their lives than we knew before. Kitt and Stephen were middle-aged at the end of the eighteenth century, but the two Jacobs were young and may have been the assistants to Mr. McDurmott. We argue that they were experienced scientific gardeners, not subordinates, but experts.

Anyone working in something so precise as the greenhouse, formal gardens, orchards, and fields at a place like Wye House will have precise knowledge and use it. A person will know soils, temperatures, water requirements, fertilizers, seeds, grafting, drainage, potting, planting, weeds and weeding, trimming, timing, as well as times needed and kept by plants. This person will be a gardener. However, there are three other far more precise elements such a gardener will know: use, rhythm, and tie to the cosmos. The latter explains why the plant exists. The association between the supernatural and the natural was not unknown to Europeans. In the development of scientific gardening, the seventeenth- and eighteenth-century Italian botanical gardens were also places for understanding God. The gardens connected to monasteries and early universities were for study, but also for the religious iconography of the garden. It was oriented using a relationship to the cosmos and designed in order to capture and express the four elements (Tongiorgi Tomasi 2005), which play a role in feeding, curing, and understanding nature. Therefore, Mr. McDurmott, coming from the Scots and British tradition of scientific gardening and, probably, British herbal medicine, knew of the world of plants and their meaning. People of African descent had similar views of the purposes and meanings of plants. There is an African tradition of rootwork and medicine that survives (Hazzard-Donald 2013) and includes cross breeding and propagating crops, herbal medicines, and agricultural skills (Horner 2010, pp. 68, 71, 90, 117, 121).

Using the idea and tradition of scientific gardening, we can place Mr. McDurmott and see the enslaved who worked with him as bringing, learning, and practicing all this specialized knowledge. To show the basis for building a common practice from different traditions of plants, we turn to the pollen counts at Wye House in the greenhouse. They show some of the plants in the slave quarter and some of those in the green house. Our choice for listing here is determined by the complexity of the environment created for such an array. In the greenhouse, from 1775 to 1790 there were decorative plants like pond lilies, water soldiers, and iris. Then, there were snakeroot, phlox, and ginseng, which are used for gout, fever, and as stimulants, or poultices, respectively. These were medicinal plants. For household uses are field and scouring rush for brushes, and impatiens for dyes. In the slave quarter, there were more local food plants like groundcherries, arrowhead, blueberries, and cranberries. There were also medicinals like wild ginger (see Fig. 5.5), saxifrage, and knotweed (Jacobucci and Trigg 2010). These are used for stomach pains, urinary tract infections, and other bodily aches, respectively.

This is a list that establishes two things. There was a substantial array of plants in the greenhouse when it was built and used in the eighteenth century. The array continued into the mid-nineteenth century and began to include citrus plants whose temperature requirements were even greater: 52–62 °F, in February, for example. This corresponds to major structural changes to the greenhouse to accommodate these plants.

Second, there were local plants of many practical uses. They continued to be cultivated well into the nineteenth century. Slave narratives, collected by the Federal Writer's Project in the 1930s, wrote down what had been an oral tradition of medicine, healing, and use of the wild apothecary. In conducting interviews with ex-slaves from throughout the South, the Writer's Project was able to preserve the experiences and knowledge of a class of individuals whose stories were ignored and marginalized in the USA. Today, burdock (see Fig. 5.8) grows in large quantities around the yard area of where a slave quarter stood at Wye House. From these stories, we find that burdock is used in folk medicine to treat gout (inflammation), rheumatism, and dropsy (forms of swelling). Burdock is also used as a diuretic, antibiotic, and an anti-inflammatory. Slave narratives talk about burdock roots being soaked in whiskey to treat unspecified illnesses or mixed with citrate of potash for scrofula—an infection of the lymph nodes (Covey 2007, pp. 85–86). One man, Mark Oliver from Mississippi, claimed that "Nothing better for the cramps than bur vine tea" (quoted in Covey 2007, p. 86), bur vine being a phrase which likely referred to burdock.

We also know dandelion acts like aspirin and watercress is high in vitamin C. We have the botanical families that include dandelions and watercress in the pollen at Wye House. Dandelion is used for kidney problems because it is a diuretic and is also used for liver problems appearing as jaundice. Dandelion is everywhere at Wye House and helps with swollen extremities, a symptom of dropsy. Plantain heals burns.

These plants are a set of medicines and have healing properties: effects like reducing anxiety, pain, blood pressure, and bodily stress by being analgesics, antibiot-

Fig. 5.8 An illustration of burdock from *Deutschlands Flora in Abbildungen.* (Jacob Sturm 1796)

ics, and anti-inflammatories. Once a local cure is tried and produces any of these effects, the body's own healing process can be more effective (Linn n.d., pp. 21–22). Some ailments that could be managed this way "include headache, toothache, fever, burns, strains, sprains, cramps… indigestion, warts, stys, nosebleeds, and sores" (Linn n.d., pp. 23–24). These ideas come from the native Irish pharmacopeia and we borrow the summary from Meredith Linn.

We do not have the ways that remedies were prepared in the two Lloyd cookbooks (Tang 2014; Lloyd family archive 1972), except those involving a lot of bourbon. This is a surprise because the books are themselves plantation care books with recipes for white wash and silver and marble polish, as well as food. The slave narratives do have recipes, in a sense. There was a tradition, passed down through generations, of the procedures and practices associated with physical and spiritual healing. The herb doctors, grannies, conjurors, and other respected keepers of botanical wisdom learned their craft from others. Many were taught from an older generation of enslaved practitioners, but also from Native Americans, who would have known and experienced the effects of the local pharmacopeia. Harriet

Collins from Texas was asked to recall her mother's knowledge of medicine in the Slave Narratives, and responded that, "My mammy larned me a lot of doctoring what she larnt from old folks from Africy, and some de Indians larnt her…All dese doctorin' things come clear from Africy, and dey allus worked for mammy and for me too" (quoted in Covey 2007, p. 76). This means that the practices developed in the USA were not transported directly from Africa, but instead underwent a unique transformation determined by the knowledge brought through the Middle Passage, the herbs locally available, and the knowledge encountered here that was held by Native Americans. The recipes are not entirely African, but African-American.

Though there were those who were regarded as experts in this practice, these medical practices were also understood and performed by anyone. Children were raised with the knowledge that certain plants were useful and should be gathered from the surrounding landscape as part of the regular seasonal routine. Dulcinda Baker Martin from Kentucky recalled that:

> When us was chillun, us went root en herb gatherin', ter git things fer de winter medicine. Us uster gather wild cherry bark, horshradish root, dand'line root, hickory bark, mullen, penny-royal, poke root, en poke berries, en de Lord knows what–things I clear fergit. Chicken gizzard skin was saved fer medicine, en I reckon goose grease is still used fer lots of things, even en dis day en time. (quoted in Covey 2007, p. 77)

These particular resources and others appear again and again in the Slave Narratives for various uses. They come in certain combinations, taken at certain times or for certain ailments, and together create a book of recipes for ways to treat the diseases, pains, and emotional ailments jointly shared by enslaved individuals forced to work on plantations throughout the South in the nineteenth century. Potatoes were carried in pockets to cure rheumatism according to narratives from Arkansas, Missouri, and South Carolina (Covey 2007, p. 107). Lobelia, a flowering tropical plant, was used in combination with gourd, buckeye, oil, and turpentine, could be taken to cure unspecified illnesses according to Abraham Chambers in Alabama (Covey 2007, p. 166). The leaves of oranges could be mixed with whiskey in order to create a tea to treat those afflicted with yellow fever according to Rose Mosley in Arkansas (Covey 2007, p. 169). The families of each of these plants are found in either or both the quarter and greenhouse at Wye, where they would have been grown purposefully by the Lloyd family or cultivated individually from the surroundings by the enslaved people and brought to the quarter.

Medical practices not only involved natural elements, but also non-plant materials. The materials themselves hold a certain power over illnesses and spiritual well-being that relied on a belief of the influence of the object over the natural and spiritual realms in order to heal the afflicted. By mixing anvil dust with snakeroot and whiskey—a seemingly common element to feeling better—one could make a tonic to cure consumption according to Lou Smith of Oklahoma (Covey 2007, p. 183). A new iron nail was mixed with vinegar to promote rusting, and then the mixture drunk, according to Betty Cunningham in Virginia, to treat an unspecified illness. Many elements could work together to create a bundle—also called a "jack" by some interviewees—which could be worn as a preventative measure against diseases and harm. Willis Easter from Texas explained the process for creating such

a bundle, saying that, "For to make a jack dat am sho' good, git snakeroot and sassafras and a li'l modest one and brimstone and asafetida and resin and bluestone and gum arabic and a pod or two red pepper. Put dis in de red flannel bag, at midnight on de dark of de moon, and it sho' do de work" (quoted in Covey 2007, p. 140). These specifications add a mystical component to the creation of a cure. The plants, the color of the cloth, the type of cloth, and the time of night work together to create the necessary treatment.

Therefore, one function of the plants we have listed is medicinal and maybe magical as well, when seen as part of the action of the African spirit world placed in the two bundles in the greenhouse, the two-face doctor figurine from the Captain's Cottage at Wye House, and the big collection of deliberately buried iron implements beneath a nineteenth-century slave quarter we now know of at Wye. We think these are the likely contexts for medical practice.

Midwives had to have existed at Wye House and these served the enslaved, free, and White communities. We learn that after Reconstruction, midwives would have been tasked with growing and gathering herbs that were necessary for treatments, much in the same way as on the plantation. According to Katrina Hazzard-Donald, "A well-stocked midwife's cabinet would contain 'digitalis, golden seal, belladonna, lobelia, sage, henna, rhubarb, May apple, blood root, wild cherry, and numerous others,'" and these are plants that the woman would have acquired herself. She would have followed a tradition of conjurers and herbalists called "swampers" in developing the skills and knowledge to identify elements of nature—plants, animal nests, and clay—that could be useful in medicine and healing (Hazzard-Donald 2013, p. 137).

This healing was not just of the body, but involved a holistic practice that treated and supported the mind as well. The midwife or "granny" would use self-hypnosis and the power of suggestion in aid of pain relief for those she tended. One such practice involved putting a sharpened axe under the bed of a woman in labor, using the object as a symbolic stand-in for the act of cutting the woman's pain. The belief in the representational power of the axe can then ease the actual and physical pain of the believer.

For the midwife, the natural elements also provide a time-keeping device. The curled fronds of a dried fern, known at the time as "rose of Jerico" or "resurrection plant" provided a means of timing the birth and to recognize that there are no complications. Again, from Hazzard-Donald:

"When she arrived at the bedside of the labor patient, she put the dried plant into a bowl of water… and watched the fronds unfold. They gave full information about the child's progress on its journey into this world. If the leaves caught on one another or opened unevenly she feared trouble and resorted to action. The value of this charm was far-famed…" (Hazzard-Donald 2013, p. 143). Finally, red, especially red string, is used for women of childbearing age with a history of difficult pregnancies. It can be formed into an amulet (Hazzard-Donald 2013, p. 149).

The tradition of slave medicinal practice manifested in the Americas on the plantations was passed on through generations of conjurors, root doctors, and midwives. This accumulated knowledge survived and became the practical healing techniques

Fig. 5.9 The west side of the garden at Wye House, taken from the top of the back porch (1904). (Courtesy of the Tilghman family)

known to these carriers of tradition, such as penny royal tea used for female complaints, sassafras tea used for measles, mint tea used for abdominal problems, and Spanish moss used to treat asthma (Hazzard-Donald 2013, pp. 150–151).

We think there are two complimentary ways to look at these plants. We have seen the medicinal one, which holds that plants are a home for spirits. That is, as a place where the spirits dwell and hide during the day, but it is the world of curing. The second we get from Linnaeus and that is the idea that plants can be arranged to tell time from the position of the blooms and leaves during the day and night. He calls this a floral clock, for telling time or making a calendar. We get this idea from Leone's colleague Professor Kevin Birth of the Department of Anthropology at Queen's College, City University of New York.

Imagine the gardens at Wye House (see Fig. 5.9). There is a natural rhythm to the landscape—the opening and closing of flowers, the path of the sun across the sky, and the movements and sounds of animals. People can understand the passage of time in this way. This intuitive sense of timekeeping seems to be in contradiction to the strict segmentation of many of our days now into regular hours and minutes. The standardization of time that we now keep is recent. The advent of "factory time" is tied to an industrial routine spread through global capitalism of the nineteenth and twentieth centuries (Leone and Shackel 1987). The day became regimented by the minutes on the clock rather than the flows of nature—corresponding to the same

patterns of increased order and symmetry in landscaping, architecture, and dining in this era. The world of the owning classes during this time became a more segmented and ordered place, including conceptions of time. However, if you think about the gardens at Wye House, you have to realize that there is little separation on the plantation between an intuitive, natural timekeeping and a clock-ordered one.

For us, there is a rhythmic pattern to daily life. Despite the power that the clock has over us, the sights and sounds that make up everyday life still help us position ourselves throughout the day. Most interestingly, to add to this idea is how these multiple ways of orienting ourselves in time and space would have come together in the plantation landscape. Different residents of Wye House would have experienced the landscape in a variety of ways depending on status, race, and ideology. African-American slaves would have developed a different sense of the plantation landscape based on where they were permitted to be and the work that had to be done. This creates two different but intertwined landscapes on the same plantation—one Black and one White. Adding a temporal dimension to this idea helps to complete the experience. Movement through space and movement through time are entangled, and two groups of people at Wye House would have navigated these movements simultaneously.

Edward Lloyd IV and his wife Elizabeth were interested in scientific gardening. Taking on the persona of a curious gentleman of the time, Edward Lloyd was concerned with the observation and understanding of nature. Scientists in the eighteenth and nineteenth centuries were beginning to discover that nature itself had an innate sense of time. Circadian, or daily, rhythms, which also determine human sleep patterns, can dictate the movements of plants throughout the day. A French astronomer named de Mairan experimented on the plant *Mimosa pudica*, and published his results in 1729 (de Mairan 1729). De Mairan found that rather than responding directly to the sun, the plant followed some form of instinctive timing in its motions, even while confined to a dark room.

Not long after, Carl Linnaeus, known for a scientific system of plant naming that is still used, published his observations of the precise timings of plant movements in 1751 in *Philosophia Botanica* (Linné and Rose 1775). He describes plants as having a sleeping cycle, explaining that the positions of plant leaves change from night to day (see Fig. 5.10). He separated flowers into groups depending on what ways they kept time. Certain flower petals, Linnaeus found and recorded, opened and closed at precise times every day, regardless of weather and time of year. These plants were called Aequinoctales. The repeated motion is so regular he proposed that a comprehensive list of the combined observations of these Aequinoctales from various climates would allow everyone to tell the time without use of a clock. His insights culminated in the theory of a horologium florae—a floral clock—which has since been illustrated and even attempted by gardeners (see Fig. 5.11).

While it is theoretically possible to create such a clock, historically it has not been successful in practice. The main reason that a formal clock made of Aequinoctales is difficult to grow is that many of the flowers that share this trait, coming from the same plant family, share physical characteristics. A large group of these flowers is collectively known as the “Damned Yellow Composites” or DYC (Eaton 2003).

Fig. 5.10 A page of *Philosophica Botanica*, in which Linneaus illustrates the movements of leaves and petals over time

They look so alike, having yellow petals of similar shape, that they would not be able to achieve the visual effect of the segmented clock. Instead, many gardens have incorporated a mechanical clock into a flower bed, integrating the segmented factory time with the natural rhythms of plants. DYC aside, the theory, however, still holds. Even without the formation of a clock, flowers could still be and are used to mark the time of day.

Other natural scientists, such as Charles Darwin, continued the careful observations of de Mairan and Linnaeus, attempting to fit the intuitive sense of timekeeping provided by nature into the segmented order of clocks (Darwin and Darwin 1896). On a plantation, the agricultural fields and gardens kept time just as much as the

Fig. 5.11 The proposed floral clock from Linneaus' *Philosophica Botanica*

clocks in the great house. The enslaved who worked in the gardens and fields would have navigated not just through the landscape, but also through time in a particular way. The successful growth of plants would have depended on their literacy of this sense of time, knowing when to water, when to rotate, and when to harvest. Those living in the great house would have experienced time in a different way, the day being controlled by the hours on a tall clock or a pocket watch. This is not to say that there would not be overlapped understandings; in fact, there would have to be. The plantation owner, and probably the overseer, would have to have an understanding of both clock-time and natural rhythms in order to keep the plantation in working order. Kitchen servants would have to keep an intuitive as well as a precise sense of minutes in order to complete meals within the framework of an exact rather than general meal time. (Fig. 5.12)

To extend the use of the idea of a floral clock, we go back to the greenhouse. There is pollen evidence that water lilies were grown in or around the greenhouse

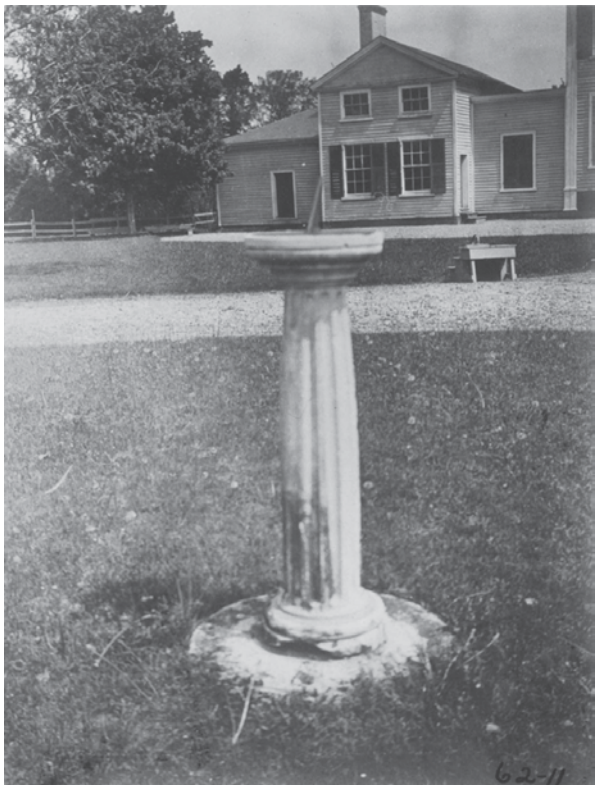

Fig. 5.12 The sundial in front of the Wye House mansion. (Courtesy of the Tilghman family)

at the Wye House plantation in the late eighteenth century and later. These close at 5:00 in the evening. Many plants included in the group Aequinoctales are in the family Asteraceae, like daisies, marigolds, and dandelions (see Fig. 5.13). This family is found in abundance at Wye House. Many of these flowers we are familiar with, and can observe in our own gardens. Morning glories open at 5:00 in the morning and close at noon. Dandelions open at 7:00 in the morning and close at 8:00 at night. This rhythmic motion would allow the gardener, the enslaved, the overseer, and the Lloyds to position themselves in time. While we do not think there was a floral clock on the Wye Plantation, the interest that the Lloyds showed in gardening means that it would be surprising if they did not recognize and understand the movements of such flowers and that the Scots gardener, and many enslaved peoples, knew all this too.

There is another progression of time at work in the Wye House gardens and in this essay, and that is the chronological distance between us and slavery. At times, this distance seems great and at other times it feels close. Time and our perception of time play a role in how we are able to examine a painful past. In our exhibit on Wye House, we focused on joint heritage, on what Blacks and Whites on the plantation built. Two groups of people occupied the same space and time, inhabiting different but overlapping worlds. In the garden and in the landscape, we can see how those

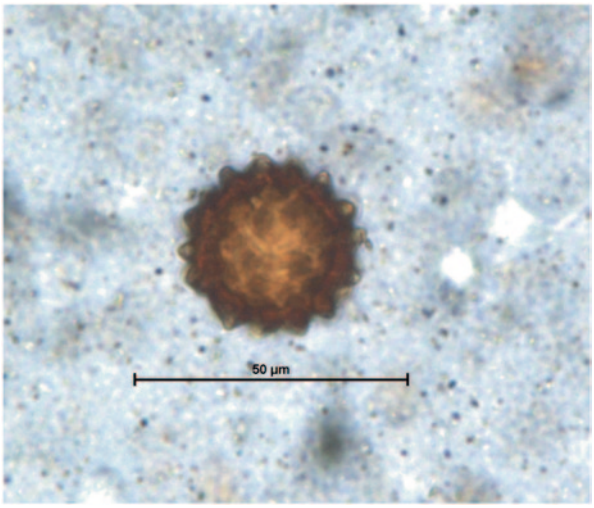

Fig. 5.13 Microscopic photograph of an example of the family Asteraceae pollen from Wye House. This plant family includes daisies, marigolds, and dandelions. (Courtesy of Dr. Heather Trigg of the Fiske Center for Archaeological Research)

worlds merged, and the powerful outcome of their creation. We can connect Frederick Douglass, the March on Washington, and the racial issues at play in Maryland today. By imagining worlds made together, complexly related and realized, we can see what we produce together today in a different light. We measure time, not just through measured devices or natural rhythms, but also through social progress.

In one world, it is easy enough to see people of African descent using native analgesics and cure-alls. We are prepared for that. It is easy enough to guess that some of this lost knowledge comes from contact with and ambient knowledge from Native Americans who had a well-known pharmacopeia. It is even easier for the rest of us to admit that archaeology and a hard day's work would be better off with a bourbon, incidentally called spirits, once we get home. So, there is not only an African pharmacopeia, but also a well-known Native American one. The British pharmacopeia existed alongside these and became modern medicine, giving no credit to its multiple cultural roots as it did so. Nonetheless, in all these traditions dandelion and watercress were used to promote the flow of urine, solve kidney and liver problems, help to cure jaundice, and aid with rheumatism (Linn n.d., p. 18). We conclude that the curing traditions were learned mutually.

It is a little harder to imagine multiple traditions and time telling. However, the natural rhythms of the growing world are easy to see and recognize everywhere. But what is hard to figure out is how to get from the Wye greenhouse to the African gardens just outside our doors in the center of the quickly gentrifying suburbs of Maryland. How do we do that? By imagining them to be home to spirits that are called into present action by the plants themselves and their colors, their need for flowing water, and their shapes. (Fig. 5.14)

One common element of the three African-American gardens in Easton, Maryland is silver mirroring. The function of a mirror in West African religion is to catch light, which a mirror or a crystal is thought to be able to hold, capture, and contain,

Fig. 5.14 Silver sowing machine in Fox Fleming's yard, Georgia. (Courtesy of University of Tennessee Press and Richard Westmacott. Reprinted by permission)

so the spirit, which is the light, can be redirected by humans for some use, likely curing or protection. Silvered bricks and silvered statues of the Virgin Mary are likely serving the same purpose as mirrored spheres.

Winged creatures and eagles above front doors with outstretched wings all represent flying away, or the wish to escape. Drain pipes, almost always white, represent the way of coming and going of spirits into and out of the house. This is like spirits going up and down a chimney (Fig. 5.15).

We do not know of a direct translation from African traditions to the gardens in Easton, Maryland. We make the hypothesis that West African religious beliefs and Christianity on the Eastern Shore of Maryland were both combined and altered. We do not hypothesize that African-American gardens can be separated from their traditions, but that those traditions are a mixture. But we place an emphasis on the elements of spirituality and healing, in order to find a system of adaptation. We suspect they are combinations of symbols and iconographies that have African roots, both historical and medicinal, but with some of the Christianity of those who created them.

Fig. 5.15 Chicken statues in Ida Mae Porter's yard, Georgia. (Courtesy of University of Tennessee Press and Richard Westmacott. Reprinted by permission)

The key to all this is spirits who are controlled by bundles, altars, plants, or herbs. We cannot tell which African group, for example, Yuroba or Congo, such gardens hail back to. What we do know through scholarship on West African religion in the New World is that there is no division between spiritual well-being and biological healing. This is where we get back to the herbs of the greenhouse. They, like African-American gardens here, lifted feelings, fevers, anxiety, and then let the body heal itself, when it could. Therefore, what went on with the greenhouse's plants and with these gardens is the same. It is only the greenhouse's Palladian form that prevents us from seeing that our forebears' world is one because the European world of healing joined to magic lost its power just as the greenhouse was being built. So, what we see is that in the late eighteenth century, Europeans divorced psychological states from curing but Africans were much slower to do the same. Ultimately, both did. The greenhouse was finally divorced from healing by the middle of the nineteenth century, which is when it became an orangery and its name changed. The African-American gardens in Easton are still about spirits, we suspect. We do not think they are about healing anymore, but we do not know yet.

What our archaeology provides knowledge of are two plant-healing traditions, joined for a while, then decoupled. We do not want to reconnect them. We want to

describe their reciprocity during their time in slavery when they were one, made and used by Europeans and Africans in one culture, highly stratified.

There is a joint heritage, British and African, in the archaeology of Wye House which forms the active basis for a more inclusive history of Talbot County and of Maryland in general. This heritage is worth finding and is in the ground, available through archaeology. But it is also available by understanding the roots of modern medicine, modern farming, modern cooking, and modern Christianity. Beneath modern medicine are many native pharmacopeias, and healing practices. The most important one is the relief of pain, anxiety, and the symptoms of disease so the body can heal itself. Beneath modern farming is agricultural experimentation that collects, understands, and breeds plants from the forest, bog, swamp, mountain, and shore for productivity. We have forgotten this and are trying to remember it under the guise of biodiversity. Beneath modern cooking is not only the fact that Africans and Europeans ate the same plants and animals, although different cuts, but also that they eliminated seventeenth-century British cuisine to create Southern cooking. And beneath modern Protestant Christianity, both that of Whites, as well as that of African Americans in the AME (African Methodist Episcopal) and other Black churches, is the world of the Spirit. These are healing spirits, house ghosts, spirits in closets that terrify children, the Holy Ghost, the spirit of God in Moses and Jesus, and the healing, protecting, and harmful spirits of the dead who once existed in African-American gardens and in all Christian cemeteries. This joint heritage is still there, not so active now, but nonracial, not angry, but creative, and equal.

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