

ARCHAEOLOGIST GO ABROAD TO STUDY SCOTTISH DISTILLERIES!

Archaeologists Dennis Pogue, Esther White, and Eleanor Breen recently took a research trip to Scotland to discover more about whiskey (but the Scottish spell it “whisky”). Why go all the way to Scotland to learn more about George Washington’s whiskey? As it turns out, James Anderson (b.1745-d.1807), the plantation manager, convinced George Washington to begin distilling whiskey soon after coming to Mount Vernon in 1797. A Scotsman by birth, he had experience distilling in both Scotland and in the colonies. Anderson was raised on his father’s farm, 40 miles north of Edinburgh, near the village of Inverkeithing, Scotland. At the age of 21, he began a farm manager apprenticeship in England. Anderson then farmed and worked in the Scottish grain business, where he gained experience distilling. In a letter to Washington, Anderson mentioned that he “almost lost all” in the economic failure of distilleries in Scotland in 1788.

The Anderson family, including wife Helen and 7 children, landed in Norfolk in 1790/91. Residing for a period in Alexandria, Anderson visited Mount Vernon before settling on a farm in Fairfax County. By 1796, the Andersons had moved to Fredericksburg, where James managed a large plantation with a distillery. After 1802, the Andersons moved south to manage the White House Plantation for George Washington Parke Custis.

Because he learned about distilling in Scotland, we figure that Washington’s distillery is probably modeled after something Anderson saw or worked in before immigrating to the colonies. Over the past few years, Dennis and Esther have done research online at the [National Archives of Scotland website](#), among other places. They found some tantalizing citations that we needed to investigate.

Our Research Trip: Traveling from York, England to Edinburgh, Scotland



*Walking the walls in York.
York Minster in the
background.*

Dennis Pogue, Esther White, Jen Ebbert, and I spent 5 days in York at the [Society for Historical Archaeology](#) Conference that ran from January 5th through the 10th. Archaeologists from around the world traveled to the old roman city to discuss the most recent research in historical archaeology. The town, encircled by extant Roman stone walls, could not have been a better place to host a bunch of archaeologists – with over 350 pubs, archaeology sites, and historical buildings every where you turned. One of our favorite sight seeing adventures, when we had a break from the hundreds of archaeology papers, was the [York Minster](#). The most breathtaking view of the city is afforded from the tower of the Minster of which you are only rewarded after climbing 275 stairs to the top! Another favorite was the [Yorkshire Museum](#), which incorporated the archaeological finds into the telling of the history of York.

The trip north to Scotland was beautiful. We trained from York to downtown Edinburgh on a bright and sunny day. The view outside the train was wonderful because part of the trip is along the coast. We saw the most fantastic rainbow stretching across the North Sea.

Our First Two Days of Research

As a member of the [Scotch Malt Whiskey Society](#), Dennis made reservations at the Flats – special apartments available to members only. The accommodations were in Leith, just a 5 minute bus ride from downtown.

Our first foray into researching at the archives landed us in the Historical Search Room where the archivist had already pulled the documents of interest. Among the interesting discoveries that were made was an indication of the enormous scale of the leading Scottish distilleries in the late 18th century. Two important distilleries that went out of business in 1788 because of their failure to pay the recently increased British excise fees, had stills with a combined capacity of 3100 gallons and 4034 gallons respectively. At just over 600 gallons, these distilleries had capacities five to eight times greater than George Washington’s, and this

finding reinforces the fact that even though Washington's distillery was a sizeable operation for this country, it was dwarfed by at least some of the leading distilleries in Europe. Also of interest is the fact that it was the

failure of these distilleries, operation by the Stein and Haig families, which was the catalyst for James Anderson's emigration from Scotland to America. With their failure, the market for grain in Scotland plummeted, and thus encouraged Anderson to try his luck in America.

After our second day of research, we visited the Scotch Whiskey Heritage Center on the Royal Mile in the old section of Edinburgh. Here, your tour guide presents you with a history of scotch whiskey. The tour culminates in a barrel ride through time that drifts by important events in scotch whiskey history.

Research, Day Three

After exploring documents at the National Archives of Scotland, we took a bus to the Georgian section of Edinburgh to the West Search Room. This building is a part of the archives that houses prints and drawings. Here, we collected architectural information on Scottish distilleries in our time period. Whereas George Washington's distillery housed almost all of the stages of distilling, Scottish distilleries looked more like industrial complexes with a separate building for each process. We did find some detailed architectural information that our architectural historians will use to help construct a more accurate distillery.



Esther and Dennis outside the Whisky Heritage Center on the Royal Mile, Edinburgh.



Edinburgh's Royal Mile

Not only did we do a lot of researching in Edinburgh, we did many tastings of Scotland's food and drink! Dennis, our culinary adventurer, set himself to the task of tasting all the top 10 foods listed in my Top 10 of Scotland travel book. Some of these – no problem, salmon, in many forms, is a fairly common dish in the States. Dishes like bangers and mash, haggis, neeps and tatties, and cull and skink offered more of a challenge – one Dennis accepted, sometimes more than once! One of our favorite places to eat was a pub on the Royal Mile called the [Royal McGregor](#) – cozy, friendly, salmon in all shapes and sizes.

Off to Speyside

After a couple days spent cooped up in the archives, we were ready to do some exploring. We rented a car and drove north to the center of scotch whiskey production: Speyside. We had two goals – to visit some of these distilleries and to see the Scottish countryside! We drove 4 hours (on the wrong/right side of the road, depending on how you look at it) through the Highlands up to Speyside passing towns such as Blairgowrie, Braemar, Tomintoul, Dufftown, and Craigellachie. We ended up in Elgin on the northern coast and stayed the night so we could visit distilleries the next morning, in the daylight hours (it gets dark early that far north!). The next morning, after a breakfast where we could have chosen between beans, kippers, porridge, among other



Barrel of whisky at Dallas Dhu.

treats, we drove to Forres, the location of [Dallas Dhu](#). This is a distillery built in the 1890s that now operates as a museum.



Large wooden worm tubs at Dallas Dhu Distillery

We also visited [Glenlivet](#), a major producer of scotch whiskey. On their property is the site of an old distillery dating to the 19th century. We visited the distillery and searched around for the location of the site, but were unsuccessful in locating it.



Sheep-dotted countryside, near Glenlivet.



Harbor and B&B in Stonehaven.

Exploring the East Coast

The city, the mountains... now we were off to the coast. After visiting the distilleries, we drove east to the water. We hit the coastal road just south of Aberdeen and spent the night in Stonehaven – a tidy seaside resort. We found a [B&B](#), 24 Shorehead, right on the water and stayed in rooms in the eaves of the building. The next day, we drove the seaside route from adorable town to adorable town. The weather was great, if a little chilly, so we disembarked from the car when we saw something that caught our eye.

Our main destination was Crail because the B&B owner told us that it's the most photographed and painted town in Scotland with its craggly coast, white-washed houses, and quaint harbor. After a nice walk around Crail we headed down to Anstruther for a lunch of fish and chips. We spent the rest of the day driving along the coast of the Firth of Forth, ending up at the airport where Esther and I caught a flight back to Manchester. Dennis planned his trip so he could stay an extra couple days in Edinburgh, taking in more sights and cull and skink! In all, the trip was a huge success. We now feel better able to contextualize George Washington's distillery both architecturally and historically. Plus, we had a great time!



Crail's rocky coast.

DIG DIARY #7 March 2005

COMPASS BRICKS



Compass brick excavated from the distillery.

One advantage to the inclement winter weather is that it has allowed us time in lab to revisit some of the artifacts uncovered during the fall. One such artifact I came across again while washing artifacts from the distillery is a compass brick from a large feature on the west side of the distillery. A compass brick is a brick that is trapezoidal rather than

rectangular in shape. The compass brick from the distillery measures 0.33 ft and 0.26 ft on each end. Bricks such as this one are laid with the small ends facing inward to create curved or circular brickwork. Finding this artifact in this large feature suggests that it is a brick lined well. As we continue to excavate the feature next spring we should find other compass bricks, perhaps still in place along the outside of the well shaft.



Arrangement of compass bricks showing arc of a well.



Compass brick excavated from the kitchen.

The archaeology department has discovered compass bricks associated with well features before. A well is located behind the kitchen and we have found many compass bricks in this area. However, the bricks found here look very different from the compass brick from the distillery. The south lane compass bricks were slightly larger, and with a greater difference between the short and longer ends (0.41ft and 0.32ft). This more extreme trapezoid shape would result in a tighter curve, and a smaller well shaft. The angle created by the distillery compass brick would have made a circle approximately 5.40 ft in diameter. The kitchen well bricks create a smaller circle, only 4.70 ft in diameter.

These differences may result from how each well was utilized: an industrial well versus a domestic well. Further, we know from documents that the kitchen well predates the well dug at the distillery. It may be that the difference in these compass bricks reflects variation in approach of different builders or brick makers over time. It is possible that, as we excavate the distillery feature further, we will find that differences between the size and shape these two well features may account for the difference in the type of compass brick used in each.



Comparison of compass bricks showing difference in distillery (left) and kitchen (right) sizes.

DIG DIARY #6 *February 2005*

A DISTILLERY FIRE?

It's been a month for the archives! One of our nagging questions is what happened to Washington's Distillery? Eleanor and I finally got to Richmond to finish up some research on Virginia's distilleries and we made an exciting discovery!

While excavating the northern end of the distillery in 2003, we found clues that the distillery had burned. Pieces of melted glass, small fragments of charred wood, and a few sherds of burned ceramics suggested there had been a fire.



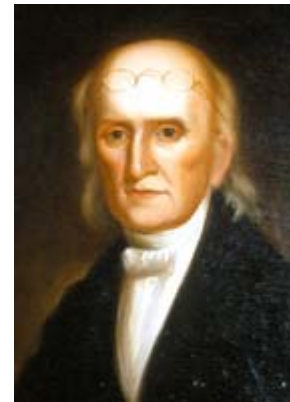
Many of the artifacts in the northern area show evidence of a fire.



The northern section is the only part of the site not uncovered during the 1930s park development.

That summer we began to discuss the possibility of a fire, but because so much of the physical evidence was removed in the 1930s it was difficult to confidently say this happened.

After Washington's death in 1799 his nephew Lawrence Lewis inherited the distillery property. He insured it against fire with the Mutual Assurance Society of Virginia in 1803. In 1804 he advertised the complex for rent in the local paper and in 1808 James Douglass, a merchant, advertised whiskey "made at Maj. Lewis's distillery" for sale. That advertisement is the last reference to the distillery. In 1815 Lawrence Lewis renewed his fire insurance but the distillery was absent from this policy.



Lawrence Lewis, the distillery's last owner.

Finding Mutual Assurance Society declarations, or insurance policies, is easy. Gary Stanton at the University of Mary Washington indexed them and this is available online on the [department of historic preservation's webpage](#). The records of the Mutual Assurance Society are housed in the [State Library of Virginia](#) in Richmond and most of the properties have drawings and other details recorded on the policies. From 1796 to 1866, 46 distilleries were insured against fire.

Discovering if an insured property burned is harder. While the policies are preserved and indexed, the claims were not systematically recorded or preserved. We knew our site disappeared between 1808 and 1815 so we read the meeting minutes of the society's standing committee. This group met monthly and supervised the business of the organization and authorized payments for losses.

At the Nov. 21, 1814 meeting an agent of the society presented a list of properties which should be released from insurance. The fourth building on the list is Lawrence Lewis's distillery. In the remarks column it states "Burnt uninsured, premium not being paid."



This newly discovered document states the distillery burned in 1814.

Our discovery answers the question of what happened to Washington's Distillery and provides necessary context as we begin to analyze the artifacts. Now that we know a fire occurred in 1814 we'll check the local newspaper to see if the fire was reported. We'll also search for additional insurance documents that discuss the fire. Check back next month to see if we've discovered more details.

DIG DIARY #5 *December 2004*

THE 2004 FIELD SEASON

This dig diary is a brief recap of the highlights from a season's worth of excavations! Read on to find out about our major discoveries.



Fall crew digging the northern units.

The Staff

We had a great crew working at the distillery site this fall including Tracy Smith, Ryan Kennedy, Ben Bradshaw, and Jeremy Floyd. The former three crew members are recent graduates of the University of Virginia. Jeremy came to us from the University of Reno-Nevada. Crew chief Jen Ebbert completed her fourth field season with us. Loyal veteran (including Sara Borgatti, Besty Alexander, Jim Hill, Joanne Carpenter, and Randy Grimsley) and new volunteers (including Daria Van Dolsen and Ashley Palmer) lent a huge hand this field season.

Northern Units

The crew excavated 7 10x10' squares in the area to the north of the current open area to ensure that an extension on the reconstructed building, housing an elevator and second stair, will not harm any archaeological resources. We encountered one posthole that related to a fence coming off the northeastern corner of the building. Generally, we were surprised by the lack of features and artifacts. This supports our hypothesis that the core of activity at the site took place to the south of the building, in between the mill and the distillery.

Drains

Our summer began with the excavation of the more than 60' long trough located outside the building. This trough collected excess water from the distilling process and channeled it to Dogue Creek. One of our more interesting discoveries was a 6' long piece of wood that we think was part of the cover for the underground wooden trough (see Dig Diary #4 for more details).

Furnaces

We completed excavating the double furnace in the southeast corner of the building. Two copper whiskey stills would have rested on top of this double furnace and shared a chimney. Removal of soil layers and destruction debris from the southern furnace exposed an intact three by three and a half foot wide firebox, the floor of which is lined with soot-covered bricks. The walls of the firebox are bricks two courses wide. In front (west) of the opening of the firebox is a two by three foot pit or hearth originally paved with brick. Using period sources, we think that the slaves feeding the fire would have stepped down onto this hearth to obtain better access to the firebox.

Just north and east of the furnace is a rectangular area of heat-altered subsoil. At the beginning of the season, we thought that this feature was a furnace similar to the one just to the south. Excavations revealed that this one does not have physical evidence to suggest its construction type, unlike its partner to the south. The base of the furnace does not have evidence that it was lined with brick, instead it appears that the fire simply occurred on the clay. In fact, only one of the five furnaces has extant brick masonry. The others can only be identified by burned earth and relationships to surrounding features. Each of these furnaces had nearby drains, which carried water away from the worm tubs after changing the alcohol vapor back to a liquid. These worm drains went through the building foundation and fed into the 60' perimeter drain mentioned above. The sharp and uniform molds of these worm drains suggest they were lined with wood, evidence of which was found in the southern-most drain where it passed under the building. We excavated 5 worm tub drains this season, which matches up well with the documentary evidence that there were 5 stills.

One of our biggest discoveries of the season occurred in the brick floor. The removal of a section of the first course of bricks came down on a footer surrounding an area of burned sand overlying burned subsoil. We think we've found the location of the boiler which would have sat on top of a furnace (hence, the footer) that was 5' by 7', making it substantially larger than the firebox in southeast section of the building. A 50' drain, lined with brick and cobbles, begins at the furnace/boiler and flows to the southeast corner of the building. It is possible that this drain carried excess water away from the boiler.



Furnace before excavation. The darker, wet bricks (forming a U-shape) are the footer for the furnace.



Furnace with part of masonry removed. Note the bright red, heat-altered subsoil underneath the furnace.

Well

One of our most recent finds appears to be a well located about 10' outside the west wall of the distillery. The circular feature is 10' in diameter and was possibly lined with bricks that were later robbed or taken away.



Partially excavated well.

From documentary sources, we know that a well was dug to supplement the millrace, the main water source. At the end of May 1798, the farm reports contain references to a well, "2 men 1 ½ days working on the well at distillery... 2 men 1 day walling up the well at the distillery... 1 man attending well digger." In early August of the same year, the cooper's shop is "making well buckets for the still house."

Discus

At the end of September, our project sponsors (DISCUS) hosted a [media event](#) announcing the American Whiskey Heritage Trail that will begin at George Washington's distillery and stop at various historically significant whiskey-related sites (including [Gadsby's Tavern](#) in Old Town Alexandria). Unfortunately, the media was not able to see much the site because tropical storm Jeanne decided to pay us a visit that day. Mount Vernon, in conjunction with DISCUS, has decided to open the second floor of the distillery as a museum for whiskey history, in addition to interpreting the two bedchambers where the distiller and his assistant would have lived.

Future Plans

This winter, the Archaeology staff will be busy preparing to write the report on our distillery excavations. We will process and catalogue the artifacts, write up our interpretations of the features, and prepare photographs and maps to be included in the report. We will also be conducting excavations in the [Upper Garden](#) so that its layout can be more accurately reconstructed. We hope to find some of the original pea gravel paths that guided visitors through Washington's garden as well as original planting beds.