A walk through the woods and a swamp

In Georgia, history revisited

What a healthy way to start 2010! A walk to Ellicott's Rock followed a few weeks later by a trip to Ellicott's Mound in the Okefenokee Swamp.**—William J. Morton, MD, JD**

Andrew Ellicott, perhaps the most famous of the United State's surveyors, yet unknown to millions of Americans. The same Andrew Ellicott—well known to Washington, Jefferson, Adams, and Franklin—who finished surveying the incomplete Mason-Dixon line, surveyed the District of Columbia and then finished laying out the streets of the District after L'Enfant was dismissed. Ellicott taught Lewis and Clark about astronomy and how to use field instruments such as the compass, sextant, and altimeter. He was also the first professor of mathematics at the fledging West Point Academy. And that's just a small list of his accomplishments!

I, too, had never heard of Andrew Ellicott until I had researched a book I was writing about the boundaries of Georgia. That book brought me to two surveyors, Bart Crattie and Robert Cagle, very much interested in surveying history and, in particular, Andrew Ellicott. I had heard about Ellicott's Rock in the northeastern corner of Georgia but had never been there and when I broached the subject of hiking to Ellicott's Rock with my new surveyor friends, both immediately embraced the idea. We decided to meet at Clayton, Georgia, in the northeast corner of the state, a week later. We were pumped!

In 1811, Andrew Ellicott was asked by Georgia's Governor David Mitchell to mark latitude 35° north at the "headwaters" of the Savannah River which was the agreed upon, although never surveyed, boundary line between Georgia and South Carolina. The "headwaters of the Savannah River" had been defined by the Beaufort Convention of 1787 between Georgia and South Carolina, which stated that the Savannah River headwaters was, "the most northern branch or stream of the River Savannah from the sea or mouth of such stream to the fork or confluence of the Rivers then called Tugaloo and Keowee: and from thence the most northern branch or stream of said River Tugaloo till it intersects the northern boundary line of South Carolina... ."

Georgia lost thousands of acres of land by agreeing to accept the Tugaloo River as the most northern source of the Savannah River, since the Keowee River rises far more north of the 35th parallel than does the Tugaloo. By choosing the Tugaloo River, Georgia lost all of that triangle of land between the Keowee and Chattooga Rivers which is now in South Carolina.

Ellicott traveled from Philadelphia to Milledgeville, the capitol of Georgia in the summer of 1811, where he picked up supplies, men, and horses. Then he walked, and rode, with his team, the 200 miles alongside the Savannah River, up the Tugaloo and then the Chattooga to the 35th parallel. On December 25, 1811, he chiseled the initials "N" and "G" in a rock at the river's edge of what he found to be the 35th

Ellicott's Rock

parallel. Although my description of his journey takes two sentences, his trip took about six months.

There are no records of the events of the six months it took him for the journey when he had to make his mathematical and astronomical calculations to find the 35th. Historians have postulated that this is because Georgia refused to pay his final bill for his labors. Ellicott did not take kindly to this impasse. In 1813, Ellicott wrote, "I have delayed the publication of the journal of our proceedings, with all the astronomical observations, and other scientific operations made use of in determining the boundary between the states of Georgia and N. Carolina... that I may upon the settlement of the account be enabled to speak as favorable of the government of Georgia as the inhabitants generally."

Governor Mitchell's reply was, "Permit me to observe that if the publication of your Journal and the truths it is to contain depend upon the amount of your account, the Government of Georgia disclaims all interest of Concern in it and is perfectly indifferent as to its fate."

So much for that. And, by the way, not getting paid seemed to be a constant problem for Ellicott on almost every one of his surveys. Not only did this happen to him on the 1811 survey, but he had the same problem of collecting money for his services after his Georgia–Spain survey.

Fast forward now to January 2nd, 2010. Almost 200 years to the day when Ellicott found the 35th latitude, three of us—Bart and Robert, two very experienced surveyors and historians, and one neophyte author, me, met in the parking lot of a downtown motel in Clayton, Georgia. It was 18° that morning, clear but really cold. After a hearty breakfast at the local eatery (which we came upon by finding where all the pickup trucks were parked), we drove down the highway about 20 miles to Burrell's Ford Road, a nine-mile gravel road with numerous trees fallen across it because of the recent ice storms, to the Chattooga River trail head. Remember, we were in a warm pickup truck, going 60 mph on the highway, with a map which we had gotten from the Ellicott

Bart Crattie and Robert Cagle

Rock Wilderness ranger headquarters. Ellicott would have been jealous.

The 3.5 mile hike from the trail head to the 35th, along the Chattooga River, started out straight and easy, but soon we were inching on top of downed trees over side channels of the Chattooga, and a rocky, very uneven, and at times unseen, trail. We got "semi-lost" twice—of course, we were never totally lost, I had surveyors with me—but got straightened out by some campers near the river. Did I mention it was 18°?

A walk through the woods


The Chattooga River

And then, there it was—a make shift sign on top of a simple iron post. We had to scramble down the steep trail to get to the waters edge, but then we found what we came looking for. Ellicott's Rock with the "N" and "G" carved into it. Can you imagine what it's like to see grown men jumping up and down and hugging and shouting? Andrew Ellicott was at this exact spot 200 years before. I'm getting goose bumps just writing it down.

After taking many pictures and trying not to fall in the Chattooga, we went looking for the Commissioner's Rock, which we knew was close-by. Commissioners from North and South Carolina were sent to find the 35th parallel at the Chattooga in 1813, to confirm the accuracy of Ellicott's survey. They found the 35th and marked it with a carving on a rock just south of Ellicott's Rock—also at the water's edge.

We had to climb back up the bank to the trail and then go south about 15 feet, and climb down again to the water's edge. Sure enough, there was Commissioner's Rock (more goose bumps,) in all it's glory. Clearly visible was the carving: Lat 35, AD 1813, NC+ SC+ GA.

Exhilarated and physically exhausted, we sat by the rock and took in the moment. We mused about Ellicott (and the subsequent Commissioners) and tried to imagine what he went through to accomplish his assignment. Not only the physical strain of making the trip from Milledgeville, but also the man's brilliance. This was a surveyor who made his own instruments and was, for the most part, self-taught astronomer and mathematician. The 1813 marker, rather than Ellicott's rock carving of 1811, is sometimes mistakenly called "Ellicott's Rock" and sometimes, Commissioner's Rock. There is no question which rock I'll call Ellicott's Rock.


The Commissioners' Rock


Bill Morton at Ellicott's Rock

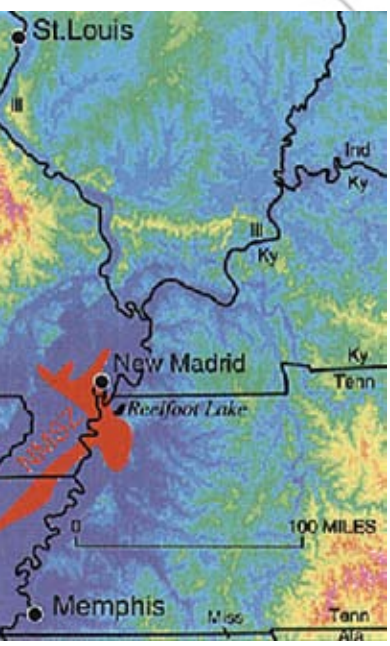
According to the National Register of Historic Places. "...the rock was located and carved in 1813 by the boundary commissioners for the states of North and South Carolina. It was to mark latitude 35° at the Chattooga River; however, later surveys have located it in 1820 at 35° 59', in the 1930s at 35° 00' 04.4" by USGS, and by the Tennessee Valley Authority as 35° 00' 02.3."

This is the inscription on the rock now known as Ellicott's Rock. The inscription is slowly

weathering away due to high rainfall and the Chattooga River's waters.

As already mentioned there are no records in the public domain documenting Ellicott's 1811 survey, It's my hope that if any of Ellicott's descendants happen to read this article and know of such records, perhaps one day we will have the pleasure of learning about Ellicott's experience in his own words. One event which has been recorded and must be mentioned, however, is the St. Madrid's earthquakes of 1811/1812.

The New Madrid Fault line is the largest fault line in the U.S., after those on the west coast. It runs from St. Louis, Missouri, down the Mississippi River into Arkansas. The New Madrid Fault line crosses five states and runs along the Ohio River, in addition to the Mississippi. The New Madrid Earthquake was a series of 2000 shocks starting on December 16, 1811, and continuing for five months. Although a scale to measure earthquakes had not yet been devised, descriptions of the severity and size of the New Madrid quake suggest it must have been at least an 8 on the Richter scale. The following excerpt from Jay Feldman's "*When the Mississippi Ran Backwards*" (2005) gives a good sense of the quake's magnitude:



"The New Madrid quakes caused the earth and buildings to shake in Natchez, Mississippi (375 miles south); the bell in the cupola of the Georgia state house in Milledgeville to peal (425 miles southeast); land to sink in Georgetown, South Carolina; and pavement to crack in Charleston, South Carolina (both about six hundred miles east-southeast). In New York City, nine hundred miles northeast, cups and saucers rattled on breakfast tables and picture frames jiggled on walls."

Surely, Ellicott and his team must have felt the ground shake since they were in the northern part of Georgia during the month of December, 1811. How marvelous it would have been to have Ellicott's observation of the tremor(s) as they worked in the foothills of the North Georgia Mountains during those winter months.

Flushed with success and the excitement of touching the rock that Ellicott himself had touched, we did not feel the Carolina commissioners deserved special accolade and did not spend much time by their rock. We headed back down the trail to the truck.

Andrew Ellicott had already been a famous surveyor when he was asked by Thomas Jefferson to survey the border between the then United States and Spain along latitude 31° North. Recall, the United States gave Spain, as a gift for their assistance, what was called Spanish Florida after the end of the Revolutionary War in 1783. Almost 15 years later, in 1795, both countries signed Pinckney's Treaty further defining the common border.

Jefferson turned to Andrew Ellicott to survey the border defined in the Treaty as "a line beginning on the Mississippi River at the 31st degree north latitude drawn due east to the middle of the Chattahoochee River and from there along the middle of the river to the junction with the Flint River and from there straight to the headwaters of the St. Marys River and from there along the middle of the channel to the Atlantic Ocean."

The portion of the border from the junction of the 31st latitude north and the Chattahoochee River, then down the Chattahoochee River to its confluence with the Flint River, and from there straight to the headwaters of the St. Marys River, and from there along the middle of the river to the Atlantic Ocean, is today's boundary between Georgia and Florida.

Ellicott spent four years measuring and marking the United States/Spain border. He walked the 450 miles from just south of Natchez, Mississippi, at the 31st latitude north, to the Mississippi River, marking with a large mound of dirt every mile of the line. Then, because of problems with the local Indian tribes, he elected to purchase a sailboat and, with a team of 20 people, sailed down the Appalachicola River from the town of Chattahoochee into the Gulf of Mexico.

I don't need to remind the reader that this was in 1800, before such things as engines, depth finders, charts, and GPS.

Ellicott came up the Atlantic Ocean side of Florida and found the mouth of the St. Marys River. When those on his team who had walked from Chattahoochee on the Flint River to the small village of St. Marys arrived, the team canoed up the St. Mary to mark its headquarters.

It was Ellicott's Mound, at the headwaters of the St. Marys River, which became my next obsession. I could think of nothing else. I had written about Ellicott's four-year expedition to measure the United States/Spain border in my book and even owned a reprint of his 1803 Journal. It was getting to the Mound, in the southern part of the Okefenokee Swamp, which was going to be tricky. The Okefenokee Swamp is part of the United States Fish and Wildlife Service and, eventually, I learned that I had to get a special permit to make the trip. I also needed help to find the mound.

I contacted Sara Aicher, biologist for the Okefenokee Wildlife National Refuge, at her

office just south of Folkston, Georgia, and filled a request for a special permit for the trek. I also asked the Surveying and Mapping Society of Georgia (SAMSOG) if they would send an e-mail to their members advertising the trip—which they graciously did. I received numerous responses from the e-mails.

Thirteen of us met at the Refuge Administration building early in the morning of February 3, 2010. The weather was cool, but it would turn out to be a gorgeous blue-sky, 70° day—perfect for a walk in the swamp. Five Rangers, including biologist Sara Aicher, got in on the act and wanted to accompany us. We were given free maps and quads for the part of the Refuge near Ellicott's Mound and had a brief conference prior to starting off. However, it was the canoe on top of one of their pickup trucks that got my eye.

We drove south and crossed from Georgia over the St. Marys River into Florida and then double

crossed the river again—in and out of Georgia and Florida only to go as far as we could go into the swamp without drowning out the trucks. All of us were aware that we would be in wading water and either wore waders or boots, but only after we had walked a mile or so did we come to a decision point! No longer were we in knee-deep, slushy water on an old road bed, now we had a small, 100-yard lake ahead of us.

We thought we could see some survey markers near the Mound in the distance, but first

we had to get past the lake. One of the rangers started wading towards the Mound and soon was waist deep. More of the group followed him, leaving the more perspicuous of the group to consider going in the canoe. Let's see, walk in the waist-deep pitch-black cold water, possibly teeming with alligators and venomous snakes, or take the canoe? I got into the canoe.

Coming upon the Mound gave all of us tremendous thrill. Overgrown with palmettos and weeds, but clearly identified by survey markers and a 1934 U.S. Geologic Network Control Station marker #BD 2570 (also found on the USGS Moniac Quad at GPS coordinates N 30.56273 and

These historical hikes through Georgia's woods and swamps are described in greater detail in the author's book, *The Story of Georgia's Boundaries: A Meeting of History and Geography*, which can be purchased online at Amazon.com or Barnes&Noble.com. For an inscribed copy of the book, contact the author at 404.405.4035, or angler37@me.com, or his website, www.wjmortonmdjd.com.

W 82.18734), we paused and again spoke about Ellicott; the tremendous energy it must have taken to persevere and make history.

We spent over an hour at the Mound, clearing the overgrowth and taking pictures, and then

reversed our course to the trucks. We developed a special bond on this "walk in the woods," and although I doubt that, as a group, we will make the trek again, on the anniversary of the trek I am sure we will all be thinking of the great adventure we shared.

As a final note, it's appropriate to quote from Ellicott's published journal about his location of the headwaters of the St. Marys River:

"This being the highest point to which we ascend the river, and the country so covered with water, that it was impossible with our few remaining broken down pack horses to convey our apparatus by land to the source of the river: we therefore had to determine the geographical position of its source by a traverse; the courses of which are as follows: viz. beginning at the observatory A where a hewn post was set up and surrounded by a large mound of earth, from thence N 10° 1' W. 4435.6 perches, thence S. 85° 14' W. 115.6 perches, thence north 44.8 perches at the end of which a hewn post was set up, and surrounded by a mound of earth. The last mentioned mound of earth was thrown up on the margin of the Okefonoke (sic) swamp, and as near to it as any permanent mark could be placed on account of the water.

It may be seen that the river St. Mary's (sic) is formed by the water draining out of the Okefonoke swamp along several marshes, or small swamps, which join into one, and form, or constitute the main branch or body of the river. The principal, or largest of those swamps, or drains, is the most easterly one, and in which the current is most visible. This marsh, or drain, is crossed by the last course of the traverse, which terminates at the mound. From this mound north-easterly into the swamp, the water has but little, if any, perceptible current. The source of the river is therefore in an indeterminate space and no specific point could be fixed on, as the swamp is at all times almost impenetrable, and at this season of the year absolutely so without immense labour and expense (sic).

It was therefore agreed that the termination of a line, supposed to be drawn N. 45° E. 640 perches from the mound, should be taken as a point to, or near which, a line should be drawn from the mouth of Flint river; which line when drawn, should be final and considered as the permanent boundary between the United States and His Catholic Majesty, provided it passed not less than one mile north of the mound' but if upon experiment, it should be found to pass within less than one mile north of the said mound, it should then be corrected to carry it to that distance. To obtain as near as possible the course of the said line, with the distance between the points to be joined, the following materials deduced from our previous operations were used. The longitudes made use of are from measurements, compounded with the eclipses of the first satellite of Jupiter." —And so defined, the river, the Mound, and Ellicott's and Commissioners' Rocks have entered the history of our Nation.