

Essex County Countryside Alliance

2014 Report



ECCA Works to Preserve, Protect, Retain and Enhance the Farms, Forests, Fisheries, Wildlife Habitat and Other Productive Natural Resources of Essex County on Virginia's Middle Peninsula

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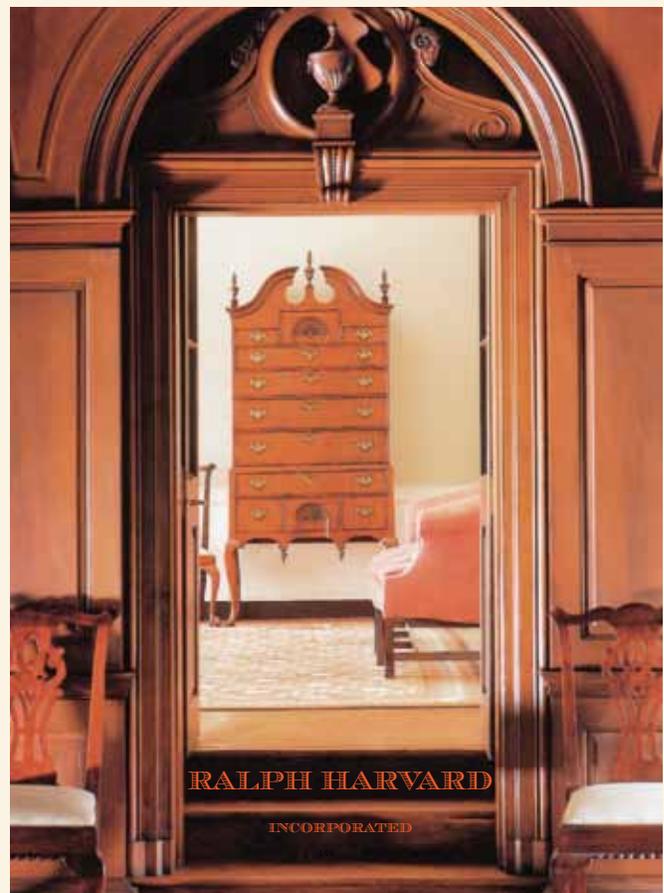
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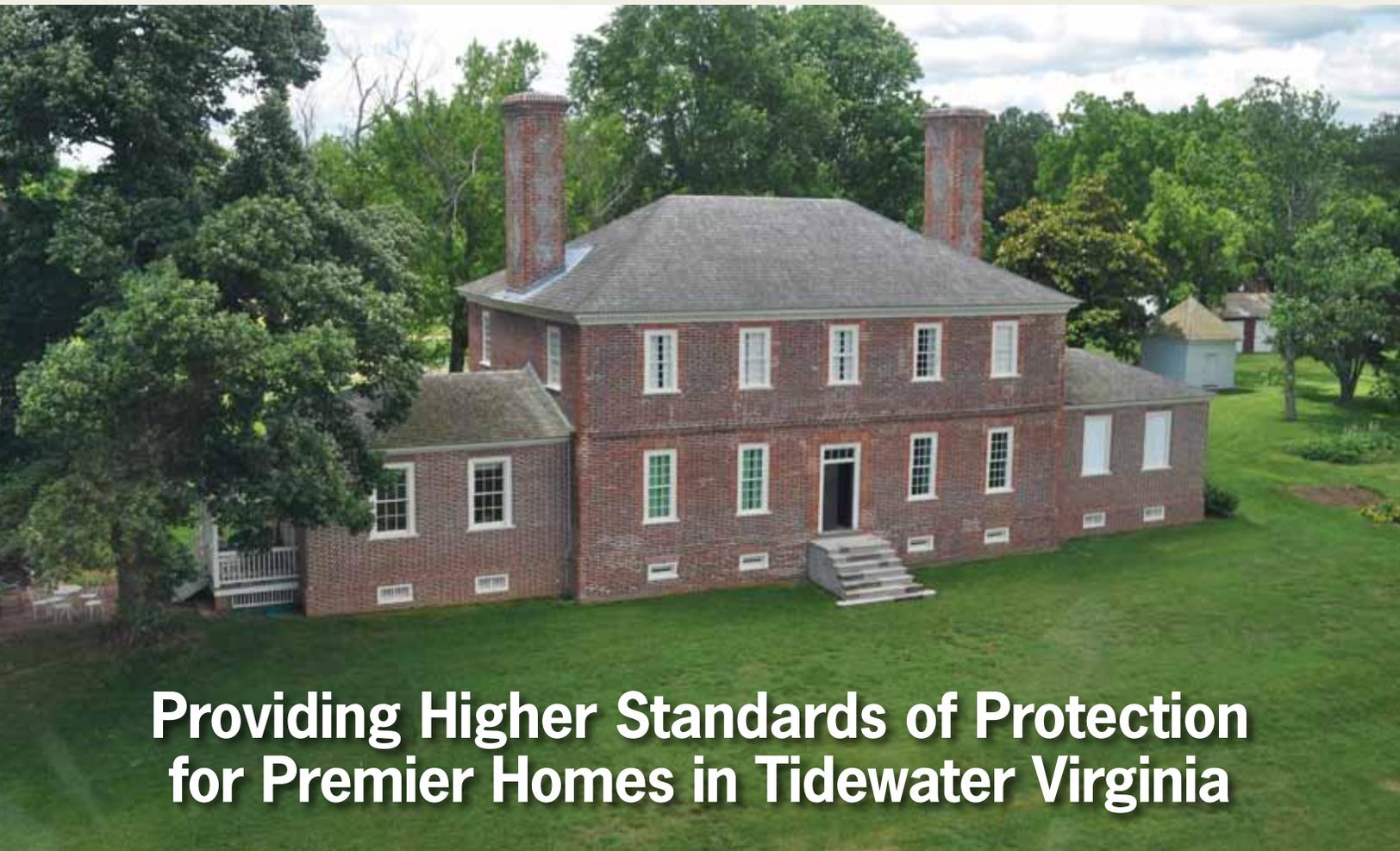
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Letter From the President



Dear Friends,

When ECCA was formed in 2006, our mission was to educate Essex County citizens about conservation easements and advocate their use in order to conserve and preserve the natural, scenic, and historical resources of our county and the Rappahannock River Valley.

Sadly, in 2013 we were forced to take the position of a defensive organization in order to protect the river. Last year was a tumultuous one to the extent that a South Carolina developer tried to build a forty-six-slip marina at Fones Cliffs in Richmond County, and it became obvious the possibility of fracking in the Taylorsville Basin is closer to becoming a reality.

The good news is that local citizens, working through an exhausting (for some) and determined process were successful in stopping the marina as planned. Why didn't Richmond County officials recognize what the Virginia Marine Resources Committee did?

We have devoted ample space to fracking in this magazine so that we can all be better informed about what might take place in the next few years throughout five counties of the Northern Neck and Middle Peninsula.

Should the possible financial betterment of a few be allowed to forever change our landscape and countryside? And also possibly permanently pollute our water supply, which is already overtaxed? Why did the oil and gas industry lobby to be excluded from the Clean Water Act in 2005?

Given that some of the drilling sites will be in the midst of the Rappahannock River Valley National Wildlife Refuge, will the migratory ducks and geese be landing in the ten-acre ponds filled with chemicals?

Can we really trust oil and gas companies to be good environmental stewards? Remember the Exxon Valdez spill, and the BP spill in the Gulf of Mexico—the list is endless.

It is up to us, as Essex County citizens and taxpayers, to speak up and let our elected officials know how we feel.

On the easement front, there are still large parcels of land throughout the county that need protecting, and we will continue to reach out to these families.

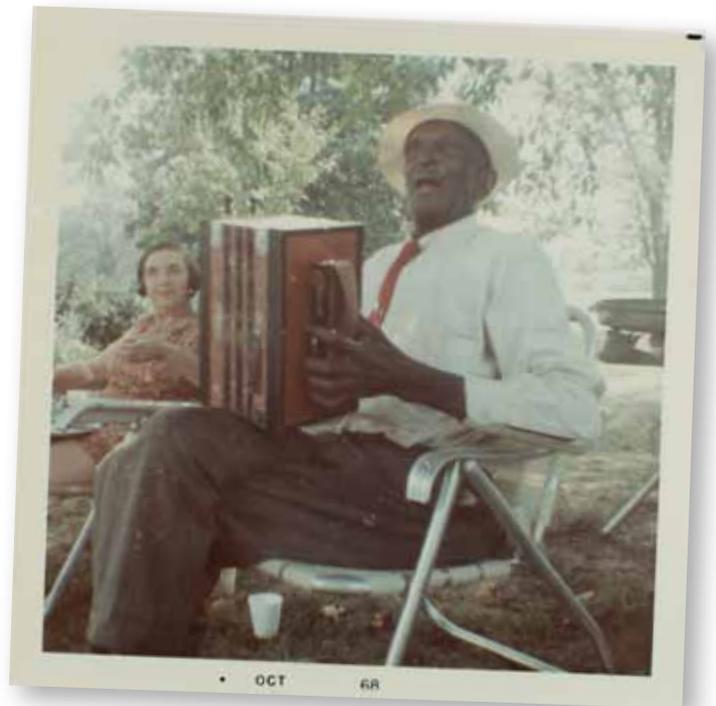
The application for Millers Tavern to be designated a rural historic district (RHD) is in the paperwork stage and we hope to have this completed by the end of the year.

Lastly, the Occupacia RHD has been identified and now the studies have to be done by a consultant to move closer to official recognition by the Virginia Department of Historic Resources. We need to raise approximately \$26,000 to complete this need, and we are planning a house tour on November 8 to initiate the fundraising effort.

Thank you for all you do to keep ECCA vibrant and healthy.

Sincerely,

A handwritten signature in blue ink that reads "Peter Bance".



John Taylor entertaining at Wheatland, October 1968, Loretto, Virginia.

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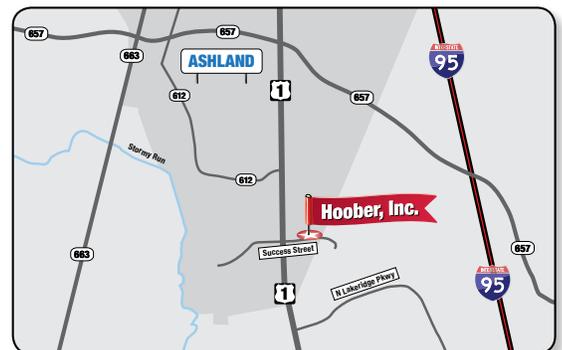


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Harvest Home Tour

To benefit ECCA Rural Historical District Registration Project

Saturday, November 8, 2014, 10:00 am – 4:00 pm

Tickets may be purchased in advance for \$30 each by mailing a check (made payable to ECCA) and a self-addressed and stamped envelope to: ECCA, c/o S.P. Derieux, PO Box 2181, Tappahannock, VA 22560.

Tickets will be available on November 8 at Vauter's Church for \$35 for the full tour or \$20 to tour only one house.

For more information call Julie Strock at 804-443-2454 or Frances Ellis at 804-443-2025.



Wheatland c. 1849

Wheatland, a mid-19th-century Greek Revival plantation house, is located on a bluff in Essex County and overlooks a bend of the Rappahannock River. The house was constructed by John Saunders, probably between 1849 and 1851. Saunders, who was a merchant as well as a planter, built the plantation wharf that is still in use and is probably the only such wharf remaining on the river.

Information about these properties is from www.dhr.virginia.gov/register.

Elmwood c. 1774

Elmwood was built around 1774 for Muscoe Garnett (1736-1803), whose family had been prominent in Essex since the 17th century. Garnett was one of the largest landowners in the county and a member of the Essex Committee of Safety, 1774-75. Architecturally, Elmwood is one of Virginia's most ambitious colonial plantation houses, both in size and richness of detail.



Rose Hill c. 1790

Phoenix-like, Gay Mont has risen from the ashes of the destructive fire of June, 1959, to stand again on its prominent site overlooking the Rappahannock Valley. Gay Mont was built in the latter part of the 18th century by John Hipkins (circa 1749-1804), a merchant of Port Royal, on land he had assembled between 1786 and 1799. At his death in 1804 Hipkins left this property, then called "Rose Hill," to his only grandson, John Hipkins Bernard, then a boy of twelve.



Vauter's Church c. 1735

Vauter's Church is regarded as one of the most graceful examples of colonial ecclesiastical architecture in Virginia. Standing in an unusually good state of preservation, the church is noted for the beauty of its brickwork, especially its fine molded brick doorways and its skillful use of glazed headers. As compared with many of the other colonial churches in the state, Vauter's preserves a large proportion of its original fabric such as doors, trim, and interior fittings, making the building a valuable textbook of 18th-century details.



Kinloch c. 1845, 1950

The original Kinloch was built by Richard Baylor in the late 1840s. This home was destroyed by fire in 1948. The original cook-house survived the fire and was incorporated in the present house, completed in 1950 and designed by Charles Goodman, a Washington, D.C. architect. Goodman's principal career achievement was to make modern houses—

houses that privileged openness in plan, natural textures and materials, and a strong visual connection to nature through extensive use of glass—available to the middle class. Goodman brought Modernism to the wider marketplace in the 1940s through the 1960s with his designs in Virginia and other Washington, D.C.-area suburban developments.

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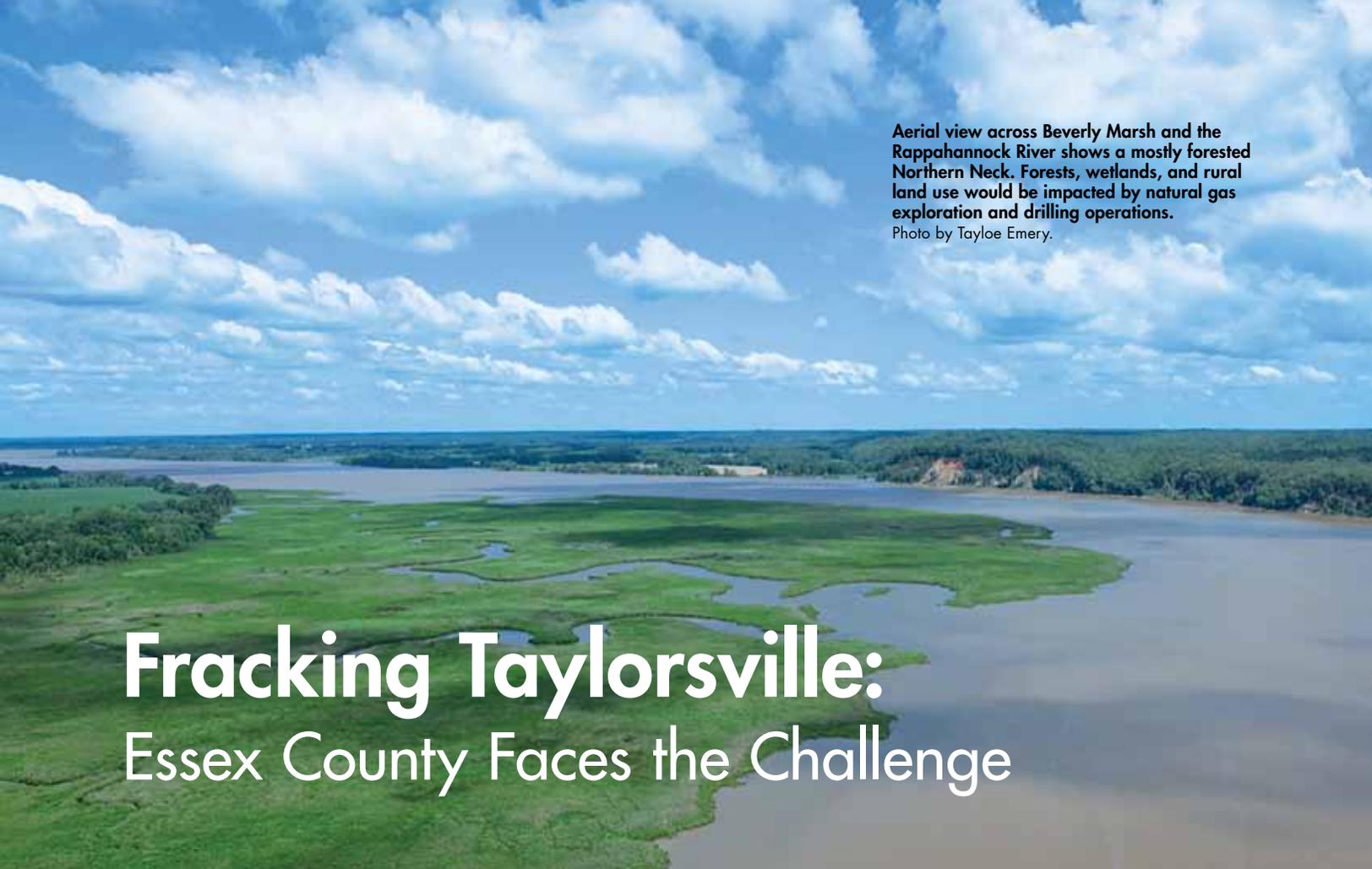
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Aerial view across Beverly Marsh and the Rappahannock River shows a mostly forested Northern Neck. Forests, wetlands, and rural land use would be impacted by natural gas exploration and drilling operations.
Photo by Tayloe Emery.

Fracking Taylorsville: Essex County Faces the Challenge

"I have thought about it, and I'm just a little bit on hold. If it were up to just me I would say no, it's too much of a risk. There's this aquifer, there's all this waste, the pools and ponds that could contaminate our water. We just don't need it here."

—Prue Davis

Leslie Middleton writes about water quality, land conservation, and the Chesapeake Bay for the Chesapeake Bay Journal, a regional nonprofit news organization. This story was written for ECCA.

By Leslie Middleton

These days, the word *fracking* sets people on edge—whether they are for or against it—and this is no different in Essex County. The cost and availability of energy is tied to the bottom line of our nation, as well as every resident of Essex County. Some people would rather not talk about it while others want to make sure there is a full public discourse on the topic.

Residents of Essex County and neighboring counties may be feeling a little uncomfortable about the added attention the region has been getting over the last six months as what was an undercurrent of activity—the private sales of leases for mineral rights—has become a matter of public discourse.

Over the last couple of years, Essex County residents have been visited by “landsmen” working for Shore Exploration and Development Corporation, a Dallas-based oil and gas company that has been quietly purchasing leases to mineral rights from landowners in Essex, King and Queen, King George, Caroline, and Westmoreland counties. Mineral rights to over 13,000 acres have been purchased in Essex County alone.

Willing landowners receive an up-front down payment for these private leases. They are also promised royalties if future drilling operations from their property yield commercially viable amounts of natural gas from deposits lying as much as 10,000 feet below the surface.

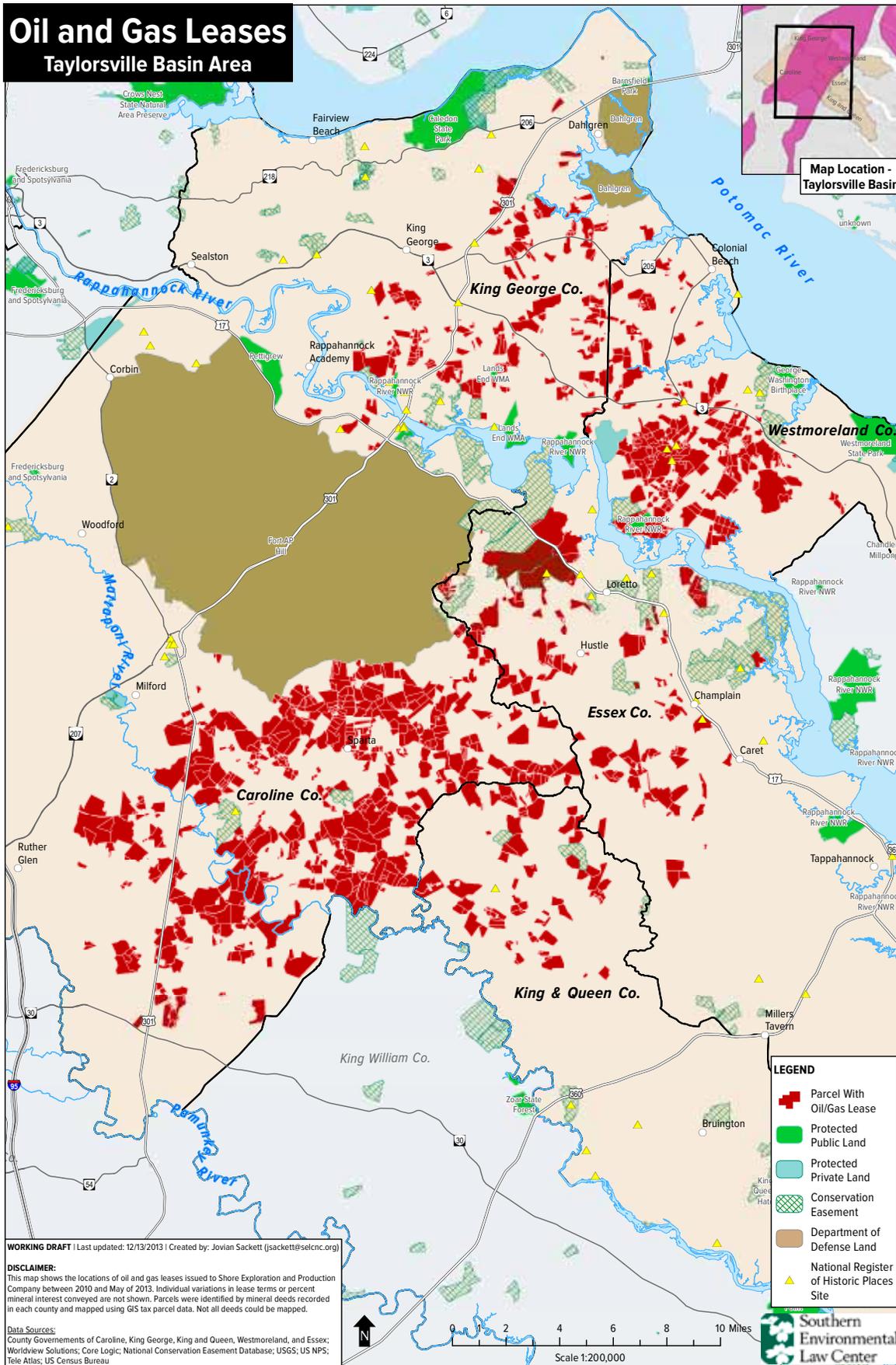


Figure 2: The Southern Environmental Law Center mapped leases recorded at local land courts prior to the summer 2013, as shown by this map.



Pennsylvania farmland, as seen in Washington County, above, now includes drilling apparatus among barns and farm fields. Photo by Schmerling via FracTracker.org.

USGS and the Virginia Department of Mines, Minerals, and Energy report that there may be as much as 1.06 trillion cubic feet of natural gas recoverable from Taylorsville. This amount would be enough to satisfy Virginia's household energy needs for 2 1/2 years at today's consumption rates. For comparison, the heavily mined Marcellus Shale oil deposits in Pennsylvania and West Virginia are estimated at 410 trillion cubic feet.

To extract natural gas reserves from Taylorsville would require drilling through the Potomac Aquifer, a large underground reservoir of fresh water that sits from 300 to 3000 feet below all of tidewater Virginia. This coastal plain aquifer is the water supply for over half a million people, farms, and industries in eastern Virginia.

Because of concerns that this resource is showing signs of depletion, the Virginia Department of Environmental Quality recently expanded the Eastern Groundwater Management Area to include all tidewater localities, in order to facilitate water use coordination between all users.

Drilling to the Taylorsville Basin deposit would require penetration of

the aquifer, a possibility that alarms many in the area. Drilling regulations created in the early 1990s, specifically for tidewater Virginia, do require additional precautions. But the fact that these two geological formations, one, a source of sustenance, the other, a source of potential wealth, lie in such close proximity has many feeling nervous.

Prue Davis of Rose Hill in Essex County, longtime farmer and Essex County supervisor, put it this way, "I have thought about it, and I'm just a little bit on hold. If it were up to just me I would say no, it's too much of a risk. There's this aquifer, there's all this waste, the pools and ponds that could contaminate our water. We just don't need it here."

But Davis knows that it is a complex issue and that the Taylorsville Basin, for some, holds the promise of possible income. "I guess it could help a lot of people here," she said. "But I'd really like to see one of these operations in person."

Recovering Natural Gas: The Good, the Bad, and the Ugly

For those inclined to be impressed by, or profit from, the seemingly endless advances in modern

Drilling to the Taylorsville Basin deposit would require penetration of the aquifer, a possibility that alarms many in the area.

technology, extraction of natural gas and oil from shale oil beds is close to the top of the list of modern technology's achievements.

The application of horizontal drilling coupled with hydraulic fracturing—or fracking—to recover natural gas has created massive changes in the physical and economic landscapes in gas-rich regions and American as a whole.

Many residents of Colorado, Pennsylvania, and West Virginia are among those who have profited by selling leases to their mineral rights to allow exploratory drilling and extraction of natural gas. To some, the presence of an oil derrick in the back forty, or often in the front yard, is like looking at money in the bank. Royalties from a natural gas "play," as an actively producing well is called by the industry, has made millionaires of many who had little wealth except the value of the land they lived on.

But, as Gwen Lachelt, an elected county commissioner from La Plata County, Colorado, explained to several groups of interested citizens in nearby Caroline and Westmoreland counties last December, this wealth does not come without its costs. "We are twenty years into the shale oil gas boom where I live, and we've seen how the community changes and how difficult it can be for a local government to regulate an industry that has deep pockets and long history of relationships in the region."



Tidewater oil and gas regulations prohibit drilling operations within 500 feet of the Bay and tidal tributaries, as well as Resource Protection Areas (like this freshwater marsh) designated by the county as part of the Chesapeake Bay Act. Photo © Bill Portlock

Lachelt said that infrastructure impacts on her county—the roads, schools, and health and human services—have been significant and largely not covered by fees paid by drilling companies to the county.

“They sold us on all the jobs that would be created,” she said, but the best jobs were for the pipe liners, highly skilled but transient energy workers who arrived at the beginning of projects but were long gone as production commenced, leaving an economic bust as the boom fueled by their high wages collapsed and the community was left in the dust.

Impacts, said Lachelt, have included road damage, a spike in demands for emergency health care and public safety services, a short-term housing boom followed by a local recession, and compromised

water quality in area streams and drinking water wells.

The long-term effects on water and people from fracking operations remain uncertain. Some studies point to the increase in methane found in drinking water supplies in areas of high natural gas development. Other studies show illnesses associated with poor air quality. Some parts of the country where natural gas production is concentrated have ozone pollution that rivals major metropolitan areas.

The industry is still relatively new. The science is even newer, and there are no long-term, peer-reviewed studies that can account for the effects on deep underground aquifers that are harder to measure.

Both Shore Exploration’s president, Stan Sherrill, and the Virginia Department of Mines, Minerals, and Energy (DMME), the state agency

charged with oversight of energy extraction in Virginia, say that the drilling technology in use today and the special regulations for drilling in tidewater Virginia (extra drill casing required to the greater of 3,000 feet or 300 feet below the deepest water sources) will protect the groundwater aquifer.

But others are not so sure. What happens if there is an accident? This troubling thought is especially hard to ignore after the recent series of coal ash and crude oil spills in Virginia and West Virginia. Technology is not infallible. Neither are humans.

One has only to travel to West Virginia to see what shale oil gas development looks like, as some elected officials from Rockingham County did in 2010 when faced with a special use application from



The Rappahannock River Valley National Wildlife Refuge provides winter habitat for black ducks and other waterfowl. Photo by Hill Wellford.

an out-of-state drilling company hoping to cash in on the Marcellus Shale bonanza. Well pads sitting right next to private homes are not an uncommon sight. School buses require escorts to assure the safety of schoolchildren on roads that have been taken over by trucks carrying water to, and waste from, drilling sites.

And miles of pipeline connecting production sites, cross open fields and run over and under roads and through forests. According to the Nature Conservancy's study of Marcellus shale development's impact on the environment, a single well pad clearing in forested portions of Pennsylvania involves an average clearing of 8.8 acres. Pipelines criss-

crossing the state fragment important ecosystems and sensitive landscapes.

The effects of unknown chemical compounds that may be introduced into the aquifer, released to the air or ground during inadvertent spills, or otherwise make their way to area streams and wetlands in spite of best efforts, is just too much of a risk for some. ECCA's policy statement on fracking cites concerns "that the chemicals may migrate through the well bore or fractures to contaminate aquifers," in new wells and those that may have been abandoned because they are no longer deemed commercially viable.

Meanwhile, the process of hydraulic fracturing introduces chemicals used to aid the drilling and fracturing process in the geologic layers. They are chemicals that the industry is reluctant to identify, citing proprietary privilege, a right that has largely been upheld in the US courts. In other words, the public's right to know about substances that may affect the health of people and ecosystems of the region is currently trumped by the need to maintain a competitive business advantage.

Land Conservation Organization Takes a Stand

These were the concerns that led the board of the Virginia Outdoors Foundation (VOF), after two intense years of deliberations, to eliminate reserved mineral rights from all conservation easements that they hold in trust for the Commonwealth of Virginia, moving forward from their April 2014 meeting.

The foundation began examining its policies shortly after Shore Exploration, in 2011, started buying up leases in the Taylorsville Basin. VOF realized that the conservation values it was charged with protecting

through easements could be compromised if oil or gas drilling were to occur on, and under, the protected lands.

Brett Glymph, VOF executive director, explained, “Starting with changes we made in 2012 in the easement language, we reserved the right to review and approve the plan of development”—in other words, how and where drilling could take place on a property with an easement written during this timeframe.

But when VOF board members heard, in March 2014, from Renee Carey, executive director of the Northcentral Pennsylvania Conservancy (a land trust in the heart of Marcellus shale country) about the need for constant monitoring of easements where gas development was allowed, VOF realized that oversight of easements with reserved mineral rights would severely strain VOF’s resources.

Carey explained how leases on lands protected by conservation easements could be “flipped”—sold to new owners—and explained how frustrating it could be to track down current owners of the resource. Often more than one company was involved. “There would be all these levels, not just the company to which the lease was sold, or the operator of the drilling equipment.”

“We started to wonder,” Glymph said. “Would the onsite operator have gotten the message that this is a special property [with an easement on it] and they’ve got to be extra careful and do these extra things [required by the easement]?” Reflecting on the issue, Glymph said, “One could fairly conclude that you’d have to be onsite every day.”

Glymph said that it was important to the foundation that it not “get out ahead of the local communities”

during VOF’s deliberation of its policy. “We didn’t want to get in the way of communities having the conversation about whether or not they want to have oil and gas as part of their economic landscape.”

Unlike southwest Virginia, where coal extraction and natural gas drilling is part of the fabric of life, the question of what the communities sitting above the Taylorsville Basin want has not yet been answered.

Those community conversations are just starting up. Again.

1990s-Era Legislation Provides Some Protection in Tidewater Virginia

Since the first oil well was drilled in the Taylorsville Basin in 1968, geologists have known that the Taylorsville Basin might hold oil and gas reserves. In the late 1980s and early 1990s Shore Exploration, working in partnership with Exxon and Texaco, conducted some test drilling, looking for oil. Though gas reserves seemed negligible, the drilling resulted in a flurry of activity in the Taylorsville Basin region.

Today some local residents remember when, a couple of decades ago, “landsmen” came around to their doors, or their parents’ doors, hoping to acquire mineral rights to explore whether there might be commercially viable amounts of oil thousands of feet below the rolling farm fields of Essex and neighboring counties.

The results were less than promising for commercially recoverable amounts of oil, and the companies turned their attention elsewhere.

But the potential for exploration in that part of Virginia where economies were dominated by working farms and watermen got the attention of lawmakers—including Delegate Tayloe Murphy—who were concerned

that this kind of industrial activity in the tidewater area of Chesapeake Bay could have disastrous impacts on the sensitive ecology of a body of water already stressed by pollution from industry, wastewater treatment plants, and some farming practices.

Murphy and others worked to enact legislation, still in effect today, that severely restricts drilling for oil and gas in the region. Virginia statute § 62.1-195.1 prohibits drilling in Chesapeake Bay waters and all of the tidal tributaries. It also establishes a 500-foot-minimum setback from these waters and any designated resource protection areas (RPAs).

RPAs are special lands designated by local governments in accordance with the Chesapeake Bay Preservation Act and incorporated in a local, comprehensive plan. Comprehensive plans serve as the foundation for land use planning by local governments in the Commonwealth of Virginia.

Virginia statute § 62.1-195.1 also outlines how any drilling would proceed in non-prohibited areas of tidewater Virginia. The law requires the DMME, upon receipt of a permit application to drill for oil or gas, to undertake an environmental impact assessment *in consultation with* the Virginia Department of Environmental Quality (DEQ). The basics of the required environmental assessment are also outlined.

While the possibility of drilling in Taylorsville has increased over the last year, organizations such as ECCA and the Southern Environmental Law Center (SELC) have discovered some troubling aspects of the state law. For example, as presently written, the law gives full authority to DMME to issue the permit and only requires that DMME consider the findings of DEQ.

This is concerning to some, including former state delegate Albert Pollard, who represented Virginia's Northern Neck counties for five terms between 1999 and 2012. He argued that "there is something basically wrong with having the agency that is charged with promoting energy development in the Commonwealth be the same one that regulates the energy industry." In other words, it's like the fox guarding the hen house.

The Role of Local Governments: Weighing Property Rights against Public Responsibility

VOF's executive director Glyph praised the ECCA for its role in bringing these issues to the attention of the VOF and the local community. "ECCA and other land preservation groups are our local partners. They are the organizers of that community's philanthropic spirit and important stakeholders in the discussion. On this specific issue [gas development], ECCA helped to funnel the citizen comment and concern about these issues to us."

Citizens and members of local governments, including Essex County, were among those watching to see how VOF would handle the question of reserved mineral rights and drilling.

Indeed, a careful look at the map showing where oil and gas leases have been recorded (see Figure 2) reveals that most of these lands are privately held and are not protected by conservation easements.

Many of the questions being raised by concerned citizens and conservation groups center on what authority local governments have to regulate, or even possibly prohibit, drilling activities within their jurisdictions.

Counties are responsible for safeguarding the health, welfare, and safety of their citizens. Local governments in the Commonwealth have always had local land use planning authority, one specific area of responsibility that does not require the state delegation of authority that the Dillon Rule in Virginia requires.

County comprehensive plans, required by state law to be updated every five years, provide the foundation for land use planning. Indeed, a map of designated land uses is a required component of the plan. Both the plan and the land use map are developed by local governments with significant community input, and are ultimately approved by the board of supervisors.

Using the comprehensive plan as the guide, counties then update and enact specific local zoning ordinances (laws) that implement the goals of the plan. Together, the comprehensive plan and zoning ordinances are the tools by which local communities determine where, how much, and even if, certain land uses are permitted in different parts of the county, town, or city. Land uses may expressly include—or exclude—industrial activities such as oil and gas exploration.

Though the Virginia Oil and Gas Law preempts some local control of gas and oil development, it does, according to many, preserve local land use authority and the ability to postpone a decision to allow gas and oil drilling, pending further study of its impacts.

In Rockingham County, for example, when the Texas oil company sought a special use permit from the county to drill on private farmland that was zoned agricultural, the county board had the authority to

deny or approve the permit application. (The application caused county officials to evaluate the impacts that gas exploration and production would have, and the board ultimately tabled the permit application. After several years, the company withdrew its request.)

A 2012 opinion by then Attorney General Cucinelli regarding oil and gas drilling in Virginia's southwest Washington County introduced some uncertainty regarding that county's ability to use its land-use powers to regulate or prohibit gas and oil drilling. The attorney general opined that the county's "delegated power is limited to the ability to adopt *reasonable siting* regulations for this industrial activity."

But a review of this opinion and other legal precedents by SELC came to a different conclusion. SELC lawyer Greg Buppert said, during a May presentation to the Virginia Association of Counties, that the attorney general's opinion overlooked a critical case decided by the Supreme Court of Virginia. In that case, the court affirmed the rights of local governments to regulate, restrict, permit, or prohibit gas and oil drilling and ruled that localities may lawfully postpone a decision to allow gas and oil drilling, pending further study of its impacts.

"Local authority plays a key role in protecting the rural nature and natural resources of our counties," said Hill Wellford, longtime ECCA member and lawyer. "State and federal officials are often under political and economic pressures to approve compromise measures that may not adequately safeguard our environment. We need to understand that fracking is a potential game-changing event that is happening on our watch."

The Role of the Commonwealth of Virginia

The statute that defines requirements for drilling in tidewater states that the Secretary of Commerce and Trade (who has oversight of DMME) and the Secretary of Natural Resources (who oversees DEQ and other natural resources agencies) are to undertake a full eighteen-month study of all impacts, but only if the production of commercially recoverable quantities of oil is likely or imminent.

That “natural gas” was omitted from this requirement for a full study reflects the times. When the legislation was written, hydraulic fracturing had not been commercially applied to natural gas extraction. No one imagined that horizontal drilling and fracking could be combined to extract natural gas from deep below Essex and other tidewater counties. Senator Richard Stuart proposed legislation in the 2014 legislative season that would have corrected this, but that legislation failed. And the fact that the laws no longer reflect current conditions isn’t enough for regulators whose jobs are to implement existing laws.

This may explain why DMME has convened a regulatory advisory panel to consider whether the existing regulations need to be changed. The panel, which first met in June, will consider requirements for disclosure of chemicals used in drilling, best management practices, and special requirements for different geographic regions in the Commonwealth. But this panel, heavily loaded with industry representatives, is hardly likely to conduct the kind of inter-agency review of drilling in tidewater per se that the 1990s-era statute seems to intend.

Some local governments have stepped forward, asking that the full



Natural gas extraction has transformed quiet communities, fragmented forests, and compromised water quality. Impacts on local infrastructure (above), including roads, increases during fracking operations.



Drilling in Loyalsock State Forest, Pennsylvania. Photo by Pete Stern via FracTracker.org.

eighteen-month study commence immediately. Essex County, Westmoreland County, and the towns of Montross and Kilmarnock, along with the Middle Peninsula Planning District Commission, have all passed resolutions that have been forwarded to Governor McAuliffe and request the study immediately.

Russ Baxter, Deputy Secretary of Natural Resources for Chesapeake Bay, speaking on behalf of Secretary Molly Ward, said that

the administration is in the midst of interagency discussions to work through the issues. “We are very much concerned about the issue. We understand the interest and concerns, and we want to make sure that we take this matter into consideration very carefully,” Baxter said. Because the DMME, which implements the oil and gas regulations, is under a different secretary, coordination at the highest level of state government is necessary.



Methane gas from deep underground is “flared” or burned off during drilling operations that are conducted round-the-clock. Photo by Diane Pitcock/West Virginia Host Farms.

Bald eagles prefer mature canopy trees that overlook the creeks and the tidal portions of the Rappahannock River. Photo by Hill Wellford.

“We are fortunate to live in one of Virginia’s most beautiful and largely unspoiled landscapes. Essex County is defined by its agriculture, its history, and its natural resources. We should be stewards of the land and always mindful that what we do with our property will impact our neighbors and affect future generations.”

—Hill Wellford

Sudden Wealth and Long-Term Concerns

Trying to get Essex County residents to share what they really think about drilling in the county can be difficult. This is easy to understand. After all, Essex is a small county, where neighbors mostly know neighbors, and relationships between families can date back many decades or even centuries.

While the views may be bucolic to the outside visitor, what lies beneath the pastoral beauty is the reality that Essex County, like the rest of the middle peninsula of Virginia, is one of the poorest regions in Virginia, with over 70 percent of workers needing to commute out of the region for paying jobs.

Reflecting on this, the Middle Peninsula PDC’s Lewis Lawrence said, “When I think about gas development in Essex County or the middle peninsula, I am aware that this issue is deeply connected to questions about social and environmental justice.”

For example, how would, and should, you respond to an offer of five or fifteen thousand dollars in exchange for drilling rights on the family farm if you had limited resources and even slimmer prospects for the future?

If you look at the map of where drilling leases have been sold, Lawrence said, the highest concentration is in the northern part of the county, which struggles economically.

Bob Baylor, whose family decided not to retain drilling rights when the question came up, said, “We decided that it just wasn’t for us. But I wouldn’t want to deprive neighbors of an opportunity.”

Supervisor Prue Davis agreed. “Some people would really like a nice big check. It would help a lot of people. And you hesitate to do something like that—put a hold on something like that for people who could use the money.”

But when there are so many uncertainties about the safety and health impacts of drilling and production, about the impacts on the aquifer, about the social impacts on the communities, it ultimately falls to the processes and deliberations of local government to be the forum where neighbors and communities must work out the details.

Helping Communities Get Ready: Asking the Tough Questions

No one can dispute that hydraulic fracturing for natural gas is an industrial activity. Land must be cleared, access roads built, and drill rigs moved on and off well pads. The drilling rigs need constant feeding with sand, lubricants, chemicals, and water. The wastes need to be transported, contained, recycled, and disposed of.

Compressors and diesel engines run twenty-four hours a day during the fracking process. High-intensity lighting is needed for the safety of the workers. Heavy truck traffic on area roads increases. Out-of-state workers come for weeks or months but then leave for the next region.

If commercially viable amounts of natural gas are found, pipelines will have to be built to move the product to distribution centers. Barge traffic may increase, especially if the Chesapeake Bay region is used for natural gas export at Cove Point, Maryland, or other sites.

Are tidewater Virginia and Essex County ready to welcome extractive mining industry into the community? This is the important question, said Lawrence, one his organization has been asking through discussions and forums involving elected officials and citizens. “We started a couple of years ago, inviting Shore Exploration to come talk to the commission. Just

last month, we had the state geologist come and show us what it really looks like, the pipes, the well pads, the production equipment.”

Having a mental picture, said Lawrence, has helped the commissioners, but there are more questions. They’ve asked for a presentation from DEQ about air quality.

Meanwhile, Essex County is well along the process of updating its comprehensive plan. Drafts being circulated now include specific language about gas exploration and production in the Taylorsville Basin:

“It is the County’s objective to protect public health, safety, and welfare, the character of its communities, and the local environment from adverse effects of industrial-scale activities related to energy production for oil and gas exploration, drilling, and related activities.”

Reese Peck, Essex County administrator, said that he is working with the commissioner of revenue to evaluate the imposition of a severance tax on oil and gas revenues, one of the few means by which a county in Virginia can directly benefit from oil and gas production.

What’s Next?

Just as technologies for oil and gas extraction are ever changing, so is the legal landscape, at all levels: federal, state, and local.

Opportunities for citizens to learn more will continue to be provided by ECCA and other conservation and civic groups over the coming months. Brett Glymph said it well: Get involved. Ask questions. Press local decision makers for satisfactory answers.

Respect the rights of your neighbors but continue to ask the tough questions, especially whether there are other ways that Essex County can ensure prosperity for its citizens that build on the agricultural and rural heritage of the region.

Remember that this natural gas production has never been done in the coastal plains of Virginia. Uncertainty about outcomes and the unintended consequences is reason for caution.

Hill Wellford summed it up when he said, “We need to be aggressive at the local level to enact and enforce restrictive ordinances that protect environmentally sensitive areas and preserve the natural beauty and rural nature of Essex County.”

Wellford added, “We are fortunate to live in one of Virginia’s most beautiful and largely unspoiled landscapes. Essex County is defined by its agriculture, its history, and its natural resources. We should be stewards of the land and always mindful that what we do with our property will impact our neighbors and affect future generations.”

Leslie Middleton grew up in Massachusetts and has worked as a commercial fisherman, research ocean engineer for the US Navy, and nonprofit manager for watershed groups in Virginia. She served as executive director of the Rivanna River Basin Commission for five years before joining the staff of the *Chesapeake Bay Journal*. For ten years she sailed out of Kinsale, Virginia, and has explored much of Virginia and the Bay region by kayak and canoe. Also a freelance writer, she lives with her husband in Charlottesville, Virginia. Photo by Dave Harp/Chesapeake Photos.



Fracking and the Potential for Gas Production from the Taylorsville Basin

By Dr. Lynton S. Land

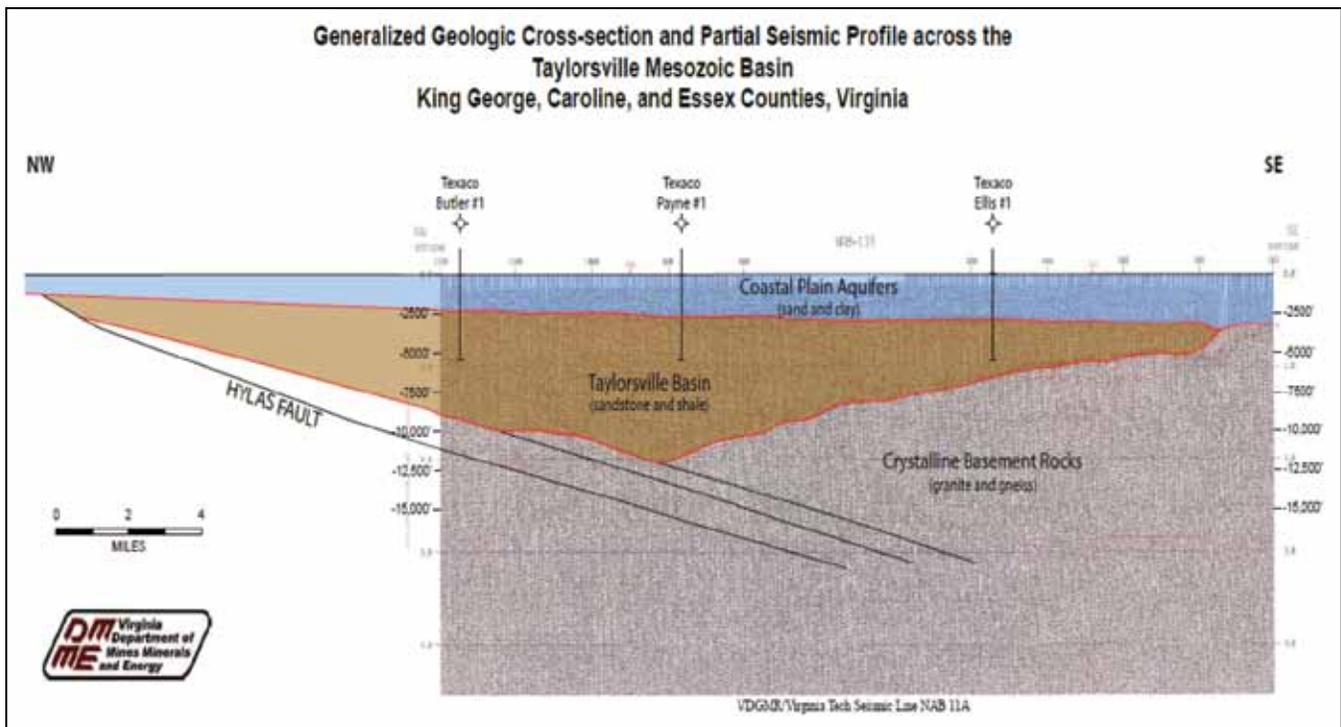
Hydraulic fracturing (“fracking” or “hydrofracking”) creates fractures in rock formations by pumping water into the formation at tremendous pressure, exceeding the pressure at which the rocks break.

Rocks are very strong in compression (think of a high building or bridge tower) but relatively weak in tension (think how easily you can break a stone countertop). The principal vertical stress, commonly called the overburden stress, is caused by the weight of the overlying rocks. At depths shallower than about 2,000 feet, high-pressure fluids can “lift” the rocks and create mostly horizontal fractures. But below about 2,000 feet, as the pressure exerted by the mass of the overlying rocks increases, horizontal confining stresses become smaller than the overburden stress, so fractures are mostly vertical. Fracture orientation is controlled by rock properties, including previous fractures, previous periods of deformation, and regional and local tectonic force fields.

The reason to create fractures is to allow oil and gas otherwise trapped in the rocks to flow toward a production well. It is now possible to drill horizontally, so a drill rig located above a layer of “tight” rock containing oil and/or gas can drill down toward the layer and then deflect the bit to a horizontal or near-horizontal orientation and penetrate the layer containing the oil/gas. Using the same rig, many wells can be drilled in different directions to form a “spoke” pattern. Depending on rock properties and other variables, wells can extend laterally from the drill rig for up to about a mile. When all the holes are fracked, that single well at the surface can tap a very large volume of rock for production. In some cases, other wells are drilled and water, carbon dioxide and/or various chemicals pumped down to drive the oil/gas toward the production well.

A huge amount of water is used in the process, which will discharge from the well when the pressure is released and production begins. There must be a source for this huge amount of water. After use, the water is almost always contaminated with oil/gas and chemicals used in drilling/production and must be disposed safely. Depending on the rocks involved, a wide variety of chemicals can be used. Water produced along with the oil/gas must also be disposed safely over the lifetime of the production well.

In most cases, some sort of proppant is also injected, usually sand or ceramic particles, to hold the fractures open once the pressure is released. In order to prevent the high-pressure fluid from discharging to the surface through the “annulus,” or the space between the vertical drill pipe and the rock formations, the space must be



This cross-section shows how Taylorsville Basin strata lie beneath coastal plain aquifers, upon which residents rely for drinking water and agriculture. Courtesy of Virginia DMME.

filled with cement capable of preventing leakage back to the surface.

Earth's crust is brittle, meaning that natural fractures exist, some of which may extend from the surface to great depths. When Earth's brittle crust is deformed and then fails by fracture, earthquakes result. Fracking can also cause earthquakes, most of them very small, but large ones have been recorded.

If done properly so there are no leaks from the rock layer being fracked, toward or reaching the surface, either through natural zones of weakness or an improperly cemented annulus (think "Macondo blowout" of the BP well in the Gulf of Mexico), then the process is safe. Except for using huge amounts of water and disposing of the huge volumes of waste fluids safely, permanent environmental problems should not occur. As with any massive industrial operation, there will be lots of heavy truck traffic, noise, and so on.

But bad luck (a fracture zone that already exists), human incompetence, or corner cutting to save money are always possibilities. The danger of permanent environmental damage increases as wells become shallower and operators are less experienced.

The Taylorsville Basin

Most of the Taylorsville Basin lies beneath King George, Westmoreland, Essex, King and Queen, King William,

and especially, Caroline Counties in Virginia, and extends into Maryland. A small surface exposure exists near Ashland in Hanover County. The Taylorsville Basin is one of the largest of many "rift basins" formed east of today's Appalachian Mountains in early Mesozoic (Triassic and Jurassic) time. At that time, all Earth's continents were amassed in a single "supercontinent" dubbed Pangaea. Heat build-up elevated the central part of the supercontinent. As a result, breakup occurred, forming smaller continents that drifted away from the elevated zone. What was to become North America separated from what was to become Europe, forming the Atlantic Ocean. Fractures and faults developed parallel to the zone of separation and blocks of rock dropped down along faults to form "grabens" or "pull-apart basins."

The Taylorsville Basin is a "half graben," with the bounding fault to the west, meaning that the deepest rocks, and those most likely to contain gas, are on the western side of the basin. All the Mesozoic basins filled with sand and mud eroded from the Appalachian Mountains and deposited from rivers, lakes, and swamps as the basins developed. The Taylorsville Basin contains as much as 15,000 feet of Late Triassic sediments. Coal deposits formed in swamps are the source of the natural gas (methane, or CH₄) sought today.

As the Appalachian Mountains eroded, the Mesozoic basins were buried deeper than they are today, to hotter

temperatures than is true today. “Cooking” at elevated temperatures is responsible for producing the natural gas. Test wells were drilled into some of the buried Mesozoic basins several decades ago, but they did not find commercial quantities of gas, given the available production methods at that time. But with the development of fracking technology, commercial quantities of gas may now exist. It is extremely unlikely that oil exists in significant quantities because of the nonmarine nature of the coal, which is never a good source rock for oil.

Upside Versus Downside

Everyone can list reasons why we should find out if this resource exists and utilize the resource if it does. A local energy source that is cleaner than coal and less reliance on imported hydrocarbons and jobs are two obvious reasons. But there are other factors that must be considered.

One downside of gas production in the Taylorsville Basin involves the issue of climate change. There is no scientific doubt that the burning of fossil fuels is warming Earth. We know with absolute certainty that about 300 Gt (a Gigaton, or Gt, is one billion tons) of carbon dioxide have been emitted since the beginning of the industrial revolution when we began burning fossil fuels, which had accumulated over tens or hundreds of millions of years. The consequences of burning so much fossil fuel in a geologic “instant” include a measured increase in atmospheric carbon dioxide concentration, from 280 ppm at the beginning of the industrial revolution to 400 ppm today; a 30 percent more acid ocean; an atmosphere that contains a lot more water vapor; and a planet with less ice cover.

What will happen if we continue to burn all Earth’s fossil fuel reserves until they are gone? In the case of oil, that will likely take place within the lifetimes of children being born today because we have already burned half of what once existed. At current production rates, coal will be used up in less than the time the United States of America has existed. Earth’s reserves of fossil fuels are estimated to be capable of releasing between 2,300 and 3,000 Gt of carbon dioxide, about ten times more than has already been released. How would Earth change if all the fossil fuels are burned? Obviously, the small changes that have already happened will increase about tenfold. Is that the kind of planet we want to bestow on our children and theirs?

Given that gas reserves in the Taylorsville Basin are probably small and will be depleted very rapidly (as is also true of many other places where fracking is taking place), is the short-lived source of gas worth the ultimate cost to society?

The folks who profit from gas production will certainly answer yes to that question. But what is society’s answer?

Granting that proper engineering procedures should not create environmental problems, what are the most likely fracking problems caused by bad luck or human error? Based on what has happened at other locations (often denied by lawyers) groundwater contamination is the most likely problem.

Groundwater is the source of all potable water from public water supplies and private artesian wells in the Virginia coastal plain. Most of the water is in the Principal Artesian, or Potomac Aquifer, of the Cretaceous (Late Mesozoic) age. The depth to the aquifer increases toward the east, beneath the coastal plain above the Triassic and Jurassic (early Mesozoic) basins, where they exist. If the aquifer were to become contaminated with methane, or chemicals used in the fracking/production process, where would people get their water? The aquifer is now part of a regional groundwater management area, and large withdrawals are regulated and permits are required.

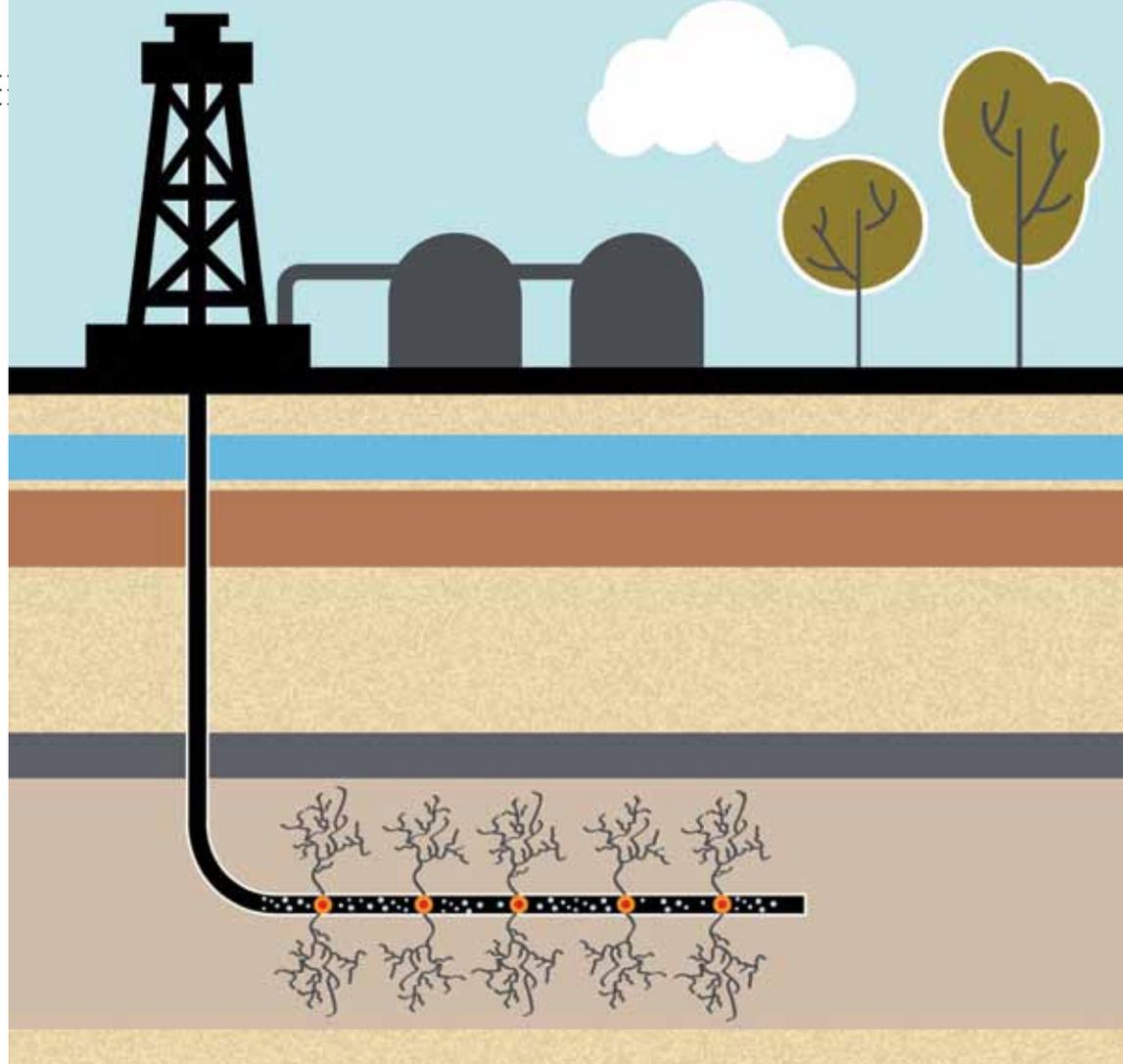
Companies involved in fracking usually do not divulge the chemicals they use, purportedly for proprietary reasons. Elements not abundant in water from the Principle Artesian aquifer, such as boron and bromine, are commonly used and could be used as “tracers” of contamination if these elements were known to have been used in the fracking process, and if a body of data existed documenting the concentration of these elements in water from the aquifer, prior to any drilling. More importantly, a compilation of methane analyses in water, prior to any exploration/production activity, could be used if methane contamination was suspected.

The Virginia Department of Health routinely analyzes public water wells for many elements and compounds. Unfortunately, boron, bromine, and methane analyses are not accomplished (see the Virginia Administrative Code 12VAC5-590-440, Analytical Methods). If legislation cannot be enacted to require methane, and perhaps other, analyses prior to any exploration/production activity, then citizens concerned about groundwater contamination might consider obtaining analyses from a reputable commercial laboratory with a protocol that would satisfy the courts in case litigation was needed.

Bottom Line

It is possible to frack safely. But given bad luck and human error, safety is not a certainty. Once environmental harm occurs, be it from potable

This diagram shows an idealized drilling operation extending through an aquifer and other geological strata to a region of shale oil, where horizontal drilling is used along the layers of the rock formation. Fracking occurs along the horizontally oriented drill pipe.



groundwater contaminated with methane, or improper disposal of the water used in drilling/production, the consequences are expensive, and perhaps impossible to correct. It is prudent to obtain ironclad data, prior to any exploration/production activity, that could be used if groundwater contamination is suspected. Society must also recognize that if we are to avoid Earth becoming so hot and the oceans becoming so acid as to be unlivable for some organisms, we must leave some of our fossil fuel reserves in the ground. Small deposits, such as natural gas from locations including the Taylorsville Basin, where no infrastructure exists, may be a good place to start.

Do you want more information? An excellent summary of our knowledge of the geology of the Taylorsville Basin can be found at www.ldeo.columbia.edu/~letour/research/reprints/letour2003.pdf.

The fracking process is more fully explained on the websites of the large oil field service companies such as Schlumberger and Halliburton, as well as on websites associated with petroleum engineering departments in major Universities. Wikipedia is a good place to get unbiased information or definitions of terms that may not be familiar.

Dr. Lynton S. Land received his undergraduate degree in geology from the Johns Hopkins University and his PhD from Lehigh University. He was a faculty member at the University of Texas, Austin, for 3 decades and retired from the Edwin Allday Centennial Chair in Subsurface Geology. He has over 135 scientific publications and awards for his research. On retiring to Ophelia in 1998, Dr. Land has been active in NAPS (Northumberland Association for Progressive Stewardship) and TOGA (Tidewater Oyster Gardeners Association) and in educating citizens about Chesapeake Bay and groundwater. He grows seed oysters commercially.



A close-up photograph of a person's hands holding a bundle of wheat stalks. The person is wearing a blue and white checkered shirt and blue jeans. The background is a soft-focus field of golden wheat. The title 'PRECISION FARMING' is overlaid in large, white, bold, sans-serif capital letters on the right side of the image.

PRECISION FARMING

Many years ago, when I would visit a mature wheat field with my dad, he would take off his straw hat and fling it across the field as one would toss a Frisbee. If the crop were sufficiently dense, suggesting a good yield, the hat would remain in view, but if there were a light canopy or potentially poor yield, the hat would sink to the ground. I have since often joked that this was my first experience with a yield monitor. Perhaps, most readers would ask, "What is a yield monitor?" While those in the agricultural community would know, today a yield monitor is as common on the farm as the combine itself. In fact, the use of monitors on Essex County farms, as well as on farms across the nation, is but one feature of the greater movement commonly referred to as precision agriculture or precision farming.



By David Taliaferro

Crop production is the center of Essex County agriculture. According to the 2012 Census of Agriculture (www.agcensus.usda.gov/), Essex farmers grew 46,163 acres of the principal crops (corn, wheat, soybeans, and barley) on 38,720 acres of land. This difference in acreage can easily be attributed to the double crop practice of soybeans planted on the same acreage from which small grains (wheat and barley) are harvested. Among Virginia's counties, Essex's production in bushels ranks third for barley, fifth for both soybeans and wheat, and eleventh for corn. To produce the best-quality grains and the highest yields, Essex farmers are increasingly adapting precision techniques to cover essentially the four general areas of crop production—namely, planning, planting, protection, and harvest.

Planning for the next crop begins in the farmer's mind when he is harvesting the current year's crop. Judgments are made about seed varieties, planting techniques, weed and insect control, and soil qualities. Unfortunately, as the acreage is larger and a farmer's memory is dulled by time, mistakes are often repeated. Thanks to precision farming, this problem is mostly alleviated by grid sampling and variable-rate fertilization application. To elaborate, the farmer may choose to sample the soil in grids using a GPS receiver to create a map with squares from 2.5 to 5 acres in size. The major nutrients—phosphate(P), potash(K), and lime—can be applied with a spreader controlled by a computer that matches applied rates to those recommended for a particular grid. Most applicators have only one of these products aboard, and a complete variable application may require three trips across the field. There are machines, today, designed to blend P and K on the go, eliminating one of the potential passes. Occasionally, the grids may suggest one rate for an entire field.

An alternative to this technique is the creation of a map based on management zones. This map is a compendium of maps of one's choosing, usually yield maps from previous years, normalized to account for

different weather history and crop type, soil type maps from USDA's Web Soil Survey (websoilsurvey.sc.egov.usda.gov), and soil conductivity gathered using the VERIS technology (www.veristech.com). Statistically, a normalized map is one made of contours comparing a spot yield to the highest yield in the field. This comparison identifies the highest and lowest areas of yield for any crop in any year. Contour maps will be fairly consistent from year to year. Simply stated, the part of the field where yields are high will always be high. The management zone map with smooth contour lines will appear with areas ranging in acreage, typically from five to twenty-five acres, such that all variables including soil productivity and slope have been considered. When additional "important" factors such as the poplar leaves being the size of squirrels' ears, the moon being in the right phase, and its not being a Friday (all of which are considered by most farmers to bring bad luck!) are acceptable, planting can commence.

Precision farming has the potential to give farmers new options on both variety and population. If the management zone indicates an area of higher production potential, the farmer may elect to increase the seed population. For instance, in a low area where moisture retention is higher, the planter could increase the seeding rate by a few thousand kernels per acre and drop this population back as it moves up the slope or into a pocket of lighter soils where moisture retention is not so good. With the advent of electric drive planters, the computers in tractors can easily adjust the rates based on the prescriptive maps created prior to planting. Machinery manufacturers are working on a planter capable of planting more than one variety in a single pass. It is important that seed companies accurately identify which varieties will perform best in changing environments.

The most popular feature of today's farming machinery is the use of GPS-related technology known as autosteer. The optional steering system in a tractor,



Grain silos pierce the hazy summer air at Montague Farms.

for example, is linked to a GPS receiver and with proper inputs, a computer will control the direction of the tractor as it moves across the field. The current pass will be parallel to, and the implement's width distant from, the previous pass. This automatically eliminates all skips and passes. The pride of every farmer is a row planted perfectly straight, now easily achieved. Additionally, the operator's hands are free for a cup of coffee and a sandwich and the eyes are free to monitor the planter's performance. These moments are fleeting, however, as the tractor must be manually turned to avoid field obstacles and the trees at the end of the pass. Machines are also automatically capable of following curves for the headlands and moving around field obstructions.

After the crop has been successfully planted and hopefully, has emerged, the scouting commences to see that weed control is satisfactory, that there are no insect invasions, and that plant diseases are in check. Essex County citizens will soon be seeing drones flying the fields to gather this kind of information. The advantage is to accurately apply chemicals to the problems, where they exist in the field. Today most sprayers will apply products at one rate to cover an entire field. If there are spots unaffected by the problem, they will receive a dose of the chemical anyway. When this technology matures, there will be a huge savings in chemicals with an overall reduction in total usage. Additionally, today's sprayers are equipped with autosteer to avoid overlaps and skips. Most machines are equipped with Swath control to reduce overlaps at the headlands. Booms are equipped with multiple valves that close when overlap is about to occur. With a 100-foot boom, for example, there are seven shutoffs resulting in no portion of the overlap being wider than approximately fifteen feet.

Finally, at harvest, the precision farming system produces a yield map. At any point in the field, the moisture and mass of the grain flow is measured. With the

GPS position of this point, the speed of the machine, and the width of the head, the monitor calculates and records a yield in bushels per acre corresponding to this position. The yield map is the key to analyzing how successful the earlier practices were in their intended purpose. This information will then be used to further refine the management zones.

Another important use of the GPS system is the autosteer feature on the combine. One variation is the row sense, a method by which the operator chooses to allow the combine to follow a cornrow using sensors on the corn head. During soybean harvest, dust clouds frequently interfere with the operator's vision, resulting in skips or overcuts. Using autosteer, the operator maintains a position of maximum efficiency. This is especially important when harvesting after dark, as the operator knows he is on line with the last cut. Today's machine also has the option for the combine operator to remotely control a nearby tractor towing a grain cart. He can manage the speed and position of the cart to ensure that grain will not spill as he unloads the combine on the go.

It is a great time to be in agriculture. The technology has been available for some time, but only recently has it been able to put all of the pieces together. Earlier, we could make yield maps but were unable to capitalize on the information due to the lack of prescriptive applications and seeding rates. The current challenge is to find the software that minimizes the need for acre-by-acre manual analysis. Farmers have an old joke about a tractor at a dealership that did not have a seat or a steering wheel. This tractor was for the farmer who had lost his rear end and did not know which way to turn. With today's technology, no steering wheel? No problem!

David Taliaferro is part of a family business, Montague Farms, with his two brothers Bill and Bryan, his nephew Tom and his son Jay. Montague Farms grows corn, wheat, soybeans and barley and also exports food grade soybeans to Japan and South Korea. David received his undergraduate degree in Physics from Wake Forest University, his Master of Science in Physics at the University of Virginia and served in the US Army in Germany.



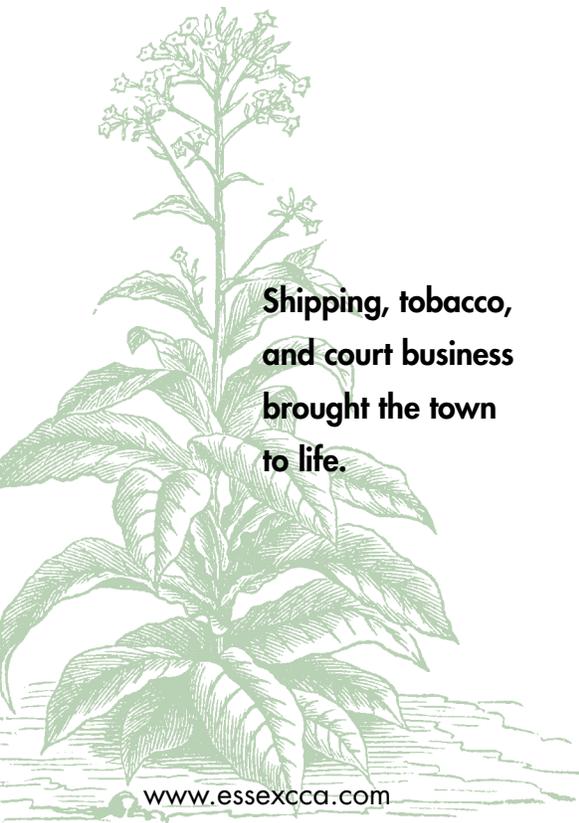


Monument Place

By Suzanne Derieux

A 1680 act of the Virginia General Assembly named Hobs Hole as a port town. In July 1706 Harry Beverley laid out a plat of the town, renamed Tappahannock, with seventy-two half-acre lots made into sixteen two-acre blocks and four one-acre blocks. Slips were added between the town and the river in 1749, and feoffees were appointed by the county court to sell the lots and collect the purchase price.

Very few lots sold, save those on the river, until 1728, when the county courthouse returned to Tappahannock.¹ An act of Assembly in 1730 ordered that tobacco warehouses be established at Bowlers and Tappahannock, which brought in Scottish merchants. Shipping, tobacco, and court business brought the town to life, and between 1732 and 1750, sixty-two lots and slips were sold or resold. In 1747 lots 45, 51 and 52, three of the four lots bounded by Prince, Church, Duke, and Cross Streets, were sold to James Mills. The lots passed to George Gerrard in 1748, to Archibald Ritchie in 1749, and to James Ritchie & Company, a firm of Scottish merchants, in 1755. Ritchie & Co. owned the



**Shipping, tobacco,
and court business
brought the town
to life.**



Mrs. Gray was well known and well connected, her school was a success from its beginning. Her curriculum included reading, writing (penmanship), figuring (basic mathematics for running a house), music, drawing, and fine manners.

lots in 1767, when they gave a power of attorney on their properties to Andrew Crawford.

At some point between 1767 and 1774 Dr. Ewen Clements, the son of Dr. John Clements and Mary Ann Latane, took possession of the four lots, either by purchase or inheritance from his father. In March 1774, Ewen and his wife Ann sold lots 45 and 52 to Joseph Richardson. Ewen Sr. died intestate in the fall of 1774, and his son Ewen inherited lots 46 and 51 and sold them to Lawrence Muse in July 1800. Muse took out an insurance policy on this property in 1801, in which the house was described as brick, twenty-eight feet by thirty feet, with a wooden roof, and there had a smoke house, dairy, kitchen, and stable to the back.

Joseph Richardson, a mariner, recorded a power of attorney in 1787 to allow Dr. John Brockenbrough to sell lots 45 and 52, and they were sold to Francis Taliaferro Brooke in 1792. Brooke had become Commonwealth Attorney of Essex County in May 1792, resigning in March 1796 when he moved to Fredericksburg. Brooke sold to Lawrence Muse in 1809, but Muse did not get a deed until 1812, when he finished paying for the lots.

Lawrence Muse was the Collector of Customs² for the port of Tappahannock, and also owned the brick

house at the river end of Prince Street, which would become known as the Customs House. He moved to this house after 1805, and rented the four lots to, among others, Dr. Robert Wellford of Fredericksburg, selling them to him in 1811.

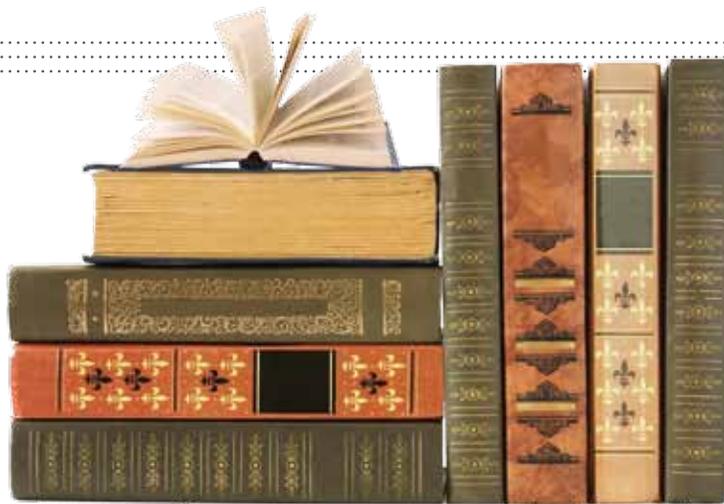
Dr. Wellford, the son of an English apothecary, came to America with the British army in 1776. After complaints were made by General Washington to General Howe concerning the treatment of American prisoners, Wellford was put in charge of them. He became friends with Washington, while at the same time falling out of favor with his British colleagues. He resigned from the British Army, and practiced medicine in Philadelphia, coming to Fredericksburg circa 1780 with letters of introduction from Washington. He married a widow, Catherine Randolph Yates Thornton, they had ten children.

Their eldest child was Lucy Yates Wellford, born in 1781. She was well educated and had traveled with her family, both uncommon things for a woman of that era. In May 1808, she married Dr. Thomas Branch Willson Gray, a colleague of her father's, who had studied at the College of Physicians in Philadelphia. They had four children, two of whom died in infancy. They seem to have moved

to Tappahannock sometime in 1808, because Dr. Gray is named in estate accounts as being owed money for services rendered that winter.

In 1813 Dr. Wellford deeded the lots to Gray, "for the love I have for Thomas and Lucy." He doesn't seem to hold his son-in-law in great regard, however, stating that if Thomas were to die, the lots should pass to Lucy, and if Lucy were to die, the lots should pass to her children, not Thomas. Between 1813 and 1818 Dr. Gray wrote five deeds of trust, mortgaging slaves to cover various debts. He mortgaged his household furniture, dishes, plate, four horses, cows, and all his medical instruments, books, and shop furniture to cover his debt of \$450 to Dabney Herndon. His last deed is dated April 1, 1818, when he was arrested for debt and had to mortgage his medical accounts to cover it.

Dr. Grey died after April 21, 1818, of unknown causes. He left no will, and there is no bond or account. His widow, instead of going home to her father and family, took one of the very few options she had, and opened a school for girls in the fall of 1818. Mrs. Gray was well known and well connected, her school was a success from its beginning. She took boarders and day students, including some male students who lived in town.



Her curriculum included reading, writing (penmanship), figuring (basic mathematics for running a house), music, drawing, and fine manners. Mrs. Gray was a devout Christian, and much of her teaching centered on religion and Christian morals. Her pupils were all expected to go to church every Sunday and prepare a Bible lesson every Sunday night. Other requirements for her students included “being especially quiet and lady-like, abstaining from merriment ... and all expressions of undue anxiety ... at mealtime.” Saturday mornings were “to be spent in making repairs in clothing, or some form of needlework,” and their “hour of retiring was 9 p.m.”

Mrs. Grey left Tappahannock in October 1836 and opened a school in Petersburg, which was in the midst of an economic boom due to its becoming a railroad hub. She returned probably because of the needs of her family³ and remained in Tappahannock, running her school until her death on August 23, 1860. She left a detailed will, written in January 1854 and probated September 17, 1860.

Mrs. Gray’s inventory, done room by room, tells its own story about her school and how it was set up. It lists the books in the parlor, including *History of England*, *Pictorial History of*

All Nations, *History of Napoleon*, *Life of Christ*, histories, English literature, and over one hundred books on theology and religion.

Her students were crammed in, one bedroom having four bedsteads, one table, one washstand, eight chairs, and three chamber pots. Each bed would have slept two to four girls. Her schoolhouse was a separate building, probably her husband’s former medical shop, and contained twenty-nine single desks, ten double desks, fifteen benches and eighteen chairs, one blackboard, one globe, one stove, six maps, and one bell.

In 1860 the Rev. William Norvell Ward of Bladensfield, Richmond County, was asked to take over the school. He accepted and moved his family to Tappahannock in the fall. Ward had attended West Point for a year and was an ardent secessionist. He was appointed a major in the 55th Virginia Infantry,⁴ and drilled new soldiers in his parlor and in the street in front of the house. He kept the school for only a year or two, the war making it impossible to continue.

Mrs. Gray left the house and lots to her grandchildren. Her elder daughter Catherine Wellford Gray had married John Waring in 1829 and had ten children in thirteen years. Only two lived to adulthood. Her younger daughter, Mary Carter

Gray, had married Dr. William A. Brockenbrough, eldest son of Dr. Austin Brockenbrough. Mary Carter married in 1832. Her first child was born in 1834, her last in July 1852. She died eight days after this child’s birth, having delivered eleven children in eighteen years. When Dr. Brockenbrough died in November 1858, seven of his children were put under the care of his brother, John F. Brockenbrough, who entered into a Guardian’s bond in the amount of \$50,000.

Mrs. Grey’s legacy was her real estate, and over twenty slaves. When the War was over, the value of the slaves vanished, and the property assessment fell from \$3400 in 1859 to \$1400 in 1871. The children’s guardian was in debt to them with no way to pay. A chancery suit was filed: William A. Brockenbrough Jr. et al. vs. Lawson E. Waring et al. The house and lots were put to auction, and bought by five of Dr. Brockenbrough’s daughters; Lucy, Kate, Lettice Lee, Elizabeth, and Judith Branch Brockenbrough. The girls rented the property as the Virginia Hotel, but could not pay off their purchase. It was sold again in 1873 to A. J. Palmer, a representative of the firm of Ferguson, Tyson & Co. Between 1873 and 1885 the property passed through five owners,

two of them losing the property to foreclosure and auction. Jennie B. Williamson and her husband bought the hotel in 1883, and because of heavy debts, placed in trust “lots 45 and 52 and the eastern part of 46 and 51, the Virginia Hotel, bar-room,⁵ and stable.” They sold the western part of the lots, bounded by Prince Street, Church Lane and Duke Street to R. C. Phillips in 1884, but still couldn’t pay off their debt. The hotel was sold at auction again, to a local merchant, Moore B. Wright, who made a swap with Lawrence Dobyys Roane in 1887. Roane took the hotel, Wright took a tract of one hundred acres called Remnant. Roane died in 1889, leaving the hotel to his cousin Spencer Roane Waring.

In 1891 Waring sold to George R. Scott and his wife, Sadie Kriete Scott. They sold another section of the property in 1900, a piece fifty foot wide, between the Phillips lot and the hotel lot, to the Junior Order of American Mechanics.⁶ The Scotts lost the hotel in 1904 to the L. E. Mumford Bank. In 1907 John D. McDaniel and Mrs. Laura M. Gresham of Charlton Plains entered into an agreement in which McDaniel would occupy the hotel until October 1907, and then she would take possession, getting title when she had paid \$2283.45 plus interest. Laura died in 1912, leaving the hotel to her daughters Genevieve, Eva Dew, and Mary Ellen.

The Gresham sisters made a success of the Virginia Hotel for over thirty-five years, mainly because of their fine cooking. Their ads proclaimed “fried chicken and seafood dinners a speciality!” They changed the name to the Monument Hotel, or Monument Place, after the Confederate Monument erected on Prince Street in 1909, directly in front of the house.

Miss Genevieve died in March 1945, and in August, Eva Dew and Mary Ellen⁷ sold the house to Dr. Charles A. Warner. Warner and his wife, Gladys, deeded the house to their daughter Elizabeth W. Tribble in 1965, and she and her husband sold it to the county in 1968 for \$51,000. The Essex County Board of Supervisors decided to demolish the house, pave the lot, and lease it to the town as a public parking lot.

Monument Place was destroyed in 1970, despite protest and argument from many of the citizens of the county, the Association for the Preservation of Virginia Antiquities, and the Virginia Department of Historic Resources. The concept that a parking lot was more important than an “old house” cost Essex County and Tappahannock one of the most important buildings in their shared history. The opportunity to adapt the house to modern use either as offices or as a restaurant was gone, and the information the property could have yielded was forever lost. In 1996 the new Essex District Courthouse and Essex County Sheriff’s Office was built on the site.

¹The courthouse started in Hobs Hole, but because of objections from citizens in the far north of the county, moved to Caret in 1694. More controversy followed, and the county looked at building at Andrew’s old field near Popoman creek in 1726. The Virginia General Assembly ordered the court to return to Tappahannock and remain there, and a new brick courthouse and prison were built in 1728–9.

²Customs: the agency that collects taxes on the importation and exportation of commodities; a tariff or tax assessed upon merchandise imported or exported.

³Her daughter Catherine Gray Waring died in June 1842, age 33.

⁴Ward was in command of Ft. Lowry in 1861–62 but was dropped during the reorganization of the 55th Virginia Infantry in May 1862. Both his sons were killed in the war He never really recovered and died at Bladensfield in May 1888.

⁵Formerly, Mrs. Gray’s schoolroom.

⁶The Fat Finch now occupies this building.

⁷Mary Ellen Gresham Roberts died in February 1959. Miss Eva Dew died in September 1962, age 93.

Suzanne Derieux was born, raised, and currently resides in Tappahannock, Virginia. She graduated from St. Margaret’s School in Tappahannock and Mary Washington College in Fredericksburg. She is a professional genealogist, and can be often found doing research in the Essex County Courthouse. She has co-compiled (with Wesley Pippenger) two books on Essex County Cemeteries: Volume 1 – County Church Cemeteries and Volume 2 – Tappahannock Cemeteries. In her spare time, she enjoys refereeing women’s lacrosse and field hockey at the high school and collegiate level.



Lawrence and Becky Latane

Ledger Book

By Lawrence Latane

Becky and I live in an old house, but because it was abandoned for decades and fell into ruin, we have nothing of the letters and documents associated with this home that has been occupied by the same family for generations.

So imagine my surprise when I rummaged around in a bookshelf recently and found a tattered ledger book.

It was signed:

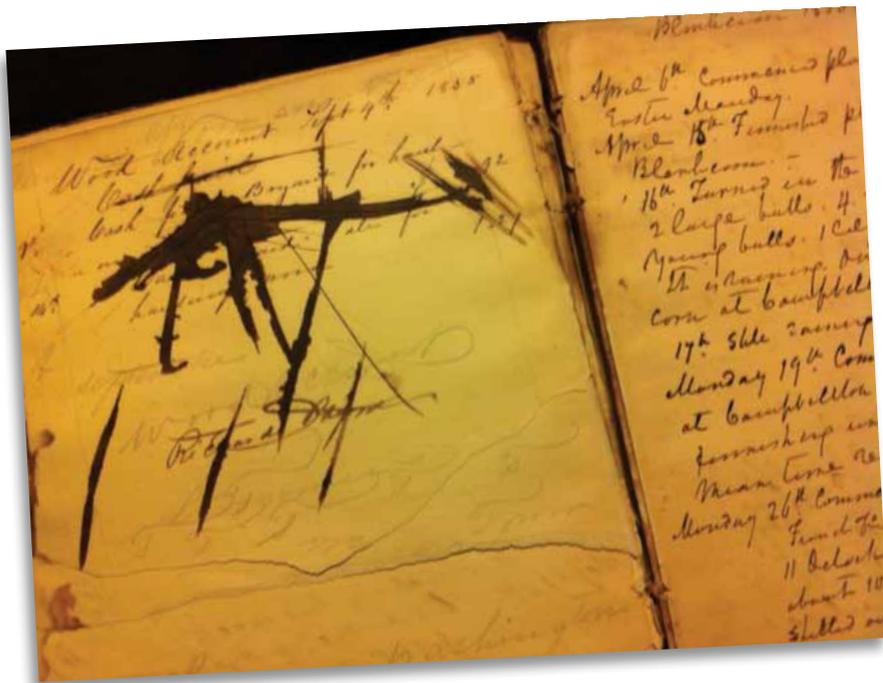
Lawrence Washington Jr.

Blenheim

Westmoreland Co.

Virginia

Yet, for a variety of reasons, it appears most of the document originated a generation earlier. Lawrence Washington's signature also appears and most of the dates that are noted make a better fit with his tenure here at Blenheim and neighboring Wakefield, which he referenced by its earlier name, Popes Creek Farm.



Notes kept by Lawrence Washington Jr. in a ledger book dating from the mid-1800s.

Most likely, an elderly cousin handed my parents the old account book sometime after Mom and Dad bought Blenheim in the 1950s, or possibly, after they restored and moved into the old home in the mid-1970s.

The bulk of the book appears to cover farm accounts from 1853 through 1858, but there are enough gaps and loose pages to suggest that the book holds the fragments of several ledgers, with the most recent account dated January 15, 1861.

We can see that six mules were bought for \$540. The sale of 1,173¾ bushels of wheat brought \$1,467 and 18¾ cents. One Christmas Day, Washington put a lock on his meat house door that cost him \$1.50. There's not a word about the political turmoil that must have cast troubling shadows over a man whose list of hands for 1854 numbered 13, hired from six different owners.

What we get is the day-to-day business of a planter with an interesting tally sheet "from Spilman's vessel" thrown in for good measure.

That set of figures likely was penciled in on the Potomac River shore, as Washington's hands unloaded guano to fertilize his fields.

The notes reflect farming a century and a half ago. In the occasional lament, they tell us what farming is still like today: "Commenced cutting wheat & finished in five days," Washington wrote on June 23, 1858. "The rust, hail, joint-worm and scab having almost entirely destroyed the [crop]."

The next notation follows on July 8 and all has gone to ruin for other reasons. "Commenced cutting oats

today," he wrote. "I find them much injured with chinch-bug & drought."

As the current farmer at Blenheim, I can relate to my great-great-grandfather's tribulations. My own farm records are full of the toos: too wet, too dry—and that sort of thing.

Becky and I cultivate fifteen acres of certified organic vegetables here at Blenheim. They say misery loves company and I guess that's true even if you have to reach back 150 years in a hard-to-read account book to find it.

But there's a positive message in that old ledger. It's the truth in the statement my father used to repeat that if you take care of the land, it will take care of you.

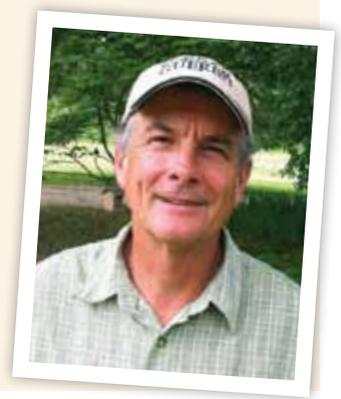
To that end, he placed Blenheim under a conservation easement back in the 1980s. My sister and I followed suit with the farmland we inherited from him that connects Blenheim to the Potomac River.

Amid farming's uncertainties, it is a great comfort to know that Blenheim will remain farmland in the future.

One day, someone may pull down one of my record books and see that the remnants of Tropical Storm Lee dumped twenty-six inches of rain on Blenheim in twenty-four hours, flooding much of our fall crop.

Farmers like to dramatize what they're up against.

Lawrence Latane serves on the board of the Northern Neck Land Conservancy and covered the Chesapeake Bay region for the *Richmond Times-Dispatch* for 22 years. He and his wife, Becky, grow 15 acres of certified organic produce on their farm, Blenheim Organic Gardens, in Westmoreland County and market it primarily at the Williamsburg Farmers Market and the Fredericksburg farmers market at Hurkamp Park.





Home in Two Parts of the World

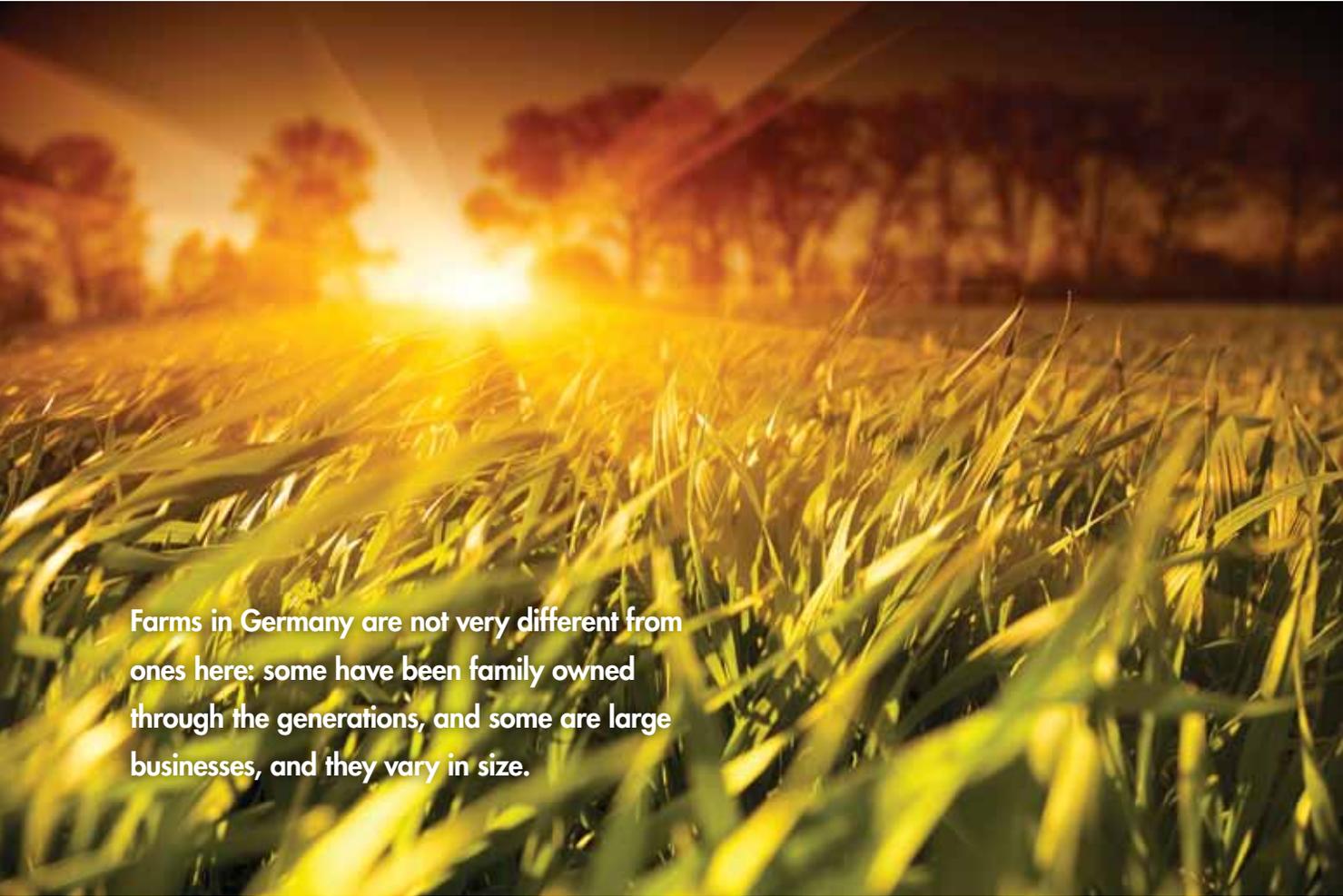
(Essex and Wolfenbuttel Counties)

By Betty Ann Garrett

The flags from Germany, Bavaria, and the United States unfurled in the gentle, late-afternoon breeze in the yard of Heinz and Isabelle Welger-Merkel, as Mac and I listened to stories and insights that the Welger-Merkels readily shared with us. We cannot remember an evening when we learned so much. The differences and similarities between the two countries became evident, as did their love of Germany, the United States, history, and rural living.

Isabelle grew up in Bavaria in southern Germany in a historic place. Farms in Germany are not very different from ones here: some have been family owned through the generations, and some are large businesses, and they vary in size. One difference, however, is that most farmers and their families live in villages, where all the amenities of any city are found, and then they go to work on their land nearby. Most growth is adjacent to the existing cities and villages, and efforts to keep urban sprawl controlled

are encouraged. Germans, like many people in our area, view farmland as a treasure to be protected from development. ECCA also wants to protect our farmland and rural area. One such way is through easements. In Germany there are many rules to overcome to change farms into developments or even to accommodate the spreading of cities. Unlike here, easements are really not necessary, as zoning does not change from county to county in Germany, and beneficial laws and tax



Farms in Germany are not very different from ones here: some have been family owned through the generations, and some are large businesses, and they vary in size.

advantages protect farms and farming families. Both Heinz and Isabelle joked that, now, the only way to get land in Germany is to inherit it or marry into it.

Heinz, on the other hand, grew up in the city of Wolfenbützel in northern Germany, about ten miles from “the fence” that separated West and East Germany for forty-five years. His mother’s family-run business dealt with baling. Heinz, a fourth generation manufacturer, became involved in the business at a young age, and he and other members of the family owned the business until 1995. Baling hay is a passion of Heinz’s. Emptying the contents of a matchbox, he showed us how hay is compressed into boxes, the first way it was done. Next came channel compressing, with bales tied with string, by hand. Eventually, the machinery for baling hay was motorized and the hay could be baled in the fields. The first round baling of hay began in the 1940s in the USA. Heinz’s company, Welger, developed the first fixed chamber baler in the 1970s, which is used worldwide. If anyone has a question about baling history, Heinz will have the answer.

Heinz has a degree in engineering. He first worked with Mercedes farm equipment from 1964 to 1965. Then, in 1965, he was accepted into a work/study program in compression technology at Michigan State, where Isabelle soon joined him with their son. After that, Heinz worked for NEW IDEA, the Farm Machine Division of AVCO in Ohio, from 1966 to 1967. A fond memory of Isabelle’s goes back to the time they lived in Coldwater, Ohio, when their son was eighteen months old. Finding a place to live was difficult until the local newspaper owner decided they could live upstairs in his house. The house was next to the railroad tracks, where trains passed each other nightly, with endless, piercing whistles, sounding as if the trains would enter the house. Added to that sound, each Thursday night, the landlord cranked up his noisy printing presses. Heinz and Isabelle have fond memories of the time spent in Coldwater and still maintain friendships established there years ago. They have traveled to the USA extensively since then. Heinz came to the USA as often as seven times a year when he had business mainly in the Midwest, the South, and Canada.

Love of history connected Heinz and Isabelle to Essex County. When applying for the work/study program at Michigan State, he had to learn about American history. He was captivated with the Revolutionary and Civil Wars. During the Revolutionary War, the Duke of Brunswick sent 3,000 German soldiers by foot to the North Sea to board a ship to England to fight for King George. They bid their farewells from Wolfenbittel, under the command of General Riedesel. Today a historical marker designates the departure from the market place. The men landed in Canada and marched to Saratoga, New York, where they were captured and eventually interned in Charlottesville, Virginia. Following their release, after the war, two-thirds went back to Germany, while the remaining Germans mainly stayed near the Blue Ridge Mountains. This bit of history drew the Welger-Merkels to Virginia. Also, in Wolfenbittel, there is an internationally famous library that was once considered the eighth wonder of the world because of its extensive collection of very old books. One of the books is a travel log by Captain John Smith about his journey on the Rappahannock River—another German connection to this area. Additionally, Isabelle has a relative who purchased Greenway Plantation on the James River. The property is the childhood home of President John Tyler. When Isabelle's relative and she and Heinz talked about the possibility of buying land here, they agreed that the history of this area was important and connected to them. The area had many similarities to Europe, and it was accessible. They feel at home at Port Micou, which they purchased in 1984. Their son, Henning, and daughter, Karoline, and their families visit here often and, like their parents, have a strong affinity for Essex County.

Heinz and Isabelle are interested in preserving the beauty and the nature of the Rappahannock River. One of the topics of interest to ECCA and many local citizens is the Rappahannock River and preserving its history. Currently, the possibility of a dock and wet slips at Fone's Cliffs on the river is a concern to many people. I asked what recourse Germans have if they oppose a change, such as this one, that would alter the dynamics of the area. The process is not too different from the American process in that people protest through the ranks of government. Potentially, the protest can go all the way to the European courts. Since the Rappahannock River is one of the cleanest on the East Coast, I was also curious about the pollution in the German rivers. After the war, polluted waters were

a serious problem, especially in East Germany. After the unification of Germany in 1990, clean up became urgent. Farmers, industries, and individuals had to pay for state-of-the-art water systems that stop pollution. Their rivers, streams, and creeks are mostly clean and clear today.

Three hours flew by as we sipped our grapefruit juice mixed with lemon bitters and listened to Heinz and Isabelle sharing their lives with us. Heinz and Isabelle believe ECCA's goal to preserve the rural nature of this county is an important one, and they think that easements are beneficial, though different for them, as they are Germans and nonresidents. He and Isabelle love the open spaces, the peaceful Rappahannock River, and the history of the area and hope that ECCA continues to help preserve this rich heritage for future generations. As we departed, Isabelle showed me the line of lilies that she has extended four times, the mulberry tree that attracts turtles and catfish under its extended branches over the river, and the barn from the 1800s. I know that she and Heinz want what so many of us do: to preserve the rural nature of this beautiful county.

Betty Anne Garrett lives in Hustle, Virginia, with her husband, Mac.



Welger-Merkel Family

ECCA 2013 Fall Meeting & Silent Auction

Held at Brooke's Bank, The Home of Walker Box



Walker Box, Brenda Gladding,
Bill Meredith



Richard & Margaret Lewis,
Roberta Garnett, McGuire &
Hylah Boyd



Anna Dickinson,
Danna Dickinson



Tricia & Bill Garner



Cindy & Andy Brooks



Muscoe Garnett, Bob Baylor, Brenda Gladding



Paul Copeland, Madeline Foresman



Elizabeth Copeland, Frances Ellis



Christopher Strock, Ruth Scott



Ned von Walter, Randy Rouse

ECCA 2014 Fall Meeting

Please mark your calendars for this year's Fall Meeting and Auction to be held at 6:00 pm on Friday, September 19, at Kendale, the home of Alice and Hill Wellford.

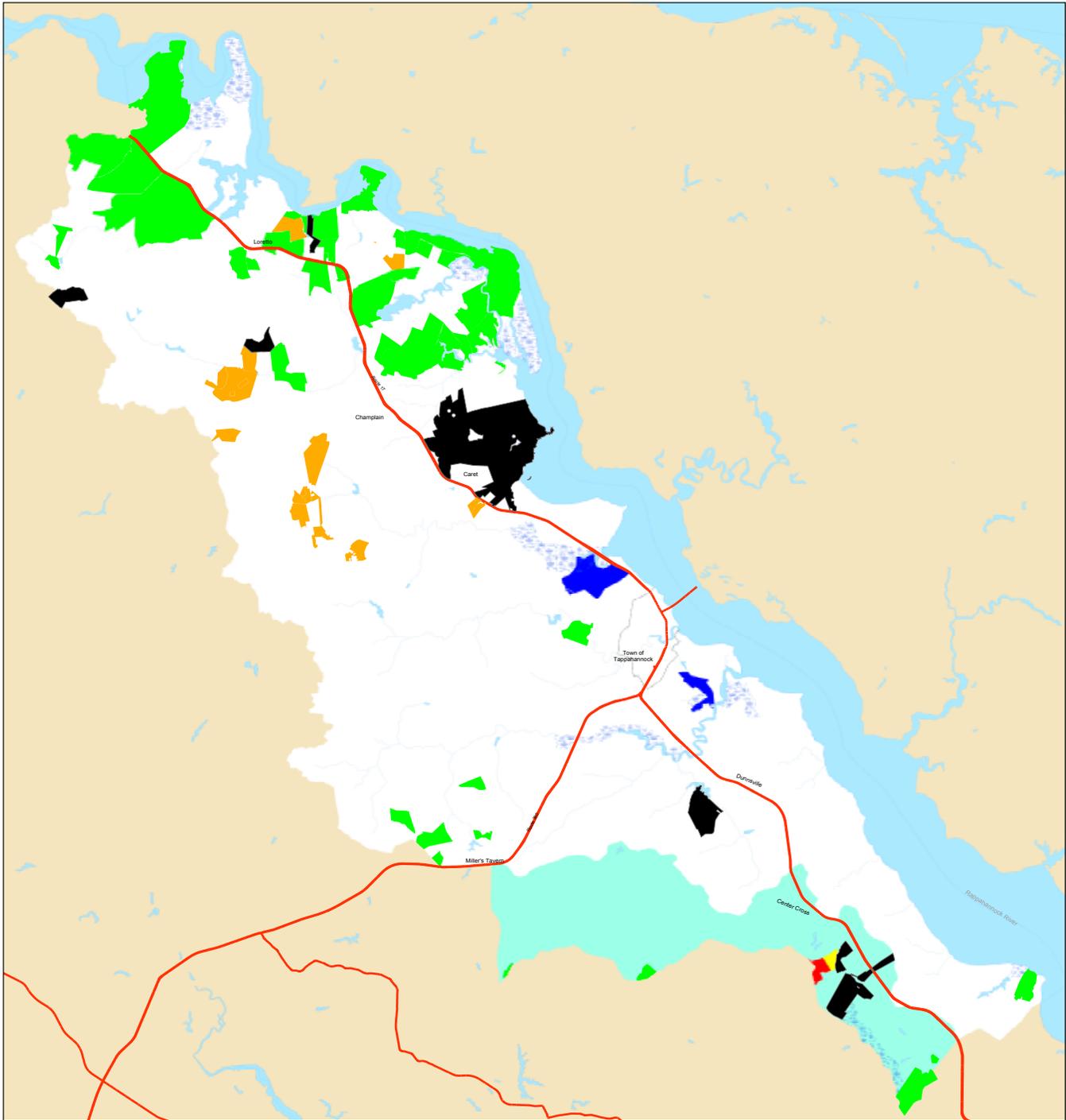
Natural gas is a critical national strategic resource, but the extraction of natural gas can present serious challenges to communities and the environment. Dave Ball, Brian Coppola and Andy Schrader, three elected officials from Southwest Pennsylvania, two of whom were litigants in the landmark lawsuit against Pennsylvania's revised Oil and Gas Act of 2012, will discuss at the annual meeting what unconventional gas drilling is, its potential impact on communities and the environment, and how they are addressing gas drilling in their communities. (There are approximately 200 gas wells in the communities represented.)

If you would like to be added to our mailing list please send your name and physical address to info@essexcca.com.



Protected Lands 2013

Essex County, Virginia



Protected Lands reported to PDC as of June 2014

- Essex County's Additional Protected Parcels June 2013-June 2014

Lands Protected in Previous Map Updates:

- Rappahannock River Valley National Wildlife Refuge
- VA Department of Forestry
- Middle Peninsula Chesapeake Bay Public Access Authority
- Land Protected by Private Landowners
- Essex County's Protected Parcels June 2012-June 2013
- Dragon Run Watershed

Data for the map provided by Essex County, the Virginia Department of Conservation & Recreation's protected lands database, Virginia Outdoors Foundation & The Nature Conservancy.

MIDDLE PENINSULA PLANNING DISTRICT COMMISSION

Although this data has been used by the Middle Peninsula Planning District Commission (MPPDC) in reports, brochures or posted in maps for the MPPDC use to the accuracy or application of the database and related materials, nor shall the MPPDC be held responsible for any errors, omissions, or inaccuracies in this map. This map was created June 2013 by MPPDC staff (CRCA).

This map production is a product of the MPPDC Technical Assistance Program and was funded by Virginia's Coastal Zone Management Program of the Department of Environmental Quality through Grant #W41102515022 Title #4 of the National Coastal and Atmospheric Administration's Office of Ocean and Coastal Resource Management. Under the Coastal Zone Management Act of 1972, as amended.

County	Acres under Easement	Total Acres	% in Easement
Clarke	22,114.40	113,036.62	19.56%
Albemarle	86,876.66	462,469.68	18.79%
Rappahannock	31,043.08	170,604.53	18.20%
Essex	20,757.32	164,972.54	12.58%
King and Queen	21,027.24	202,406.08	10.39%
King George	6,702.36	115,199.82	5.82%
Richmond	6,283.18	122,534.21	5.13%
Westmoreland	7,429.61	146,674.97	5.07%
Middlesex	3,182.83	83,391.87	3.82%
Lancaster	3,031.18	85,209.47	3.56%
Northumberland	3,838.16	123,071.81	3.12%
Caroline	6,914.26	340,812.27	2.03%
Mathews	1,104.37	54,835.11	2.01%
Gloucester	2,554.09	138,630.18	1.84%



Photo © Bill Portlock



Eastern Bluebird

The Washington's Birthplace Christmas Bird Count

By Teta Kain

In the last few years, around the Christmas and New Year holiday season, you may have noticed people peering into woods and nearby fields, through binoculars, as they walk or drive along roads of the Northern Neck and upper Essex County, and wondered what they were doing. Most likely they were bird watchers participating on the annual Washington's Birthplace Christmas Bird Count, sponsored by the National Audubon Society.

This event is part of a massive effort to census winter bird populations on the North American continent and has been going on for more than a century.

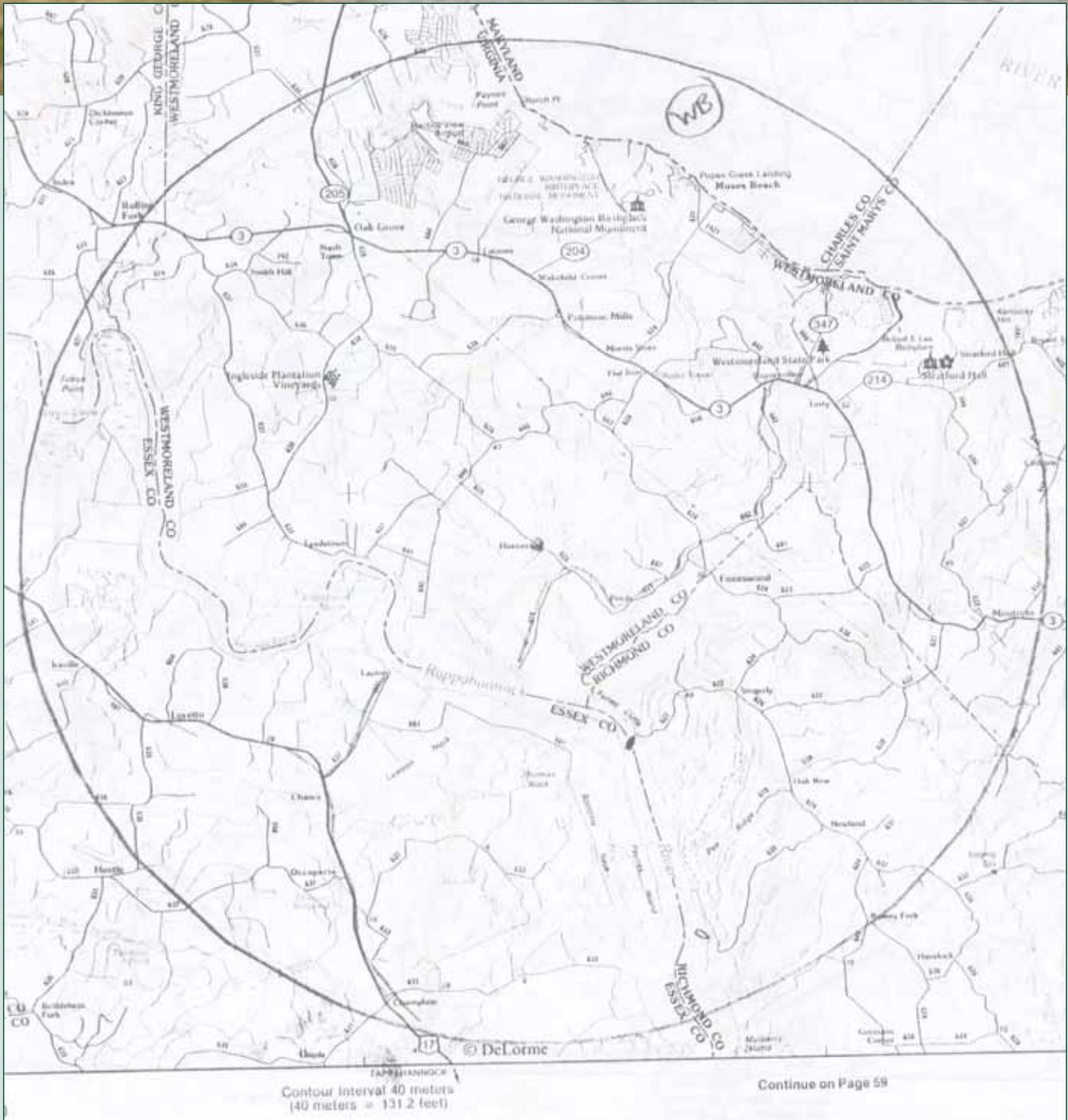
In days gone by, if someone saw a bird and wanted to know what it was, he got out the trusty shotgun and killed it for a close-up look. Granted, back in those days, not many people had binoculars, so it was pretty tough to get close enough to tell what anything was.

Nevertheless, ornithologists of that day took a dim view of this approach and started encouraging people to identify birds without killing them by using binoculars and consulting bird field guides. By that time, the National Audubon Society had been established, and people were encouraged to report their sightings to the society for publication.

In 1899 Frank Chapman, one of the leading ornithologists of that day, invited Audubon members and bird

lovers all over the country to engage in something called a Christmas Bird Census. Observers were asked to spend a portion of Christmas Day simply observing and identifying numbers and species of all the birds they saw on that day. They were then asked to "write up and send a report to Bird-Lore (Audubon's bird magazine of that era) before retiring for the night." Twenty-seven people took up the challenge and conducted twenty-five counts in thirteen states and two

Geese and ducks are among the wide variety of bird population.





Red Hawk



Carolina Wren



Cedar Waxwing



American Robin

Canadian provinces. They recorded a total of ninety species of birds on Christmas Day of 1899. Thus, the National Audubon Christmas Bird Count project was born.

It took no time at all for the idea to catch on. Just four years later, results from nearly eighty counts were received and the activity had become so popular that it prompted Bird-Lore editors to write, "The plan of reporting one's observations afield on Christmas Day has met with such cordial and practical endorsement by bird students throughout the country that Bird-Lore's Christmas Bird Census may now be considered a fixed event." And so it was.

After that stellar beginning, however, progress was slow for the first four decades of the twentieth century. Two world wars during that period did not provide much opportunity for men (very few women participated during those years) to go forth into the wilds for a leisurely day of bird watching. Too, that rule of counting only on Christmas Day put a crimp in the holiday festivities of many outdoorsmen and their families. Eventually, officials found it necessary to expand the count period to accommodate the varied schedules of the growing number of participants. Today the count period extends from December 14 through January 5 each year.

In those early days there weren't many rules. "Birders," as these avian aficionados called themselves, simply went afield anywhere they wished and randomly counted and reported whatever they saw. It was soon realized, however, that counts needed to be standardized to provide more meaningful data. A count circle of fifteen miles in diameter was established. The territory within the circle was carefully described and the center

identified. Those who submitted the results were named compilers. Their tasks were not only to report numbers of species and individuals. Now, they were required to report numbers of participants, hours and miles traveled on foot, vehicle or boat, times in the field, and weather conditions and other pertinent data.

In recent years the counts have expanded to cover not only the United States and Canada but also countries in Latin America, the Caribbean, and the Pacific Islands. During the one hundred and thirteenth count season (December 15, 2012 through January 13, 2013) 71,531 people took part in 2,369 counts. Of that total, 56,027 participants were in the United States, and 13,243 were in Canada.

The first Christmas count held in Virginia was a modest affair, indeed, when, on Christmas Day of 1904, Dr. William Caton spent twenty-five minutes looking out his dining room window and fifty minutes walking around his yard in Accotink, Arlington County, to record nine bobwhites, nine bluebirds, four cardinals, four song sparrows, three juncos, and two crows, for a total of thirty-one individuals. And as directed, he completed his report that Christmas night and popped it in the mail the next day.

For the next four years, no count results were submitted from Virginia, but in 1909 Norfolk resident M. A. Lewis submitted count results from his Bowers Hill backyard. From that time forward to the present, from two to fifty-two counts have been reported from Virginia every year. Today, an average of fifty Virginia counts are held state-wide, from Chincoteague National Wildlife Refuge on the Delmarva Peninsula in the east to



Northern Cardinal

Breaks Interstate Park on the border of Kentucky in the west.

Only one count was conducted anywhere in the middle of the eastern part of Virginia during the first half of 1900. That was a brief effort by Elizabeth Hawes Ryland in the northern section of King and Queen County to conduct a yearly count from 1910 through 1912. She spent about an hour each year, counting the birds on her family farm in Beulahville. After that, no counts were conducted anywhere in the Northern Neck or Middle Peninsula area for the next twenty-four years. Even though the fairly large concentrations of population in Richmond, Fredericksburg, and Williamsburg were not too distant, transportation was a far more complicated matter back then than it is nowadays. It was

a major undertaking to brave the primitive road system in vehicles that were anything but trustworthy.

At last, the void was filled when, on December 21, 1935, two men, Charles P. Preston and Harold J. Brodrick, conducted the first Washington's Birthplace (WB) count. They started at Washington's Birthplace Monument, proceeded to the Rappahannock River at Leedstown, then to Cat Point Creek and to Currioman Bay on the Potomac River, returning to the starting point at the monument nine hours later. They recorded sixty species totaling 2,566 individuals. For the next two years, Preston, alone, traced the same route, finding fifty-seven species (2331 individuals) in 1936 and sixty species (2839 individuals) in 1937.

No WB census was reported in 1938, but Preston again covered the area in 1939, this time with the help of Paul Hudson. The route was the same as in previous years but with the addition of Westmoreland State Park. The number of species observed was somewhat higher (sixty-three) but the total of individuals was more than quadruple that of previous counts, thanks to the presence of large numbers of waterfowl that year. The fifth and final count, conducted by Preston in 1940, produced the best numbers of all: sixty-nine species comprising 5,268 individuals. That was the last count in the area for fifty-two years.

In 1993 locally well-known naturalist-photographer Bill Portlock saw the need for a bird count in the Northern Neck-Essex County area



Dark-Eyed Junco



House Finch



Carolina Chickadee



Tufted Titmouse

and set about organizing the event, inviting birders from all over the eastern part of Virginia to take part. Portlock was unaware of Preston's 1935-1940 efforts, but ironically, he gave the count the same name Preston had used. In addition, the circle that he established included all the places Preston had visited. Portlock recognized the Rappahannock River should be the main focus of the count and he designated Horners in Westmoreland County as the circle center to accomplish that end. The circle includes the stretch of the Northern Neck from Mattox Creek in the north to Wilna Creek in the south. It also encompasses a significant portion of Essex County from above the Marlbank area down to just below Champlain.

Portlock was successful in enlisting the help of many well-known birders and ornithologists in the area and, on that first count, eighteen participants

reported eighty-seven species of over 29,000 individuals. The count has been held every year since, with impressive numbers racked up over the years. The most participants in one year was twenty-seven in 1998; the most individuals found was 581,833 in 1995; and the most species was 109 in 2008. The cumulative total of bird species over the twenty years is 146.

Without a doubt, the most significant data coming out of this latter-day count is the astonishing number of bald eagles recorded each year. Portlock has added a significant dimension to the count by launching his motor boat on the Rappahannock. The boat easily covers the twenty or so miles of the river that the circle encompasses. This unique mode of transportation has provided superb coverage of all the bays, inlets, and shorelines that are inaccessible by land. Most of the stunning numbers of various waterfowl and eagles are generated by these river excursions.

Eagles have been wintering on the Rappahannock and Potomac Rivers for years, but starting in the

1960s, the fatal effects of DDT took a terrible toll on this species, decimating the numbers to the point that it became rare to spot even a handful of eagles all around the state during the count period. Those numbers remained precariously low for eighteen years. That deadly pesticide was finally banned in the United States in the 1960s, and slowly, ever so slowly, the eagles started to grace the Virginia skies once more. When Portlock resurrected the count in 1993, there were signs that the eagles were making a comeback from the brink of extinction.

In those years, from 1993 through 2000, the average eagle count on the WB census was about seventy-five per year. Starting in 2001, numbers began to soar and have remained high ever since. The average in the last twelve years has almost doubled to 140 a year. The most ever counted on the WB count was 231 in 2010. The comeback of the eagle is one of the few American conservation success stories.

Another development in recent years has been the significant increase in coverage of the circle on the Essex

In those years, from 1993 through 2000, the average eagle count on the WB census was about seventy-five per year. Starting in 2001, numbers began to soar and have remained high ever since.



County side of the river. Through the stepped up efforts of several birders in that sector, access to hundreds of acres of farmland, forest, and river fronts that were not available to us previously are now available to survey. Judy Allen, Dorothy Miller, and Alice Wellford have contacted dozens of landowners and obtained permission to include their farmlands and backyards in the surveys. This access to such a large and varied assortment of habitats not only helps birders find more of the resident birds, but it also gives them a better chance to find those elusive, but very important, and sometimes rare, species that drift down from the north and winter in Virginia each year.

One other very important aspect of the Christmas count success is the cooperation of so many landowners

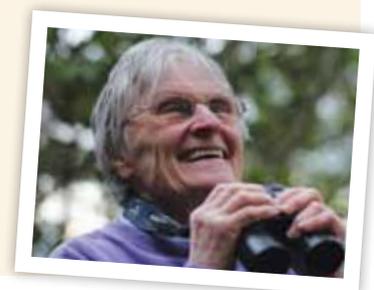
that allow observers to census their properties. This has resulted in birders now having access to miles and miles of western Rappahannock shoreline, and acres of forests and fields that were not accessible previously. It should also be noted that participants never enter private properties unless they have specific permission. Whenever possible, the landowners are contacted by phone or e-mail a few days before the count to inform them of the count date and that birders will be in their area. Birders take great care not to damage any property or cause harm to the environment in any way.

We are extremely grateful to the many residents of Essex County, as well as those all over the count area who have graciously given us permission to bird their properties.



With so many cooperating, this wider coverage will yield better results and we will be able to spot trends and changes in bird distribution during the winter months with much greater accuracy, both on the Northern Neck and Middle Peninsula.

Teta Kain is a self-taught naturalist and avid wildlife photographer. She has served as president of the Virginia Society of Ornithology, editor of the state birding journal, *The Raven*, and has been the regional editor of the Virginia-Washington DC Christmas Bird Counts for over twenty years. She is very active in Friends of Dragon Run and leads kayak trips down that river each spring. She lives in Gloucester with her husband, Reece, who tolerates her antics.



Herring Dipping

By Marty Glenn Taylor

When the woods become white with wild dogwood and fields are flecked with gulls seeking worms behind the plough, then country folk long to get out their long-handled nets and travel to a convenient stream to dip for herring, the tiny fish that migrate every season back to where they were spawned.



Salt herring is a delicacy enjoyed by many.

All along the Atlantic coast, on both sides of the ocean, blueback herring swim to fresh or brackish water to lay their eggs, each female laying between 20,000 and 40,000, which hatch in about three days at 72 degrees. The larvae live for a few months at the site where they were fertilized by the male herring—on any hard bottom, such as gravel or rock—and then move back downstream to the rivers and ocean.

The Atlantic herring are the most abundant fish species on earth. They are a flat-sided fish, with a rounded belly and a forked tail, that may grow to a maximum length of sixteen inches and a weight of seven ounces. They travel in huge schools, in deeper waters, numbering as many as several million, forming waves that may be seen on the surface. As they travel, they eat copepods, krill, and small fish. Larger fish and seals eat them, as do the country folk of Essex County.

When there is a legal season for catching these tiny delicacies, Essex fishermen may be found in the early evening, just past dark, their cars and pick-ups parked beside a culvert or small bridge that crosses the highway. I too have parked beside a country road and walked along the stream bed

to observe this vernal ritual. With flashlight in hand, I swat at clouds of gnats that circle my head. The trees, just beginning to leaf, muffle traffic sounds nearby as I watch the plunging dip nets come out of the water, each time with hundreds of leaping fish. The fishermen are spread out along the stream, twenty to thirty feet between them, and I wonder how they know when to thrust their stiff nets into the water.

“Watch for the silver,” one man tells me, explaining that he can see the movement of the fish beneath the surface.

I look intently but fail to see what he observes. His net is made of what looks like an old crab pot, the sides stiff and unyielding. The long handle, he tells me, was once a TV antenna. Herring dipping requires more arm and back strength than the kind of fishing I am accustomed to doing in the Rappahannock River, but I am just as eager as these dippers are to have salted herring on my breakfast plate on a cold morning.

Luckily, on this excursion into the customs of Essex County, I have chosen as my guide the one man (my husband) who probably knows as much as there is to know about herring, particularly salt herring. He was the proprietor of Rappahannock Products, Inc., an establishment known since the 1940s for salting and shipping this delicacy to customers in twenty-three states. In the old days, his father bought the herring from Capt. Clem Haynie in Reedville, who had already cleaned and put them in brine. Now, years later, the fish are purchased wherever they can best be found, gutted and scaled, and then put in brine strong enough to float an egg, for a minimum of ten days. They can be left here indefinitely. When they are

taken out of the brine, a “cure is put on them,” my guide explains. This cure is the secret formula that makes his herring special. By September the fish are ready to be packed and sold, often through the mail. The product does not require refrigeration but must be kept in a cool place. Before the fish are cooked, usually by frying in hot grease, they should be soaked in water overnight and then patted dry and rolled in cornmeal. Herring roe is considered a great delicacy, but the fish itself has millions of tiny bones, which some people may object to. The taste for salt herring probably begins at infancy and is not likely to be acquired later.

In the March 12, 1955 issue of *The New Yorker*, a columnist—prompted by Martha Taylor, my guide’s mother—wrote:

In reporting on some salt roe herring packed in the pleasant Virginia town of Tappahannock on the Rappahannock River, I am addressing myself principally to exiles from the Old Dominion and the Deep South, since the residents of these regions do not need to be told where to get their roe herring, and outsiders rarely care. . . . Herring packing is one of the oldest industries in Virginia (George Washington himself turned an honest penny at it), and it still flourishes, but not all roe

herring meet the exacting standards of the Tappahannock fish.

When Rappahannock Products closed as a business, the fish continued to be salted and packed for shipping in another venue. Some customers forgot to respond to a flier announcing the new shipment information. They were forced to call Lowery’s Restaurant or St. Margaret’s School, prominent area locations, seeking the phone number so that they could place an order for the herring.

“Oh, thank goodness,” one of them said as he placed a double order with my husband. “I’m so glad I found you.”

Another wrote, “Your fish bring back wonderful memories to me, as my aunt used to send my father a wooden keg of fish packed in rock salt every Christmas until I was about fourteen years old. At that time, my father developed kidney failure and could no longer partake.”

Prices for a five-pound tub of fish have ranged from \$3 to today’s price of \$27.50.

Over the years, as Rappahannock Products’ salt herring customers have aged, many have been forced to give up salt. Several have written letters of farewell, explaining how sad they were to end a relationship with their supplier and, most especially, with salt roe herring for breakfast, the small fish with the zealous following.

After moving to Essex in 1979, Marty Glenn Taylor worked in education and advancement at RCC, St. Margaret’s School, and Stratford Hall Plantation. Before this, she taught English at VCU and U-R. She is the author of *The River Me*, a collection of vignettes about growing up in the waterfront village of Morattico, and currently is writing a similar book about Essex County.





*Servitude
and Splendor*

The craftsmen and the carved furniture of the
Rappahannock River valley, 1740–1780

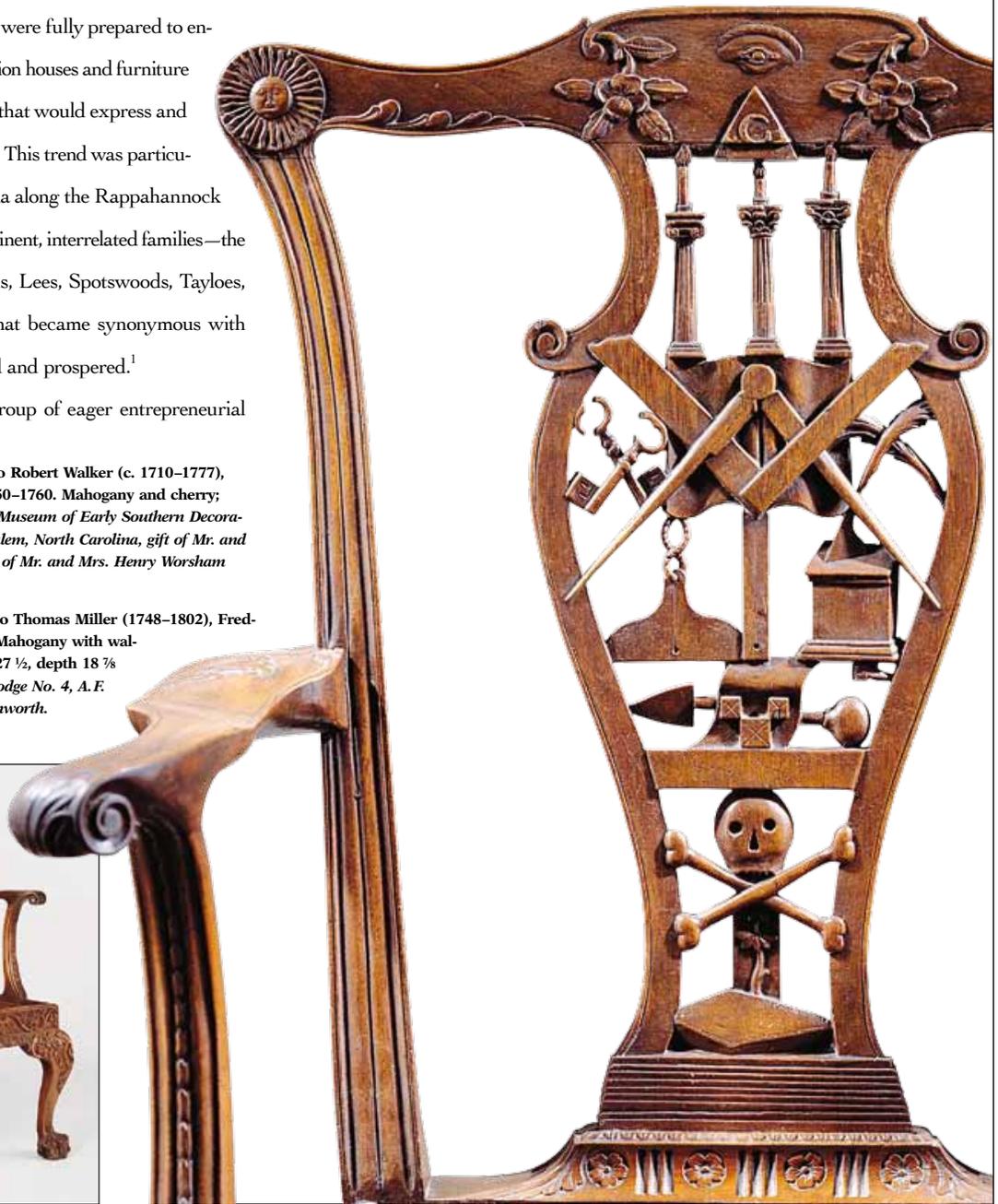
By 1740 a colonial elite of well-to-do merchants and landowning planters had emerged in Virginia. With riches from tobacco production supplemented by investments in the profitable iron industry, they were fully prepared to engage artisans and to commission houses and furniture in the latest European styles that would express and solidify their economic status. This trend was particularly true in northern Virginia along the Rappahannock River, where a cluster of prominent, interrelated families—the Beverleys, Carters, Fitzhughs, Lees, Spotswoods, Tayloes, and Washingtons—names that became synonymous with early southern history—lived and prospered.¹

Into this milieu came a group of eager entrepreneurial

By Robert A. Leath

Figs. 1, 1a. Tea table, attributed to Robert Walker (c. 1710–1777), King George County, Virginia, 1750–1760. Mahogany and cherry; height 28 ½, diameter 30 inches. *Museum of Early Southern Decorative Arts at Old Salem, Winston-Salem, North Carolina, gift of Mr. and Mrs. John T. Warmath in memory of Mr. and Mrs. Henry Worsham Dew; photographs by Wes Stewart.*

Figs. 2, 2a. Armchair, attributed to Thomas Miller (1748–1802), Fredericksburg, Virginia, 1773–1774. Mahogany with walnut and oak; height 42 ½, width 27 ½, depth 18 ¾ inches. *Fredericksburg Masonic Lodge No. 4, A.F. & A.M.; photographs by Gavin Ashworth.*



Figs. 3, 3a. Armchair made by Walker, King George County, 1749. Mahogany; height 38 ½, width 28 ½, depth 18 inches. *Mary Washington House, Fredericksburg, Association for the Preservation of Virginia Antiquities; Ashworth photographs.*



craftsmen from abroad. Over a period of roughly four decades, from 1740 to 1780, a cadre of British, and, in fact, primarily Scottish cabinetmakers, migrated and set up shop in the Rappahannock River valley's thriving port towns. Once established, these master craftsmen secured the labor of apprentices and journeymen and, even more important, of highly skilled indentured servants, men formally trained in European cabinet shops who came to America seeking economic opportunity. Setting the usual notion of fashion transmission on its head, in which style travels in a straight downward line from court circles to common men, it was frequently these indentured servants who were responsible for maintaining the fluency of the Rappahannock River valley's cabinet shops with the latest European styles. The region's richly carved furniture, demonstrating the transitions from baroque to rococo to neoclassical, clearly illustrates this fact.

In 1732 William Byrd (1674–1744) of Westover, a plantation on the James River in southern Virginia, visited Fredericksburg, then the most prominent town in the Rappahannock River region. He noted that it possessed “a commodious and beautiful situation for a

town, with the advantages of a navigable river and wholesome air, yet the inhabitants are very few" with "only one merchant, a tailor, a smith, and an ordinary keeper," and Susanna Levingstone, the widow of Williamsburg's former theater operator, "who acts here in the double capacity of a doctress and coffee woman. And were this a populous city, she is qualified to exercise two other callings."² In the decade that followed Byrd's commentary, Fredericksburg grew significantly, the rival towns of Falmouth and Port Royal emerged, and two Scottish-born cabinetmakers—James Allan and Robert Walker—arrived, settling in Fredericksburg and Port Royal respectively, and began producing furniture for the area's burgeoning population.

Working in collaboration with his brother William Walker (c. 1705–1750), a talented architect and master builder, Robert Walker introduced some of the earliest and most elaborate baroque style carving seen on colonial Virginia furniture.³ In 1746 his shop produced for John Spotswood (1722–1758), the son of a former colonial royal governor, a set of one dozen mahogany chairs embellished with fashionable carving in the early Georgian taste (see Fig. 4).⁴ The key elements of Spotswood's chairs—the dramatic shaping and scrolling of the crest rail, the heart-and-ribs piercing of the splat, the clamshells and husks carved on the legs terminating with claw-and-ball feet—established a new standard for Rappahannock River chair design and gradually evolved into the local vernacular style imitated by others.

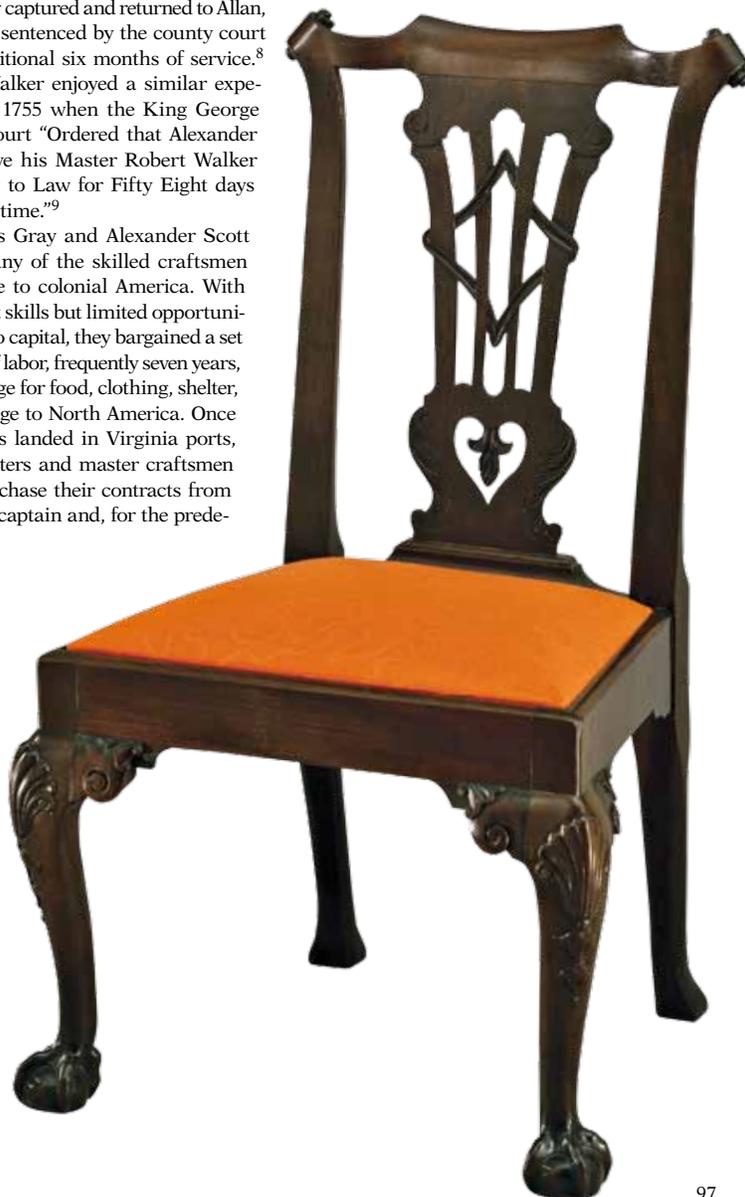
In 1749 John Mercer (1704–1768) commissioned a set of fourteen chairs from the Walkers that document Robert's reliance on a professional carver, probably an indentured servant, for the successful execution of his designs. According to Mercer's account book he paid the Walkers £30.8 for the chairs, which included £10.16 in charges for fifty-four days of work by a carver at the rate of 4s per day, making the carver's time and skill more than a third of the total sum. Referred to in the account book as simply "his Carver," the possessive terminology used by Mercer implies a master-servant relationship between Walker and the carver. The account book further demonstrates that three months later, for an unexplained reason, Mercer sold the chairs back to William Walker at cost.⁵ Miraculously, an armchair from the set survives with a history of descent in the Walker-Ferneyhough family (Figs. 3, 3a). Nearly identical to the Spotswood chair, its gadrooned seat rail and the carved dog's-head arm terminals represent additional core

features of the Walker shop's chairs.

That Robert and William Walker had an indentured servant craftsman was not unique. In 1748 the Scottish-born clergyman Robert Rose (1704–1751) went to Fredericksburg and paid £28 for "a joiner from Mr. James Allan who has six years to serve."⁶ Allan appears to have engaged indentured servants on a regular basis, for three years later he advertised in the *Virginia Gazette* for a runaway "Servant Man, named Thomas Gray...a Cabinet maker and Joiner by Trade...very talkative, much addicted to Drinking and plays well on the violin; was imported by Indenture from London in the Ship Rachel, Capt. Armstrong, this Summer."⁷ Eventually captured and returned to Allan, Gray was sentenced by the county court to an additional six months of service.⁸ Robert Walker enjoyed a similar experience in 1755 when the King George County court "Ordered that Alexander Scott serve his Master Robert Walker according to Law for Fifty Eight days Runaway time."⁹

Thomas Gray and Alexander Scott typify many of the skilled craftsmen who came to colonial America. With important skills but limited opportunities and no capital, they bargained a set amount of labor, frequently seven years, in exchange for food, clothing, shelter, and passage to North America. Once their ships landed in Virginia ports, local planters and master craftsmen could purchase their contracts from the ship's captain and, for the prede-

Fig. 4. Side chair made by Walker, King George County, 1746. Mahogany with beech; height 37 7/8, width 21 3/8, depth 17 1/4 inches. Colonial Williamsburg Foundation, Williamsburg, Virginia; photograph by Hans Lorenz.



terminated number of years, they were the servants of their masters, occupying a legal status between that of slaves and freemen.

Could Alexander Scott be the carver mentioned in the Mercer accounts? Unfortunately, it remains a mystery. However, the accounts reveal that whoever he was, this artisan worked for both Robert Walker, the cabinetmaker, and William Walker, the architect, and so was cross-trained in architectural and furniture carving, a fact that sheds interesting new light on his work. Perhaps the earliest example of his work is the elaborately carved tea table in Figure 5, which descended in the Lee family of Stratford Hall Plantation in Westmoreland County. Produced shortly after Walker's documented association with Thomas Lee (1690–1750) and the construction of his new house, the Lee family table combines the leafage, husks, and claw-and-ball feet seen on the legs of the Walker shop chairs with a turned drop pendant similar to those on the newel posts of staircases and carved imbrogation, or fish scales, frequently found on the architectural bolection moldings and trusses for mantelpieces

and door surrounds (Fig. 5a).¹⁰

The death of William Walker in 1750 and the dissolution of his workforce created an architectural vacuum in northern Virginia, but surviving objects suggest that the unknown carver continued his affiliation with Robert Walker's cabinet shop for at least another decade, presumably after his term of indenture had expired. The objects attributable to this artisan can be dated from the mid-1740s to around 1760.

An important group of objects demonstrates the Walker carver's awareness of the style transition taking place from the late baroque to the early rococo. These include a tea table made for the illustrious Carter family at Cleve Plantation in King George County, Virginia (Figs. 1, 1a). Its elaborately shaped top is a tour de force of carving, the design of which may have been inspired by a silver salver made by the London silversmith John Swift (free 1725) in 1753/54 and owned by the Spotswood family.¹¹ A very similar top is found on the kettle stand made for the Semple family (Figs. 6, 6a). On both the tea table and the kettle stand, the carving on the knees flows in two directions, rather than simply cascading down the legs as seen on the earlier Lee family tea table (see Figs. 1a, 5a). Altogether, these pieces convey a lightness verging on asymmetry that heralds the arrival of the rococo taste.¹²

William Walker's untimely death came at the point when George Mason (1725–1792) was looking for craftsmen for the construc-



Figs. 5, 5a. Tea table, attributed to Walker, King George County, 1740–1750. Mahogany; height 28 ¾, width 32 13/16 inches. Stratford Hall Plantation, Robert E. Lee Memorial Association, Stratford, Virginia; Ashworth photographs.

tion of his new house, Gunston Hall. In 1755 he turned to Europe for indentured servants, and with the help of his brother living in London, he procured a young architect and master builder named William Buckland and a carver named William Bernard Sears. Sears, identified in London records as "Barnard Sears, carver," left England as a felon sentenced to seven years of indentured servitude in the North American colonies for stealing "one cloth waistcoat, one cloth coat, one pair of cloath breeches, four linnen shifts, two linnen shirts, twelve linnen aprons, and one guinea."¹³ Buckland and Sears completed Gunston Hall, gained their freedom, and set out on their own, finding employment with John Tayloe (1721–1779) to build and furnish his new house, Mount Airy plantation, on the south bank of the Rappahannock River in Richmond County. There, they collaborated on two magnificently carved, marble-topped sideboard tables, including the one illustrated in Figure 7.¹⁴ A straightforward adaptation of Plate 38 in Thomas Chippendale's *Gentleman and Cabinet-maker's Director* (London, 1754), this table again illustrates the role played by indentured servants, even those who arrived as convicts, in delivering the latest British style to their patrons.

By the mid-1760s James Allan's shop in Fredericksburg appears to have acquired its own professional carver. A small group of chairs with distinctively carved splats, now attributed to the Allan shop, survive with histories in the vicinity.¹⁵ This important group includes the side chair illustrated in Figure 8, which demonstrates a carving style and construction techniques that are clearly different from the Walker shop's chairs. Like the others in the group, it features an interlaced splat carved with rosettes and acanthus leaves, sometimes supplemented with clamshells and ribbons. Given his training before immigrating to Virginia in the 1730s, the up-to-date rococo fashion of these chairs would have been completely unfamiliar to Allan, but like Robert Walker, he came to the colonies with enough capital to create his own shop, to hire apprentices and journeymen, and on a regular basis to procure the skills of newly arrived craftsmen to insure that his offerings to customers remained suitably fashionable.

In 1765 significant competition arrived in Fredericksburg with Thomas Miller, another Scottish-trained cabinetmaker.¹⁶ Miller joined the local Masonic lodge and quickly followed the pattern of setting up shop and advertising

in the newspaper for "Journey-men Cabinet-Makers, well recommended."¹⁷ In the same issue he offered a reward of £3 for the return of a runaway indentured servant "George Eaton, born in London and imported last February in the Neptune, Capt. Arbuckle," noting that "he is by trade a cabinet-maker, about 5 feet 3 or 4 inches high, 20 years of age, of a fair complexion, wears his own hair, which is short and fair, and sometimes wears a false curl, which a stranger would not know from his hair, being exactly of a color."¹⁸ Four years later Miller sought the return of "a Convict Servant Man...William Jennings, by Trade a Cabinet Maker."¹⁹

Such advertisements for runaways are too frequently the only reference to these obscure craftsmen, but the journal of John Harrower (d. 1777) offers a rare insight into the important roles they played in colonial Virginia.²⁰ A bankrupted merchant from the Scottish Shetland Islands, Harrower bargained four years of his labor for transportation aboard the ship *Port of*



Figs. 6, 6a. Kettle stand, attributed to Walker, 1750–1760. Mahogany; height 31 ¾, diameter of top 21 inches. Private collection; Ashworth photographs.

London to Fredericksburg. Sailing up the Rappahannock River, he noted that “along both sides of the River there is nothing to be seen but woods in the blossom, Gentlemens seats & Planters houses.” Passing the port of Leedstown he observed “a ship from London lying with Convicts,” and upon arrival in Fredericksburg in May 1774, he described the sale of indentures for the barbers, coopers, blacksmiths, shoemakers, farmers, and cabinetmakers that were listed among the seventy-five passengers on the *Port of London*.²¹ His own contract was purchased on May 23 by Colonel William Daingerfield (d. 1783), a wealthy local planter, and he became a tutor in the Daingerfield household.

The *Port of London*'s official passenger list identified four furniture makers: Daniel Lakenan, a twenty-two-year-old cabinetmaker from London; Thomas Low, a seventeen-year-old cabinetmaker from Chester; John Tran,

Fig. 7. Sideboard table, attributed to William Buckland (1734–1774) with carving attributed to William Bernard Sears (1732–1818), Richmond County, Virginia, 1761–1771. Walnut with marble top; height 34 3/8, width 44 7/8, depth 28 inches. *Museum of Early Southern Decorative Arts at Old Salem; Stewart photograph.*

Fig. 8. Side chair, possibly by James Allan (1716–1789), Fredericksburg, 1765–1780. Black walnut; height 35 5/8, width 20, depth 18 1/2 inches. *Colonial Williamsburg Foundation; Lorenz photograph.*



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a twenty-year-old carpenter and joiner from Southwark; and Thomas Ford, a thirty-two-year-old carver and gilder also from London.²² Currently, no other references to these artisans are known, but the regular arrival of fresh talent helps explain the remarkable carving seen on furniture of the Rappahannock River valley.

Perhaps one of these men was responsible for the carving on Miller's extraordinary Masonic master's chair in Figure 2, which is today considered one of America's earliest and best-documented expressions of neoclassical design.²³ In the mid-1770s Fredericksburg's Masonic Lodge paid Miller £5 for the chair. It is richly embellished with carved gardooning, floral decoration, and hairy paw feet (see Fig. 9). Indicating the carver's British training, the frieze across the front seat rail is adapted from Plate 52 of Abraham Swan's *British Architect* (London, 1758). To create a fashionable product for the lodge's use, the carver utilized a full range of Masonic imagery on the crest rail and splat, with a sun, moon, columns, compass, square, sundial, and Bible surrounding the all-seeing eye.²⁴ Subtle details betray his familiarity with the newly emerged neoclassical style. Specifically, his approach to the metopes and triglyphs carved on the shoe and the elongated husks on the arm supports bespeak his knowledge of the innovative designs of Robert Adam (1728–1792) and others from Great Britain.

Like the Walker shop carver, the identity of Thomas Miller's professional carver is a mystery, but a small cluster of his work survives in houses and on furniture produced in Fredericksburg from the early 1770s to around 1780—interestingly, roughly equivalent to the typical seven-year term of an indenture. Like the Walker brothers' carver, he seems to have been cross-trained in both architectural and furniture carving.

His architecture portfolio includes the advanced carving found on chimneypieces



at Kenmore, the residence of George Washington's sister and brother-in-law, Betty and Fielding Lewis, and at the Chimneys, a house built in the late 1770s for Fredericksburg's leading Scottish merchant, John Glassell (1734–1806).²⁵ In furniture, his hand is also seen in a significant set of chairs made for the Waller family of Spotsylvania County and Williamsburg (see Fig. 10).²⁶ The chairs feature one of the most iconic expressions of early neoclassical design, an anthemion, carved in each of the crest rails.

Clearly, not all furniture enjoyed the time and attention of the professional carver. Thomas Miller's shop also produced plain style chairs such as the one illustrated in Figure 11, which descended in the Little family of Freder-

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icksburg. It is nearly identical in construction and design to the Masonic chair and the Waller family chairs but is devoid of the adornment. Indeed, this chair recalls the set of "12 Black Walnut Chairs" made by Miller in 1774 for the local tavernkeeper, George Weedon, priced at only twenty shillings each, significantly below the price of carved chairs.²⁷

Could Thomas Ford, the thirty-two-year-old carver and gilder from London who arrived in Fredericksburg with John Harrower aboard the *Port of London* on May 10, 1774, have been Miller's elusive carver? He does not appear in any known records in the Fredericksburg area. But the importance of the thousands of indentured servants like him who came to America seeking new opportunities for professional expression should not be underestimated. The splendidly carved furniture of the Rappahannock River valley remains as a testament to the historical and artistic importance of these craftsmen, and radically subverts presupposed notions of "trickle-down" decorative arts.

Fig. 9. Detail of the carved front seat rail and one of the legs of the armchair illustrated in Fig. 2. Ashworth photograph.

Fig. 10. Side chair, attributed to Miller, Fredericksburg, c. 1774. Cherry with oak; height 38, width 21, depth 18 inches. Colonial Williamsburg Foundation; Lorenz photograph.

Fig. 11. Side chair, attributed to Miller, Fredericksburg, 1770–1780. Black walnut; height 37½, width 21 ¼, depth 19 ¼ inches. Fredericksburg Area Museum and Cultural Center, gift of Genevieve Rowe Hunter; Ashworth photograph.

¹ For Landon Carter's 1738 estate on the Rappahannock, see Ralph Harvard, "A baroque Virginia treasure house: Landon Carter's Sabine Hall," *The Magazine ANTIQUES*, vol. 173, no. 4 (April 2008), pp. 104–115.

² William Byrd, "A Progress to the Mines in the Year 1732," in *The Prose Works of William Byrd of Westover*, ed. Louis B. Wright (Harvard University Press, Cambridge, 1966), p. 368.

³ Robert A. Leath, "Robert and William Walker and the 'Ne Plus Ultra': Scottish Design and Colonial Virginia Furniture, 1730–1775," *American Furniture*, 2006, pp. 54–95.

⁴ *Ibid.*, p. 72.

⁵ *Ibid.*, pp. 68–70. Mercer's Ledger Book 1741–1750 is in the Mercer Museum, Bucks County Historical Commission, Doylestown, Pennsylvania.

⁶ *The Diary of Robert Rose: A View of Virginia by a Scottish Colonial Parson*, ed. Ralph Emmett Fall (McClure Press, Verona, Virginia, 1977), p. 29.

⁷ Williamsburg *Virginia Gazette*, October 20, 1752.

⁸ Entry for November 8, 1752, Order Book, 1749–1755, p. 206, Court Records, Spotsylvania County, Virginia, microfilm, Museum of Early Southern Decorative Arts, Research Center, Winston-Salem, North Carolina.

⁹ Entry for October 2, 1755, Order Book, 1751–1765, p. 580, Court Records, King George County, Virginia, microfilm, *ibid.*

¹⁰ Leath, "Robert and William Walker," pp. 66–67.

¹¹ Wallace B. Gusler, "The tea tables of eastern Virginia," *The*

Magazine ANTIQUES, vol. 127, no. 5 (May 1989), p. 1250.

¹² Leath, "Robert and William Walker," pp. 78–79, 80–81.

¹³ Quoted in Robert F. Dalzell Jr. and Lee Baldwin Dalzell, *George Washington's Mount Vernon: At Home in Revolutionary America* (Oxford University Press, New York, 1998), p. 168.

¹⁴ For the other sideboard table, see Ronald L. Hurst and Jonathan Prown, *Southern Furniture 1680–1830: The Colonial Williamsburg Collection* (Colonial Williamsburg Foundation, Williamsburg, Virginia, 1996), pp. 264–269.

¹⁵ Tara Gleason Chicirca, "The Furniture of Fredericksburg, Virginia, 1740–1820," *American Furniture*, 2006, pp. 101–103.

¹⁶ *Ibid.*, pp. 114–115.

¹⁷ Williamsburg *Virginia Gazette*, September 22, 1768.

¹⁸ *Ibid.*

¹⁹ *Ibid.*, June 25, 1772.

²⁰ *The Journal of John Harrower, an Indentured Servant in the Colony of Virginia, 1773–1776*, ed. Edward Miles Riley (Colonial Williamsburg Foundation, Williamsburg, Virginia, 1963).

²¹ *Ibid.*, pp. 37–40.

²² *Ibid.*, pp. 166–168.

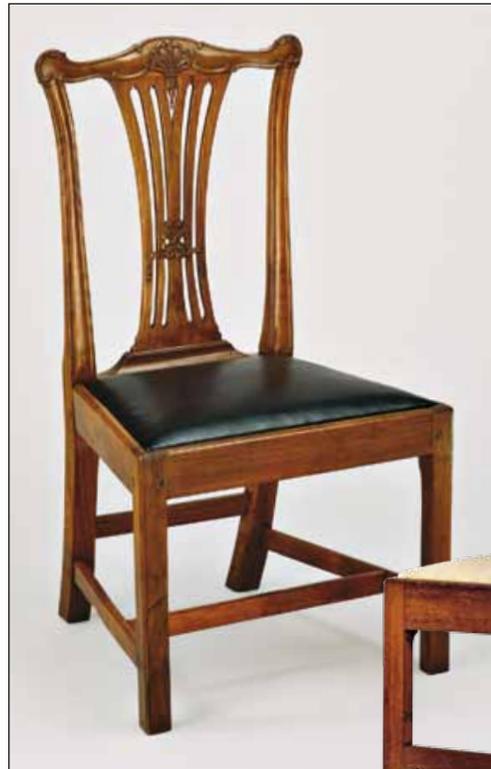
²³ For more about the chair, see Chicirca, "Furniture of Fredericksburg," pp. 106–112.

²⁴ For more about Masonic imagery, see Aimee E. Newell, "Celebrating 275 years of brotherhood: The Grand Lodge of Masons in Massachusetts," *The Magazine ANTIQUES*, vol. 173, no. 4 (April 2008), pp. 84–91.

²⁵ For the chimneypieces at Kenmore and the Chimneys, see Chicirca, "Furniture of Fredericksburg," pp. 116–117, Figs. 34–38.

²⁶ *Ibid.*, pp. 118–119.

²⁷ *Ibid.*, p. 122.



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MY DISCOVERY OF THE RAPPAHANNOCK

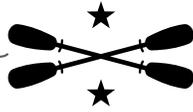


By Edward Wright Haile

When I was sixteen in the summer of 1959, I got the idea of camping and exploring the upriver below the falls. I had just bought a canoe from my brother for \$25. A canoe requires two paddlers. I took it up with my best friend, John Schuyler Moon. “How about it, Fredericksburg to Tappahannock?”

John and I had already used the thing pretty hard for a couple of years. It was a 16-foot, Old Town canoe with spruce ribs and thin cedar planking, sheathed in canvas, painted green, and built in the year 1928. We would go after I got out of summer school in the city.

I don’t believe I gave John much choice. He was a year younger and an inch taller and strong for his age. He lived in the house in which he was born, at the end of Queen Street, Tappahannock, with three older sisters. He could row like any kid in town in those days when kids rowed boats, but he was also, by now, a seasoned canoeist, a good bow man or stern man. For two or three summers, we had lifted it over our heads and carried it from my Aunt Mary Esther’s backyard, past the water tower, down Queen Street, and across highway 17, and we had embarked from the end of Marsh Street. We explored by



paddle the limits of Mount Landing and Hoskins Creeks. We had put in a ways into Catpoint and Piscataway and knew all the river shoreline, and the good swimming, on both sides, from Wares and Wellfords to Naylor's and Mallory's Point.

I was on vacation, but John had two daily obligations: splitting up the kindling for his mother's cook stove and a paper route. He delivered the *Times Dispatch* from Marsh to the lower end of Water Lane, more or less the whole town, but Wakefield. Fine, I said. Nobody cooks that much in summertime. I grabbed an ax lying beside his, and together we split up a week's worth. Meanwhile, couldn't Rappahannock go without the news of Ike and the recession for a few breakfasts? Or maybe somebody called for a sub delivery boy. Hard to remember after all these years, but John got free. All was set. We were going the length of the upriver and that was that.

Canoe gear consisted of a rope for a mooring line, two paddles, and a bailing scoop. No seat cushions and no life jackets in those days. I recall what an older Boy Scout once told me. A canoe can hold three when dry and a dozen when swamped.

We had my dad's pup tent from the war, sleeping bags, a flashlight, plenty of beans and hot dogs, a jar of instant, for John (coffee and cream poured over his Wheaties for breakfast was a John Moon trademark), canned soup, beef stew, candy bars, a famous racy novel recently published, enough cigarettes for two boys, a knife, a can opener, and an Esso road map, courtesy of Gaines's Servicenter, that I studied and studied (and studied) as the trip got longer and longer (and longer). I also brought a lengthy swath of cheesecloth to serve as mosquito netting, which proved totally inadequate. The mesh must have been too wide.

John's cousin Leonard Taylor drove us up to Fredericksburg on the 22nd, a beautiful, sunny day, in my Aunt Mary Esther's black '48 Desoto, with the canoe tied on top under perfect Boy Scout knot craft. Leonard was the sweetest, gentlest, and most accommodating of souls, with an air of quiet sorrow he bestowed upon two fine lads he seemed convinced were about to leap to their destruction. He cautioned us not to drown!

We loaded and shoved off from the ancient steamboat landing just below the RF&P railroad bridge. I don't know how we found the spot. It was at the overgrown end of Sophia Street, nothing but honeysuckle, ruts, and smashed whiskey bottles. A couple of scruffy fishermen

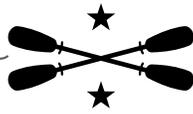
greeted us as we came down to the water. Could this be the Rappahannock? It was so narrow. It looked more like Hoskins Creek. No wonder George Washington threw a Spanish silver dollar across it right here, when he was about our age. But no, we couldn't quite get a rock that far. I bet he relied on skipping it, oyster-shell fashion, like kids at Wares Wharf.

The loaded canoe still felt light, springy, swift. This was going to be easy, fun, and quick. Full of boyish excitement, we decided, heck, let's go upstream under the railroad bridge, and then under Chatham Bridge. We were passing through the heart of two beautiful old villages, Fredericksburg and Falmouth, but the banks were still woody and wild. We could have camped there! The river became very shallow by the time we rounded the bend to the left and reached the Route One bridge. I looked at all those rocks and, as far as I was concerned, the river had come to an end. Nothing navigable above here! Time to turn around and get underway.

It was early afternoon and progress downstream was excellent. But uh-oh, only a mile below our put-in we came upon the 30-inch effluent pipe of the huge cellophane factory, by far the largest employer in the area. The process of turning wood pulp into transparent wrap was notorious for decades of stinking up the atmosphere on the south side of town, but we hadn't reckoned on what was happening to the river. A liquid smelling just as bad was spewing out of that pipe into the clear waters in a steady milk-white stream of manufacturing effluvia. For the next twenty miles the water was the color of milk. Mixed in it were tons of shredded cellophane that, for years, collected on anything in the way as far downstream as the waters of Essex. But we were boys, it was all an adventure, we were determined.

The banks were tall, steep, and covered with massive hardwoods unlike any river we knew. We paddled miles and miles, it seemed. I thought we were halfway to Port Royal already, when we veered over to a five-foot bank at Hayfield farm to camp, a mile below Hollywood Bend, across from the mouth of the county line creek. The area today is gravel quarries and the handsome antebellum house is unoccupied now as it was then.

In the dark, the mosquitoes came out in dependable quantities. We told each other stories about camping mishaps and lethal snakes that crept into sleeping bags in the cool of the wee hours. At least the odor in the river



was all but gone, if not the milk. Awake long after dark, we took flashlights and hiked inland to the big house, in search of a refill for our army canteens. We found a cattle waterer, but John stepped on a snake and dropped our one flashlight in the act of jumping out of his skin. We were sure there had to be dozens more if it was so easy to step on one right away. We stared at the flashlight a long time until it dimmed and every single snake had had a chance to crawl away over the horizon. That included another one in the tent, right under John's sleeping bag, that turned out to be a piece of extra rope.

The dawn was fresh. It was another pretty, late summer day with a light mist, and we launched early. The wind was blowing, but we were sheltered by the steep terrain. I remember rounding Corbins Neck under a marl cliff that rose sheer over us a hundred feet, a magnificent sight to a boy. We were in a canoeing ideal of woods, marshes, gentle currents, broken only by the rare farmhouse. The human world by the mid-twentieth century had pulled away from the river because of a shift in the avenues of commerce. Gone were the schooners and steamboats with their wharves teeming with passengers and freight. Gone was much of the rural population with the mechanization of farming and logging. I don't recall seeing a single fisherman, likely due to the obvious water pollution, with one exception, as we came around what's called the "camel's nose."

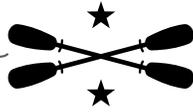
Actually, I was getting worried. In those days there was no nautical chart of the river above Horse Head Point, and there were many miles to go below us. As mentioned, I used the eastern Virginia page of the Esso road map, which showed nothing but a winding thread. Counting all those bends was well nigh hopeless. The river just went on and on and was perfectly empty of traffic, so it was a great relief when we encountered a motorboat off Acodale. I sang out, "How far to Port Royal?" I recall his answer to this day. "The river makes an S, a bend to the left, then the right, and you can see the bridge." We should have stopped, rested, maybe even called it a day. But progress impatience was taking over. It is an attitude I have always had to fight as a traveler, especially in a slowing-moving canoe. You see a tree or a point a mile up ahead and you tell yourself you will pause and rest when you get there but not before. Then when you reach it you see another tree another mile further and on you go until you are exhausted.

Thus, when at last we rounded the bald cypress bend at Cleve and glimpsed civilization at the 301 bridge, we both let out a rebel yell, utterly exhausted but, to our minds, victorious. And yet that final two-mile stretch to the bridge was to be a greater ordeal, the worst of the day. The river suddenly was wider. A stiff breeze hit us in the teeth and as hard as we could stroke, we barely moved. The prevailing winds here are southeasterly and today they were fresh. To top it all, I remember just as we pulled up under the shelter of the bridge abutment, a thunderstorm hit with a hard downpour. I was so utterly spent by then that it came as a complete surprise. As it let up, John climbed the riverbank and found a telephone across the street at a café to call home and assure everybody that Leonard so far was wrong.

The river is cleaner these days above Port Royal. Captain John Smith, our predecessor in exploration, reported islands and bays, but today, as fifty years ago, the banks are parallel. He charted ten Indian towns to this point below the falls. As a boy, three and a half centuries later, there was no development at all. That was still largely the case when I traveled it ten years ago. Tract development has crept downstream from the growth of the Fredericksburg/Falmouth doughnut, but little of it below the immediate suburbs of the original town impinges on the view from the water. The biggest change is the absence of that desecration of an effluent pipe, gone without a trace, and along the same stretch of right bank an attractive and busy golf course. Nowadays, on a pretty summer day in August, the fishermen are out in force and the river is anything but deserted.

Below Port Royal the river steadily takes on a tidewater character. The ebb and flow is stronger, the banks are low and irregular, now and then revealing a ribbon of sand. In a dry year, when the salt creeps up, you can go crabbing at Greenlaws Wharf. In one of the driest—2002 I believe—I could taste a trace of salt at Hicks Landing, in the middle of that S.

Sixteen-year-olds recover quickly. With the storm past, we set out again to breast the wind and waves (and tidal flood) with three or four hours of daylight left. I remember the wind had got up a short, steep chop on Port Tobago Bay that came right over the bow where I was sitting. John in the stern had to do a lot of bailing to keep us afloat while I supplied the power to keep us moving, slicing the waves and shipping water. Our gear was soaked

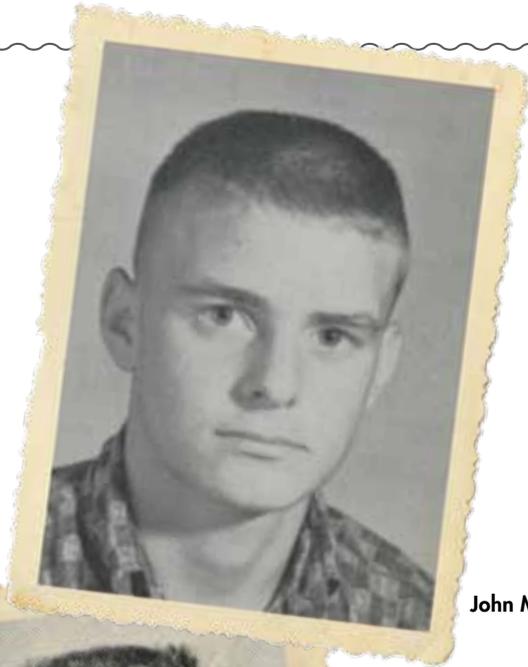


and our arms once again were strings by the time we pulled up to the beach below Mrs. Snowden's. A gaggle of campers there refused to believe we had been two days coming down the river.

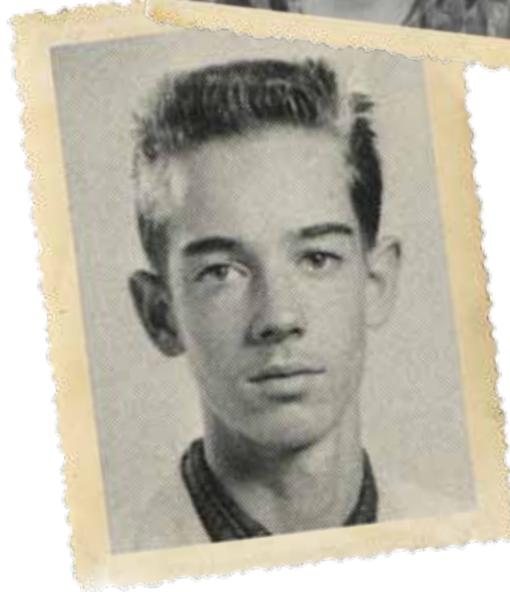
We made an excellent camp, had a real driftwood fire, swilled plenty of soup, poured off whole cans of beans at a gulp, did not let many hot dogs escape another day. John and I were both big eaters at home, but I recall that night we ate like wolves. And got some rest. The bugs must have tried, but a fresh breeze all night helped us. We turned in early and rose late.

And we took our time this morning. The truth is we were bushed and stood looking at the wide water, not sure we were enjoying it any more. Wind and waves all day, heat and bugs all night—I am afraid the racy stories, hot food, and real cigarettes with instant coffee did not quite offset the rigors. A canoe is a tough way to go against a daily southeaster on open water. But the river now looked a lot more like the Esso road map. We could find exactly where we were. And the sights! I had never seen anything like the flooded forest pocosins inside the river bends, the huge naked clay cliffs on the outside around Horse Head. I loved the open-water vistas. Just as our spirits sagged, it was as if the river was giving us something novel and spectacular. I was familiar with the shape of the river from having studied the nautical chart of this portion for years. It hung on the wall at the cottage we rented at Wares Wharf. Now, suddenly, the shapes on a map were replaced with the real thing approaching and passing—Devils Elbow, Saunders Wharf, Devils Reach, Otterburn Marsh, Laytons Landing—it brought home the aspect of discovery.

We made camp at Carters Wharf, right in the middle of Fones Cliffs. It was a grand setting but for mosquitoes that made it the worst night yet. Carters back then was just like it is today, minus the boat landing and ramp, and no bulkhead. It was a grassy shelf and turnaround at the end of the county road. We bravely pitched our tent, laid out bedding, struck up a fire. But no sooner did the sun set than out came all the mosquitoes on the Northern Neck. Hayfield had been annoying, Snowden's was a little better, but Carters ... well, it was as though the air itself had come alive. We crawled under our bags and sweated and they gnawed at us through the summer-weight lining. We got on our feet and ran around. When we paused, in seconds they were on us again. John had an idea around



John Moon



Ed Haile

midnight. There was a rotten, waterlogged skiff by the bank as we pulled in at dusk. We dragged it up out of the water, flipped it over—what was left of it—stuffed it with kindling, and set it afire. Smoke billowed out, and when we stood in the smoke the mosquitoes diminished comfortably. Brilliant. We made dashes into the underbrush and along the shore to gather more kindling and driftwood and that was the way we spent the last night discovering the Rappahannock. At the barest first hint of glow we were packed, aboard, and gratefully away. We were utterly miserable and we could smell home.

The river, though, was covered with pea soup fog. I was in the stern and I had immediately lost the riverbank, had no idea whether I was going upstream or down. And then there was a noise, a low, regular thump. The next thing I remember John gave a yell, "Edward, look out!" and not a hundred feet from us was the frothy bow wave



of a tugboat on a collision course. I dug my paddle in as hard as I could and spun off with not a second to spare as tug and barge slid by at a paddle's length. Look out, Leonard Taylor!

And then it was day and the beautiful waters that I have come to know and love so well opened before us—Paynes Island, Blandfield Wharf, Naylors Wharf, and then, at last, the old Downing Bridge with its icebreaker piles and cantilever draw. The last few miles, canoeing down the river midstream, passed like a dream and a wonder. I have checked the historic tides and, though I did not know it at the time, we had departed at the crest of high tide and so had the ebb with us now to the end and in the morning the breeze was apt to be still or light. No two boys coming around Mallorys Point have ever been happier at the sight of old Hobbs Hole. We had done it, sixty miles of river in four days. We were heroes, we were true explorers. We hid the cigarettes as we pulled in at the end of Marsh Street, left our gear at the waterside, and staggered to our homes and the sleep of the dead.

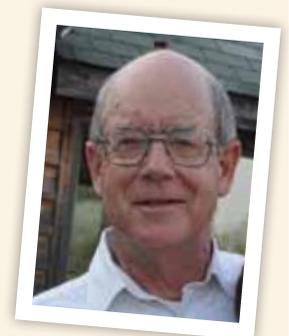
Mrs. Deshazo arrived from the *Rappahannock Times* to interview us when we went back later to retrieve our craft and gear, but I recall it was a moment as difficult to share with a newspaper as with the campers at Snowden's. John, I think, felt the same way. We didn't want to boast. We just wanted to feel proud. I believe we politely gave her the bare facts but kept the story of the ordeal to ourselves. I have never read what she wrote.

We had hatched the idea, planned the trip, made all arrangements, and executed it to perfection, all without the intervention or even encouragement of a single adult. In all the camping and canoeing in the years subsequent, nothing ever quite matched the Rappahannock that August and the prowess felt by two young Tappahannock river rats.

In the spring of 1979, I bought a kayak and almost on the spur of the moment I set out on the 25th of August, twenty years to the day since the end of our trip, to go it from my home at Daingerfield Landing, mile 45, to Port Royal, right past Carters Wharf, right past Snowden's. It was the first time since then that I had been up that stretch of the river. The experience set up a regular kayak rendezvous of five-year intervals of commemorating all or part of the route. Nowadays the water quality appears excellent. At any rate, there are plenty of fishermen! Plenty, that is, above Port Royal. The lower Rappahannock, actually the lower river all the way to the Bay, has seen a steady decline in traffic both commercial and pleasure, the reverse of the situation in 1959.

On the narrows of the river these days, eagles and ospreys escort my coming and going. They use oaks and poplars of such a height as to put much of the river above Hopyard in shade. I don't recall if John and I saw these birds. I see herons too, both blue and white, in the marshy shallows. Why is it the whites are so tame? Above Cleve, the channel buoys have been removed with the cessation of commercial barge traffic. A faux stern-wheeler riverboat with diners comes down in the evening from the Sophia Street landing. I see it docking right where Leonard dropped us off years ago. Today the trash and broken glass are gone, yielding to a shady lawn of a public park with launch ramp and bulkheads and paved parking. In August it attracts picnickers. There are several more boat landings downstream and any number of beautiful places to camp out along the bank, not forgetting the very best mosquito netting! Yes, it is still just about as wild as it was then, but times have changed. Nowadays one needs permission in writing and some other treat in lieu of Lucky Strikes.

Edward Wright Haile, author of *John Smith in the Chesapeake, Jamestown Narratives*, fifteen books of poetry, including *Komfustian Odes of the Virginia Dynasty* and the little epic *Where None Before Hath Stood*, two historic maps of the Chesapeake Bay, calls himself a native of Essex born in Washington, D.C., who has all his roots here on both sides, has lived at Chesituxent for the last forty years, and in his career as a land surveyor has set foot on at least one out of every four acres of the right bank of the Rappahannock. "I like to quote my neighbor Melvin Clark who said 'Let the city be the city and let the country be the country.'" Ed is married to Bess Haile, director of Essex Public Library.



Conservation Easements and Estate Taxes: A Win-Win-Win Situation

By Margaret J. Smith, CPA

Making the irrevocable decision to voluntarily gift an interest in your real property to a conservation organization is one that reaches far beyond financial objectives. Recognizing that the emotional value is often exponentially greater than your attorney or CPA can quantify, it is important still to be aware of the tax benefits available to your family. In addition to the immediate federal and Virginia income tax advantages for donating conservation easements (win-win), landowners also have unique opportunities to yield significant estate tax savings through easements (win). To us, this is a win-win-win situation.

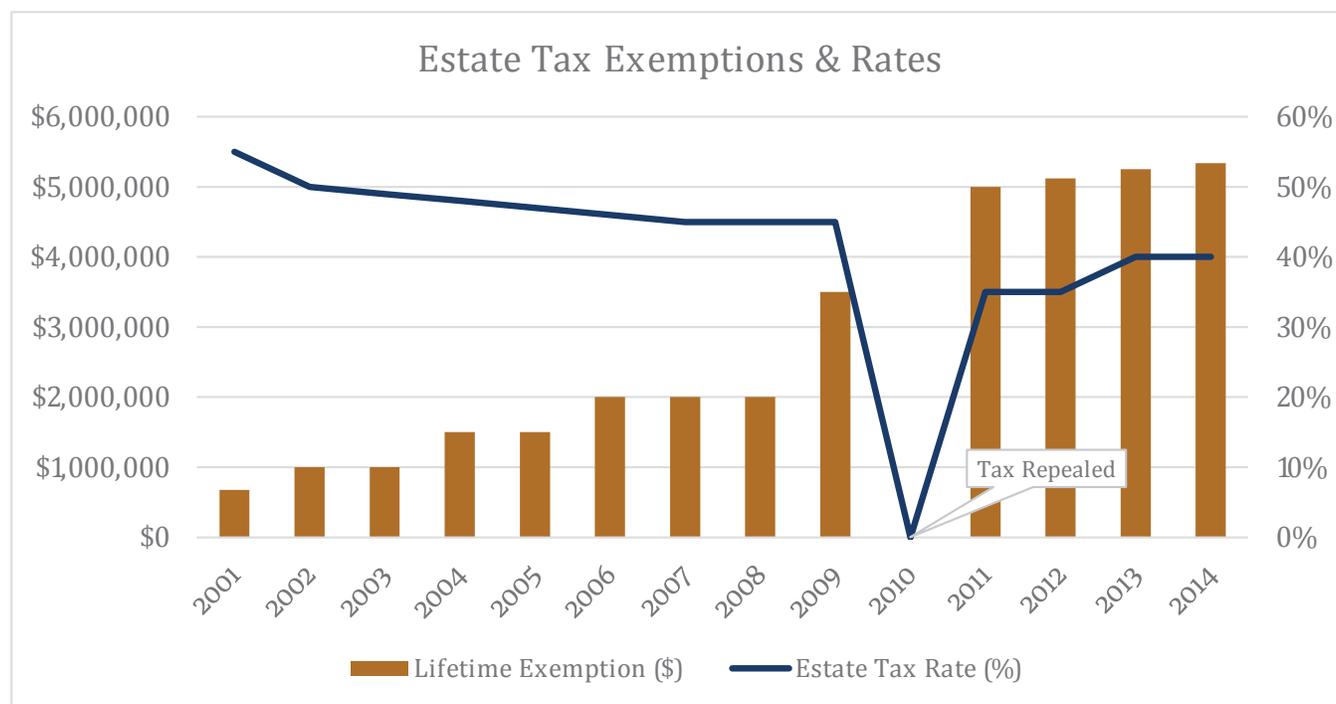
There is no cookie cutter approach to estate planning. For some, it makes sense to gift during their lifetime in order to reduce the size of the taxable estate at death, but for others, lifetime gifting may not be advisable. The number-one estate planning mistake we see is procrastination in establishing a master plan (see #2 and #3 below for post-mortem opportunities). A well-executed plan should work today and into the future, and will be updated as there are changes in estate tax exemptions and rates. Let's take a look at the basic rules

of the estate tax system and three planning suggestions to reduce estate taxes with conservation easements.

The Basics

In 2013 Congress set the lifetime gift and estate tax exemption at \$5 million per person, indexed for inflation. The "lifetime exemption" is the amount you may transfer during your lifetime or leave to your heirs at death, free from inheritance, or estate taxes. This legislation provided clarity for many individuals, particularly when compared to the estate tax exemptions of \$1 million in 2002–2003 and \$2 million in 2006–2008. So, for example, in 2014 a couple with a taxable estate of less than \$10.68 million (\$5.34 million each), who have not used their lifetime exemption, would not be subject to the estate tax system. To the extent that they wish to pass more than \$10.68 million to their heirs, the estate tax rate is fixed at 40 percent.

Even if you are not subject to the estate tax system today, it is important to establish a plan that works when changes in estate tax law occur (as an example, the 2014 budget called for lowering the exemption to 2009



levels as early as 2018) and your assets have appreciated, as well as to ensure that your property passes to your heirs or charity, according to your wishes.

Easements and Estate Taxes

If the intent is to limit development in perpetuity, why pay additional taxes? Conservation easements can produce significant tax savings both during a landowner's lifetime and after death. Post-mortem estate tax planning is rarely used, often because it is not understood, but there are a number of opportunities if timely action is taken:

1. Reduced Value for Estate Tax Purposes

The most widely noted estate tax benefit of a conservation easement is its ability to reduce a decedent's estate by the value of the easement when calculating estate taxes. Easement properties are valued according to the restricted uses (typically farming, timber, and open space) permitted by the easement deed. This value is usually much less than a property's "highest and best" use, often for development. Excluding the development value of the easement property from an estate helps ensure that the property is passed from generation to generation with reduced or zero wealth erosion from estate taxes. An example is provided in #2 below.

2. Section 2031(c) Exclusion

In addition to the reduced valuation of #1, Section 2031(c) of the Internal Revenue Code also provides for an additional estate tax exclusion of up to 40 percent of the remaining restricted value of the land protected by the easement. The Section 2031(c) Exclusion is limited to \$500,000 and may be lower than 40 percent if the original easement reduced the value of the property by less than 30 percent.

For example, the owner of a 1,000-acre property, valued at \$3 million, puts an easement on her land. An appraiser determines the value of the land reduced

by the easement to be \$1.8 million, creating a \$1.2 million charitable deduction for the land trust donation. The immediate benefits of donating the easement include \$420,000 of federal income tax savings (if 35 percent tax bracket) and \$480,000 in Virginia Land Preservation credits issued. If the landowner later dies and is subject to the estate tax system, the property is included in her estate at the reduced value of \$1.8 million, not \$3 million, saving \$480,000 in estate taxes. Section 2031(c) would allow a further estate tax exclusion of \$500,000, or \$200,000 of additional tax savings. In this example, the \$1.58 million total tax benefit from the easement far exceeds its cost (\$1.2 million reduction in value of the land).

3. Post-Mortem Conservation Easement Deduction

An estate's executors and heirs may have the opportunity to convey a qualified conservation easement, thereby excluding the value of the donation, and benefitting from the Section 2031(c) Exclusion from estate taxes after a decedent's death if timely action is taken. While proactive planning during one's lifetime is always the best course, and a number of issues can arise to prevent an estate from qualifying for it, Section 2055(f) of the Internal Revenue Code outlines this option. A post-mortem easement donation could allow heirs to continue to use the land in the exact same manner as before while providing significant tax savings to the family.

Estate tax planning can be complicated, particularly when dealing with easements and post-mortem planning, so it is important to consult with your tax professionals before taking action.

Example:	
1,000 Acre Property	\$3,000,000
Qualified Conservation Easement Donation	(\$1,200,000)
Restricted Value of 1,000 Acres	\$1,800,000
Tax Benefits:	
Federal Income Tax Deduction (35% tax bracket)	\$420,000
Virginia Land Preservation Credits (40% credit)	\$480,000
Estate Tax Reduction (40% estate tax)	\$480,000
Section 2031(c) Exclusion (40% estate tax)	\$200,000
	\$1,580,000

Margaret Smith is a native of the Northern Neck with strong family ties to Essex County. Now a CPA with Canal Capital Management in Richmond, Virginia, she helps clients protect and grow their wealth with a focus on proactive income and estate tax planning. Margaret and her husband, Blakely, currently live in Mechanicsville and are expecting their first child in July.



Poems by Edward Wright Haile

HAYING

The sweetest stink of all I am afraid
is hay, but only when it's rightly laid
and heaviest at all-out dog days noon.
Or it'll be too green and it's too soon.

Big bales or small, for me it doesn't matter.
Both feed the cows. They won't get any fatter
on those barn-dry or on the one
that got a thatch from freezing and the sun,
just like the fog-bound stack of old
that fork men wound around the pole.

The greenest tender that feeds the river vale,
the tufts all but forgotten in the swale
that runs athwart the woods, then plunges in it,
or that shy hair opened by the beavers,
or shier still that peeks among the cleavers,
a knife, a pair of sheers might trim it
but all too manual, they say, and slow
for nowadays and the mechanical mow.
Big saves our labor at the cost of thrift.

I think that any leisure is a gift
out of your farming round
that you can weigh and measure in the mound.

But thrift's a virtue, so in its own right
something you can think about at night
when wind's confused and a bit too loud,
and the full moon is terrified of cloud.
You have a set of honest little numbers
in which to lay uninterrupted slumbers.

But back now to my history, your footing
in this curing industry is putting
every wagon load morn, during, and after
all day up face to face with every rafter,
man-jacketed in the uniform of cool,
head-to-toe sweat-saturated wool,
that is, to keep the twine and baler if you fool
with small-bale and the train of take and pass,
those manly lunges, heard ever in the proof
of "Here you go" and "Got it" to the roof,
no more. The big-bale days are upon us, alas.

But me, I feel no richer than the land has grass.
If that makes me an ox, then more than ass
among my stamping brethren when they munch
and steam and I hear the hollow crunch,
and know the day goes on out in the cold
and early twilight when new year's plucked from old.

GONE FISHING

Afternoons I am fond
to drop a line in the back pond
and see what's on the other end ...

... sprawled face in hat to spend
a spree where hoping nothing woke us
ere fish or locust.

Or days I seek
my fortune in the creek,
and cast among the lily, cattail, mallow
beside the hot, brown shallow.

In Occupacia on the moon,
slack water at the stroke of noon,
fish bite.

Or else their particular wish
deems this particular stretch of stream
a desperation of the appetite.

Or in some pattern may they decline
a decent hook and line
just to drowse.

Or does the north wind blow, the sun sit low,
the tide retreating through heavy, trailing
April boughs?

Fish wisdom is mostly nothing,
nonsense and stuffing.
There're days as hot when the breeze doesn't fan
and the fish all ready to leap in the pan.

ECCA Welcomes New Board Members

By Larry Mazzeno



Juliana Strock was born in Opelika, Alabama, and raised in Alabama and Georgia. The Auburn University graduate and former school teacher lived in various locations in the United States and abroad, accompanying her husband Lieutenant General Carl Strock, who retired from the Army in 2007. She and Carl have two sons and three granddaughters. Over the years, Julie and Carl fell in love with this region of Virginia during their visits to the Strock family's property in Westmoreland County, and when Carl retired in 2007 the Strocks purchased Oakalona, an Essex County plantation home built in 1840. Four years later, after completing extensive renovations, they moved in. Always interested in conservation, Julie and Carl learned about the Essex County Countryside Association from their contractor, who introduced them to Peter Bance. In 2012 the Strocks hosted ECCA's annual meeting. In 2013 they placed their property in Essex County under conservation easement.

Born in Richmond, A. Fleet Dillard III, Esq., was raised in Ware's Wharf. A graduate of Woodberry Forest School and the University of the South (Sewanee, Tennessee), he studied law at Mississippi College School of Law, graduating in 1997. Returning to Essex County, he was admitted to the Virginia bar in 1998 and joined the law firm of Dillard & Katona, a firm established by his grandfather in 1941. He and his wife Latane live with their two sons in Tappahannock. He serves on the Board of Riverside Tappahannock Hospital and is a member of the Tappahannock Rotary. He became involved with ECCA through his work in real estate. His acquaintance with Peter Bance convinced him of the value of ECCA's ongoing efforts to conserve the rural character of Essex County.



Wesley E. Pippenger, a native of Kansas City, Missouri who grew up in Littleton, Colorado, graduated from Regis College in Denver and spent thirty-five years with the federal government. An accomplished historian, he is the author of more than 100 books and articles dealing with historical and family research, and compiler of the recently published *Tappahannock and Essex County, Virginia in Early Photographs*. He is a past president of the Virginia Genealogical Society and the recipient of awards from the Sons of the American Revolution and the City of Alexandria. In 2007, Pippenger moved to Tappahannock and now resides in Little Egypt, an elegant historic house that stands on property originally included in a patent issued to James Griffing, Jr. in 1748. Pippenger's interest in local genealogy and his commitment to historical preservation convinced him to support ECCA's efforts at conserving Essex County's rural heritage.



IN 2013, BLANDFIELD PLANTATION, ESSEX COUNTY, DONATED A CONSERVATION EASEMENT ON 3,434 OF ITS 3900 ACRES TO THE VIRGINIA OUTDOORS FOUNDATION. THIS GIFT WAS PART OF THE ONGOING EFFORT TO PERPETUATE THE UNIQUE NATURAL HERITAGE OF THE LANDS AND WATERS OF THE RAPPAHANNOCK RIVER VALLEY.

Many thanks to the following organizations for their ongoing efforts to protect the Rappahannock River Valley, its natural resources and fragile ecosystems:

- | | |
|--|--|
| <i>Chesapeake Bay Foundation</i> | <i>Chesapeake Conservancy</i> |
| <i>Caroline County Countryside Alliance</i> | <i>Essex County Countryside Alliance</i> |
| <i>Friends of the Rappahannock</i> | <i>Middle Peninsula Land Trust</i> |
| <i>The Nature Conservancy (Virginia Chapter)</i> | <i>Northern Neck Land Conservancy</i> |
| <i>Rappahannock Wildlife Refuge Friends</i> | <i>Scenic Virginia</i> |
| <i>U.S. Fish and Wildlife Service</i> | <i>Virginia Dept. of Conservation & Recreation</i> |
| <i>Virginia Dept. of Game & Inland Fisheries</i> | <i>Virginia Dept. of Historic Resources</i> |
| <i>Virginia Marine Resources Commission</i> | <i>Virginia Outdoors Foundation</i> |

The following individuals may be contacted to begin saving your lands for future generations:

- | | | |
|---------------------|--------------|-----------------------|
| Deb VanDuzee | VDGIF | (804) 367-2212 |
| Estie Thomas | VOF | (804) 443-3029 |
| Jamie Tucker | NNLC | (804) 462-0979 |



Downriver view from Fones Cliffs.

Essex From Above

By George Dickinson

When most people hear the word “drone”, I think they conjure up images of scary flying machines strapped with missiles and bombs wreaking havoc in foreign lands. I immediately think about the amazing aerial videos that I have been able to get with my quadcopter. A quadcopter is a type of drone, but it is more or less a remote control helicopter with four rotors. It is surprisingly easy to fly thanks to the GPS integrated navigation system. Combine its stability with a small camera like a GoPro, and you have a powerful tool capable of producing Hollywood quality video. Gone are the days when you needed to rent a plane or helicopter to capture the view from above.

So, is this legal? The FAA has been very slow to react with regulations for unmanned aircraft systems (UAS). Despite Congress pressuring them to define regulations because of the numerous commercial applications for this industry, the FAA will most likely not release regulations until 2015. According to the FAA, flying a drone commercially is illegal while flying a drone recreationally is legal. However, there is much debate on whether the FAA can enforce these rules. Right now it is like the wild west, but the rules and regulations should start

streaming in over the next couple of years. Currently, a recreational UAS operator is not allowed to fly over 400 feet, and they must notify the air traffic control tower if you intend to fly within 5 miles of an airport.

I feel very fortunate to have access to some beautiful portions of Essex County, Virginia, and it has been really fun to see how compelling the county looks when recorded from the perspective of a drone. The images on these pages are snapshots from some videos that I have taken while flying around Essex.

Don't expect to see packages delivered by drones anytime soon as the risk to the public is currently too great. Among the many commercial uses for this type of technology, I think the most promising application is the creation of promotional videos for real estate listings with expansive parcels of land, scenic views, and/or luxurious amenities. In addition, farmers are using drones to record aerial video in order to monitor their crops. Drone technology isn't just for the military, and it is really good at highlighting the natural beauty of our county!

Email George Dickinson at: gdickinson@pelagicsoftware.com

View his videos on youtube: <https://www.youtube.com/user/pelagicgeorge>



Vauters Church

Don't expect to see packages delivered by drones anytime soon as the risk to the public is currently too great.



Wheat fields at Little Wheatland.



Wheat field at Layton's Landing.

ECCA Board Reports: **Financial**

By Trip Taliaferro, Treasurer

Your Directors would once again like to thank our members for your generous donations over the last year, with special recognition for our corporate donors. Your continued support enables the ECCA to continue its mission of educating and informing Essex County landowners on the various options available to them through conservation easements. Through our collective efforts, over 4,900 acres in Essex County have gone under easement over the last 12 months. These results could not have been accomplished without your donations, thank you for your support. The last 12 months have been a time of growth and improvement for the ECCA. We have expanded our Board to include 17 members, including new members Wesley Pippenger, Julie Strock, and Fleet Dillard.

Year-to-date, we have received \$10,956 in individual

donations, while securing \$7,950 in corporate donations. Please remember us as you contemplate annual giving through the remainder of the year. Corporate donations are the primary offset to our annual magazine and annual meeting costs, while the generous donations of our individual members provide the foundation for our educational programs and literature.

Our 2014 goal is the continued improvement and evolution of the ECCA. Our primary focus on educational efforts and materials, working on projects that have a positive impact on our environment and community, and researching future impacts of development in our region. We are confident in our organization and our mission; it is only a matter of time before our foundation grant pursuit becomes reality.

Thank You for Supporting ECCA

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Hill & Alice Wellford

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This list reflects donations received August 2013 through June 2014.

June Board Meeting and Dinner

The June Meeting was held at Hundley Cottage. Photos by Susan Bance.



Frances Ellis, Peter Bance, Hill Wellford



Hylah Boyd, Julie Strock, Kimberly Abe



Alice Wellford and Carl Strock



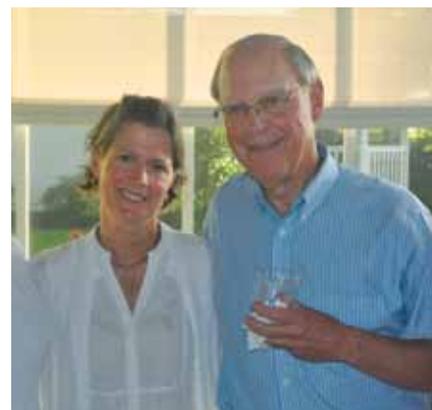
Betty Jo Butler, Prue Davis post knee surgery.

David Taliaferro



David Taliaferro, Prue Davis, Hill Wellford, Frances Ellis, Betty Jo Butler, Hylah Boyd, McGuire Boyd, Virginia Heiskill, Julie Strock, Carl Strock, Larry Garnett, Peter Bance, (front row) Alice Wellford and Kimberly Abe.

Susan Bance and Hill Wellford





Betty Jo Butler, Registrar
Essex County Countryside Alliance
748 Tidewater Trail
Supply, Virginia 22436

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Photo by Susan Bance.