River of Redemption

Almanac of Life on the Anacostia

(Excerpt)

January: The deprivation moon

At icy dawn, the city remains gentled in night's deepest repose. I depart from my warm house in Mount Rainier, Maryland, and walk past slumbering bungalows and a shuttered gas station, through deserted streets, across railroad tracks and along the edge of a sleepy forest–traversing a dark, noiseless mile to the frosted footbridge at Bladensburg Waterfront Park.

Upriver, near the confluence of the Anacostia's northwest and northeast branches, hundreds of Canada geese huddle together, raising a dark feathered shield against winter's white knife and its unusually sharp edge this January morning. Last night an angry north wind descended on the watershed, driving temperatures to a low of minus 11 degrees Fahrenheit, more than 20 degrees below normal.

Today's river landscape testifies to the hard hand of that north wind. At low tide a rigid silt sandbar covers the west side of the riverbed, and a half-inch of ice caps most of the remaining water surface. Downstream, the river departs to the southwest through a luminous white forest, gleaming toward the heart of Washington D.C.

I stand at river's edge in Bladensburg, Maryland, once one of the busiest shipping ports in North America, a nucleus for trans-Atlantic trade in tobacco cultivated by the hands of enslaved Africans. This soul-weighty cargo succored a fledgling British colony and fueled an American revolution, all while sending a webwork of moral and ecological fissures spidering through the foundation of a young nation.

The thought sends a tremulous chill through my bones, though the Bladensburg waterfront before me bears little witness to this tortuous historical fault line. A few memorials to the War of 1812 are all that's left as direct physical reference to what

happened here, and day-to-day this humble space exists as a much-loved nexus for people and the Anacostia River. But in the silted shallow riverbed and bare-turf landscape, the river remembers.

On a slow stroll along the park's riverside walk, I step out onto a floating pier, where I encounter a single Canada goose asleep on the cold wooden platform. I stop, wondering why he is separated from the larger flock and surprised that he has not been roused by my presence. Inching a few feet closer I observe that the morning frost, which has settled on the river landscape, its trees, riverbank, and pier, has also laid a glittering glaze over the goose himself, whose head is locked tightly in the thick down of his back. When I approach within a few feet of the bird, he still does not stir. I reach out, tentatively, and lightly touch a tail feather, preparing myself mentally to be scared witless when the goose awakens.

The feather crunches beneath my finger-the goose remains utterly still. Here is a sleep my winged friend will not be waking from.

Leaving the bird to his eternal rest, I make my way to the bank on the opposite side of the river. Ring-billed gulls have gathered on the western shore, tapping their beaks softly against the thin crust of ice covering the mud flats, searching for soft-bodied creatures in the warmer earth below. Gulls are argumentative, pushy birds by nature, but today they are solemn and respectful of each other, and barely bother to look up when I approach. In this deep cold, there exists a momentary truce. We are all too busy surviving the deficit of light and warmth to meddle in each other's affairs. There is too much to lose in January.

We all, each Anacostia and Earth resident in our own way, have strategies for surviving the deprivation moon. And in this month of scarcity and dark vulnerability, we each harden our creaturely resolve and lean, as ever, toward a universal prime directive– what Aldo Leopold called, "freedom from want and fear." It is a desire never attained in life, not really, but ever sought-after for all who move about on this planet, whether they are rooted to the earth and reaching toward the sun, or walking, flying, or swimming in search of life's next pressing need. This elusive prize fuels our action and existence, from humble subsistence to greedy conquest. How a creature or community pursues this fundamental freedom, will ultimately define it.

Leopold's anxious ambassador for this universal endeavor was a meadow mouse, gleefully building his snow tunnels and food storage rooms, gathering his brittle brown grasses, all in the safe obscurity of winter's white cloak on the Sand County land.

"The mouse is a sober citizen who knows that grass grows in order that mice may store it as underground haystacks, and that snow falls in order that mice may build subways from stack to stack," Leopold wrote.

For mouse, unlike goose and gull, a long harsh winter offers rest, a relative reprieve from the ever-keen eyes of winged predators. It is here, under the deprivation moon, that he has a frosty window on a world free from fear and want. For this clever mouse, snow is a building material and shroud for protected transportation pathways out of the eyesight of raptors, and for storage rooms to house a larder of grass for a well-fed winter mouse. The hawk, whose great advantage of speed and vision is stymied by the snow, will hold on over hungry months, awaiting a warm spell or the spring thaw, when

mouse pathways are generously revealed, and another winter has passed into spring–a season of increasing freedom from fear and want.

My Anacostia gulls, if they live through this trying winter, will surely experience a similar spring euphoria, and will undoubtedly squawk and caw about their spring fortune loudly and often. I anticipate shaking my head and rolling my eyes at their brash boasterisms sometime in a near warmer future, but in truth, they will then have earned bragging rights. Though they themselves are not modest, gull, like hawk and mouse, seek a modest fortune, nothing more than freedom from hunger, and a sheltering space insulated from the icy grasp of death. They harbor no desires for superfluous luxury, their pursuit is simple–they want only a chance at life in all its luminous elemental dimensions.

Today, that pursuit demands determination, discomfort, and an efficient stillness. Gulls keep their wings tucked tight, voices quiet, and heads down.

I do the same, substituting arms for wings, and leave them to their winter misery.

On normal days, even in winter, attempting to walk out onto the silted shallows of the Anacostia would be treacherous. Many have died in the urban sludge that has accumulated on the Anacostia bottom over the past four centuries of America's pursuit of freedom from fear and want. Our proclivity to hound every manner of superfluity led to the felling of ancient forests, silting of the river and elevation of the historic riverbed some 40 feet–bringing an end to the bustling port of Bladensburg. It is now almost beyond imagining that ocean-going ships once docked at this spot on the river.

I test the earth of river bottom and find it icy-firm, a rare opportunity to experience a moment within the arterial wall of the Anacostia. We are all, always, within

the body of a river. Every upland and lowland inch of the watershed plays a part in the river system, from my own backyard, to the headwaters at Sandy Spring in Olney, Maryland, to the smallest trickling capillary entering into the Watts Branch. But here, upon this artery at river-heart is where it all comes together.

On any given day the Anacostia, like all rivers, is ever new. It is the same water course, but eternally changing and ever changed, reinvented by moods of wind and weather, the magnetic pull of the moon on its waters, the restless angle of sun's illumination, and the wingbeats, splashes, and songs of its wild inhabitants.

I stand in the middle of a unique moment flowing together with an infinity of distinct river moments-there is a timeless surge of power here that jolts the senses and urges me forward.

Cautiously I test each step before I take it, and when the river begins to give beneath my weight, I go no further. By this point I am nearly standing in the middle of the Anacostia and can view the sculpted work that winter wind and restless tides have made of the river. The deep freeze that came in the night during a higher tide capped the river in thick ice, but when the tide began to go out and the air began to warm, rigid sheets of Anacostia began to buckle and break apart, like a river-puzzle–each piece now set aglow at the edges by the subdued light of a far-distant sun.

The fractured ice gives new voice to the Anacostia, a grumbling, groaning riverresentment as tide and current jostle the river's assemblage of broken ice sheets. But the real river drama must have happened sometime in the dark early morning hours, when shifting tide and climbing temperatures pried the largest pieces apart. This thunderous cracking of a massive volume of water must have be something to hear–a soundtrack

echoing the epic ecological dynamism that over so many eons of fire, ice, water, and wind-of continents colliding and seas ever-rising, ever-falling-created and continues to recreate this river watershed.

Somewhere in the earth beneath my feet there lies a record of the grand incomprehensible ages of river life. Somewhere, running deep beneath the riverbed, back through time beyond reckoning, it leads down to a primal era where river life radiates in its purest form, from some ancient infernal source, through a billion years of rock, clay, sand, and silt. Down 50 feet, 100, 500, 1000–there lie the hallowed earthen halls of river memory.

The memory begins in the Pre-Cambrian eon, that epic dream of time from 4.6 billion to 540 million years ago, when Earth was forming as a collection of molten starstuff jettisoned during the Big Bang. This molten matter was ground zero, quite literally the cornerstone of everything that has ever been in the world we know. As the fiery matter cooled, it transformed into the rocky foundation beneath my feet that through so many interactions with billions of years of water, sun, and wind became the Anacostia body. Down deep beneath this icy landscape may rest a billion-year-old boulder comprised of cosmic debris from the formation of our glittering Milky Way galaxy.

This thought expands in my head, neurons sparking out in their relay race toward consciousness, pressing against the outer space of understanding. My feet, with a direct physical conduit to this unfathomably aged earth, feel a tingle of their own sensory imaginings. My heart skips a beat.

During the span of time known as the Pre-Cambrian, Earth transformed from a bubbling cauldron of heat and creative energy, to a blue planet covered with water and

shifting continents of land, ever altered by heat energy erupting from below and sun energy beaming from above. The contours of the land carved by upheavals epic and unseen created spaces for water to flow and pool, evaporate and precipitate. Watersheds took shape, creating the framework for the intricacies of the land and habitats for all the living forms that would follow.

Life began in the Pre-Cambrian. A tiny mysterious spark grew into microscopic green hair-like bacteria that multiplied and multiplied and began to exhale oxygen from their undulating green beds upon the ocean. Over many millions of years the breath of these cynobacteria gave rise to an oxygenated atmosphere and this collective breath animated the earth. We owe these little ancients everything. All we are, including the air we breathe today, remains entwined inextricably with their Pre-Cambrian exhalations.

Rock, sun, water, air, and hairy green spaghetti–deep beneath my feet lie these primordial membranes of river memory, shrouded in a few billion years of mystery that scientists are only beginning to unravel. The Pre-Cambrian covers almost ninety percent of the known geologic timeline, more than *4 billion years*, and yet it is nearly as coherent as a bumblebee nightmare about an asteroid collision on the dark side of a Jupiter moon.

Exactly what the region now defined as the Anacostia watershed looked like during that immense span of time is speculation. There was certainly rock, water, and toward the end of the era some foundational life forms, but it would probably have looked to our eyes like a bombed out moonscape bereft of trees, plants or any visible life on land. By the end of the Pre-Cambrian, sea life included sponges, jellyfish, and worms. But they had the world to themselves. At the dawn of the Cambrian period, 540 million years ago, a sharp rise in global sea level inundated our Mid-Atlantic region, and something epic began to unfold. Scientists call this time period the Cambrian *explosion*, and though the explosion spanned 20-25 million years, this was a nuclear blast of biologic events. For four billion years Earth had existed with next-to-nothing in terms of biological activity, aka *life*. Then suddenly, in twenty million years, atmospheric and geologic changes sparked the rise of most of the major animal groups. *Arthropoda*. *Mollusca*. *Chordata*—the trunk of our own family tree and all of our distant relatives like the blue whale, bumblebee bat, marmot, and meadow mouse. Based on what we homo sapiens can read in the ossified Earth memory, the Cambrian explosion represents a geologic split-second when all of these creatures' ancestors opened their eyes for the very first time.

These early animal pioneers inhabited an Earth unrecognizable to our eyes and as they evolved massive transformations were ongoing. About 60-80 million years after the Cambrian explosion, North America collided with a volcanic island, crushing what we now call Maryland. This collision–the Taconic Orogeny–smashed the landscape of our Anacostia and the Mid-Atlantic, but it happened over millions of years, so slowly that even the longest-lived creatures of that time would never have noticed it. Yet so colossal was this battle of giant landmasses that it crushed the eastern edge of North America, smashing flat earth into a mountain chain. This mountain range was the beginning of the Appalachian Mountains, and in a way, the beginning of our Anacostia.

Though the mountains are so far away from where I stand on this winter river I can't begin to see them, I am currently standing within the great drainage basin of the Appalachian foothills, or piedmont. This mountain range formed and reformed over

hundreds of millions of years as the restless land wandered and was weathered by flowing water, relentless wind, and grinding ice. Over the past 450 million years the Appalachians went on some grand geologic adventures. During a 125 million year period spanning the Paleozoic and Mesozoic eras, the Appalachians and all of North America joined with Earth's other land masses into a single enormous continent we call Pangea. During that period, our mountains were just one section of a vast range called the Central Pangean Mountains, which spanned Pangea from the northeast to southwest of the landmass. As part of that range, the Appalachians were contiguous with both the modern day Scottish highlands and the Little Atlas mountains in Africa. Thus, while Pangea was intact, and if human beings had existed at the time, we could have taken an easy stroll from the Anacostia region to Africa!

On this frigid morning, a stroll to Morocco has a certain appeal. I consider for a moment the cultural ties that connect this landscape at the foot of the ancient Appalachians to both Africa and Scotland–from the rocky roots of our mountains, to the roots of mountain music, to the cultural and geographic roots of the people who have long inhabited the Anacostia watershed.

Sparks of connection swirl in the air, mingling with my frozen breath. The temperature is beginning to rise and the frosted corridor downriver is beginning to fade to a colorless corridor of brown mud, water, and bare bark. I make a judicious choice and leave my frozen mid-river musings while the ground is still good and solid. I trek across the river, back to the western shore and along a path of brown grasses to the lowland forest that follows the river's every bend to the south.

Here winter's deprivations are joined with the deprivations we as a society have visited on land and river. This forest is young, a pale reflection of the aged trees that would have sheltered the first human inhabitants of this landscape. It is quieter than an ancient forest would have been, even in winter.

I stroll slowly through the stark naked beauty of the winter riverside. On the ground, lies a matted bed of last-year's life: a memory of a thousand green leaves reaching toward the nearest ray of solar energy, bringing life to a forest that will, by their work, outlive them. Mingled with fallen leaves are insect bodies who, in summer, consumed leaf energy and gave song to the forest in return. Their song has died, their bodies joined with the silent soil. All around the dark bones of the forest slumber, so stark against river and sky. Even in sleep they seem to reach for the far-off sun. I walk on, quiet and content beside the river, within the restive community of bramble, maple, ash, and birch.

Suddenly my winter eyes are arrested by a brilliant blue and orange beacon, a chromatic incongruity that floats upon the air for a moment, then comes to rest on a bare limb outstretched over the water.

My heart skips another beat at the sight of this beauty, this unexpected, colorful company, an eastern bluebird. The surrounding landscape gives no hint of how he survives the winter: barren branches, not an insect in sight, bitter cold. But somewhere nearby there is a bright red berry on a holly tree with his name on it. The bluebird, like many other birds who share this winter landscape, adapted its habits and geographical range as plants like the holly tree made berries and evergreen foliage available through

the frozen months. His presence is a testament to the strange, seemingly infinite series of events that over time brought about the landscape we are sharing at this moment.

I sit down on the frozen riverbank and look across the river, which now moves through its channel as a sluggish frozen gravy. On the opposite side, a red fox moves quietly along the shore, which is littered with an old tire, plastic bottles, a soccer ball. Foxes are adaptable; they have learned to quietly keep their place in an ecosystem too broken for most of their canid relatives. The red fox arrived in the Anacostia thousands of years ago, around the same time as my forebears, using the same land bridge across the Bering Sea during the Wisconsin glaciation. They have survived this long by their extreme cunning–a trait that has memorialized them in human mythology spanning global cultures, from China, Japan, and North American native peoples, to the Celts–who I think have the best myths about witches who can turn themselves into foxes in order to steal butter.

Beyond mythological powers, foxes have real-life staying power. In part they remain here because humans dispatched most of their larger rivals–wolves, coyotes, and mountain lions–who we viewed as rivals to ourselves. But their prey species remain steady, including reptiles, birds, rabbits, and of course, the modest mouse. Mice in their snow tunnels may have an advantage over hawks, but not so much over foxes, whose ears are so sharp they can hear a mouse squeak 300 yards away, and be able to accurately pinpoint the creature's location.

The red fox's dexterous adaptability has made it a survivor. Not an easy feat. Just ask the dinosaur.

When Pangea began to break apart in the middle of the Jurassic period, 175 million years ago, the life forms wandering the planet, and our Anacostia, were as mythical in stature as were the landmasses they evolved on. Life during this period varied from a warm shallow sea, rich with marine creatures, to a humid tropical lowland, lush with magnolia, cypress, and redwood trees, dynamic with volcanic activity, and alive with a menagerie of Jurassic creatures.

The dinosaurs were gone forever before we even existed. They seem almost as distant and unfathomable as the mythical kraken and Loch Ness monster. Yet, they were real and the Anacostia land remembers these giants, and the watershed they inhabited 70 to 200 million years ago.

At the southern end of Laurel, Maryland, tucked behind strip malls, parking lots, office complexes, and warehouses there hides a curious patch of land near the meeting point of the Anacostia and Patuxent watersheds. An aerial view reveals a bare spot of earth with asphalt, rooftops, and roads on three sides, and a small tract of forest to the southeast. This site was an open pit iron mine in the mid-1800s. One day, in 1858, workers came across some odd bones, which turned out to be remnants of an enormous plant-eating dinosaur, or sauropod, named the astrodon. The miner's discovery, right here in our Anacostia watershed, was the first sauropod fossil found in North America, and the second dinosaur fossil of any kind found on this continent. Since then, over the past 150 years, thousands of animal and plant fossils dating from the Cretaceous period have been found here, and are still being discovered. I visited the site one day and, along with a class of excited elementary school children, helped archeologists search for new discoveries. I found a petrified seed cone from an ancient redwood tree.

This site, one of the most important archeological deposits in the United States, has helped scientists form a snapshot of what this landscape looked like 110 million years ago. It was a wild watershed, where the first great expansion of flowering plants was occurring, making way for the evolution of the first pollinating insects. On this flat coastal plain, winding rivers flowed and within them swam crocodiles, turtles, a tiny shark called the hybodont, gars, lungfish, and bowfin. On land, beneath towering redwood forests, large predators like the Acrocanthosauris stalked the astrodon, who walked the warm, wet, bayou landscape with Priconodon, an armored, spiny plant eater; ornithomimids, like a modern ostrich; and dromaeosaurs, a feathered raptor like velociraptor.

These creatures ruled the earth, their presence ensuring that mammals remained modest, small, and secretive. The dominion of the dinosaurs was well beyond our reckoning.

But then, a Mesozoic river dream came to a sharp Pliocene end. Just like that, the dinosaurs were gone. In a thin line of earthen rock, deep beneath my boots may lie evidence of the utter end for a whole suite of species whose like the Earth will never see again–and the beginning point for my own species. At the end of the Cretacous period three-quarters of the plant and animal species on Earth disappeared in a mass extinction marking the end of the Mesozoic Era.

Within the genetic code of every species lies a richness of time and remembrance of those creatures who came before it. In the Cretaceous Extinction, innumerable volumes of evolutionary memory, reaching back billions of years, simply disappeared. All that remains is an earthen memory—bits of bone, prints of an enormous foot–buried

deep beneath this Anacostia landscape. And along side them may be trace evidence of their capricious fate in the form of an enormous asteroid believed to have struck Earth some 66 million years ago. This asteroid left a 100-mile wide crater in the Gulf of Mexico and ignited a domino effect of cascading atmospheric and climatic chaos–the assumed cause of the Cretaceous extinction.

It took Earth 10 million years to recover but eventually, out of the Cretaceous chaos, conditions developed that gave rise to much of the animal kingdom we know today–from birds and whales to bats and eventually a many-branched family tree of primates. Somewhere above the bones or other evidence of the footfalls of dinosaurs within this Anacostia riverbed, may linger some evidence of the beginning of the Age of Mammals, when giant sloths, cave bears, saber tooth cats, and camels roamed the land of North America.

As the oscillating cold of the Pliestocene epoch set in just under 2 million years ago, glaciers gouged the continent, advancing and retreating throughout the epoch. Those ice sheets never reached the Anacostia earth, but that era of deep freezes and recurring thaws made its mark on our river landscape. Epic floods and shifting sea levels carved the topography and rainwater pathways of this watershed, creating the modern architecture of the Anacostia, the bones of the river body. And somewhere down there, mingled with pollen of spruce and pine forests that shaded this land at the end of the last major ice age, is a river memory and earthen record of storybook forebears that predated human existence in the watershed. Here, beneath my bi-pedal primate feet, down deep the river remembers footfalls of mastodons roaming its moist wooded landscape of aged spruce trees, 200 feet tall, showering river hillsides with seeds for a modest mouse and his

shrew, vole, and chipmunk cousins. The Anacostia earth remembers crisp mornings of quiet fog hanging on crystal clear river waters; the sound of a noisy river-crossing by bold, restless musk oxen; the soft lapping of river water by a secretive wolverine; these echoes of life live somewhere in deep sandy soils, within the bones of tapir, peccary, badger, and bear, lemming, mink, and tiny shrew that once roamed this watershed in search of freedom from fear and want. Memories of clean waters, healthy forests, innumerable fish splashing through her streams, must be good, good memories hidden deep beneath this city, in some core place where river resilience lives.

And from that time 10,000 years ago there is perhaps a record of the footfalls of the first homo sapiens. Their numbers were few, and their reliance on hunting and fishing required them to revere the river and forest. Perhaps 50 feet below my boots, lay arrows and knives made of stone, shards of pottery, pollen from a hemlock forest and the bones of sturgeon, shad, elk, and herring. They lived in balance within and as members of a healthy Anacostia community. And the river remembers.

But this is where the Anacostia memory changes, after 4.6 billon years of becoming, to a story of undoing.

The river story of Washington D.C. is suspended, for the most part, in the topmost 40 feet of riverbed. The story's surface can be seen on this cold winter morning, and continues back in time and down through the land memory to the late 1700s, when European conquest of this region was complete, the United States was forming as a nation, and human population in the watershed was rapidly increasing.

The topmost layer, which crunches beneath my boots, consists of the salt that road crews, businesses, and homeowners have over the past weeks shoveled onto sidewalks

and streets, to be carried by snowmelt through storm drains to the riverbed. Below that, within the first foot of earth, the river remembers last summer's stormwater runoff, a slurry of silt, oil, pesticides, plastic, cigarette butts, and a million particles of polystyrene like a poison snow that never melts. Further on down in this modern layer, running through most of our 40 feet, we find deeper, older chemicals, the legacy of a city dump, energy production and the manufacture of weapons of war. Alongside these toxins, swirls the sewage of centuries and the silt pollution that has run off the land during every construction project–from recently clear-cut forests for Whole Foods, Costco, and the National Harbor, back to the building of the Navy Yard– and agricultural development since the 1600s, when the land was scraped bare and planted in tobacco. Here, in this exact spot where I stand, deep within the river earth is a memory from the land that echoes the iron shackles around the feet of Africans who survived the horrors of the Middle Passage and disembarked at the docks of Bladensburg, where endless bales of tobacco were being loaded for transport to England.

Just beneath my feet, lies our signature on the land, a crushing legacy beneath a proud city that broke a river community. And the river remembers.

Our earth-record is deep for the time it represents, only a few hundred years, because the scope of changes that have occurred during this period are unprecedented in river memory. The Anacostia has weathered bigger transitions in its lifetime, inundations by great seas, volcanic explosions, mass extinctions. But never has so much devastation happened in such a short span of time. Geologists might one day label it the *Washington implosion*. Here we have an utter transformation of watershed dynamics in less than 400 years, the evidence of this catastrophe recorded in 40 feet of Anacostia earth.

But there is something else, a shift that has happened so recently that as yet it leaves little trace, even in the topmost millimeters of river memory. Perhaps, some subtle evidence exists, a slight increase in tree pollens, a growing concentration of seeds of wild rice and aquatic celery, the shell of an eastern elliptio mussel, fragments of shell from the natal home of a bald eagle chick, a slight lessening in the toxic content of the sediment–in short, the physical evidence of a new human consciousness and action to heal the Anacostia.

Our role here is changing, and someday, someday, the river will remember.

A flash of blue stirs on the branch above me, then darts into the winter forest. Fifty years ago bluebirds were in decline due to habitat loss and invasive species like starlings and house sparrows, introduced from Europe by humans without thought to the ecological ripples they would cause. But then humans took thought to the disappearance of this beauty, we realized that its scarcity on Earth impoverished our community in some important way. We began putting up nesting boxes and planting trees, trying to replace some of the habitat we had destroyed. Since 1966, bluebird numbers have been increasing to an estimated global breeding population of 22 million birds. It was also the late 1960s that the consciousness of the dire plight of the Anacostia began to shift– because it was at that moment that the Anacostia River was plunged into its darkest hour.

February: The fire and ice moon

An ashen cloud shrouds Kenilworth Park in cold, gray shadow this morning, casting an especially bleak pall on the asphalt moonscape that sprawls across the southern end the park. Winter wind strikes my face as I gaze westward across a field of pocked gravel and

bare turf, toward the sliver of remnant forest that lines the river. The voice of a distant Carolina wren, perched across the river, rings out from the forested bluffs of the National Arboretum. His loud, sweet song lofts along the Anacostia, an optimistic note challenging the drear of the day. I take a few steps toward the little crooner then stop, gazing for one wistful moment in the direction of the quixotic bird. Would that I could go to the river and sit in quiet audience until he has tired of singing; to watch cloud and sun dance to the tune of a jaunty north wind–swirling figures of golden flame and shadow that glow and fade, glow and fade upon the bony winter forest, capering along with the river as it rolls on ever toward the sea.

Instead, I force my feet to walk in the opposite direction, obligated by the singular reason I have come here on this particular morning. February 15. The anniversary of bedrock bottom for the battered soul of the Anacostia. What happened here 49 years ago today, the river will always remember.

I turn my eyes to a blank, recently plowed expanse of bare earth to the southeast, stretching 100 yards toward the mouth of the Watts Branch. This ocean of dirt, made heavy by the moist winter wind, and made tidy by machinery over the past week, cannot hide what lies beneath-the last immortal remains of the Kenilworth dump.

It will not be mourned.

For most, it is long forgotten.

But forgetting a hidden wound doesn't heal it. No matter how deep we bury this place in the crypt of collective memory, it shadows us, a toxic emotional and ecological undercurrent of our river community, one of those deep hairline fissures set in motion

when English settlers followed John Smith up the Potomac, bringing with them the seeds of the Anacostia's destruction, quite literally.

Tobacco.

Introduced to Europe by Spanish explorers in the West Indies, tobacco had become a hallmark of social status with the ruling class, a superfluity whose sole purpose was to broadcast a personal dominion over the chains of fear and want.

Demand for tobacco grew as renowned physicians began to lecture and publish articles about the health benefits of this new plant from the colonies—which, according to some was a medical cure-all; a solution to every manner of malady from headaches, constipation, snake bites, and joint pain, to "rottenness of the mouth" and "windiness."

As news of its prowess spread, tobacco became the economic foundation of the struggling British colonies in the Chesapeake Bay watershed. So central was this plant to colonial success, that setting a minimum price for the commodity was the first item on the agenda at the very first meeting of the first elected governing body in the North American colonies. That meeting of the Virginia House of Burgesses took place at the Jamestown Church in 1619. That same year, the first 20 African slaves were sold in Jamestown.

Up until this time, British colonies had proved themselves hapless in both the growing of food crops and the building of relationships with native peoples. For the floundering colonies, tobacco offered a way out and a way up–a means of transferring wealth and power from Europe to the New World. Wealth would buy weapons for conquest and expansion, food for sustenance, and slaves to produce more tobacco and keep the cycle of wealth and power flowing. With a growing demand and natural scarcity

of tobacco in Europe, sales were assured; and the production opportunity in the colonies was bounded only by the supply of labor and land, and a means of transport abroad. In the Anacostia, these bounds could be removed by slavery, suppression of the Nacotchtank, and the river.

Tobacco production in the Chesapeake colonies exploded in the 17th century, from 20,000 pounds in 1619, to 38 million pounds at the turn of the 18th century, just 80 years later. In the same span of time, the number of African slaves tending the tobacco economy grew from 20 to 700,000.

By 1640, both Maryland and Virginia had made tobacco official legal tender–cash money. It's really no wonder then, why forests were scraped clean off the land: they could be quickly transformed into money that literally sprouted from the ground. For 150 pounds of tobacco, a man might buy more land or a larder full of groceries; or he might purchase an English woman for a wife, or 5 years of the life of an indentured servant, or put a down-payment on the entire life of a slave–all of which would help the planter cut down more trees to grow more tobacco money to buy more land and people.

This tobacco cycle ripped like a cyclone over the Chesapeake Bay and into its sub-watersheds, including the Anacostia, leaving a waste of broken ecological and human communities in its wake. And like a cyclone, the ravaging of the tobacco economy could not be stopped until the forces that fueled it were spent: either demand for tobacco eased, or the supply chain was disrupted. Until then, the pursuit of tobacco riches would continue to scour the land and soil and soul of an embryonic nation, hardening the concrete of a European economic model in which wealth was defined by profits, land, and slaves.