



# RED SKIES and BLUE COLLARS

## Sparrows Point Shaped Baltimore

*A 1976 view of Sparrows Point's coke ovens, which were closed in 1992 for air-quality reasons. The ovens converted coal into coke, the fuel used to fire steelmaking furnaces.*

BY BETTY JOYCE NASH

**K**evin Nozeika lost his job of 16 years at Sparrows Point last summer when the steel company's fourth owner in a decade, RG Steel, went bankrupt. His father retired from another now-departed Baltimore steel-maker. Nozeika worked there, too, with 2,000 others, until it closed. "I'm an old hand at shutting down steel mills in the Baltimore area," Nozeika jokes. He started working in steel just before his 20th birthday. He's now 44.

Sparrows Point's flaring furnaces reddened the skies above Baltimore Harbor for more than a century. Workers made steel for rails, bridges, ships, cars, skyscraper skeletons, nails, wire, and tin cans.

It was a remarkable run. "If you look at Sparrows Point's history, there were times when the different generations of blast furnaces, or the rolling mills, or the coke works were the biggest in the world," says David Hounshell, a professor of industrial history at Carnegie Mellon University. Even as late as 1995, the Point's "Beast of the East," its last big blast furnace, reached record output — 3.4 million tons.

At its 1957 peak, the company made Maryland's biggest payroll, for 30,000 workers. Many of them lived in the shadow of the hulking steel works — in the unincorporated town of the same name — others in Baltimore City or the nearby neighborhoods in the suburb of Dundalk. As steel-making grew, matured, and declined in the United States, the plant that once symbolized blue-collar Baltimore changed the city — its footprint, population, and economy.

Today, smokestacks tower over rows of empty gray mills. Rusting locomotives line chain link fences, and it's the Johns Hopkins Institutions — "eds and meds" — that comprise Maryland's biggest private payroll.

Sparrows Point grew into its own 3,000-plus acre city-state, where raw iron ore was transformed into finished steel, and nearby manufacturers like General

Motors, Western Electric, Signode Strapping, Thompson Steel, Continental Can, and Crown Cork and Seal employed thousands.

Once the site was nothing but desolate marshland jutting into the Chesapeake, but as historians often say, geography is destiny.

### Forging an Industry

The Pennsylvania Steel Co. in 1887 sent its engineer, Frederick Wood, to scout the East Coast for a site conveniently located to receive iron ore shipments from the firm's captive Cuban mines; there, they'd transform the iron into steel for rails. Sparrows Point lay 100 miles closer to Cuba than Philadelphia and 65 miles closer to western Pennsylvania's bituminous coal fields. The Point also had deep water and its swamps were flat and easily filled.

Industrialists were nurturing their first infant — steel. Wood built this subsidiary of Pennsylvania Steel, known then as the Maryland Steel Co., for \$7 million; his brother, Rufus, built the town of Sparrows Point for \$700,000. (The brothers had grown up in a company town themselves, in Lowell, Mass.) From the start, the company sought and received political favors giving it government-like powers, including the right to run its own police force and prohibit alcohol consumption.

The company, backed by the Pennsylvania Railroad, made steel rails and ships using the first steelmaking breakthrough, the Bessemer oven, which allowed large-scale steel production — 20 tons of steel in 20 minutes. "By 1910, the railway track rolled at the plant had spanned Mongolia, climbed the Andes, breached the pampas of Argentina, and descended into the tunnels of the London Underground," wrote Mark Reutter, in *Making Steel: Sparrows Point and the Rise and Ruin of American Industrial Might*.

PHOTOGRAPHY: MARK REUTTER

**Sparrows Point got plenty of military business in both world wars, in no small part because of its location near the Atlantic.**

Skilled workers were imported from the steel towns in Pennsylvania — Johnstown, Steelton, Homestead, and others. But the plant also relied on workers from eastern Baltimore, already a hub for canneries, immigrants, and domestic migrants, white and black. Families who lived in the company town of Sparrows Point had their own schools, including the first kindergarten in the South, even a separate one for black children, and their own dairy, bakery, and slaughterhouse.

The work was perilous and backbreaking and dirty, but the living in the company town was cheap. A company store sold groceries and just about everything else until it closed in 1944 when the plant expanded. In 1956, the company flattened about a third of the town's homes for the same reason. In 1974, the company razed the rest of the town to make room for the biggest blast furnace in the western hemisphere, the "L" furnace.

Early on, black and white immigrant men lived in a "shantytown" beside the steel furnaces, four to a shanty. In the town proper, most workers lived in duplexes, with few houses for black workers.

Blacks represented about a third of the workforce over the plant's history, according to Reutter. Blacks were segregated; their homes had no indoor plumbing. That beat life in Georgia, the Carolinas, and Virginia, from where many of them had migrated.

"It was certainly a way up for these guys who were working essentially as sharecroppers, where there was no future," Reutter says. "There was terribly institutionalized racism, but there was that everywhere."

Charles Mandy, who is 71 and black, started at Sparrows Point in 1960 checking railcars loaded with various materials and notifying the rail yard master when they needed hauling off. Back then, blacks and whites used separate locker rooms. His uncle worked there, too. "If you had a family member working there, you had a better chance of getting on." He did well there and retired as a shipping supervisor in 2005.

Inside the company town of Sparrows Point, white workers lived in 500-square-foot brick and frame row houses on sycamore-lined streets.

Elmer Hall was born and raised there. His father and his father's three brothers had migrated from Virginia to Sparrows Point to get work during the Depression. "We all had one thing in common," he says of the families living so close together. "We had the same boss."

Superintendents lived in multistoried homes, with wide porches and carved banisters inside. "Just to give you some idea of the houses on any block of 'B' and 'C' streets, where the superintendents lived, there were six houses on a block there and 32 on a block on my street," says Hall, who lived on

Beechwood Street. He can still name every resident who lived on Beechwood. Nobody moved unless they died. His dad paid \$23 a month until the family moved, displaced by the new blast furnace. "If you never moved, they never raised your rent," he recalls.

The town of Sparrows Point, by most company town standards, was in some ways progressive,

providing education and leasing land to churches for \$1, with baseball and football teams, Boy Scouts, Christmas and Halloween parades, playgrounds, and carnivals. Yet there was no local government. Company towns were common in that era: automotive suburbs in Detroit, the Pullman factory town outside Chicago, New York's satellite towns in New Jersey, as well as steel towns in the Midwest and textile towns in the North and South. Between 1880 and 1890, about 100 manufacturing suburbs grew up with industrial America, wrote Reutter in his book. The town of Sparrows Point died only when the company flattened it.

Even now, the spirit of the town lives on the Facebook page called "I grew up in Sparrows Point, Md."

"For all the red soot and belching smokestacks, it was a wonderful place for a kid to grow up," Hall remembers. "I have nothing but wonderful memories of the place as a kid, fishing off piers, crabbing, swimming at the bathing beach, riding my bike all over Sparrows Point. You couldn't do much without word getting home before you even arrived because somebody was watching — in a good way."

Hall grew up and left. In 1942 when Hall was born, Sparrows Point was pouring steel and building ships for wartime.

### **From Heyday to Doomsday**

Sparrows Point got plenty of military business in both world wars, in no small part because of its location near the Atlantic. In the middle of World War I, in 1916, Bethlehem Steel, led by Charles Schwab, bought Sparrows Point. Schwab had built "Aunt Beth," as the Sparrows Point workers came to call it, into a power by making guns and armor plate for Central and South American countries and selling weapons to Britain and France before the United States went to war. The company also defied neutrality by arranging for a Canadian shipyard to make submarines for Britain, wrote Reutter in his book. By war's end in 1918, the nation's steel production had almost doubled, to 44.5 million tons. Sparrows Point alone produced 366,000 tons of steel that year.

By Dec. 8, 1941, when the United States officially entered World War II, the Roosevelt administration had already anticipated a steel shortage and had arranged two months earlier to finance additional capacity of 10 million tons. The government agreed to fund a million tons of steelmaking at Bethlehem Steel alone, half of which would expand

Sparrows Point, at a cost of more than \$20 million.

Between 1941 and 1944, the Point produced about 2.4 million tons of steel a year. In 1941, the plant built a shipyard under a government contract on the west side of Baltimore Harbor where workers would make 384 of 2,500 “Liberty” ships, a critical link in supplying overseas troops. Employment at Bethlehem’s Fairfield Shipyard, on the west side of Baltimore Harbor, reached 60,000 during the war.

Yet even amid wartime production — Bethlehem Steel was the nation’s top war contractor — there were hints of steel’s decline. “World War II was a war where steel was hugely needed, but it was no longer the most advanced material,” Reutter says. Emerging technologies, particularly in flight, depended on lighter weight materials and electronics. Aviation led wartime innovations. They grew from startup flight companies formed in World War I — Grumman, Lockheed, Boeing, and others. Steelmakers were largely left behind, in terms of advancing new technologies and ideas, though steel output was so great they had steel to spare — 2.5 times as much production as in World War I.

The domestic steel industry also was not forced to innovate in the way many companies abroad were: None of the U.S. steel plants were bombed during the war; Japan and Europe, meanwhile, rebuilt their steel industries from scratch, with the latest available technology.

War changed life on the factory floor too. Women had worked as crane operators and machine tenders during World War II, but lost those jobs in 1945; the only jobs open to them afterward were in the sheet and tin plate mills. The Point’s first tin mill had opened around 1917, and served thriving waterfront canneries that sprang up in the late 19th century to preserve oysters, tomatoes, and corn from the fertile fields of the Eastern Shore. The women’s job was to check — by eye and touch — for defective tin. If they found holes, spots, or pits, they quickly “flopped” the tin sheet into the appropriate bin, sometimes at a rate of 30 a minute. They were known as “tin floppers” for the sound the tin made as it hit the bin. In the 1950s, opportunities for women at the plant closed still further as the tin floppers were automated out of their jobs.

Other wars, including the Cold War, required steel too. “In the heyday of the 1950s, you have a strong program of both guns and butter,” Hounshell says. The United States was building domestic interstate highways, bridges, and skyscrapers, and the cold war brought construction contracts for armaments and infrastructure at overseas bases.

Production at Sparrows Point reached a record high of 6.6 million tons in 1968, during the Vietnam War, and declined from there. Even as the plant and the industry as a whole were prospering, executives were making decisions that would cause the fortunes of Sparrows Point to take a turn for the worse.

Bethlehem Steel became blinded to threats to its future, Reutter says, perhaps on account of its success. Substitute products, imports, and declining demand were biting steelmakers, but the industry failed to respond. For example,

steel production fell to less than 60 percent of capacity in the 1958 recession, yet the company raised prices. The oil company Esso Standard Oil, a predecessor of today’s ExxonMobil, converted quart oil cans to aluminum in 1960, partly because of rising tin plate costs. Even the beer industry converted from tin cans to aluminum. Construction projects used less steel and more reinforced concrete for highways, bridges, and buildings. “Engineers found that great economies could be achieved by reducing overall weight, for example, by using fewer structural girders in a large building,” Reutter wrote in his book.

And then there was plastic. Carmakers switched to plastic-coated stainless or other metal trim, known as “plated plastic.”

It didn’t help that the firm was slow to adopt new technology. In the 1950s, Sparrows Point built another open hearth furnace rather than a faster oxygen furnace. That technology converts up to 350 tons of iron to steel in 40 minutes, compared to 10 to 12 hours in an open hearth furnace.

“The next innovation — and this is not rocket science — was the electric arc furnace to replace the blast furnace,” says Reutter. The major industry players passed on this innovation, too, because at first the lower-grade steel they produced only served low-end product markets. But the technology improved, opening the door to competition from the smaller scale “mini-mills,” which melt scrap steel from autos and appliances to make new steel.

Today, 60 percent of the world’s steel comes from Asia. Half of the world’s steel today is made from scrap, in mini-mills, and the biggest steelmaker in the United States is Nucor, based in Charlotte. Pittsburgh, once the steel capital of the world, hung onto 4 percent of the nation’s steel-making capacity, says economist Frank Giarratani of the University of Pittsburgh, because of the region’s historically healthy cadre of suppliers. “We had not just equipment suppliers but engineering and materials suppliers. We’re exporting stuff steelmakers use from this region to other parts of the United States.”

That’s not true in Baltimore, once home to several steelmakers. And it doesn’t help Kevin Nozeika, who’s watched three steelmakers exit Baltimore.

### **The New Baltimore?**

“When I was a kid all three were still going and now all three are gone,” Nozeika says. There’s no job that will pay him the \$25 an hour he was earning in steel. He’s had some college, but not much. He knows that limits his options.

“I was looking for manufacturing jobs, but honestly, when I look at them and see what they pay I know there is no way I could live on that kind of money,” he says. Companies are offering \$8 or \$10 an hour.

Some former Sparrows Point workers have found the situation overwhelming. One, Robert Jennings, a 59-year-old welder, committed suicide in January, reported Reutter in an article for *Baltimore Brew*, an online daily journal.

Though Baltimore, in many ways, is healthy, its shrinking

manufacturing base means it is often labeled a declining industrial metropolitan area. Jennifer Vey of the Brookings Institution, who has studied Baltimore's labor market, bristles a little at the notion. Heavy manufacturing work has gone from the nation's landscape, not just Baltimore's. "We've shifted away from an economy with a lot of blue-collar jobs that don't require education toward one that is more service oriented," she says.

Manufacturing now represents only about 4.8 percent of the metro Baltimore economy. "But that's 62,000 people working in manufacturing in Baltimore," Vey says. The diverse sector is dominated by small and midsized firms, including computer and electronics firms that are driven by the defense industry. (Older titans remain, though. Domino Foods' sugar refinery, with 500 employees, has occupied its storied waterfront location for about 90 years.)

The reasons why those firms stayed are the same as Frederick Wood's were back in 1887 — ports and proximity to markets. Location, location, location.

Still, there's no question that the old blue-collar jobs are dying. And that's a problem. Though median household income in the metro Baltimore area was \$15,000 higher than the national average in 2010, and its unemployment rate lower than most of its metro peers, the jobs you can get without post-secondary education aren't easily replaced. Most, three-fourths, of low-income workers in Baltimore work in the service end of health care, education, retail, and the food and hospitality sectors.

At least Baltimore has cultivated economic variety. Its advantages include world-class hospitals and universities. "Baltimore has always had other things — now you have the whole biomedical sector," says Scott Holupka, senior research associate at the Johns Hopkins Institute for Policy Studies. In fact, the Johns Hopkins Institutions employ more than 46,000 people, excluding the students who work part-time, in Maryland.

But to compete in a global economy, Vey says, people need skills to get jobs in the growing sectors. That takes coordination among economic developers, high schools, private training firms, the public workforce system, and employers.

Vey suggests economic developers capitalize on exports to take advantage of purchasing power of other nations; on transportation — truck, air, and rail — which had expanded employment leading up to the recession; on the sectors of information technology, bioscience, and the "green" economy; and on that new kind of manufacturing, the one that's clean and requires fewer, tech-savvier workers.

Getting jobs that pay well in those sectors, though, is tough without an education. Overall, 28 percent of low-income residents have no high school diploma, much less post-high school training.

No one, in short, wants a dirty factory like the old Point except maybe the people who need those jobs. Ideas for the Point's re-use were recently floated by area architects and planners and published in Baltimore's weekly *City Paper*. They were far removed from the Point's industrial history: biotech and amusement parks linked by hydrofoil to the Eastern Shore, a port expansion with a cruise ship terminal and luxury hotels, dense housing, with parks featuring pollution-eating plants.

The Point struggled — and failed — over the years to meet state and federal environmental standards which are often blamed, with its other legacy costs and foreign imports, for the industry's demise.

Nozeika still can't believe Sparrows Point is probably history. "Everybody assumed when it went to auction another steel concern would buy it," he says. Hilco Industrial, a liquidator, bought it for \$72.5 million, with a brownfield redeveloper, Environmental Liability Transfer. Hilco, which is selling all assets, offers the old "Beast of the East" on its website. No one has bought that. But in mid-December, Nucor acquired the most profitable component, its cold mill, not to crank up steelmaking at the Point, but to upgrade and replace parts at Nucor's own mills.

The sale killed off any hope of a revival. Nozeika is making other plans, and so are his friends from his steel days. Some, including Nozeika, are going into a federal program for displaced workers. After six months of classes, he may be back in manufacturing, only this time, with the technical skills to operate computerized machines. **EF**

## READINGS

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