

Pollux & Phoebe

Going down to the dock the day after Easter I was hoping to find an unusual display like the one that I'd seen a couple of weeks before, when four or five otters had been tumbling around near our little sandy point. They had drawn my attention by the racket they were making. We usually saw otters about once a year, but always just a pair and never with such loud chattering. In retrospect, the larger ones may have been convincing the youngsters that it was time for them to strike out on their own.

A few minutes later there had been movement in the water right next to where I was standing. I assumed it was one of the smaller otters from the point or perhaps a large muskrat, but as it emerged on the other side of the dock its tail wasn't correct for either one: it was too flat and too broad. Having spent almost my whole life on the Chesapeake and never having seen a single beaver - either on the Severn River where I grew up, on Spa Creek in Annapolis, or on St. Leonard's Creek off the Patuxent where I had been for the last 25 years - it took a moment to register. It was moving at high speed and its wake didn't look like any I'd ever seen from the house. It was fairly acute in shape, there were no cross ripples, and it had distinctive edges rolled like a rope. In just a few seconds my very first beaver disappeared.

All was quiet on Easter Monday. Except for squawking by the resident Great Blue Herons, there was no action in our little cove, but as I moved from the steps onto the dock, the light was much



Newly-built lodge on the beach, just 2 ½ feet high.

brighter than it should have been. I realized that the waterline shrubbery - always a nuisance when launching a kayak - wasn't there any longer, just an expanse of light-colored sand. I looked further down the beach and discovered where all the shrubbery had gone: there was a lodge just 50 feet away.

Had I not seen a beaver recently, I would have thought that I was looking at a brush pile or the top of a fallen tree, but our prayers had, indeed, been answered. For years, Stovy and I had joked about putting a Beavers Welcome sign in the ravine which opened out where the lodge was built. The freshwater stream trickling through it could be dammed without flooding anyone's lawn and there were acres of trees to spare. But where was the dam? There must not have been time to build it yet. There was time, however, to find a good book on beavers.

When you're 75, your mind is not the sponge it once was, at least for learning names or remembering details, so it was amazing to discover how much I could absorb when I really wanted to. I read and read: everything from the highly accurate 1917 children's book by Thornton Burgess, *Paddy the Beaver*, to the just-published theories of Ben Goldfarb on the environmental benefits of beaver reintroduction to the American west. You could soon quiz me on diet (strictly vegan), family structure (monogamous), sexual signposts (females leave castoreum deposits that smell like cheese, males, like motor oil), and how the beaver almost disappeared in the colonists' quest for sartorial splendor (pelts for top hats destroyed 99% of the population). How could one have known so little about a subject that now dominated the mind? Beavers are nocturnal. If they've read the book, they work from 8 at night till 8 in the morning. Ours retired a little earlier; my morning schedule had to adapt to theirs. At least four days a week I was heading down the dock steps half-asleep, still in my nightgown at 6 a.m., with a cup of coffee, apple quarters as beaver treats, binoculars, and a camera.

I also snooped around in the kayak, discovering that at the same time as the lodge construction there had been canal work going on. At the far eastern end of the beach, where it meets the bank, there had been a dredging operation: the East River. The River didn't go far inland but was useful by shortening the distance that logs had to be dragged before being floated to their destination.



The East River, a canal

There was still no dam evident, but I learned that the first thing that the beavers build when establishing themselves is the dam, not the lodge. The dam's purpose is protection: it creates deep water, usually from a running stream, and the lodge is built in it as an island of safety. Our beavers already had deep water. There was a price to pay for not having to create it, though, because it was brackish and tidal, not fresh water staying within a predictable depth.

When the tide was at its lowest you could make out underwater channels that the beavers had built to gain access to the lodge. For protection, an animal had to dive to get into the lodge. Shallow channels were built to make this easier. The beavers would go under water about 10 feet



from the edge of the lodge and then come up inside it. They can hold their breaths for very long periods, though in this case 15 seconds was all that was necessary.

Very little information is available on tidal beavers. When I contacted the Maryland Department of Natural Resources and asked for the names of some landowners with tidal beavers who might give me some tips, I was

told that I was the expert on tidal beavers! It turns out that there are marshes in the Carolinas with beavers and some near Puget Sound, but they are an anomaly. Climate change had brought greater rainfall to the Mid-Atlantic in recent years and the central Chesapeake's salinity had been diluted, from around 15 ppt to 8 or 9. If the rains returned to normal, would the water in our cove be too salty for the new residents?

Who had built the lodge? I decided that it was probably a young male trying to attract a young female – most likely the beaver I had seen a couple of weeks before. In a few days I saw him again, as I did almost daily thereafter, swimming across the creek and disappearing in the shadows. The Latin for beaver is Castor. The twin stars in the constellation Gemini are Castor and Pollux, so Pollux it was. After about three weeks of just the one beaver, suddenly there were two. The second looked larger and was faster. Since we needed someone of the opposite sex, she became Phoebe, Castor's wife in the Roman legend, who had had a dalliance with Pollux. Perhaps our latter-day Phoebe was a year older than Pollux and had some experience in lodge construction and furnishing. One could only hope, as the lodge did not look high enough to hold the different chambers necessary for nursery, storeroom, and small guest room for smaller wintering rodents.



Pollux, 18 April 2019

Lodges are not built like houses. There is no vaulted or roofed interior. Branches and mud are combined into a heap and then the interior is hollowed out. Maintenance must be an ongoing problem for tidal beavers, with mud having to be refurbished twice a day. Most of the building material was no larger than the size of my arm and most was stripped of leaves, though occasionally there was decorative greenery. During high tides, overhanging branches were harvested. Driftwood was not used, only freshly hewn wood gnawed from within 50 feet of the water's edge. Beaver teeth are shaped like chisels and gnawing is at a rate so rapid that it sounds like a saw. The wood chips are enormous.

There are five mature sycamores in the ravine, quite near the beach. I suddenly panicked, wondering if they would come to harm. Though they were far too big for the beavers to handle, perhaps they would want to strip the lower bark to eat its inner layer. Instead of buying yards of hardware cloth and stakes to circle them, in the nick of time the internet provided the modern solution: simply add some handfuls of sand to a can of bark-colored latex paint. The beavers can't stand the grit. If only all problems were so easy to solve! "What did you do this morning, Anne?" "Oh, I painted two more trees with sand."



Hickory, not Sycamore



Phoebe the Towboat

Patterson Park, our neighbor. The Park unwittingly provided some newly-planted Bald Cypress saplings for the building effort, as well. Our apologies.

What kind of a girl was Phoebe? She may have been in a hurry to find a place to live. By early July, whimpering sounds could be heard when she returned to the lodge, so she must have been pregnant when she arrived. Males don't become sexually mature until three, so if Pollux was a recently turned-out two-year-old, he couldn't be the father. Despite her mysterious past, Phoebe was a hard worker, who gathered rushes from a wide area. I'll always remember her trailing a 4-foot-long piece of cordgrass from Jefferson

If the sounds were indeed from kits, they would not come out of the lodge for two months. In the meantime they would have swimming lessons inside while they developed oil for their fur and put on weight from both milk and soft vegetation. When born they weigh only a pound, but when they leave the lodge they already weigh five or six pounds. As they leave the parents just shy of two years they may weigh 25. At three years they level off at close to 40. Chesapeake beavers never reach the size of their Canadian cousins, Canada's national symbol. Learning the size difference between two- and three-year-olds supported my theory on the ages of Pollux and Phoebe.



A Tail-slap

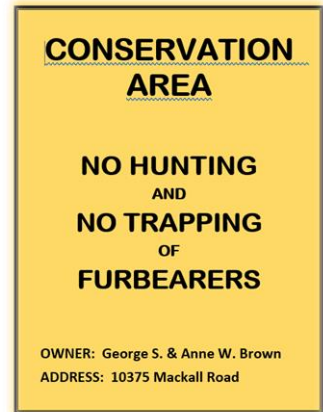
I had never heard of a tail-slap. It's the way a beaver warns other beavers that something isn't quite right. It sounds like a gunshot, and my first one was in the water directly behind me. It scared me to death just the way it was intended to do. After a while it hurt my feelings that Pollux couldn't recognize me and resist his slaps. After all, who else did he ever see in a nightgown?

Mornings on the dock were lovely. I had never been down there at sunrise when the foxes, raccoons, and opossums were still awake and sharing the waterfront with the deer and all the daytime birds, though their tracks on the beach had made their presence known. I started looking for beaver tracks, but to no avail because the big tail they tow acts as an eraser. There were no territorial problems evident between the newcomers and the established residents. One raccoon, ambling down the beach, just kept going when it came to the lodge blocking its way. Rather than make a wide detour, it clambered up on top just as Pollux appeared from upstream and produced a half-hearted tail-slap. The raccoon continued on its way, unperturbed.

Wintertime trapping of furbearers is legal in Maryland. I was already worried about it. In my chat with the DNR the subject had come up and I mentioned that I was thinking of posting signs on either end of our waterfront saying that this was a Conservation Area (but no mention of any

government) and that trapping was not allowed. To my surprise, the DNR agent thought it was a fine idea. Perhaps I should be prepared, so I designed a sign.

The end of August was busier than usual as we prepared for house guests and our 50th anniversary. When calm returned and my morning forays could resume, no beavers were to be seen. I went down to the creek earlier and stayed longer, but to no avail. After a few weeks it struck me: they were gone. Tides had been high for the last two years but particularly high that summer. The Chesapeake is young and altering so rapidly that I had seen the difference in my lifetime. One island off the Eastern Shore which my mother remembered supporting a farm was now an underwater shoal marked by a buoy. We had built our dock a foot higher than common, but late that summer the water was frequently lapping at the stringer supports. Perhaps the living quarters in the lodge had not been sufficiently elevated. Perhaps something else had gone wrong. The beavers were going to have to hustle to build a new lodge before winter arrived. Would they be able to do it? Could they travel with the kits?



One day in October I was chatting with someone across the cove and telling him how my beaver summer had begun with joy and ended in despair. “Funny.” Jon said, “I was over at Sollers’ Wharf a couple of weeks ago and saw the tiniest beaver I’ve ever seen swim under the dock. Its tail wasn’t even fully formed.” Sollers’ Wharf is fifteen miles away by road but only a half-mile by water across St. Leonard’s Creek. I tell myself that I know just who that little guy was, and that when he’s two years old, he’ll know just where he’s welcome.



Pollux & Phoebe roughhousing, the last shot

Anne Wright Brown, 10 June 2020

Postscript. Just eight weeks after writing this, Tropical Storm Isaias spawned a number of small tornados, one of which hit us. We lost several big trees. On the bank to the east of the East River a large oak fell parallel to the beach. Had the beavers been in their lodge, they would not have survived.

12 August 2020