

Kiptopeke State Park – Exploring the Concrete Fleet

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Figure 1: Breakwaters created by sunken concrete ships

Standing at [Kiptopeke State Park](#) on the eastern shore of Virginia, near the mouth of the Chesapeake Bay, I gazed west across the water, unable to see any part of the Virginia Peninsula about 16 miles away. But right in front of me, starting less than a thousand feet from the pier, I saw a line of several sunken concrete ships known collectively as the Concrete Fleet. Ships made of concrete? That seems crazy. But ironclad boats probably seemed just as ludicrous to the average person when they first appeared back in the 1800s. Wanting to learn more and get an up-close and personal view of these relics, I launched my kayak from the park's [boat ramp](#).

Nine concrete ships form two breakwaters with four on the north side and five on the south. The closest to the launch site and pier is the S.S. Leonard Chase Wason, named after the former President of the American Concrete Institute. Behind it, a few miles away, I could see the 17.6-mile-long Lucius J. Kellam, Jr. Bridge-Tunnel which crosses the Chesapeake Bay.



*Figure 2: East side of the S.S. Leonard Chase Wason*

As I paddled closer, I noticed how the elements, time, and human activity had taken their toll on these 366-foot-long behemoths. Serving as breakwaters, their weathered west sides faced several miles of open water to take the brunt of the wave action while their east sides appeared far less worn. Intentionally sunk in 1948 to provide shelter to the Little Creek-Cape Charles Ferry terminal, these ships developed numerous cracks and large holes. Exposed rusty rebar and other hazards create unsafe conditions for boats that venture too close, so the park posts signs telling people to maintain a distance of at least 50 feet.



*Figure 3: A broken hull exposes the inner parts of the ship*

At the southernmost end of the two breakwaters, I saw the S.S. Willard A. Pollard with its distinctive “H20” mark on its bow. Like the Wason, Pollard and all the other ships at Kiptopeke are named after pioneers in the science and development of concrete. As the waves crashed into its exposed starboard side, I thought about how these ships serve so well as breakwaters, standing steadfast to the forces of Mother Nature. It seems almost as if their concrete structure was chosen specifically for this task. In fact, some concrete ships were scuttled in Normandy to create a breakwater protecting the troops landing on D-Day. The ones here at Kiptopeke were built around 1943, when steel was in high demand due to the war, while concrete was inexpensive and plentiful. Not suited for combat, these ships instead served as transport and training vessels in the South Pacific.



*Figure 4: The S.S. Willard A. Pollard at the end of a chain of concrete ships forming a breakwater*

Paddling near the S.S. Willard A. Pollard, I caught fleeting glimpses of about four or five dolphins swimming as a pod. I spotted other wildlife residing on or near the concrete ships, especially brown pelicans. These beautiful and somewhat comical birds obtain a wingspan of about six feet and can weigh eight to ten pounds. I saw so many while kayaking that it is hard to imagine they were endangered in the 1970s as a result of DDT and certain persistent pesticides (ones that resist being broken down) whose use was later halted. Their comeback is truly a victory for conservationists.



*Figure 5: Brown pelican in flight*

There were numerous immature brown pelicans resting on or near the piles south of the breakwaters. They look rather plain, as it takes about three years for them to acquire their more vibrant adult plumage. Studying them, I watched some open their large bills, exposing their elastic throat pouch which they use to catch up to four pounds of fish and invertebrates every day.



*Figure 6: Immature brown pelicans*

In addition to brown pelicans, I have been told the park is a good place for birders to see migrating peregrine falcons, merlin, American kestrel, warblers, and thrushes.

Paddling to the park's Southern Beach, I pulled ashore and explored on land, where I found a dead striped burrfish. Reminiscent of a porcupine, this fish wards off predators by puffing its body into a spiny ball. You'll definitely want to watch where you step around here if you choose to walk barefooted.



*Figure 7: The remains of a striped burrfish*

I also found what a fisherman told me was the carcass of a red drum fish (aka redfish or channel bass). As the name implies, these fish make drumming sounds during spawning season using special muscles that rub against their air bladder. Peering inside its mouth, I saw several rows of small, sharp teeth. But looking further back in its throat, I saw what appeared to be even more teeth. This second set, known as pharyngeal teeth, are used to crush oysters and other shellfish.





Figure 9: The remains of a red drum fish



Figure 8: Oral teeth of a red drum fish



*Figure 10: Pharyngeal teeth of a red drum fish*

Kiptopeke State Park is one of the most unique places I have paddled in the Chesapeake Bay watershed. While I have seen other concrete vessels, I have never seen ones so large or high above the waterline as those at Kiptopeke. Its proximity to the Atlantic Ocean sometimes makes it feel more ocean-like than bay-like, and its clear view to the west makes for spectacular sunsets. Prior to the Coronavirus pandemic, the park rented tandem and single kayaks, and offered ranger-led kayak tours beyond the breakwater. But as of 2021, I have been told that they are unable to find staff to manage the rentals. I sincerely hope this service can be reinstated soon so that those that don't own a kayak can explore the Concrete Fleet, appreciate the wildlife, and enjoy paddling here as much as I have.

For more information, see

[Virginia Department of Conservation and Recreation \(DCR\) – Kiptopeke State Park](#)

[Abandoned Country - Kiptopeke's Concrete Ships; A Long Journey to Obscurity](#)

[Virginia DCR – Kiptopeke's Breakwater](#)

[Concrete Ships – The Kiptopeke Breakwater](#)

[Visit Virginia's Eastern Shore – The Ghost Ships of Virginia's Eastern Shore](#)

[Chesapeake Bay Program – Brown Pelican](#)

[National Zoo – Brown Pelican](#)

[Audubon – Brown Pelican](#)

[Chesapeake Bay Program – Striped Burrfish](#)

[Florida Fish and Wildlife Conservation Commission – Red Drum \(Redfish\)](#)