Honeymoon Island and Caladesi Island were connected as one barrier, known as Hog Island, prior to 1921. The Hurricane of 1921 breached the island in the center, creating Hurricane Pass and the two separate islands.

Honeymoon Island went through the hands of several developers in the early 1900’s. The last owner was responsible for the most dramatic morphologic modification to any barrier island in Pinellas County. The developer dredged material from the nearshore and pumped over 1 million cubic yards of rocky fill onshore. The historic photos illustrate that from 1926 to 1973, the size of the island was nearly doubled and the shoreline orientation changed by more 10 degrees.

The Florida State Park system acquired island in 1974 and constructed many of the park facilities, including parking lots and bathhouses, along the newly created western shoreline. The unnatural shoreline orientation has resulted in beach erosion and exposure of a rocky coastline. A phased coastal management plan has recently been developed to maintain a sandy beach along the central island shoreline. The Honeymoon Island Beach Restoration Project Phase I was constructed in late 2007.