

Marshall Islands stick chart, Meddo type, 192-. Geography and Map Division.

The Unique Seafaring Charts of the Marshall Islands

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Posted by: [Cynthia Smith](#)

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The Geography and Map Division holds thousands of vintage and antique nautical charts. Among the most compelling navigational charts in our holdings are the traditional stick charts of the Marshall Islands. The first time that I saw them, displayed in shadow boxes, I thought they looked like striking works of modern art. My curiosity led me to learn more about them.

For thousands of years Marshall Islanders used a complex form of navigation with charts made from coconut midribs and seashells. The charts consisted of curved and straight sticks. The curved sticks represented ocean swells and the straight sticks represented the currents and waves around the islands. The seashells represented the locations of the islands. Marshallese navigators memorized the charts and did not take them with them on their canoes. Each chart was unique and could only be interpreted by the person who made it.

The layout of the Marshall Islands is shown on the map below. The Marshall Islands consist of 29 coral atolls and five single islands. The islands and atolls are spread out in two chains; the western chain is named Ralik and the eastern chain is named Ratak. The islands have an extremely low elevation and were not visible to the navigators from great distances. In addition to observing wave and swell patterns, the Marshallese used star patterns to navigate the ocean. They also determined the locations of the islands by observing the flight of the birds that nested on them. Song was used to estimate the distance that the navigators traveled.



Marshall Islands. Central Intelligence Agency, 1989. Geography and Map Division.

There are three kinds of Marshall Island stick charts: the Mattang, the Rebbelib, and the Meddo. Many years ago, The Library of Congress acquired one of each kind. The charts were made during the 1920s in Majuro, the capital of the Marshall Islands. Images of the charts are featured below.

Below is an image of the Mattang chart. The Mattang was used as a training chart. The cowrie shells do not represent specific islands, they were placed on the chart to illustrate how islands interfere with the wave patterns of the Pacific Ocean.



[Marshall Islands stick chart, Mattang type](#), 192-, Geography and Map Division.

The Rebbelib chart covered a large area of the Marshall Islands. The shells on the Rebbelib chart featured below represent the locations of the atolls and islands for both the eastern and western chains.

The Meddo chart was used to map only a section of a chain. The Meddo chart below represents the Ralik (western) chain. The largest shell, placed near the center, represents the Kwajalein Atoll. The herringbone pattern on the right represents the effect of the northeast trade winds on the ocean swells as they pass through the Jaluit Atoll.

Marshallese navigation techniques were passed on from father to son. The use of customary navigation techniques started to decline during the late 19th century. During the 20th century there were very few remaining experts in traditional Marshallese navigation. One of the last experts was [Korent Joel](#), who passed away in 2017. Korent Joel, a cargo ship captain, partnered with the organization [Waan Aelōñ in Majel](#) (Canoes of the Marshall Islands). The organization works to preserve Marshallese culture through canoe building and sailing. During his partnership, Captain Joel taught Marshallese youth traditional navigation techniques that he had learned from his grandfather.

The Marshallese stick charts that are made today are sold as souvenirs. The charts featured in this post were created approximately 100 years ago. We are fortunate to have them in our collections.

Learn More:

Learn about traditional Marshallese navigation in [Breaking the shell: voyaging from nuclear refugees to people of the sea in the Marshall Islands](#) by Joseph H. Genz.

The article cited below may be accessed on [jstor.org](#). JSTOR is available to researchers onsite at the Library of Congress. If you are unable to visit the Library, you may be able to access this resource through your local or university library:

Navigating the Revival of Voyaging in the Marshall Islands: Predicaments of Preservation and Possibilities of Collaboration by Joseph H. Genz. *The Contemporary Pacific*, 2011, Volume 23, No. 1, pp. 1-34.

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1. Judge Muscat

February 11, 2023 at 8:49 pm

Does anyone know where I might find a stick chart superimposed over a modern map of the Marshall Islands?

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