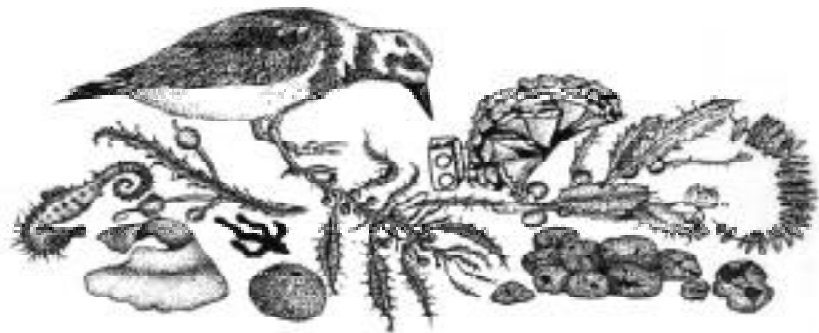


Uncommon Treasures at Canaveral National Seashore

written and illustrated by Cathie Katz ©99

Beachcombers are fascinated with the variety of treasures found at Canaveral National Seashore's long stretch of unpopulated beach. In addition to the familiar shells, bottles, and driftwood that typically wash up with the tides, lots of odd-looking items are mixed in with the clumps of seaweed and river grass. But what are these strange things? — most of the time we can't even tell if they're dead or alive.

Mermaids' purses, shell egg cases, pumice, sand collars, algae, rams' horns, lava bomblets, opercula, LEGO® toys, and sea-beans are just a few of the treasures that accumulate on the beach at Canaveral National Seashore. How do mermaids' purses, rams' horns, and LEGO® toys end up on Florida's shore? And, more importantly, *what are these things?* To uncover the mystery surrounding these treasures, the following descriptions will identify these gifts in the *wrack*.



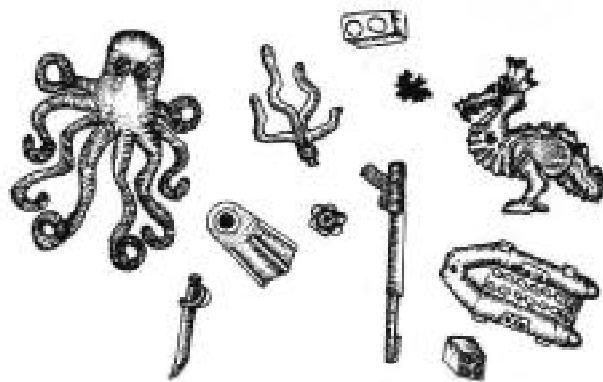
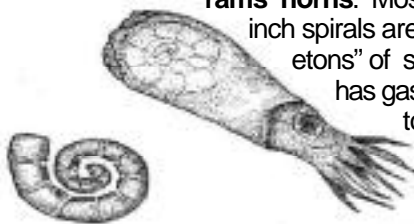
First of all, what is a **wrack**? Also known as a *sea wrack*, this is the line of seaweed and ocean "junk" left behind by incoming tides. Most tourists say they don't like it because it stinks, but experienced beachcombers know this is where the real treasures are found. The tides bring these free samples to us as advertisements for a warehouse of exotic merchandise drifting out at sea.

The items that beachcombers collect in the wrack are usually small and light compared with heavier beach collectibles such as shells, sea glass, and shark's teeth — all of which usually sink at the shoreline, too heavy to move farther up the beach by wind or wave, but exposed when the tide recedes. Each incoming tide adds the lighter items to the wrack, until a strong outgoing tide takes it back out to sea, perhaps depositing it on another beach in North Florida — or on a beach in Maine — or across the Atlantic in England.

What is a **mermaid's purse**? This is the egg case of a skate, a marine creature related to the familiar stingray. Skates lay their eggs in the ocean, usually near a rocky or grassy bottom. The eggs are inside black leathery cases, shown here, to protect them from damage and predators. The cases are anchored down with strings from their "horns" so they don't drift away. Some people call the cases "devils' purses" because of their horns. Inside each case, an embryo develops, similar to the way a chicken grows inside an egg. After nine weeks or so, a baby skate squirms out of its case to start life in the ocean. After the miniature skate swims away, the empty egg case rises to the surface and drifts with the currents until a high tide carries it to the beach. Eventually it gets pushed into the wrack where it dries out and becomes hard and wrinkled. (It will return to its original shape and rubbery texture if you put it in water for several hours.)



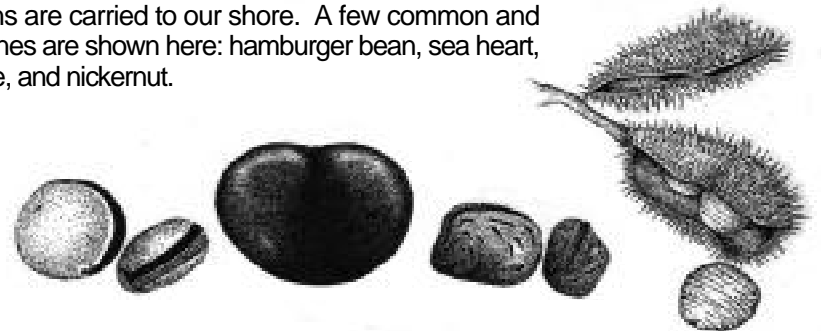
Much lighter and more fragile than mermaids' purses are spirula, also known as **rams' horns**. Most beachcombers assume these graceful one-inch spirals are shells. However, they are the internal "skeletons" of small deep-sea squids. The delicate structure has gas-filled chambers inside that allow the tiny squid to swim vertically in the deep ocean. When the squid dies and decomposes, its skeleton rises to the surface and, like the mermaid's purse, it eventually drifts toward the beach.



The wrack also contains human-made objects such as cans, bottles, and plastic toys. Beachcombers should be aware that **LEGO® toys** found in the wrack may have come from a ship leaving the coast of England in February 1997. The *Tokio Express*, a cargo ship carrying thousands of toys made in Denmark ran into rough seas and lost several crates of its cargo. Scientists and oceanographers want to know when and where the toys reach the United States to study ocean current trends and rates. The LEGO® pieces include yellow dive rafts, green dragons, black bats, red dive flippers, gray swords, green sea grass, and yellow spear guns. (Anyone who finds a LEGO® toy: please call 1-877-OCEAN99.)

But of all the treasures beachcombers find on Florida's shore, none is more beautiful or exciting than our **sea-beans**. What are sea-beans? Most people who find their first sea-bean think it's a rock or shell, or perhaps an egg from a strange animal. But sea-beans are actually seeds from tropical vines and trees that grow along waterways, mostly in the world's rain forests. They fall from their parent plant into rivers such as the Amazon, then float through inlets to the ocean. Like many of the ocean treasures found in the wrack, sea-beans drift with the currents until the Florida Current carries them to our beaches. Over 100 different kinds of sea-beans are carried to our shore. A few common and familiar ones are shown here: hamburger bean, sea heart, sea purse, and nickemut.

When beachcombers find a sea-bean at Canaveral National Seashore, how do they know where it came from? It could be from South America, Central America, Cuba, Jamaica, Africa, or even from a cruise ship passenger tossing one overboard. We don't always know. Sea-beans are world travelers and have no boundaries — not geographic, political, social, economic, or cultural. They drift to Canaveral as readily as to Cuba. Part of the mystery of finding a sea-bean lies in figuring out what it is and where it came from. To help identify sea-beans, the book *World Guide to Tropical Drift Seeds and Fruits* by Charles Gunn and John Dennis identifies most of the commonly found seeds with illustrations and descriptions.



But part of the mystery of sea-beans might never be solved — the magic associated with them through the centuries. Most beachcombers who have found a sea-bean have experienced the legendary magic: when you find one, your life changes. And when you give one away, the other person's life changes — and good luck begins... for the gift-giver as much as for the receiver.

Cathie Katz has written four wildlife books for Florida including *The Nature of Florida's Beaches* and *The Nature of Florida's Ocean Life*. She is the editor and publisher of *The Drifting Seed*, a newsletter about drift seeds and other ocean drifters. Cathie is also the author of *Nature a Day at a Time: An Uncommon Look at Common Wildlife*, published by Sierra Club Books/Random House, available June 2000. Cathy Katz can also be reached at www.seabean.com.