

**Shelling & Beachcombing Interpretation**  
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**Definition - Beachcombing**, which includes **Shelling**, is meandering along the seashore picking up whatever catches ones eye. (from **Herman Melville** and Europeans in the South Pacific islands)

**Rewards** - the **excitement** of that special find, a great **hobby**, **exercise**, etc.

**Shelling 101**

**What are shells?** - They're the outer skeleton of mollusks.

**5 major classes:** ***Gastropoda*** (meaning "stomach - foot") **Snails**  
***Bivalvia*** (meaning "two, leaves of door") **Clams/Oysters**  
***Cephalopoda*** (meaning "head - foot") **Squids/Cuttlefish**  
***Polyplacophora*** (meaning "bearer of many plates") **Chitons**  
***Scaphopoda*** (meaning "shovel foot") **Tusk Shells**

**Common names for the two Groups most often found at Clam Pass are**  
**Gastropods** (previously called univalves) & **Bivalves**.

**Best time to go - low tide**, especially on a new or full moon  
(Shelling is exceptional 24 up to 48 hours after a storm)

**Best places to look - surf line** or **drop line** (small lip of sand formed where waves are breaking) and **trash line** (high tide line where seaweed, flotsam and shells are deposited)  
This is a good place to find miniatures.

**Cleaning & Preserving Shells** - Remove any remaining tissue by boiling, microwaving or freezing. You can also let nature (insects) take it's course or use water pressure. Soak In a 50%-50% solution of bleach and water to remove algae or periostracum and rinse well. Never use beach with shiny shells such as Olives. A toothbrush and dental pick are also useful tools for cleaning shells. A dremel or fingernail file can be used to smooth rough areas. To bring out luster you can rub the shell with baby or mineral oil. When displaying your shells, remember, sunlight can dull a shell over a period of time.

**Shelling requires patience! What makes a shell valuable is not what it cost in a gift shop, but how difficult it is to find.**

## Other Beach Treasures

### **Seabeans & Drift Seeds**

**Best time to find** is September - March when storms blow drifters out of sea currents and onto beaches.

**Sea Glass** (aka known as **mermaids tears**) is found on beaches much the same as shells. Sea glass is pieces of glass (mostly from bottles) that has been tumbled and smoothed by water and sand. The most common colors are kelly green, brown and clear. Less common is jade, amber, blue and purple. Pink, black, red and orange are rare. Artificial sea glass (craft glass) is produced using a rock tumbler and is often what you find in gift and craft stores.

**Fossil Shark's Teeth** - Since shark skeletons are composed of cartilage instead of bone, often the only part of the shark to survive as fossils are teeth. Fossil shark teeth date back hundreds of millions of years. The most common are from the **Cenozoic Era** beginning 65 million years ago. A tooth **becomes a fossil** when it's buried in sediment soon after being lost. The sediment precludes oxygen and bacteria which would destroy the tooth. The **fossilization process** varies depending on the exact situation. Generally it takes approximately **10,000 years** for a tooth to become a true fossil. The **color** is determined by the color of the sediment. The most common is gray with a black root. Different colors are less common and increase the value.

**F.Y.I.** - Sharks have 40 teeth in each jaw with seven rows developing to replace ones that are shed or lost. For example, in ten years a Tiger Shark can produce **24,000** teeth. The extinct Megalodon could reach a length of 60' and have teeth measuring 7".

**Beach Minerals - Beach Stones** are smooth limestone stones formed from fine cemented sands. Gulf coast beach stones are between **120,000 - 20 million** years old. **Worm rocks** are formed by marine worms. The rocks are a result of sand and shell bits cemented with a sticky protein. **Pumice** is a floating rock formed by volcanic eruptions. They are frozen foam infused with gas bubbles held together by fragile volcanic glass and other minerals.

**Sponges** - Although they may look plant like, sponges are the simplest of **multi-cellular animals**. The scientific term for sponges is **Porifera** which means "**pore-bearing**." They are covered with pores and are very effective filter feeders. Sponges come in two basic types: **encrusting** and **free-standing**. Examples are the **Boring Sponge** and the **Tube Sponge**.

**Coral** - Corals are invertebrates; like shellfish. There are two types: **hard corals** and **soft corals**. Examples are **Finger Coral** and **Fan Coral**. Hard corals are formed by the animals called **Polyps** taking **calcium** and **carbonate** out of sea water and turning it into an **external skeleton**. Hard corals live in a **symbiotic** relationship with micro-algae. (food for housing) Unlike hard corals, soft corals do not need symbiotic algae to survive and can live in deeper, more turbid water. **Living coral is protected!**

**Flotsam** is defined as floating debris.

**Jetsam** is items thrown overboard. (jettisoned)